

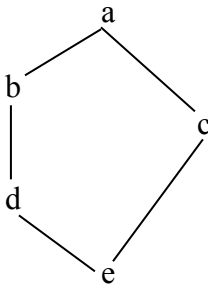
Prince & Smolensky 1993¹ excerpt study questions

- Read pp. 4-6, 11-21, 107-126; consult tableaux in 127-135 for any forms whose analysis you want to see in detail. I have some old notes on other pages that I'm leaving in, in case you end up reading more.

Notes

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

p. 3: Requiring the grammar to impose a stratified ordering on candidate analyses (for any pair, either they have the same harmony² or you know which is more harmonic) is not a logical necessity. Consider the following non-stratified 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].’

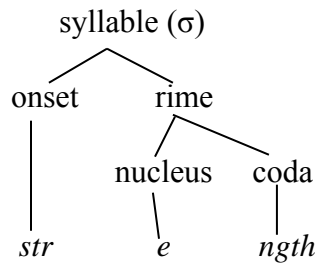
You may worry about how H-eval can possibly deal with an infinite set of candidates. Most computational proposals for dealing with infinite candidate sets manipulate regular expressions (like ab^*a , the set of all strings consisting of an a followed by zero or more b s followed by an a), which are themselves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

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

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.

² By “ i and j have the same harmony” I mean that anything more harmonic than i is also more harmonic than j , and anything less harmonic than i is also less harmonic than j .



p. 24: Containment theory again: the idea that an epenthetic segment is just an empty segment slot, and it's up to a post-phonology component to decide how to pronounce it, has also largely been abandoned. Most OT phonologists now assume that the candidate set for /al-qalam+u/ includes also *[talqalamu], *[palqalamu], etc., and that it is up to the grammar to select [ʔalqalamu] as optimal.

p. 25: For those of you who already know OT, **FILL** is roughly today's DEP ("don't insert"). And **PARSE** (appears later in the paper) is roughly today's MAX ("don't delete").

p. 30: By '**coalescence**', I think P&S mean putting a long vowel in a single syllable.

p. 34: The claim about Austronesian infixes always being VC (and the implication that in a language with a VC infix there could be no VC prefixes) has been challenged by Blevins, Yu, Kaufman, and probably others.

p. 36: [g-um-radwet] is actually possible (try a Google search for "gumraduate"!). Various people, including me, have reanalyzed Tagalog infixation since then.

p. 107: '**prosodic**' means something like "related to the grouping of phonological material into constituents, such as segments, syllables, feet, phonological words, phonological phrases, etc.".

p. 108: '**underparsing**' = failing to attach a segment to the syllable structure, so that it can't be pronounced, like the <i> of (147).

p. 108: $\Sigma^{CV(C)}_{del}$ = languages in which syllables require onsets (enforced by deletion of vowels), and allow codas.

p. 108: **Faithfulness** constraints: e.g. **FILL** (don't insert) and **PARSE** (don't delete).

p. 111: An **extrametrical** segment is one that is not included in any syllable. Usually, we're talking about a segment that *is* pronounced—it could be a direct daughter of, say, the phonological word. But here, the final, unparsed vowel is not pronounced, so presumably it's not attached to any higher structure.

p. 111: **LX** \approx **PR** is collapsing a few requirements into one constraint: a lexical word [noun, verb, adjective] must be a prosodic word (=phonological word); a prosodic word must dominate at

least one foot; a foot must dominate (in this language) at least two moras. [Or, as suggested on p. 114, *the beginning of a lexical word must also begin a prosodic word*, etc.]

p. 112: So, unlike Estonian, Lardil does allow morphemes to consist underlyingly of a light syllable.

p. 112: ‘**Null Parse output**’ = silence—just not saying the word. This candidate satisfies the faithfulness constraints, but violates a special constraint MPARSE.

p. 114: ‘**prothetic vowel**’ = vowel inserted at the beginning of the word

p. 122: [] surround the prosodic word; () surround each foot [grouping of syllables, usually one or two), and periods . . surround each syllable. So the second candidate in (170) has a syllable but no feet and no p-word node in its prosodic tree.

p. 126: ‘**hiatus**’ = a configuration like V.V, where one syllable ends with a vowel and the next starts with a vowel.

Questions

1. Find an example of a constraint triggering a rule from last week’s class, last quarter, or anywhere. Give a mini-tableau illustrating the ranking of those two constraints—also say what the language is and where the example comes from in case I’m confused. N.B.: **triggering ≠ feeding**.

2. Do the same for a case of a constraint blocking a rule. Here you’ll probably need three constraints. N.B.: **blocking ≠ bleeding**.