

*Natural classes* are classes of sounds which can be characterized by a set of features no larger than the number of sounds in the class. In English, the class of sounds {f θ s ʃ h}, for instance, is a natural class because its members can be described exclusively with fewer than five features: [-sonorant, -voice, +continuant] characterizes these sounds and excludes all other English sounds. But the set {a v ɪ ð j}, while all [+voice], needs many more features and disjunctive sets of features to distinguish it from all others:

[+syll +low]	for /a/
[-son, +cont, + voice, + ant, Labial]	for /v/
[-son, +cont, + voice, + ant, [Coronal]	for /ð/
[+son, -nas, -lat, [Coronal]	for /ɪ/
[+son, -back, [Coronal]	for /j/

As you can see, not one of these sounds can be considered as forming a natural class with any of the others in the group. We would therefore not expect them to *act* as a group either—to undergo similar processes or to have similar effects on other sounds. And in fact they don't.

Now consider some more groups of English. Which of the following groups is more natural?

1	i ɪ e ε æ	i k l f ɹ
2	i ɪ e ε æ ʌ	u ʊ o ɔ ɑ
3	p t k s	f θ s ʃ
4	i u j w	i ɪ u ʊ j w
5	d ð z	ɹ l j w
6	ʃ ʒ k g	ð z ʒ
7	ð z ʒ	v ð z

Each of the following sets of sounds includes one member which is not like the others and doesn't belong there. Pick it out.

Example: p t k (s) all the others are \_\_\_\_\_ stops.

b d ð z ʃ ʒ g all the others are \_\_\_\_\_.

i u ʊ o ɔ w all the others are \_\_\_\_\_.

æ ʌ ə ɒ all the others are \_\_\_\_\_.

ɹ l m g w all the others are \_\_\_\_\_.

p b m f v all the others are \_\_\_\_\_.

p b m f v t all the others are \_\_\_\_\_.

Write the features that the following classes have in common, excluding all other English phonemes:

Example: p t k f θ s ʃ [-son, +cons, -voice]

b d g v ð z ʒ \_\_\_\_\_

i ɪ u ʊ \_\_\_\_\_

e ε o ɔ \_\_\_\_\_

ɹ l w j \_\_\_\_\_

θ ð t d s z ʃ ʒ \_\_\_\_\_