## Phonologically conditioned affix order in Washo

Johanna Benz benz.johanna@web.de

Universität Leipzig

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### Introduction

**Claim:** Affix order in Washo is partially phonologically conditioned. Stratal OT offers a particularly interesting set of options and restrictions in dealing with phonologically conditioned affix order (PCAO).

### Introduction

#### Overview:

- in Washo, stem-level suffixes are reordered to avoid a stem-final stressed syllable if possible
- at the stem level, the phonological constraint NonFinality outranks morphological alignment constraints
- unstressed suffixes are later added at the word level but counterbleed the observed change in affix order

## **PCAO**

- "phonologically conditioned affix order": semantically and/or morphologically unexpected affix order triggered by phonological constraint(s), affixes may be more than one segment long
- Paster (2006a,b 2009) argues that "true" PCAO does not exist, reported cases reduce to either segmental metathesis or infixation
- affix order in Washo is non-transitive (c.f. Ryan 2010) and opaque (c.f. Stiebels 2003)
- data from Jacobsen (1964, 1973), who also identified the pattern as phonologically conditioned

### Non-transitive affix order in Washo

### Washo<sup>1</sup>

- (1) léme?huyáša?i le-íme?-hu-áša?-i 1SBJ-drink-PL.INCL-NEAR.FUT-IND "We (incl.) are going to drink."
- (2) léma?áša?é:si le-íme?-áša?-é:s-i 1SBJ-drink-NEAR.FUT-NEG-IND "I am not going to drink."
  - from this data we might infer: PL.INCL-NEG

 $<sup>^1</sup>$ Glosses: 1SBJ: first person subject, PL.INCL: plural inclusive, NEAR.FUT: near future, IND: independent mood, NEG: negation

### Non-transitive affix order in Washo

- from this data we might infer: PL.INCL-NEG
- instead, we find NEG-PL.INCL
- (3) léme?é:shuyi le-íme?-é:s-hu-i 1SBJ-drink-NEG-PL.INCL-IND "We (incl.) are not drinking."

## Washo verbs in Stratal OT

### Stratum 1: Stem-level suffixes

	/ímeʔ/, /hu/, /éːs/	NonFinality	Neg-R	Incl-R
(4)	a. ímeʔ-hu-éːs	*!		*
	🖻 b. íme?-éːs-hu		*	

- morphologically preferred order (semantically transparent, transitive) encoded in alignment constraints which are violated once for every morpheme intervening between e.g. NEG and the right edge of the stem (c.f. McCarthy & Prince 1993)
- NONFINALITY (here, simply: do not have a stressed last syllable, compare Prince & Smolensky 2004) causes that order to change, yielding non-transitive, potentially opaque order
- on Stratum 2, prefixes and word-level suffixes are added. The word-level suffixes are never stressed, so they never violate NonFinality.

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## Opaque affix order in Washo

### Washo<sup>2</sup>

(5) geyúliyé:sha ge-yúli-é:s-ha IMP-die-NEG-CAUS "Don't kill it!"

# Cyclicity and PCAO

- "Stratal OT is cyclic but not too cyclic"
- process of dislocating an unstressed suffix such as Plural Inclusive -hu
  may apply across intervening affixes:
  - (6) léma?áša?é:shuyi le-íme?-áša?-é:s-hu-i 1SBJ-drink-NEAR.FUT-NEG-PL.INCL-IND "We (incl.) aren't going to drink"

 assuming Bracket Erasure (Kiparsky 1982, see also Bermúdez-Otero 2011), the morphological makeup of the inner stem becomes invisible, PCAO is thus predicted to be possible only between Bracket Erasures

- (7) a.  $*[le-[[íme?]-hu-áša?-é:s]_x-i]$  vs.
  - b. \*[le-[[[íme?]-hu]-áša?]-é:s]<sub>x</sub>-i] vs.
  - c. \*[le-íme?-hu-áša?-é:s<sub>x</sub>-i]

### Conclusion

- PCAO exists
- there may be many more cases of e.g. stem-level PCAO effects which are obscured by later suffixes
- PCAO locality determined by Bracket Erasure and thus the number of cycles

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