

# Tutorial on Overwriting

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'We'd better get this business straight,' said Edwin. 'This business of honorifics. I'm *Doctor* Spindrift.'

'Doctor?' Dr. Railton looked wary: delusions of grandeur setting in?

'Yes. I was awarded the degree of Doctor of Philosophy by the University of Pasadena. For a thesis on the semantic implications of the consonant-group "shm" in colloquial American speech.'  
(*The Doctor is Sick*, Anthony Burgess, 1960, p.15)

- 1 Exponence and Readjustment
- 2 Avoidance Effects
- 3 Complex Onset Effects
- 4 Extension of Overwriting Mechanism
- 5 Taking Stock for Future Exponence Research

## Phenomenology of Overwriting

Fixed Segment Reduplication:

- (1) Yoruba *dí-dàrà* 'goodness' (NOMINALIZATION)
- (2)
  - a. Hindi: *paani-vaani* 'water and the like'
  - b. Kannada: *ooda-giida* 'running and related activities'
  - c. Turkish: *attila mattila* 'attila and his family'  
(ASSOCIATIVE)
  - d. English: *table, shmable*, I'll sit on the floor  
(DISMISSIVE)

## Constraints on Possible Meanings of Echo Reduplication?

Observations in Grohmann & Nevins 2003:

- (3) a. Echo reduplication is always Base-Reduplicant, never *shmopy*, *copy*
- b. Dismissive reduplication cannot occur in argument position;<sup>1</sup> associative reduplication can
- c. Echo reduplication is never used to expone case or wh-features

They concluded that *shm-* reduplication is decidedly non-iconic, and that a topic-comment “about iPod, I think they are equivalent to the nonsense word *shmiPod*” wouldn’t quite fly given the intonation.

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<sup>1</sup>Some speakers allow clausal pied-piping: Billy wants an iPod, Billy wants a *shmiPod*; the kid doesn’t need more toys.

(Perhaps shm- reduplication is banned from argument position because of its prosody; it must be externalized to clause-external position not for semantic reasons but for prosodic reasons)

## Phonology: Three Possible Analyses of *table*, *shmable*

- (4) Copying the /t/ is never part of the instruction to reduplicate  
COPY *able*. /šm/ + *able* = šmable
- (5) /šm/ and /t/ are both in the input to the reduplicant, and /t/ loses.  
/šm/ + /table/ = šmable
- (6) Faithful copying is followed by the instruction to change/overwrite /t/ with /šm/  
/table/ + CONSONANTAL ABLAUT = šmable

## Fundamental Exponence Issue

Is Overwriting an “Item” or a “Process”?  
Is overwriting a vying of affixes for surfacing or an imperative to change? Are both RED *and* /m/ the exponent of Turkish ASSOCIATIVE?

## Raimy and the morphology of reduplication

- (7) Bella Coola:  
qa-qayt-i 'hat / toadstool (dim.)'

CV Reduplication always co-occurs with an overt affix *-i*.  
Raimy: *-i* is the exponent of DIM, and reduplication is a readjustment rule.

Kawu 1999: Yoruba reduplicative copying is a repair-driven operation to provide onset for an initial high-toned vowel.

## Affixal Exponents and Readjustment Rules are Independent

(8)

	RR	no RR
Zero Affix	sang	put
Overt Affix	fel-t	call-d

PAST / - {feel,kneel,deal,...} ↔ /-t/; RR: [-high, -ATR]

## Fixed Segment as Affix, Reduplication as Readjustment

Echo reduplication can be treated as suffixation plus readjustment:

paani + ASSOC

ASSOC  $\leftrightarrow$  /v/; RR: reduplicate from first vowel to end

paani + /v/ + Red-from- $V_1$ -to-End: paani-vaani

Halle/Harris 2005, Frampton 2006 models of reduplication:

p[aani<v]

- (9) Confusion, shmusion: some speakers allow readjustment copying only from stressed vowel onward.

## “Avoidance” Effects

The Hindi Fixed Segment is /v/, e.g. paani-vaani, aam-vaam, kitab-vitab.

But when the input word *starts with v*, the fixed segment is something else: /š/: vaakil-šaakil, \*vaakil-vaakil.

This is like English \**schmidt*, *shmidt*, I don't see what's so great about the guy.

How to model these kinds of “avoidance effects” is interesting: is this dissimilation or allomorph selection? How local is it?

## Avoidance Effects: Implementation

Use B-R Antifaithfulness? Why *vakil-šakil* and not *vakil-vakit*?

Use Yip 1998 constraints: *Rhyme*, *\*Aliiterate*?

(10) Turkish adjectival CV**p** reduplication: *cip-ciliz*, *yep-yeni*


(11) When the “corresponding” segment is an obstruent, /p/ cannot be used: *bom-boš*, *dim-dik*

This is not anti-identity between fixed-segment and base for rhyming/alliteration, but dissimilation of a manner feature!


## Not Every Language has a Clear “Repair”

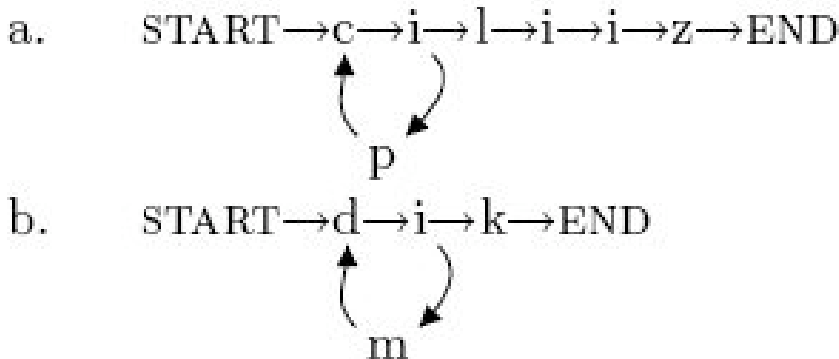
Turkish m-reduplication: \*masa-masa, no reduplicative output.  
English schmidt: schmidt-flidt, schmidt-shpidt, schmidt-shmemit,  
... (Nevins & Vaux 2003)

a.      START → p → a: → n → i: → END



b.      START → v → a → k → i → l → END





## Avoidance in Vocalic Fixed Segmentism

Tuvan (Harrison & Kaun 2001) :

- (12) a. nom-nam, se:k-sa:k, is-as, ög-ag, qis-qas  
b. at-ut, a:r-u:r

When the base contains [a], the fixed segmentism must “know” to change to [u].

- (13) Reharmonization of non-initial vowels: idik-adɨk,  
tevelerim-tavalarɨm

## For English,

It's easy to say that *shtable* is phonotactically illformed, and that faithfulness decides that only *šm* can survive.

But not for Hindi: *tras-vras* ok, but *roti-voti*.

(9) Erroneous prediction when PHON-CON allows *roti-vroti*

/roti-RED-v/	MAX <sub>IO</sub>	MAX <sub>BR</sub>	DEP(Base)
a. $\text{€} \text{ } \text{roti-}\underline{\text{vroti}}$			
b. $\text{roti-}\underline{\text{roti}}$	v!		
c. $\text{roti-}\underline{\text{voti}}$		r!	
d. $\text{voti-}\underline{\text{voti}}$	r!		v
e. $\text{vroti-}\underline{\text{vroti}}$			v!

The actual state of affairs is one in which A and B are not in competition. On the contrary, the examples seem to indicate that A and B are in a relationship of mutual exclusivity determined by the morphological process of FSR, which *replaces* the first member of the first onset of the second copy with the fixed segment.

## Zimmerman & Trommer: Comparative Markedness

Basic idea: Retain underlying/old markedness, but don't introduce new markedness (cf. Mekkan Arabic voiced stops):

- (14)
- a. /ʔibnu/ [ʔibnu]
  - b. /ʔagsam/ [ʔaksam]
  - c. /ʔakbar/ [ʔakbar], \*ʔagbar

(37) *Hindi FSR with Comparative Markedness Constraints*

	F-AF	F-S	BR <sub>N</sub> *[ <sub>σ</sub> CC	F-BR	BR <sub>O</sub> *[ <sub>σ</sub> CC
r <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub> -v <sub>5</sub> -RED					
☞ a. r <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub> -v <sub>5</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub>				md	
b. v <sub>5</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub> -v <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub>		md!			
c. r <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub> -r <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub>	m!				
d. r <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub> -v <sub>5</sub> r <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub>			*!	d	

# Ussishkin's analysis of Denominal Verb Formation in Hebrew

- Root-based view (see e.g. Arad 2003):  $\sqrt{bjm}, \sqrt{dm}$  put into CiCeC template generates *bijem*, *dimem*. Noun templates generate *bima*, *dam*.
- Ussishkin: there are no “roots”. There are only surface-to-surface relations. *dam* turns into *dimem* and *bima* turns into *bijem* by overwriting the vocalic melody of the nouns with *i,e*.

(37) *Hindi FSR with Comparative Markedness Constraints*

	F-AF	F-S	BR <sub>N</sub> *[ <sub>σ</sub> CC	F-BR	BR <sub>O</sub> *[ <sub>σ</sub> CC
r <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub> -v <sub>5</sub> -RED					
☞ a. r <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub> -v <sub>5</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub>				md	
b. v <sub>5</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub> -v <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub>		md!			
c. r <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub> -r <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub>	m!				
d. r <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub> -v <sub>5</sub> r <sub>1</sub> O <sub>2</sub> t <sub>3</sub> i <sub>4</sub>			*!	d	

The problem arises because of the encoding of a competition relation between stem and affix vowels for nuclear positions and because of the nature of constraint evaluation as counting. When there are “two overwriters”, “two overwritees”, and three positions to compete for, there are too many solutions.

## Back to Our Three analyses

- (15) Overwriting as optimizing competition: doesn't work very well
- (16) Overwriting as lack of overwritee in the first place: very hard to implement for vocalic overwriting. Ok to say *t[able]+šm* or *ba[:gi:l]+gi*, unclear how to do *[n]o[m]+a* in a non-Semitic language. (similarly if we want to model binominal compounds like “knick-knacks, ping-pong”.)
- (17) Overwriting as the instruction to change: works for consonantal and vocalic fixed-segmentism, perhaps extensible to umlaut, ablaut, tonal overwriting: Rongxian ta33-ta35, liu55-liu35.