Ethan Poole LING 20: Introduction to Linguistic Analysis **Due: 23:59, 8 February 2021** 

1 6 points

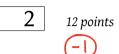
[folitf va de falowing sets va sawndz stejt wat alt<sup>h</sup>ik<sup>h</sup>juletoli p<sup>h</sup>lap<sup>h</sup>elri ol k<sup>h</sup>ambinejfen va p<sup>h</sup>lap<sup>h</sup>elri de sawndz in dæt list hæv in k<sup>h</sup>amen dæt now vdel sawnd in stændild emelik<sup>h</sup>en inlif felz]

- a) [b], [m] voiced, bilabial, Stop not net
- b) [i],[I],[i],[u],[v]

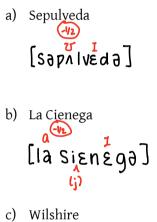
high

- c) [f], [θ], [s], [j]
  voiceless, fricative, non-glottal
- d) [υ],[ɔ],[ʌ]

back, lax



Using the IPA, please transcribe the following words as they are pronounced in the audio file **"midterm-audio.m4a"**. You must use the IPA transcription system for English that we developed in class.

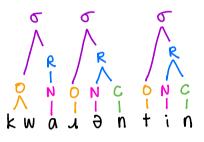


- c) Wilshire [wIlʃ÷ɹ]
- d) Centinela

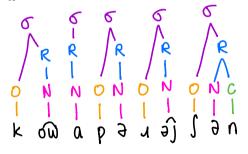
3 9 poi
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[pliz fow haw ðə sılæbıfıkejjən ælgəлðəm sılæbıfajz ðə falowin wendz juzin də tji nowtejjən]

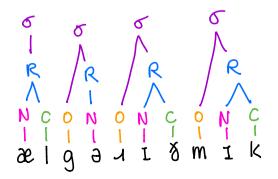
a) [kwaJəntin]



b) [kowapəaejjən]



c) [ælgəлðmık]

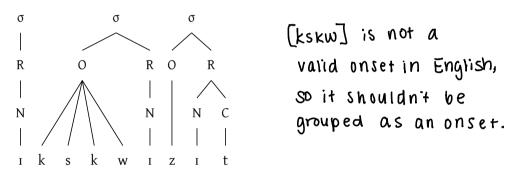


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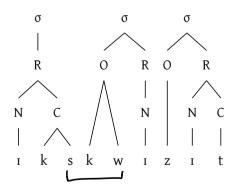


For most speakers of English, the word *exquisite* is syllabified as [ Ik.skw1.zIt ].

a) How does the syllabification algorithm explain why this word is not syllabified in the following way: [I.kskwI.zIt]? In other words, explain why the syllabification algorithm does not produce the following syllable structure (1–2 sentences)?



b) How does the syllabification algorithm explain why this word is not syllabified in the following way: [ iks.kwi.zit ]? In other words, explain why the syllabification algorithm does not produce the following syllable structure (1–2 sentences)?

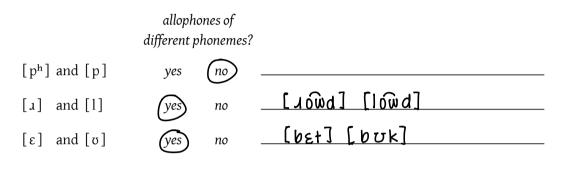


While [kw] is a valid onset in English, so is [Skw]. The algorithm says to group the largest Page 4 of 10 POSSible onset, so [skw] should be grouped instead of just [kw].

5

8 points

For each of the sound pairs below, please indicate whether they are allophones of different phonemes in English by circling "yes" if they are and "no" if they are not. If you circle "yes", please write on the line that follows a minimal pair that shows this. Write this minimal pair in IPA.



6 4 points

Consider the following German words.

[ kyçə ]	'kitchen'	[ mapə ]	'folder'	[gəlf]	'golf'
[ gʊs ]	'cast'	[asketı∫]	'ascetic'	[kysə]	'kisses'
[bakən]	'bake'	[∫tɛkdozə]	'outlet'	[fraw]	'woman'

a) The data contain a minimal pair. Please state this minimal pair.

b) What does this minimal pair allow you to conclude about phonemes in German (1-2 sentences)?

## [5] and [5] are allophones of different phonemes in German.



The following data are from Narnian, a language spoken in the mythical world of Narnia. The sounds [v] and [ $\beta$ ] are allophones of the same phoneme.

				V	β
[ риβи ]	'please'	[visi]	'chocolate chip'	0-i	<u> </u>
[terovit]	'tell'	[ kußɒ ]	'ice cream'	i /0	u_u u_v
[kivp]	'me'	[mukʉβɒ]	ʻis'	£_æ	4_₽ 4_₽
[tɛvæt]	'why'	[ møβy ]	'bright'	Ø _ æ	¢ _ y
[møvæ]	'mint'	[tove]	'green'	# _ j	φ
			-	0-e	

a) State a generalization about when [ v ] and [  $\beta$  ], respectively.

## [b] occurs between two rounded vowels; [v] appears elsewhere

b) What phoneme are [v] and  $[\beta]$  allophones of?

/v/

c) State a phonotactic constraint that prohibits the underlying form in the right environments. Write this constraint using IPA symbols.

d) Now state this constraint using articulatory features instead of IPA symbols. The constraint must be a single statement ("It is not possible to have ...") and must not involve disjunction ("X or Y").

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e) Based on this constraint, provide a rule that changes the underlying form in the right environments. Use IPA symbols in this rule.

f) Now formulate this rule using features instead of IPA symbols.

Let us consider two phonological rules in Fillorian, a language spoken in the mythical world of Fillory. The first rule changes  $/ \alpha / to [\alpha]$  if it occurs at the end of a word.

- (1) Rule 1: Change / æ / to [ a ] if it occurs word-finally.
- (2) Examples of rule 1:  $/powvæ / \rightarrow [powva]$  'cranberry'  $/fætræ / \rightarrow [fætra]$  'kiwi'

The second rule changes an oral stop into a fricative if it precedes a front vowel.

(3) Rule 2:

$$\begin{array}{c} \text{Change} \middle/ +\text{stop} \\ -\text{nasal} \middle/ \text{to} \left[ \begin{array}{c} -\text{stop} \\ +\text{fricative} \end{array} \right] \text{if it precedes} \left[ \begin{array}{c} +\text{vowel} \\ +\text{front} \end{array} \right]$$

$$/\operatorname{tupit}/ \rightarrow [\operatorname{tu}\phiit]$$
 'melon'  
 $/\operatorname{sowd}\alphali/ \rightarrow [\operatorname{sow}\delta\alphali]$  'lychee'

Against this background, the underlying form / topæ / becomes [ topα ] in Fillorian. It cannot be \*[ toφα ].

a) Based on the underlying form / topæ /, what is the result that is produced if Rule 1 applies first, followed by Rule 2? Show the output of each rule.

Underlying form:	/topæ/
Rule 1:	topa
Rule 2:	
Output:	[topa]

b) What happens if the two rules apply in the opposite order? Again, show the output of each rule.

Underlying form:	/ topæ /
Rule 2:	to¢æ
Rule 1:	toøa
Output:	*[toøa]

c) What is the relationship between the rules (no interaction, feeding or bleeding)? Briefly explain why (1–2 sentences).

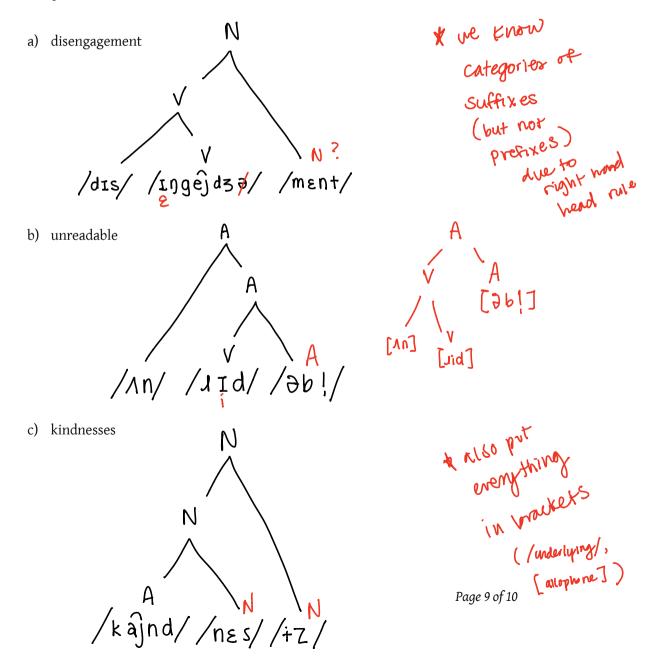
The relationship between the two rules is <u>bleeding</u> because rule 1 destroys the context for rule 2 to be applied by changing /ae/ to [a], preventing rule 2 from changing the oral stop in front of it to a fricative.

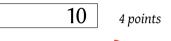
9 points

9

*(b)* ?.

Based on our set of morphological rules, please give the morphological structure(s) of the following words. If the morphological rules produce multiple structures, give all of them. Give all the grammatical-category labels that we can identify. Write the morphemes in IPA.





Consider the following compound words from Vietnamese.

(i)	máy 'machine' (N)	+	lạnh 'cold' (A)	$\rightarrow$	máy lạnh 'fridge' (N)
(ii)	bà 'grandma' (N)	+	ngoại 'maternal' (A)	$\rightarrow$	bà ngoại 'maternal grandma' (N)
(iii)	phòng 'room' (N)	+	ăn 'eat' (V)	$\rightarrow$	phòng ăn 'dining room' (N)
(iv)	bàn 'table' (N)	+	ăn 'eat' (V)	$\rightarrow$	bàn ăn 'dining table' (N)
(v)	máy 'machine' (N)	+	giặt 'wash' (V)	$\rightarrow$	máy giặt 'washing machine' (N)

Judging from these examples, what morphological regularity of English does not hold in Vietnamese? Briefly explain why (1–2 sentences). What holds instead in Vietnamese?

The morphological regularity in English that the category of the Compound is always the same as the category of the last Morpheme in the compound (A+N=N, V+N=N) dues not hold in Vietnamese. Instead, in Vietnamese it holds that the category of the compound is always the same as the category of the FIRST morpheme in the compound (N+A=N, N+V=N).

mention Page 10 of 10 left-hand head rule