

Answer each question/problem clearly and completely, and, of course, clearly.

①

Some eastern dialects of American English contain the diphthongs [ay] and [ʌy] in their phonetic inventory. Use the following data from one of these dialects of English to determine if these sounds are allophones of the same phoneme or separate phonemes in that dialect. Follow the steps of analysis outlined below to arrive at your conclusion.

(4 points)

- | | | | |
|------------|-------|-------------|-------|
| 1. [baɪt] | bite | 9. [fʌɪt] | fight |
| 2. [taɪm] | time | 10. [taɪ] | tie |
| 3. [baɪ] | buy | 11. [tʌɪp] | type |
| 4. [raɪd] | ride | 12. [raɪs] | rice |
| 5. [naɪnθ] | ninth | 13. [raɪz] | rise |
| 6. [faɪəl] | file | 14. [faɪər] | fire |
| 7. [raɪt] | write | 15. [laɪf] | life |
| 8. [baɪk] | bike | 16. [baɪd] | bide |

Are there any minimal pairs with respect to [ay] and [ʌy] ?

Describe the environment in which each sound appears.

Are the sounds in complementary or ^{contrastive} overlapping distribution?

Are the sounds allophones of the same phoneme, or are they of different phonemes?

If they are allophones of the same phoneme, what determines which allophone is used, and which allophone is the basic form (the one we should name the phoneme after)?

Based on your analysis of the data, which of the following pronunciations is/are phonologically possible in this dialect of English?

[kɹaɪm] [mʌɪl] [waɪl] [brayb] [kwaɪt] [səblaym]

2. Swahili (Bantu; East Africa) [ɔ o]

Are [ɔ] and [o] different phonemes or allophones of the same phoneme? If they are two different phonemes, give evidence for this; if they are allophones of the same phoneme, choose one as underlying and state the rule.

<u>Swahili form</u>	<u>English gloss</u>	<u>Swahili form</u>	<u>English gloss</u>
[ɲgɔma]	drum	[watoto]	children
[bɔmba]	pipe	[ndogo]	little
[ɔmba]	pray	[jogo]	rooster
[ɔna]	see	[soka]	ax
[ɔŋgeza]	increase	[okota]	pick up
[khɔndo]	sheep	[moja]	one
[karɔŋgo]	wash out		

③

Fijian

Determine whether [t], [d], and [ʰd] are allophones of the same phoneme or if they are in contrast as separate phonemes. If any are separate phonemes, give evidence for this; if you decide any are allophones of the same phoneme, choose one as underlying and give the rule. NOTES: 1. [ʰd] represents a prenasalized stop; i.e. a nasal is pronounced immediately before the stop, and the two together are a single sound unit (like affricates are). 2. All Fijian syllables end in a vowel.

4 points

<u>Fijian form</u>	<u>English gloss</u>	<u>Fijian form</u>	<u>English gloss</u>
[vi ⁿ di]	to spring up	[dina]	true
[ke ⁿ da]	we	[dalo]	taro plant
[tiko]	to stay	[vu ⁿ di]	plantain banana
[tutu]	grandfather	[ma ⁿ da]	first
[viti]	Fiji	[tina]	mother
[dovu]	sugarcane	[mata]	eye
[do ⁿ do]	to stretch out one's hand	[mokiti]	round
		[veve ⁿ du]	(a type of plant)

4

■ Korean alveolars

Korean is a language isolate (it has no existing linguistic relatives). Consider the data below and answer the following questions.

Note: [u] is a high back unrounded vowel. [ː] indicates that the preceding sound is long.

(6 points.)

[talda]	'sweet'	[ko:ri]	'distance'
[o:lmana]	'how much'	[noŋ]	'song'
[solhwa]	'legend'	[purida]	'to use'
[pulgogi]	'barbecued meat'	[saram]	'person'
[tal]	'moon'	[ɪrum]	'name'
[sul]	'wine'	[ku:rɪda]	'to draw'

- Are [l] and [r] in complementary distribution or contrastive distribution?
- Are [l] and [r] allophones of the same phoneme or different phonemes?
- If you believe they are allophones of the different phonemes, briefly explain why. If you believe they are allophones of the same phoneme, write a rule in ~~formal rule notation~~ *your own words* describing their distribution.

Now consider [l] and [r] in Spanish.

[prenda]	'jewel'	[ola]	'wave'
[eroiko]	'heroic'	[pleno]	'full'
[ora]	'(he/she) prays'	[selo]	'zeal'
[maroma]	'rope'	[kulero]	'lazy'
[sero]	'zero'		

- In Spanish, are [l] and [r] in complementary distribution or contrastive distribution?
- In Spanish, are [l] and [r] allophones of the same phoneme or different phonemes?
- If you believe they are allophones of the different phonemes, briefly explain why. If you believe they are allophones of the same phoneme, write a rule in ~~formal rule notation~~ *your own words* describing their distribution.