Handout #14

Lamba

Lamba (a Bantu language of Zambia) (Kenstowicz and Kisseberth 1979: 71-72)

Basic	Passive	Stative	Applica-	Basic verb
verb	("beed")	("beable)	tive	gloss
			(" for")	
t∫ita	t∫itwa	t∫itika	t∫itila	do
tula	tulwa	tulika	tulila	dig
lasa	laswa	la∫ika	la∫ila	wound
masa	maswa	ma∫ika	ma∫ila	plaster
pata	patwa	patika	patila	scold
fisa	fiswa	fi∫ika	fi∫ila	hide

Morphemes

```
"passive"
- W
- ik
                "stative"
- il
               "applicative"
– t∫it
                "do"
               "dig"
– tul
- las \sim las "wound"
– mas ~ ma∫ "plaster"
                "scold"
pat
fis ~ fi∫
               "hide"
```

Alternations

Morpheme alternants

- las ~ la∫ "wound"
- mas ~ ma∫ "plaster"
- fis \sim fif "hide"

Alternating sounds

$$- s \sim \int$$

Alternations

- Distribution of alternating sounds
 - $[\int]$ occurs only before [i]
 - [s] occurs only elsewhere.
- Note that we've seen this same distribution before, in <u>Korean</u> (Handout #2).
- The analysis is also the same as there.

Analysis

- Underlying representation of alternating morphemes:
 - /las, mas, fis/
- Rule (Palatalization):

Derivations

Underlying representation	/fis - a/	/fis - il - a/
Palatalization		/fi∫ - il - a/
Surface representation	[fisa]	[fi∫ila]

Lamba: Some more data

Basic	Passive	Stative	Applica-	Basic verb
verb	("beed")	("beable")	tive	gloss
			(" for")	
t∫eta	t∫etwa	t∫eteka	t∫etela	spy
soŋka	soŋkwa	soŋkeka	soŋkela	pay tax
seka	sekwa	sekeka	sekela	laugh at
poka	pokwa	pokeka	pokela	receive
t∫esa	t∫eswa	t∫eseka	t∫esela	cut
kosa	koswa	koseka	kosela	be strong

Alternations

- There are some new **alternations** here:
 - ik ~ ek "stative"
 - − il ~ el "applicative"
- The alternating sounds are:
 - $-i \sim e$

Distribution of the alternating sounds

- The mid vowel [e] occurs after [+syll, -high, -low] C₀, as well as elsewhere.
- The high vowel [i] does not occur there, but does occur elsewhere.
- Note that this is the same pattern of distribution as in the related language <u>Kinyarwanda</u> (Homework #4).
- The analysis is the same as there too.

Analysis

• Underlying representations of the alternating morphemes:

$$-/ik$$
, $il/$

• Rule (Vowel harmony):

Derivations

Underlying representation	/fis - il - a/	/kos - il - a/
Vowel harmony		/kos - el - a/
Palatalization	/fi∫ - il - a/	
Surface representation	[fi∫ila]	[kosela]

Interaction

- We now have two rules that refer to vowel height:
 - Vowel harmony, which eliminates high vowels in certain contexts
 - Palatalization, which is conditioned by high vowels
- There are some forms, like *kosela* in the last derivation, where both rules apply.

Interaction

- In such a case, the order in which the two rules are applied makes a difference.
- If Vowel harmony is applied before Palatalization, as in the derivation above, then Palatalization won't apply before underlying high vowels that Vowel harmony changes to mid vowels.
- Palatalization could have applied to the underlying representation /kosila/, but can't apply to the output of Vowel harmony /kosela/.

Bleeding

- Vowel harmony bleeds Palatalization because there are forms, like [kosela], where Palatalization fails to apply because Vowel harmony has applied.
- As the following derivations show, applying Palatalization before Vowel Harmony yields incorrect outputs (marked by asterixes).

Derivations (wrong order)

Underlying representation	/fis - il - a/	/kos - il - a/
Palatalization	/fi∫ - il - a/	/ko∫ - il - a/
Vowel harmony		/ko∫ - el - a/
Surface representation	[fi∫ila]	*[ko∫ela]

Reference

• Kenstowicz, Michael and Charles Kisseberth (1979). *Generative Phonology: Description and Theory*. Academic Press, San Diego.