Homework #8: Malagasy. Data from Richardson (1885)[1]
Due Friday, March 9

Directions
1. Develop a Stratal OT analysis of the Malagasy data, up to item 89.
   - All the morphemes illustrated seem to apply at the same level, so you can just have two levels: lexical and post-lexical (or even "early" and "late").
   - You don't have to account for why there are gaps in some of the paradigms.
   - There are some unusual consonant alternations. Make sure your analysis accounts for *where* the alternations occur, but don't worry about ruling out candidates where an underlying consonant changed to the wrong surface consonant.
   - Treat superscript consonant letters as belonging to the adjacent consonant. Thus, $^{n}d^{r}$ is a single segment.
   - Acute accent marks main stress. (Secondary stress not marked.)
   - Assume that stress in Malagasy is totally predictable: at some level, stress the penultimate mora. Any surface deviations from that pattern will have to be explained.
   - The *u~i* alternation in the passive imperative isn't 100% regular.
2. Now consider a monostratal analysis, perhaps using output-output correspondence.
   - If it works, explain how.
   - If it doesn't work, explain why/where not.
3. Take a look at items 90-97.
   - They show data gathered from our consultant in the 2003-2004 Malagasy field methods course.
   - A century after Richardson, it's not surprising that some of the data would be different.
   - What is surprising is that these words don't seem to have a single underlying form (at least not under any analysis I can think of).
4. Discuss whether these items could or couldn't be accommodated in your analyses (or maybe they can be accommodated in just one of them?), and speculate on what might be going here.
   - Whatever the explanation is, it doesn't operate in a uniform manner, since different words seem to depart from Richardson in different parts of their paradigms.

Data caveats
- I have simplified the data by giving only roots and suffixes, omitting all prefixes. Don't try these forms on your next trip to Madagascar.
- In many dialects of Malagasy some of the vowels (and all of the *h*s) are deleted in normal speech, so when you hear Malagasy it might not sound much like the transcriptions.
- It's not the case that most words in Malagasy start with *b*—I just relied heavily on that part of the dictionary.

unaffixed noun or adj.	*passive imperative*	*active imperative*	*passive1*	*passive2*	*gloss of root*
1. bábu	babúi	babúa	babúana	babúina	plunder
2. bá^{n}gu	ba^{n}gúi	ba^{n}gúa	ba^{n}gúana	ba^{n}gúina	plait
3. bé^{n}gu	be^{n}gúi	be^{n}gúa	be^{n}gúana		curvature
4. bú^{n}gu	bu^{n}gúi	bu^{n}gúa	bu^{n}gúana	bu^{n}gúina	nest
5. béku	bekúi	bekúa	bekúana	bekúina	foreign words
6. búdu	budúi	budúa	budúana		childish
7. búhu	buhúi			buhúina	carry on back

[1] Richardson, J. (1885). *A New Malagasy-English Dictionary*. Antananarivo: London Missionary Society.

Allomorph of passive imperative, also passive2 is different					
8. bári	**baríu**	baría	baríana	**barína**	brilliant
9. búri	**buríu**	buría	buríana		shorn
10. burúsi	**burusíu**	burusía	burusíana	**burusína**	brush
11. buláli	**bulalíu**	bulalía	bulalíana		slip
12. bulídi	**bulidíu**	bulidía	bulidíana		concealment
Active imperative and passive1 are different here					
13. bá^{ŋ}ga	ba^{ŋ}gáu	**ba^{ŋ}gá**	**ba^{ŋ}gána**	ba^{ŋ}gáina	gappy
14. báta	batáu	**batá**	**batána**	batáina	lift
15. buréra	bureráu	**burerá**	**burerána**	bureráina	weak
16. baréra	bareráu	**barerá**	**barerána**		freely flowing
17. báda	badáu	**badá**	**badána**		barren
18. béda	bedáu	**bedá**	**bedána**		seize
19. búda	budáu, budái	**budá**	**budána**	budáina	soft
These show different stress behavior; look carefully at all 5 columns for clues					
20. báhana	bahánu	bahána	bahánana		straddle
21. bá^{n}zina	ba^{n}zínu	ba^{n}zína	ba^{n}zínana	ba^{n}zínina	stare
22. búbana	bubánu	bubána	bubánana	bubánina	calumny
23. bú^{n}t^{s}ina	bu^{n}t^{s}ínu	bu^{n}t^{s}ína	bu^{n}t^{s}ínana	bu^{n}t^{s}ínina	swollen
24. burídana	buridánu	buridána	buridánana		going off in haste
25. búruna	burúni	burúna	burúnana	burúnina	tapped out
Here are the consonant alternations; again, considering all 5 columns will help					
26. bábuka	babúhi	babúha	babúhana		prostration
27. badíaka	badiáhu	badiáha	badiáhana	badiáhina	badly done
28. balíaka	baliáhu	baliáha	baliáhana		big-eyed
29. bébaka	bebáhu	bebáha	bebáhana		repentance
30. bélaka	beláhu	beláha	beláhana		full-faced
31. búhaka		buháfa	buháfana	buháfina	fastened
32. áluka	alúfi	alúfa	alúfana		shelter
33. véluna	velúmi	velúma	velúmana	velúmina	alive
34. á^{n}d^{r}ana	a^{n}d^{r}ámu	a^{n}d^{r}áma	a^{n}d^{r}ámana		attempt
35. búhit^{r}a	buhíru	buhíra	buhírana	buhírina	convex
36. bulásit^{r}a	bulasíru	bulasíra	bulasírana	bulasírina	slip
37. súrat^{r}a		suráta	surátana		writing
38. púrit^{r}a	purítu	puríta	purítana	purítina	cramped
39. élat^{r}a	elátu			elátina	remove
40. fú^{ŋ}gat^{r}a	fu^{ŋ}gáti	fu^{ŋ}gáta	fu^{ŋ}gátana	fu^{ŋ}gátina	pop up
41. lumánu	lumanúsi	lumanúsa	lumanúsana	lumanúsina	swimming
42. vúlu	vulúsi	vulúsa	vulúsana	vulúsina	hair, feathers
43. búhi	buhízu	buhíza	buhízana		inflated
44. fúi	fuízu	fuíza	fuízana	fuízina	hatched
45. lálu	lalúvi	lalúva	lalúvana		gone
46. nía	niávu	niáva	niávana		resolve

These words look rather different but might not require much change to your analysis					
47. rúna	rúni		rúnana		leaning
48. fúna	fúni		fúnana		beg pardon
49. vúna	vúni	vúna	vúnana		knot
50. tána	tánu		tánana		grasp
51. gúka	gúhi	gúha	gúhana	gúhina	guzzling
52. píka	píhu				click
53. tˢáka	tˢáhu	tˢáha	tˢáhana		cross water
54. léna	lému	léma	lémana		moist
55. nútʳa	núri	núra	núrana	núrina	go backwards
56. dítʳa	díru	díra	dírana	dírina	dispute
57. dútʳa	dúri	dúra	dúrana		burn
58. fátʳa	fáru	fára	fárana		measure
59. dí	dízu	díza	dízana		wild
60. pí	pízu	píza	pízana	pízina	twinkle
61. fĩ	fĩzu	fĩza	fĩzana		delicious
62. lú	lúvi	lúva	lúvana	lúvina	rotten
63. tú	túvi			túvina	fulfill
64. lá	lávu	láva	lávana	lávina	refuse
Can your analysis deal with these too?					
65. béna	benáu	bená	benána	benáina	seize
66. vína	vináu			vináina	conjecture
67. dáka	dakáu	daká	dakána		kick
68. dána	danáu	daná	danána	danáina	open wide
69. díka	dikáu	diká	dikána	dikáina	overstep
70. héna	henáu		henána		lessen
71. fána	fanáu	faná	fanána		heat
72. báka	bakáu	baká	bakána	bakáina	branching
73. tˢáka	tˢakáu	tˢaká	tˢakána	tˢakáina	fetch **(cf. 53!)**
74. vúha	vuháu, vuhái	vuhá	vuhána	vuháina	open
75. éfa	efáu	efá	efána	efáina	done
Shifting gears a bit, some e~i *alternations to account for* (It's not a coincidence that most of the words below have [e] in the first syllable instead of some other vowel, but I didn't give you enough data for you to account for that fact)					
76. bédi	bedéu	bedé	bedéna		tattle
77. éⁿgi	eⁿgéu	eⁿgé	eⁿgéna		praise
78. éti	etéu	eté	eténa		narrow
79. duⁿgaíⁿgi	duⁿgaiⁿgéu		duⁿgaiⁿgéna		burden
80. bédi	bedésu	bedésa	bedésana	bedésina	tattle
81. réni	renésu	renésa		renésina	perceived
82. véli	velézu	veléza	velézana	velézina	blow
83. téti	tetézu	tetéza	tetézana	tetézina	bridge

84. éᵐbitʳa	eᵐbéru	eᵐbéra	eᵐbérana	eᵐbérina	prevented
85. éfika	eféhu	eféha	eféhana	eféhina	shaking
86. éⁿdʳika	eⁿdʳéhu	eⁿdʳéha	eⁿdʳéhana	eⁿdʳéhina	feature
87. táⁿdʳina	taⁿdʳému	taⁿdʳéma	taⁿdʳémana		remembered
88. télina	telému	teléma	telémana	telémina	pleasant
89. éⁿdʳina	eⁿdʳénu	eⁿdʳéna	eⁿdʳénana		lemur/clown

Here are the consultant data. Each word is a little different. I've bolded the consultant's items that differ from Richardson's (or, where there's nothing in Richardson, that differ from expected).

consultant	90. tʳaúka[2]	**tʳaukáu**	**tʳauká**	**tʳaúkana**		strangle
Richardson	tráuka	traúhi			traúhina	
consultant	91. fúka	**fuháu**	**fuhá**	fúhana		smoke
Richardson	fúka	fúhi	fúha	fúhana	fúhina	
consultant	92. fúna		**funá**	fúnana		atone
Richardson	fúna	fúni		fúnana		
consultant	93. raútʳa		**rautá**	raútana		take advantage
Richardson	ráutʳa	raúti	raúta	raútana	raútina	
consultant	94. zaítʳa		**zairá**	zaírana		sew
Richardson	záitʳa	zaíru	zaíra	zaírana	zaírina	
consultant	95.	haúri		**hautʳána**	haúrina	scratch
Richardson	háutʳa	haúri	haúra	haúrana	haúrina	
consultant	96. paúka	**pauháu, paukáu**	**pauká**	**pauhána**		grab
Richardson	páuka	paúhi	paúha	paúhana	paúhina	
consultant	97. taítʳa	taíru	**taitʳá**		taírina	wake
Richardson	táitʳa	taíru	taíra	taírana	taírina	

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[2] Actually stress is retracted to [áu] or [ái] (with possible coalescence to [o], [e]). That's true for the Richardson data too, so the distinctions I'm showing between [áu], [aú]; [ái], [aí] are fictional.

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