

LING 313.02 – Problem Set 3

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Notation: [ɯ], [ɔ], [ɑ] are the fronted allophones of /u/, /o/, /a/. \$ = syllable boundary, # = word boundary.

Exercise 1: Vowel allophones

Each pair below contains two allophones of the same phoneme. Transcribe the bold vowel in each word and state the environment that conditions the difference.

Pair	Vowel 1	Vowel 2	Conditioning environment
a. ben / beni			
b. sol / ot			
c. kabul / sulak			
d. kâr / kar			

Exercise 2: Phonotactics

(a) Final consonant clusters

Classify each final cluster as sonorant + obstruent (S+O), obstruent + obstruent (O+O) or sonorant + sonorant (S+S). Then state whether it is an exception to either voicing tendency: (i) the first consonant is voiced, (ii) the second consonant is voiceless.

Word	Cluster	Type	Exception to (i) or (ii)?
zevk			
aşk			
çift			
şarj			
derz			
form			

Where would you place *aks*, *boks* and *raks*?

(b) Initial consonant clusters

Turkish does not allow initial clusters in pronunciation. Give the epenthetic vowel for each word and the rule that selects it.

Word	Pronunciation	Rule
kravat		
klima		
plan		
Brezilya		
trafik		
tribün		

Compare *spor* and *ıspanak*. How is the cluster broken up in each case?

Exercise 3: Long vowels

(a) The status of *ğ*

Complete the table. Which words does *bağ* pattern with, and what does this show?

	<i>ada</i>	<i>bina</i>	<i>çay</i>	<i>bağ</i>
3sg possessive	adası	binası	çayı	_____
accusative	adayı	binayı	_____	_____

(b) Vowel shortening

	Nominative	Accusative	Locative
<i>zemin</i>	[zemin]	[zemi:ni]	[zeminde]
<i>yasemin</i>	[ja:semin]	[ja:semini]	[ja:seminde]

- Why can a rule that lengthens the root-final vowel before a vowel-initial suffix not account for these data?
- Propose an alternative and give the underlying forms of *zemin* and *yasemin*.
- Explain the vowel length in *kabul et!* [k^habu:let^h] and *kabuller* [k^habulleɾ].

Exercise 4: Underlying and phonetic representations

Give the underlying and phonetic representation of each word, and list the rules involved. Consider only the rules from Weeks 4–5.

Word	Underlying Rep.	Phonetic Rep.	Rules involved
<i>zaman</i>			
<i>zamanı</i>			
<i>kabul</i>			
<i>öğlen</i>			
<i>düğme</i>			
<i>soğuk</i>			

Exercise 5: True or False

- There are no initial consonant clusters in Turkish pronunciation.

T / F

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2. In *krem*, the epenthetic vowel is front because the vowel of the word is front. T / F
 3. The second consonant of a final cluster is always voiceless. T / F
 4. [e] and [ɛ] are separate phonemes in Turkish. T / F
 5. According to Lees (1961), [ø:] in *öğlen* is a phonemic long vowel. T / F
 6. Under Analysis 1, Turkish has 16 vowel phonemes. T / F
 7. *saman* has an underlying long vowel in its final syllable. T / F