

Assignment #3: WoleaianData from Sohn (1971)¹Due **Friday, Oct. 23** (put a hard copy in my mailbox, Campbell 3125 by 5 PM)

In recent study questions, you saw that an [a]~[e] alternation in Woleaian could be analyzed with directional rule application. Here are the full data (just about) from Sohn.

Your job is to develop an **OT** account of these data. Some aspects of the data are challenging for OT, such as opacity involving final vowels, and the forms that Sohn points out as problematic for the rule analysis. So you'll be doing something more like actual research here, rather an exercise with a known answer.

General notes and tips [see also below in the data]

- Recall that there was also a rule of final-/a/ raising. Sohn proposes that this rule applies before both = (in reduplicated words) and #.
- There's an additional rule that raises /a/ when it's flanked by high vowels.
- I've given Sohn's underlying forms, but you should feel free to challenge them.
- Sohn says: "[ü] and [wü] are in free variation. The motivation for setting up w will not be elaborated here." You can ignore the /w/→∅ change if you like, or decide that the /w/s aren't there in the underlying forms.

Transcription notes (I copied Sohn's transcriptions, which are non-IPA)

- capital letters (I, E, etc.) are voiceless vowels.
- ü is a high central vowel. Judging from Sohn 1975, I think it's [+round]
- è is a mid central vowel. Judging from Sohn 1975, I think it's [+round].
- j is a glide (i.e., IPA [j])
- g seems to be IPA [ɣ]

Possessed forms of nouns

- Ignore the /c/ → [š] change, here and throughout.

	<i>eye</i>		<i>drinking object</i>	
<i>X</i>	1. /mata/	matE		
<i>my X</i>	2. /mata+i/	metaj	3. /wülüma+i/	ülümej
<i>your (sg) X</i>	4. /mata+mu/	metamU	5. /wülüma+mu/	ülümemU
<i>his/her/its X</i>	6. /mata+la/	metaE	7. /wülüma+la/	ülümaleE
<i>our (incl) X</i>	8. /mata+ca/	metašE	9. /wülüma+ca/	ülümašE
<i>our (excl) X</i>	10./mata+mami/	matemamI	11./wülüma+mami/	ülümemamI
<i>your (pl) X</i>	12./mata+mii/	metami	13./wülüma+mii/	ülümemi

¹Sohn, Ho-min. 1972. a-raising in Woleaian. University of Hawaii *Working Papers in Linguistics* 3: 15-36.

I've also consulted Sohn 1975 for clarification here and there. Where the two sources disagreed on a transcription or underlying form, I went with Sohn 1975, particularly with respect to final vowels:

Sohn, Ho-min. 1975. *Woleaian reference grammar*. Honolulu: University of Hawaii Press.

'2' things

- “?” after the UR means I was guessing.
- I assume there's a voiceless vowel at the end of '2 flat pieces', but I don't know which one.

14. /ruwa+xofeti/ ?	ruwagofetI	'2 pieces'
15. /ruwa+m ^w ëü/ ?	ruwam ^w ëü	'2 groups'
16. /ruwa+ali/ ?	ruwa:II	'2 skinny things'
17. /ruwa+tabo/	ruwetabO	'2 halves'
18. /ruwa+ŋafa/	ruweŋafE	'2 arm-lengths'
19. /ruwa+fawü/	ruwefäü	'2 round things'
20. /ruwa+fija/	ruwefijE	'2 handfuls'
21. /ruwa+tip?/ ?	ruwetip?	'2 flat pieces'
22. /ruwa+wülü/	ruweülÜ	'2 handfuls of leaves'

Reduplicated words

- /x/ becomes [g] between two voiced vowels.² You can ignore that, here and throughout.

23. /ka=kaŋi+i/	kekaŋi	'to be eating it'
24. /m ^w ara=m ^w ara/	m ^w arem ^w arE	'lei'
25. /m ^w ara=m ^w ara+li/	m ^w arem ^w eralI	'lei of'
26. /xe+m ^w ara=m ^w ara/	xem ^w arem ^w arE	'to put leis on'
27. /xe+m ^w ara=m ^w ara+a/	xem ^w arem ^w era	'to put the lei on him'
28. /raxi=raxi/	ragirexI	'to line up'
29. /lawü=lawü/	laülaü	'to deliver babies'
30. /fitija=tija/	fitijetijE	'to marry each other'
31. /tapaŋi+a/	tapaŋi	'to help it'
32. /ta=tapaŋi+a/	tetapaŋi	'to be helping'

Causatives

- Note [xeraŋereŋa] and [xetapetepa], where final /aa/ results in an unraised final [a]—and note how the preceding /a/ reacts.
- Sohn discusses the variant [xareŋereŋaII] as problematic. Also [xapelepelalI] and [xatepetepalI], which don't have variants. You'll have to decide what to do about them.

33. /xa+b ^w u:toxo+a/ ?	xab ^w u:togo	'to make him go'
34. /xa+tem ^w a:üwè+a/	xatem ^w a:üwè	'to make him sick'
35. /xa+laxo+a/	xelago	'to make him come'
36. /xa+mm ^w acü+a/	xe+mm ^w ašü	'to hold him'
37. /raŋa=raŋa/	raŋeraŋE	'yellow'
38. /xa+raŋa=raŋa/	xeraŋeraŋE	'make yellow'

² Although actually, Sohn transcribes this one as [x].

39. /xa+raŋa=raŋa+a/	xeraŋereŋa	‘make it yellow’
40. /xa+raŋa=raŋa+li/	xeraŋereŋaII ~ xareŋereŋaII	‘making yellow of’
41. /xa+pala=pala/ ?	xepalepalE	‘sarong’
42. /xa+pala=pala+li/ ?	xapelepelalI	‘sarong of’
43. /tapaŋi+a/	tapaŋi	‘to help it’
44. /ta=tapaŋi+a/	tetepaŋi	‘to be helping’
45. /xa+tapa=tapa/	xetapetapE	‘to support’
46. /xa+tapa=tapa+a/	xetapetepa	‘to support it’
47. /xa+tapa=tapa+li/	xatepetepalI	‘supporting of’

Miscellaneous

- In (56) and (57), Sohn says the = might not be there synchronically.
- In (62), the second /a/ deletes by a rule that deletes a vowel between identical laterals, nasals, or fricatives. Then there’s also a prohibition against [II], so you get [nn] instead. You don’t have to analyze all that, but do consider why the winner is [jennapE] instead of *[jannapE].
- Similarly, in (69), the first /i/ deletes. You don’t have to analyze that, but do consider why the winner is [lessegannenI] instead of *[lessegannaŋI] or *[lessegennaŋI] or *[lessagennaŋI].

48. /marama/	meramE	‘moon’
49. /marama+li/	maremalI	‘moon of’
50. /wera=wera/	werewerE	‘thunder’
51. /wera=wera+li/	wereweralI	‘thunder of’
52. /paab ^w ija/	pa:b ^w ijE	‘pig’
53. /b ^w uxuwa/	b ^w uguwE	‘knee’
54. /waxa/	wa:xE	‘vein’
55. /jalüsa/	jalüsE	‘sideburns’
56. /jaremata/ or /jara=mata/	jarematE	‘person’
57. /jaremeta+li/ or /jara=mata+li/	jaremetalI	‘person of’
58. /jafara/	jefarE	‘shoulder’
59. /jafara+i/	jaferaj	‘my shoulder’
60. /jafara+mami/	jefaremamI	‘our shoulders’
61. /jala/	jale	‘road’
62. /jala=lapa/	jennapE	‘road’ (same meaning?)
63. /matawa/	metawE	‘sea’
64. /metaxO/	metaxO	‘to be afraid’
65. /weri+xamami/	werixemamI	‘see us (excl)’
66. /teraa/	tera	‘adze’
67. /maŋaaxo/	meŋa:xO	‘clothes’
68. /xaraŋapa/	xareŋapE	‘bonito’
69. /le+ssaxa+li#laŋi/	lessegannenI	‘in the middle of the sky’