

Problem Set #4

I. GERMAN (Revisited!)

	German Spelling	IPA	Gloss
a.	siech	zi:ç	<i>sickly</i>
	ich	ɪç	<i>I</i>
	Pech	pɛç	<i>bad luck</i>
	euch	ɔʏç	<i>you (fam. pl. acc./dat.)</i>
	reich	raɪç	<i>rich</i>
	Büchlein	by:çlɛɪn	<i>booklet</i>
	Wöchnerin	vœçnɛrɪn	<i>maternity case</i>
	höchlich	høçliç	<i>highly</i>

b.	Buch	bu:x	<i>book</i>
	Spruch	ʃpru:x	<i>saying</i>
	Koch	kɔ:x	<i>cook</i>
	hoch	ho:x	<i>high</i>
	Hauch	haʊ:x	<i>breath</i>
	nach	na:x	<i>after</i>
	Bach	bax	<i>brook</i>

1) (2 points) What 2 sounds are in complementary distribution? Please provide support for your answer. (Hint: they're both voiceless fricatives and we've worked with them before).

2.) (2 points) From these data, is it possible to identify which one is the underlying phoneme? Why or why not?

Now consider these forms:

	German Spelling	IPA	Gloss
c.	solch	zɔlç	<i>such a</i>
	manch	manç	<i>many</i>
	durch	durç	<i>through</i>
	Dolche	dɔlç	<i>daggers</i>
	mancher	mançər	<i>many a (masc.)</i>
	schnarchen	ʃnarçən	<i>to snore</i>

d.	Chernie	çemi:	<i>chemistry</i>
	Chirurg	çirurk	<i>surgeon</i>
	Cholesterin	çolesterin	<i>cholesterol</i>
	Charisma	çarisma	<i>charisma</i>

3) (2 points) How do the examples in (c) and (d) affect your hypothesis? That is, can you now answer question 2 above?

4) (10 points) Provide a rule to encapsulate the alternation and state which form you now think is the underlying form (support your analysis). Include an alternative analysis and show why the one you select as correct is the best analysis possible.

Now consider these data below. In the morphological data column, “+” equal a morpheme boundary.

	German Spelling	IPA	Gloss	Morphological Info
e.	Kuchen	ku:xən	<i>cake</i>	
	tauchen	tauxən	<i>to dive</i>	(tauch+en)
	pfauchen	pf̥auxən	<i>to hiss</i>	(pfauch+en)
	Kuhchen	ku:çən	<i>little cow</i>	(Kuh+chen)
	Tauchen	tauçən	<i>little rope</i>	(Tau+chen)
	Pfauchen	pf̥auçən	<i>little peacock</i>	(Pfau+chen)

5) (2 points) Do these forms indicate that your claim in 4 above is accurate? Why or why not? That is, how are these data problematic for your analysis above? (The forms in parenthesis represent the morphological boundaries with a +).

6) (2 points) What is the crucial difference in the position of the relevant sounds in the data in (e) above?

7) (10 points) Revise your account to take into consideration these data using what we learned with respect to phonological domains or boundaries. Include in your analysis an argument for or against the claim that these 2 sounds are separate phonemes or that they are allophones of 1 phoneme (a discussion of neutralization may be useful for some accounts as well as mention of pseudo minimal pairs). Provide derivations (use at least 4 examples).