Phonology – HW2 Name: _____

Part I.

Consider the following data based on Chatino, a language of Mexico. This language contains voiced and voiceless vowels. (Voiceless vowels sound "whispery.") Voiceless vowels are indicated with a small circle under the vowel (like voiceless liquids and glides), e.g., [ḁ], [u̥]. The data have been modified to simplify this problem. Assume phonetic transcription. Consider [ʔ] to be a *voiceless glottal stop* (a consonant).

a)	kḁta	'you will bathe'	j)	siju	'juice'
b)	ki̥ʔ	'fire'	k)	sula	'open!'
c)	ku̥su̥ʔwa	'you will send'	l)	tije	'stomach'
d)	se̥ʔe	'place'	m)	laʔa	'side'
e)	ʃi̥ʔɪ	'sad'	n)	loʔo	'where'
f)	tḁʔa	'fiesta'	o)	ndiki	'you are burning'
g)	ti̥hi	'water'	p)	ŋguʃi	'tomato'
h)	tu̥ʔwa	'mouth'	q)	ki̥su	'avocado'
i)	kino	'sandal'	r)	hḁʔ	'grass mat'

1. For each of the following pairs of vowels, offer an analysis to support either separate phonemes or allophones of the same phoneme: [u̥] and [u]; [i̥] and [i]; [ḁ] and [a].

2. Knowing what we know about sounds behaving as a natural class, what can we suggest about [e̥] and [e]? Then, write a rule using prose that describes what is happening in this language with respect to these sounds (use natural classes if possible). Also, what articulatory process seems to be at work here? (That is, can we support our analysis in 1 with phonetic-based motivations?)

3. Now, support your above analysis in #1 by showing how another hypothesis is less elegant. (Try to offer another analysis of the data and demonstrate why it is a less-supportable analysis than in #1.) Remember that analyses should be elegant, which means as simple as possible but including all the necessary information to account for the data.

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4. Write the Chatino **phonemic** forms (Underlying Representation) for the following:

a) [ʃi̥ʔɪ] 'sad' _____

b) [tu̥ʔwa] 'mouth' _____

c) [laʔa] 'side' _____

d) [ndiki] 'you are burning' _____

5. Write the Chatino **phonetic** form (Phonetic/Surface Representation) for the following:

/ʃaketudi/ _____

Part II.

Consider the following data based on Greek. The data have been modified to simplify this problem. Assume phonetic transcription.

a)	kano	'do	f)	kufeta	'bonbons'
b)	xali	'plight'	g)	xrima	'money'
c)	xori	'dances'	h)	xano	'lose'
d)	krima	'shame'	i)	kali	'charms'
e)	xufta	'handful'	j)	kori	'daughter'

1. Can you identify any phonemes in the language? If so, what are they and provide support for your answer. If not, explain why not.

The following data are from Sindhi (spoken in India and Pakistan).

	Sindhi	**Gloss**		**Sindhi**	**Gloss**
1.	[pənu]	leaf	7.	[təru]	bottom
2.	[vəd͡ʒu]	opportunity	8.	[kʰəto]	sour
3.	[ʃeki]	suspicious	9.	[bəd͡ʒu]	run
4.	[gədo]	dull	10.	[bənu]	forest
5.	[dəru]	door	11.	[bət͡ʃu]	be safe
6.	[pʰənu]	snake hood	12.	[d͡ʒəd͡ʒu]	judge

2. Can you identify any phonemes in the language? If so, what are they and provide support for your answer. If not, explain why not.

3. Thinking about Sindhi phonology regarding voiceless stops, how does it compare to the phonology of English regarding voiceless stops? Remember, phonology has to do with what sounds are produced in a language as well as how they are organized.