

# Distributions and generalizations

## Phonology I

### Week 2

#### Goals

- Practice **assembling distributions** for sounds by analyzing local environments
- Practice **looking for generalizations** in the distributions of sounds
- Think about whether particular distributions are **phonetically sensible**

## 1 Problem set: Chatino

Chatino is an Otomanguean language spoken in Oaxaca, Mexico and by diaspora communities throughout Mexico and the US. There are, in fact, several Chatino languages which have varying levels of mutual intelligibility. There are about 45,000 speakers of Chatino languages.

(1)

a.	[ti'jeʔ]	'lime'	g.	[ti'hi]	'hard'
b.	[ki'no]	'sandal'	h.	[ki'su]	'avocado'
c.	[su'wi]	'clean'	i.	[suʔ'wa]	'you send'
d.	[la'ʔa]	'side'	j.	[taʔa]	'fiesta'
e.	[ngu'ta]	'seed'	k.	[ku'ta]	'you will give'
f.	['kit]	'fire'	l.	[ki'ta]	'you will wait'

- Write out the environments in which [i] and [i̯] appear.

- Are [i] and [i̥] in complementary or contrastive distribution?
- Do the same as above for [a] and [ḁ] and for [u] and [u̥].
- Write a generalization that captures the distributions of [i] and [i̥], [a] and [ḁ], and [u] and [u̥].

## 2 Problem set: Finnish

Finnish is a Finno-Ugric language spoken by approximately 6 million people in Finland and neighboring countries.

(2)

[ku:zi]	‘six’	[li:sa]	‘Lisa’	[kadot]	‘failures’
[madon]	‘of a worm’	[kate]	‘cover’	[li:za]	‘Lisa’
[maton]	‘of a rug’	[katot]	‘roofs’	[radan]	‘of a track’
[ratas]	‘wheel’	[ku:si]	‘six’		

- Examine the pairs of sounds [t] and [d]. Are [t] and [d] contrastive in Finnish? Support your answer by listing the local environments of these sounds.

- Examine the pairs of sounds [s] and [z]. Are [s] and [z] contrastive in Finnish? Again, support your answer with a list of their local environments.

### 3 Problem set: Modern Greek

Modern Greek is an Indo-European language spoken by about 12 million people in Greece and neighboring countries.

(3)

a.	[kano]	‘do’	b.	[kori]	‘daughter’
c.	[xano]	‘lose’	d.	[xori]	‘dances’
e.	[x <sup>j</sup> ino]	‘pour’	f.	[k <sup>j</sup> ino]	‘move’
g.	[krima]	‘shame’	h.	[xrima]	‘money’
i.	[xufta]	‘handful’	j.	[kufeta]	‘bonbons’
k.	[kali]	‘charms’	l.	[xali]	‘plight’
m.	[x <sup>j</sup> eli]	‘eel’	n.	[k <sup>j</sup> eri]	‘candle’
o.	[x <sup>j</sup> eri]	‘hand’	p.	[ox <sup>j</sup> i]	‘no’

- Are [k] and [x] contrastive? Write out the environments for [k] and [x]. Can they occur in the same environments? Are there minimal pairs?

- Are [k<sup>j</sup>] and [x<sup>j</sup>] contrastive? Do the same as above.

- Are [k] and [k<sup>j</sup>] contrastive? Do the same as above.

- Are  $[x]$  and  $[x^j]$  contrastive? Do the same as above.