

1

Give a narrow transcription of the following passage as it is produced in casual speech. (Do not indicate where syllable boundaries are.)

Syntax is the study of the principles and processes by which sentences are constructed in particular languages. Syntactic investigation of a given language has as its goal the construction of a grammar that can be viewed as a device of some sort for producing the sentences of the language under analysis. More generally, linguists must be concerned with the problem of determining the fundamental underlying properties of successful grammars. The ultimate outcome of these investigations should be a theory of linguistic structure in which the descriptive devices utilized in particular grammars are presented and studied abstractly, with no specific reference to particular languages. One function of this theory is to provide a general method for selecting a grammar for each language, given a corpus of sentences of this language.

Noam Chomsky, *Syntactic Structures*, Mouton, 1957, p. 11.

2

Transcribe the following words, and break them into syllables (using the “tree” notation we have used in class). If necessary, ask a native English speaker to pronounce these words for you.

- a. redundant
- b. absolute
- c. mixtures
- d. templatic

3

In this question, I want you to discover something about the phonotactic constraints that limit codas in English. If you are a native speaker of English, then you should rely on your grammaticality judgements about English words. If you're not a native speaker, you may have to consult with one.

Your job is to find all of the two-phone sequences that make a grammatical coda, where one of those two phones is [p], [b], [t], [d], [k] or [g] (i.e., the non-nasal stops of English, ignoring [ʔ]). The other phone should be one of the stops or fricatives of English. (Ignore the affricates, and also ignore [ʔ].) So, in other words, determine which fricatives and stops can follow or precede [p] in a grammatical coda. And then do the same thing for [b], and so on. When possible, illustrate with an English one-syllable word. So, for example, the word *cusp* [kʌsp] illustrates that the sequence [sp] is a legitimate coda. By contrast, [pn] does not make a grammatical coda in English. Not only is there no syllable that ends with this sequence of sounds, made-up syllables of this sort sound distinctly non-English (witness: *[kʌpn]).

There are many possible combinations to consider. To give you a feel for what's involved, here are all the two-phone sequences that need to be checked where one of them is [p]: [pp], [bp], [pb], [mp], [pm], [tp], [pt], [dp], [pd], [np], [pn], [kp], [pk], [gp], [pg], [ɲp], [pɲ], [fp], [pf], [vp], [pv], [θp], [pθ], [ðp], [pð], [sp], [ps], [zp], [pz], [ʃp], [pʃ], [ʒp], [pʒ]. So that's 33 possible combinations to consider, where one of the phones is [p]. There will be another set of 31 for [b] (31 rather than 33 because [pb] and [bp] are included already in the possible combinations involving [p]). And so on for the others. You might find the chart below helpful in finding all the relevant pairs. ("X" marks where combinations are duplicated.)

	p		b		t		d		k		g	
	before	after	before	after	before	after	before	after	before	after	before	after
p		X										
b	X	X		X								
m												
t	X	X	X	X		X						
d	X	X	X	X	X	X		X				
n		bad										
k	X	X	X	X	X	X	X	X		X		
g	X	X	X	X	X	X	X	X	X	X		X
ŋ												
f												
v												
θ												
ð												
s	✓ [kʌsp]											
z												
ʃ												
ʒ												