

**Introduction to Phonology**  
**LSA Summer Institute 2019**  
**Instructor: Laura J. Downing**

**Assignment 4:** Comparing analyses

**The assignment is a partially an at-home assignment and partially to be finished in class and submitted, individually, at the end of class.**

For this assignment, please go through the assignment carefully before the class on 19 June and bring notes. I will split the class into 4 groups, and each group will be in charge of one section of the assignment. You will be given class time to decide on a group response to your question and then present it to the class. We'll aim to leave time for a general discussion at the end of the class.

**Please create a pdf of your group's response to the question** you are in charge of and upload it by the end of the class on the 19th. Everyone who shows they have come to class prepared and who uploads their group's response by the end of class will get a score of 90. (You need to upload individually.) If you are not sure you will be able to upload your group's response by the end of class, please email me ahead of time or tell me in class.

**1- Turkish** yet again. In Assignment 3, you were asked to analyse a  $v \sim \emptyset$  alternation and an alternation in vowel length and to show the role of constraints on well-formed syllable structure in accounting for these processes.

<u>Nominative</u>	<u>Possessive</u>	<u>Nominative pl.</u>	<u>Gloss</u>
kojun	kojunu	kojunlar	sheep
deniz	denizi	denizler	sea
kap	kabı	kaplar	container
tat	tadı	tatlar	taste
kojun	kojnu	kojunlar	chest
ymyr	ymry	ymyrler	life
fikir	fikri	fikirler	idea
kısım	kısım	kısımlar	part
kira:	kira:sı	kira:lar	rent
ma:zi:	ma:zi:si	ma:zi:ler	past
merak	mera:kı	meraklar	curiosity
hukuk	huku:ku	hukuklar	law
sevap	seva:bı	sevaplar	good deed

**1a- an OT account**

As discussed in the textbook and in class, Optimality Theory formalizes constraints and accounts for their role in particular languages by constraint ranking. The constraints relevant for these two Turkish alternations (see, too Zsiga’s discussion, pp 322-324) are:

\* $\mu\mu\mu$ : Syllables are maximally bimoraic.

\*COMPLEX: Onset and coda can only contain one consonant.

WEIGHT-BY-POSITION: coda consonants are moraic.

MAX: all segments in the input must surface in the output. = do not delete segments. **NOTE:** this constraint does not penalize deleting a mora as long as the segment is not deleted.

DEP: all segments in the output must be present in the input. = do not insert segments.

**How must these constraints be ranked to account for the Turkish data?**

I provide partially filled in tableaux below. Your task is to rank the constraints and put in asterisks, indicating violations, in the relevant cells. (We are ignoring vowel harmony for these tableaux.)

/fikrler/					
☞ a. fikirler					
b. fikrler					
c. fikler					

/mera:klar/					
☞ a. meraklar					
b. mera:klar					
c. mera:lar					
d. mera:kilar					

**1b- What was the non-OT** account of the data developed in Assignment 3? What aspects of that account are autosegmental? What aspects preview OT? What is one advantage and one disadvantage of the OT account as presented in these tableaux compared to the account in Assignment 3?

2. **Bukusu** again. In Bukusu (and in Zoque, Assignment 2), a nasal-consonant sequence triggers phonological processes. We will concentrate on two: place assimilation of nasals to a following consonant and deletion of the nasal preceding a fricative.

The relevant Bukusu data is repeated here from the first class handout for convenience:

[ndi:la]	'I hold'	[ndʒina]	'I scream'
[se:nda]	'I move'	[suna]	'I jump'
[ndʒu:ŋga]	'I watch'	[xala]	'I cut'
[ŋgapa]	'I divide'	[ŋgeta]	'I pour'
[mbi:ma]	'I weigh'	[ndasa]	'I add'
[xola]	'I do'	[mbula]	'I roam'
[mbuka]	'I perish'	[ndula]	'I trample'
[fuka]	'I cook'	[fwa:ra]	'I dress'
[funa]	'I break'	[mbala]	'I count'

**2a- an OT account.** Assume the following constraints. (See Zsiga's textbook, pp 316-318, 326 for discussion of these constraints.)

AGREE-NASAL-PLACE: an NC sequence must agree in Place features.

IDENT-PLACE: the input and output place features for a segment must be identical.

ID-PLACE-ONSET: The input and output place features for a segment in Onset must be identical

\*NS: a nasal-fricative sequence is ill-formed.

IDENT-CONTINUANT: the input and output specification for [continuant] must be identical.

MAX: input segments must occur in the output. = do not delete segments.

**How must these constraints be ranked to account for the Bukusu data?**

I provide partially filled in tableaux below. Your task is to rank the constraints and put in asterisks, indicating violations, in the relevant cells.

/N-bi:ma/						
☞ a. m-bi:ma						
b. n-bi:ma						
c. bi:ma						

/N-xala/						
☞ a. xala						
b. ŋ-xala						
c. n-xala						
d. mera:kilar						

**2b- an autosegmental account.** From your class notes, what is the autosegmental account of these two processes? What aspects preview OT? What is one advantage and one disadvantage of the OT account as presented in these tableaux compared to the autosegmental account discussed in class?