

## Assignment Four

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Linguistics 201

1

Each list below contains sounds that are members of a natural class and one sound that does not belong to that natural class. Find one feature that all the phones of the natural class share and name the phone that is left out. (There may be more than one solution — you need give only one.) So, for example, if the sounds are [t, d, g, b, m], one answer would be: the natural class is made up of phones that are [+voice] and the phone that doesn't belong is [t].

- (1) [p, k, g, b, s, v, n, t, ʃ, ɹ]
- (2) [f, g, n, p, d, m, k, ŋ]
- (3) [o, æ, ɪ, i, e, u]
- (4) [s, ʃ, m, p, f, v, n]
- (5) [p, f, s, v, m, w, ʃ, n, t, j]

2

Consider the following Finnish words.

[kuuzi]	six
[kadot]	failures
[kate]	cover
[liisa]	Lisa
[maton]	of a rug
[kade]	envious
[ˌɹatas]	wheel
[kuusi]	sixty
[ˌɹadan]	of a track

([VV] represents a long vowel.) Compare the non-nasal voiceless alveolar stop (that is:

$$\left[ \begin{array}{l} -\text{continuant} \\ +\text{coronal} \\ +\text{anterior} \\ -\text{voice} \\ -\text{nasal} \end{array} \right]$$

with the non-nasal voiced alveolar stop (that is:

$$\left[ \begin{array}{l} -\text{continuant} \\ +\text{coronal} \\ +\text{anterior} \\ +\text{voice} \\ -\text{nasal} \end{array} \right]$$

). Are these allophones of the

same phoneme or instances of different phonemes? If you decide that they are allophones, give the phonological rule using features that determines their distribution. If you decide that they are phonemes, explain why.

2

There is a rule in English that devoices [ɹ]. An unvoiced [ɹ̥] is represented in the IPA with a little circle written under it, as in: [ɹ̥]. Based on the following distribution of words, come up with the rule that does this, and express it in terms of phonological features.

[spɹaʊt]	'sprout'	[spɹaɪt]	'sprite'
[ɛɹoʊɹ]	'error'	[bɹaɪt]	'bright'
[k <sup>h</sup> ɹaɪ]	'cry'	[k <sup>h</sup> ɹeɪjən]	'crayon'
[fɹaɪt]	'fright'	[t <sup>h</sup> ɹɪp]	'trip'
[gɹaɪm]	'grime'	[p <sup>h</sup> ɹeɪ]	'prey'
[fɹɪɪm]	'from'	[skɹætʃ]	'skratch'
[spɹeɪ]	'spray'	[bɹoʊ]	'borrow'
[stɹɪp]	'strip'	[dɹɪjɪj]	'dreary'

(NOTE: The feature chart I handed out does not include the feature [+aspirated], but if it were more complete, it would. The sounds that are aspirated are [+aspirated] and those which aren't are [-aspirated].)

The following are words from the Portuguese spoken in Brazil.

[tenu]	'I have'
[tal]	'such'
[natu]	'born'
[kuat.ru]	'four'
[uta.ɾ]	'to anoint'
[ʃivi]	'I had'
[ʃiu]	'uncle'
[patʃina.ɾ]	'to skate'
[pa.ʃi]	'party'
[peʃi]	'comb'
[dadu]	'given'
[mad.i.ɾina]	'godmother'
[mode.ɾnu]	'modern'
[unidu]	'united'
[gwa.ɾda]	'guard'
[dʒinei.ru]	'money'
[oɖiu]	'hatred'
[vɛ.ɾɖi]	'green'
[vɛ.ɾdaɖi]	'truth'
[gɾaɖi]	'big'

Compare [t]/[d] to [ʃ]/[ɖ]. Are these phonemes or allophones? If allophones, give the rule, in terms of phonological features, that controls their distribution.