

Week 2 quiz

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Here is a phoneme inventory for an imaginary language:

p			t	k	i	y	u
b			d	g	e	ø	o
	f	θ	s	x	ɛ	œ	ɔ
	x	ð	z		æ		ɒ
m			n	ŋ			

1. What is the set of phonemes above that are [+ sonorant, - approximant, - labial] ?

✓ n ŋ

2. Write the narrowest feature matrix which picks out {f, θ, x} from inventory above.

- | $\left[\begin{array}{l} + \text{continuant} \\ + \text{delayed release} \\ - \text{voice} \end{array} \right]$ You need [-strident] to exclude /s/

3. Combine these two rules into a single rule, using features (assume the same phoneme inventory above)

$\emptyset \rightarrow y / _ \{s, z\}$ $e \rightarrow i / _ \{s, z\}$

-0.5 $\left[\begin{array}{l} - \text{high} \\ + \text{tense} \\ + \text{front} \end{array} \right] \rightarrow \left[+ \text{high} \right] / \left[\begin{array}{l} + \text{continuant} \\ + \text{delayed release} \\ + \text{coronal} \\ - \text{distributed} \end{array} \right]$ to exclude /θ, ð/

When you write your rule, you should be able to make sure that you don't predict:

$o \rightarrow u / _ \{s, z\}$

4. Write the following rule as a sentence: /s, z/ → [t] / _ #

You just needed to write a sentence

✓ $\left[\begin{array}{l} + \text{continuant} \\ + \text{delayed release} \\ + \text{coronal} \end{array} \right] \rightarrow \left[\begin{array}{l} - \text{strident} \\ - \text{delayed release} \\ - \text{continuant} \\ - \text{voice} \end{array} \right] / _ \#$ word. ← this is more than that.

5. Write the following sentence as a rule: voiceless stops become voiced after nasals.

✓ $\left[\begin{array}{l} - \text{continuant} \\ - \text{voice} \\ - \text{delayed release} \end{array} \right] \rightarrow \left[+ \text{voice} \right] / \left[+ \text{nasal} \right] _$