

Lama Tone

Due Friday 12/15/00 in my office or mailbox

Provide an Optimality-theoretic analysis of the Lama data below. This problem is taken from Kenstowicz's (1994) phonology text.

You should include early in your answer a brief discussion of the overall pattern of Lama: what are the contrasting tonal entities? In what contexts are these contrasts neutralized, and under what circumstances are they "displaced" to another part of the word? What phonotactic principles guide the neutralizations and the displacements?

If you like, you can make use of the following suggestions.

(a) There is clearly rightward spreading in Lama. A way of accomplishing this mentioned in class is to use an alignment constraint: penalize by one violation every syllable that follows the rightmost syllable linked to the tone you are trying to spread.

(b) There is downstep in Lama. You can use either theory put forth in class: either L can float, lowering the registers for what follows, or it can be linked into a contour, but not receive a target in the phonetics.

(c) Note that there is a case of opacity, involving the falling tone. You can use whatever recipe you like.

(d) To solve the problem, you will probably find it use to impose the tightest tonal phonotactics you can. Look for what tones Lama allows and where it allows them.

(e) If you wish to use OTSoft, then there is a problem with putting an autosegmental representation on a single line. I suggest the following notations:

pata
| | pata H L
H L

p a t a
^ | pata HL L
H L H

pata pata H=H

∨
H

pata pata H=H

∨
H

pata pata H=HL

∨
H L

p a t a pata H lH (high, downstepped high; “no target” theory)

| ^
H l H

p a t a pata H <∩> H (high, downstepped high; “floating L” theory)

| |
H l H

(f) You should be able to derive at least the following forms:

nâ: ‘cow’

yâl ‘wife’

wá:l tê ‘under husband’

ná: tèt ‘under cow’

yâl têt ‘under wife’

cì tét ‘chez father (at f.’s house)’

ná: tét ‘chez cow’

yâl tét ‘chez wife’

cì sèwá ‘father ran’

wá:l sé'wá ‘husband ran’

ná: sèwá ‘cow ran’

yâl sé'wá ‘wife ran’

wá:l rá sèwá ‘husband’s friend ran’

rì 'mother'	yír 'person'	sí: 'sheep'	rà:l 'brother'
rà 'friend'	lé:l 'widow'	tí: 'elephant'	nùn 'aunt'

cì tèt 'under father'	wá:l tèt 'under husband'	ná: tèt 'under cow'	yàl tèt 'under wife'
cì rà 'father's friend'	wá:l rà 'husband's friend'	ná: rà 'cow's friend'	yàl rà 'wife's friend'
rì tèt 'under mother'	yír tèt 'under person'	tí: tèt 'under elephant'	rà:l tèt 'under brother'
rì rà 'mother's friend'	yír rà 'person's friend'	tí: rà 'elephant's friend'	rà:l rà 'brother's friend'

cì tét 'chez father (at f.'s house)'	wá:l tét 'chez husband'	ná: tét 'chez cow'	yàl tét 'chez wife'
rì tét 'chez mother'	yír tét 'chez person'	tí: tét 'chez elephant'	rà:l tét 'chez brother'

cì sèwá 'father ran'	wá:l sé'wá 'husband ran'	ná: sèwá 'cow ran'	yàl sé'wá 'wife ran'
			rà:l sé'wá 'brother ran'

wá:l rá tèt 'under husband's friend'
wá:l rá tét 'chez husband's friend'
wá:l rá sèwá 'husband's friend ran'