Linguistics 201A Winter 2023
Phonological Theory II B. Hayes

Homework #4: Bases and Stress in Indonesian

Due Tuesday Feb. 28 in class

1. The Data

Cohn (1989) [1] explains the patterning of stress in a dialect of Indonesian as it relates to morphology. We will cover only a subset of the data, leaving out various complications involving prefixed forms, schwa, reduplication, and compounding.

Stress in this dialect is predictable if you know (a) number of syllables in the word; (b) the number of suffixes (zero, one, or two; all suffixes are monosyllabic). The following forms are representative. I've saved space by using acute and grave accents to depict primary and secondary stress, instead of IPA [ˈ] and [ˌ]. [c] and [j] are palatal affricates, [ñ] a palatal nasal. I had to fill in one missing datum, but I'm pretty sure this form would be correct.

	0 Suffixes	*1 Suffix*	*2 Suffixes*
1 syllable	[cát] 'print'		
2 syllables	[cári] 'search'	[[cát] kan] (conjectured by BH)	
3 syllables	[bicára] 'speak'	[[carí] kan] 'search for'	[[[cat] kán] ña] 'print it'
4 syllables	[bìjaksána] 'wise'	[[bicará] kan] 'speak about'	[[[càri] kán] ña] 'search for it'
5 syllables	[kòntinuási] 'continuation'	[[bìjaksaná] an] 'regulations'	[[[bicàra] kán] ña] 'speak about it'
6 syllables	[òtobìográfi] 'autobiography'	[[kòntinuasí] ña] 'the continuation'	[[[bìjaksàna] án] ña] 'the regulations'
7 syllables	[àmerikànisási] 'Americanization'	(not given)	(not given)

[1] Cohn, Abigail (1989) Stress in Indonesian and bracketing paradoxes. *Natural Language and Linguistic Theory* 7:167-216. Based on a UCLA M.A. thesis.

For convenience, below are the same data given as formulae; 1 = main stress, 2 = secondary stress, 0 = stressless.

	0 Suffixes	*1 Suffix*	*2 Suffixes*
1 syllable	[1]		
2 syllables	[1 0]	[[1] 0]	
3 syllables	[0 1 0]	[[0 1] 0]	[[[0] 1] 0]
4 syllables	[2 0 1 0]	[[0 0 1] 0]	[[[2 0] 1] 0]
5 syllables	[2 0 0 1 0]	[[2 0 0 1] 0]	[[[0 2 0] 1] 0]
6 syllables	[2 0 2 0 1 0]	[[2 0 0 0 1] 0]	[[[2 0 2 0] 1] 0]
7 syllables	[2 0 0 2 0 1 0]		

2. Class demo

In class, we will do the monomorphemic forms. This is an early start on our coverage-to-come of metrical stress theory. Here are some fairly standard constraints we can use.

CULMINATIVITY	Penalize any candidate that lacks a stress.	
EMPLOY SYLLABIC TROCHEES	(maximally disyllabic, initially-stressed feet)	assume undominated (include no violators in GEN)
FTBIN	Penalize every monosyllabic foot	
ALL-FEET-L	Count every case in which any syllable precedes any foot.	
ALL-FEET-R	Count every case in which any syllable follows any foot.	
ALIGN(Word, L, Foot, L)	Penalize every word that does not begin with a foot.	
ALIGN(Word, R, Foot, RL)	Penalize every word that does not end with a foot.	
*UNFOOTED	Penalize any syllable that does not belong to a foot.	

3. Your task

Add one or two OO-Faithfulness constraints that can derive the full set of data.
Unlike the others this is not necessarily an open-ended problem; you probably will find the solution I found pretty quickly; just be a bit flexible on what can be a base!

Download the spreadsheet for this problem from the course website, which will be at at https://www.palisadessymphony.org/temp/ until the Humanities webserver has been repaired. This spreadsheet will include a worked-out version of the monomorphemic analysis, along with suggested candidates for the affixed forms.

In your writeup, describe your analytical approach and the constraints you used. Paste in the tableaux (use Courier font for legibility). In your answer, explain why the data might be problematic for tradition "inside-out" approaches to paradigm uniformity, such *SPE* cyclicity or Stratal OT.

Note: this is meant to be a short homework, freeing up your time to work on your term project.

4. List of candidates to handle

- Note: the first six inputs were covered in class.

Input	Candidate	Winner
s	(x)	1
	.	
s s s	. (x .)	1
	(x .) .	
	(x .)(x)	
s s s s	(x .)(x .)	1
	. . (x .)	
	. (x .) .	
s s s s s	(x .) . (x .)	1
	. (x .)(x .)	
	(x .)(x .).	
	. . . (x .)	
s s s s s s	(x .)(x .)(x .)	1
	. . . . (x .)	
	(x .) . . (x .)	
	. . (x .)(x .)	
s s s s s s s	(x .) . (x .)(x .)	1
	(x .)(x .) . (x .)	
	(x .) . . .(x .)	
[[s s] s]	. (x .)	1
	(x .) .	
	(x)(x .)	
	(x .) .	
[[s s s] s]	(x .)(x .)	
	. . (x .)	1
	. (x .) .	
[[[s s] s] s]	(x .)(x .)	1
	. . (x .)	
	. (x .) .	
[[s s s s] s]	(x .) . (x .)	1
	. (x .)(x .)	
	. . . (x .)	
	(x .)(x)(x .)	

	(x .)(x .) .	
[[[s s s] s] s]	(x .) . (x .)	
	. (x .)(x .)	1
	. . . (x .)	
	(x .)(x)(x .)	
	(x .)(x .) .	
[[s s s s s] s]	(x .)(x .)(x .)	
	. . . . (x .)	
	(x .) . . (x .)	1
	. . (x .)(x .)	
	(x .) . (x .) .	
	(x .) . (x)(x .)	
[[[s s s s] s] s]	(x .)(x .)(x .)	1
	. . . . (x .)	
	(x .) . . (x .)	
	. . (x .)(x .)	
	(x .) . (x .) .	
	(x .) . (x)(x .)	