

Prince & Smolensky 1993¹ excerpt study questions

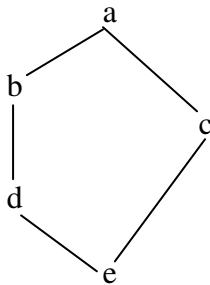
Due Thurs., Oct. 16

- Read pp. 1-7, skim pp. 9-22—if you are new to OT, pay attention to the explanations of the tableaux on pp. 18-20—then read pp. 23-38.

Notes

p. 2: By ‘analysis’ here, P&S mean something like ‘potential surface form (output) of the underlying form (input) in question’.

p. 3: By the way, requiring the grammar to impose a stratified ordering on candidate analyses (for any pair, either they have the same harmony or you know which is more harmonic) is not a logical necessity. Consider the following Hasse diagram of candidate harmony according to some hypothetical constraint set:



p. 4: (2) illustrates two functions. In words: ‘The function Gen applied to an input In_k [the underlying form] produces the set of candidate outputs $\{Out_1, Out_2, \dots\}$, where each output contains information telling you what the input was. The function H-eval applied to that set of candidates produces a single output, Out_{real} [the actual surface form—though more generally, this could be a set of tied winners].’

You may worry about how H-eval can possibly deal with an infinite set of candidates. Most computational proposals for dealing with infinite candidate sets manipulate regular expressions (like ab^*a , the set of all strings consisting of an a followed by zero or more b s followed by an a), which are themselves finite but can represent infinite sets.

Don’t worry too much for now about the idea, known retrospectively as *containment*, that all the structure of the input is retained (even if not pronounced) in each output—it was abandoned soon after by most OT phonologists in favor of a different way of encoding the input-output relationship (McCarthy & Prince’s correspondence theory).

p. 12: ‘Margin’ here means a syllable onset or coda—i.e., whatever is not the nucleus.

¹ Prince, Alan & Paul Smolensky (1993 [2002]). *Optimality Theory: constraint interaction in generative grammar*. RuCCS-TR-2 and CU-CS-696-93 [ROA 537-0802]. Published 2004 by Blackwell.

