

Problem Set #6: Sonority Distance in Ancient Greek Onset Clusters

Due Monday, April 15

Or: Submit rough draft by Friday, April 12, and final draft by Wednesday, April 17

As we saw in class (see online handout from April 8), languages that allow onset clusters do not necessarily allow just any two consonants to form a cluster. Most languages impose the Sonority Sequencing Principle on clusters, and some languages also impose a Minimal Sonority Distance requirement as well.

- **Sonority Sequencing Principle** (goes back to work by Sievers and Jespersen in the late 19th and early 20th centuries; see also Hooper 1976, Selkirk 1984, Clements 1990, etc.)

Sonority is highest at the syllable peak and becomes progressively lower toward the syllable margins

- **Minimal Sonority Distance Principle** (Selkirk 1984; Clements 1990, etc.)

The members of a cluster must be d distance apart on the sonority scale (where d is determined on a language-particular basis)

We also saw in class discussion that Zec's initial sonority scale, $O < N < L < V$, isn't fine-grained enough to account for sonority-related phenomena in all languages (as Zec herself points out). Many languages need to divide the sonority scale into further steps; for example, a distinction is made between high and low vowels in IT Berber (see online handout from April 8 class).

In this problem set, your job is to develop a sonority -based account of possible onset clusters in Ancient Greek. (That is, assume that all impossible clusters are forbidden on the basis of sonority and not for other reasons.) The data you will use for this problem are given below.

Specifically, your write-up should address the following questions and should (as always) provide *explicit evidence*, with reference to relevant data, for each claim that you make.

- What are the steps of the sonority scale that we need to distinguish for Ancient Greek? (Is $O < N < L < V$ specific enough, or do we need to divide some of these levels?)
- Do Ancient Greek onset ("type (a)") clusters obey the Sonority Sequencing Principle?
- Is there a Minimal Sonority Distance in effect for onset ("type (a)") clusters in Ancient Greek? If so, how many steps apart on the sonority scale do the members of an onset cluster need to be?

Hint: Some linguists have proposed that the steps of the sonority scale are not always evenly spaced — there may be "gaps" between certain levels.

The data

Note: a macron (line) over a vowel indicates that the vowel is long.

In Problem Set #1, it was determined that the word-initial consonants in (1a) and the underlined word-internal consonants in (2a) are syllabified as onset clusters (these were referred to as "type (a) clusters"). However, the word-initial consonants in (1b) and the underlined word-medial consonants in (2b) (called "type (b) clusters" in Problem Set #1) are not syllabified as "real" onset clusters — basically, a special rule allows "extra" unsyllabified consonants word-initially, producing apparent cases of type (b) clusters at the beginning of words, and type (b) clusters are always split up into coda+onset word medially.

(1) Word-initial consonants

Actual onset clusters

(a) krāsis	‘mixture’
kleptō	‘to steal’
k ^h lōros	‘green’
kneph ^h as	‘darkness’
k ^h noē	‘joint’
k ^h reos	‘debt’
grap ^h ō	‘write’
tmetos	‘cut’
t ^h nēsko	‘to die’
tlaō	‘to endure’
t ^h lao	‘crush’
t ^h riks	‘hair’
trepo	‘turn’
drūs	‘oak’
prassō	‘achieve’
p ^h rēn	‘heart’
plekō	‘weave’
p ^h legō	‘burn’
pneō	‘to breathe’
brotos	‘mortal’

Not allowed as "real" onset clusters

(b) gnōmē	‘judgment’
dnop ^h os	‘darkness’
glukus	‘sweet’
mnemon	‘mindful’
smēk ^h ō	‘to wipe clean’
skaptō	‘to dig’
spanios	‘rare’
stadion	‘race-course’
psauō	‘to touch’
p ^h t ^h ērō	‘destroy’
ptuttō	‘to spit’
zdugon	‘yoke’
zbennumi	‘quench’
ksenos	‘stranger’
k ^h t ^h es	‘yesterday’
ktēnō	‘to kill’
blabō	‘harm’
bdeluros	‘disgusting’

(2) Word-internal consonants

Actual onset clusters

(a) mi. <u>k</u> ron	‘small’
pa. <u>t</u> ri	‘father’
kata. <u>k</u> lausantes	‘crying’
Oia. <u>g</u> ros	<i>name</i>

Not allowed as onset clusters

(b) ok. <u>t</u> ō	‘eight’
skep. <u>s</u> is	‘consideration’
des. <u>m</u> os	‘fitting’
hag. <u>n</u> os	‘holy’
ked. <u>n</u> os	‘careful’
Agamem. <u>n</u> on	<i>name</i>
hes. <u>p</u> era	‘evening’