

### The ingredients of a phonological analysis

1. an underlying representation (UR)
2. a set of phonological rules (possibly null set)
3. an ordering of these rules

### Comparing alternative phonological analyses

	Analysis 1	Analysis 2	Analysis 3
UR	/lɔŋ/	/lɔŋg/	/lɔŋg/
1. Alveolar Stop Assimilation	—	—	lɔŋg
2. /g/-deletion	—	lɔŋ	lɔŋ
Surface form	[lɔŋ]	[lɔŋ]	[lɔŋ]

### Evaluating alternative analyses

Criterion	Analysis 1	Analysis 2	Analysis 3
1. Descriptive adequacy	✓	✓	✓
2. Internal consistency of analysis/theory	✓	✓	✓
3. Minimal phonemic inventory	÷	÷	+
4. Simplicity: fewer rules and rule applications	+	—	÷
(5. Naturalness of rules			)
6. Uniformity of URs	÷	+	+

**So which analysis is the right one?** It depends ... on

- a) which criteria one values higher and
- b) further evidence

For instance Toni Borowsky<sup>1</sup> has proposed an analysis very similar to our Analysis 3, arguing that /ŋ/ is not a phoneme of English, but that [ŋ] always derives from an underlying nasal-velar stop cluster. Probably she valued criteria 3 and 6 very highly (and higher than 4), and she also presented further evidence for this analysis from various differences between [ŋ] on the one hand and [n] and [m] on the other, indicating that [ŋ] is quite different from [n] and [m], a difference she attributes to /n/ and /m/, but not /ŋ/ being phonemes of English.

<sup>1</sup>In her 1986 dissertation *Topics in the Lexical Phonology of English* from UMass, Amherst.

**Aside on rule ordering** Why is rule ordering important? What would happen if /g/-deletion applied before Alveolar Stop Assimilation?

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2. Alveolar Stop Assimilation			
Surface form			

**A historical perspective** Juliette Blevins and Andrew Garrett<sup>2</sup> draw attention to the work of the 18th century orthoepist<sup>3</sup> James Elphinston. In his 1765 book *Principles of the English Language* Elphinston discusses the pronunciation of nasal-velar stop combinations at the time of writing and notes that all the words and expressions in (1) pronounced with a [g] in the bolded part of the word:

- (1)
- a. angle, angling, anger, angry, finger, hunger, **linger**, longer, younger
  - b. hanger, singer, **singer**, slinger, hanging, singing, prolonging, bringing, belonging, longing, twanging, hanged, longed
  - c. sing aloud, prolong it, strong and mighty, spring eternal, long repose, young Leander

B&G (page 3): In most modern English dialects /g/ is still pronounced in the words in (1a), but not in the words or phrases in (1b) and (1c).

**Current variation** Some American English speakers (including at least one young male from Virginia) has the following pronunciations:

- long [lɔŋ]
- longer [lɔŋr]
- finger [fɪŋgr]

What is going on in this dialect?

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<sup>2</sup>In a paper called “Analogical morphophonology” to appear in *The nature of the word: Essays in honor of Paul Kiparsky*, edited by Kristin Hanson and Sharon Inkelas and published by MIT Press.

<sup>3</sup>OED on *orthoepist*: An expert in orthoepy; a person who studies the pronunciation of word. *ortho* from ancient Greek word meaning ‘straight’ and *epos* from Greek word meaning ‘word’ or ‘song’.