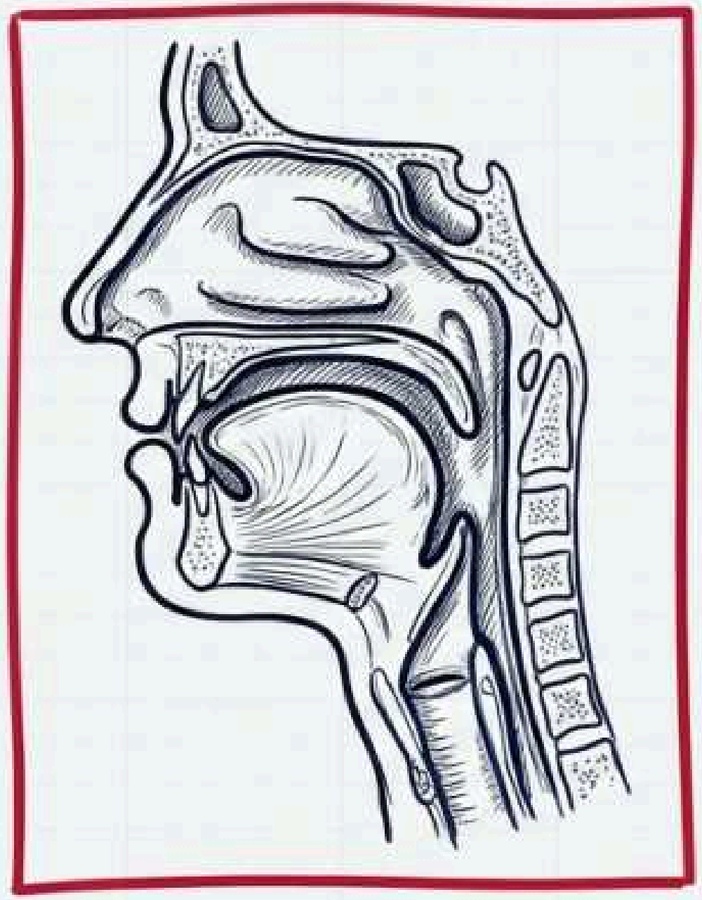
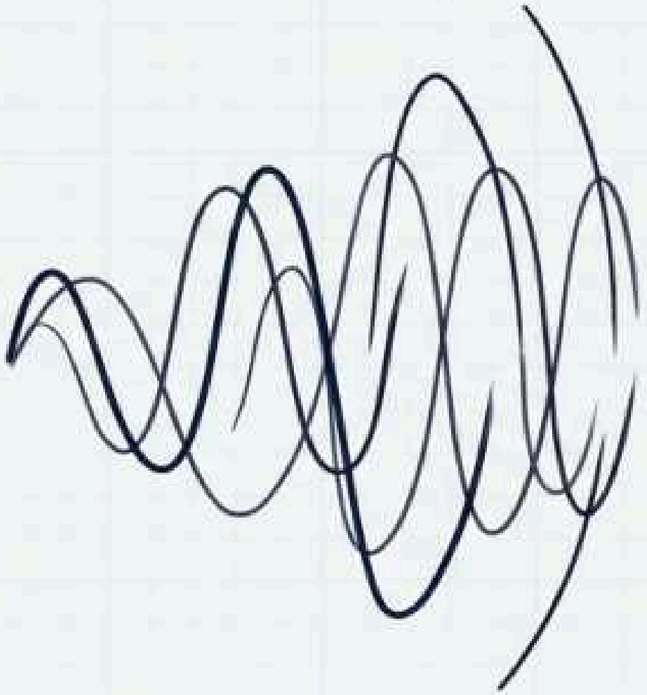
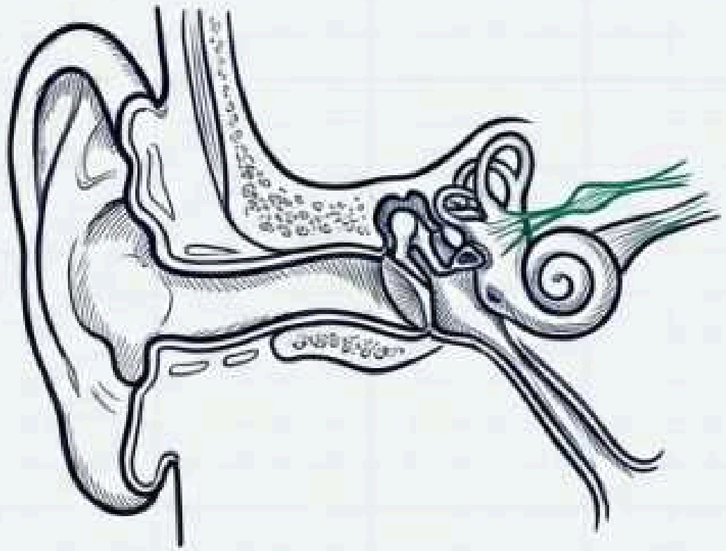
Phonetics: The Scientific Study of Speech Sounds.

¶ 1.1







Articulatory
(Production)

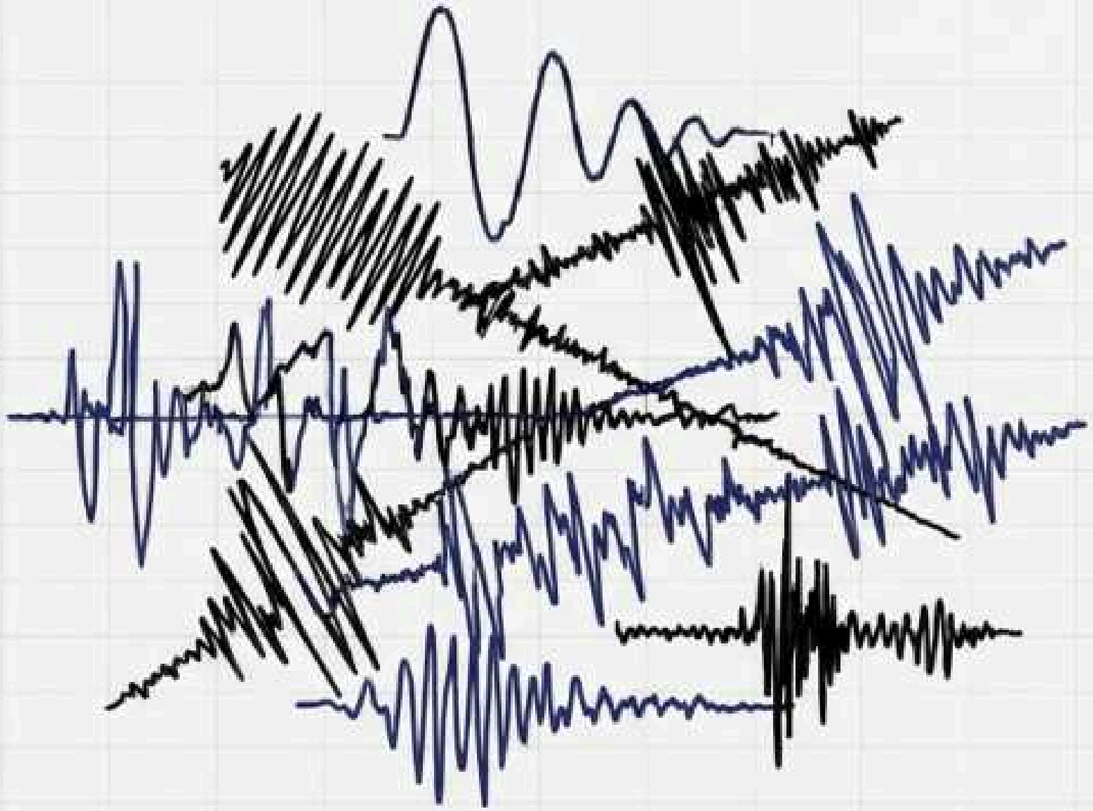
Acoustic
(Transmission)

Auditory
(Perception)

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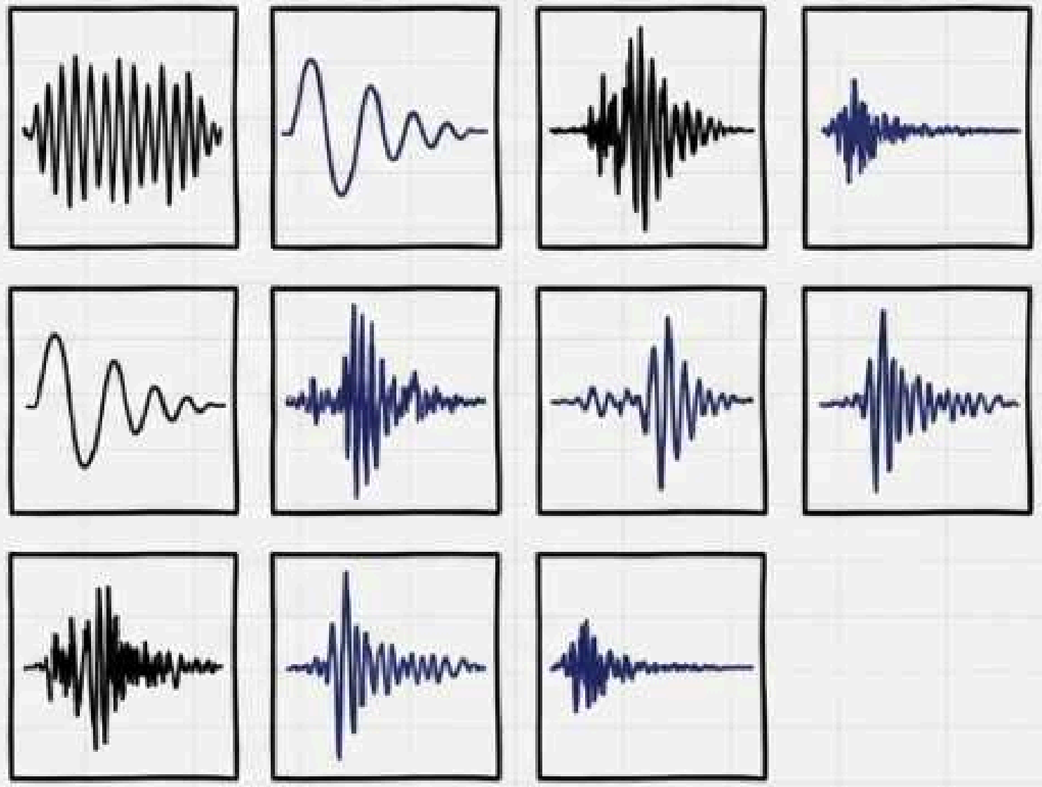
Phonetics

Raw Sounds (Physical Description)



Phonology

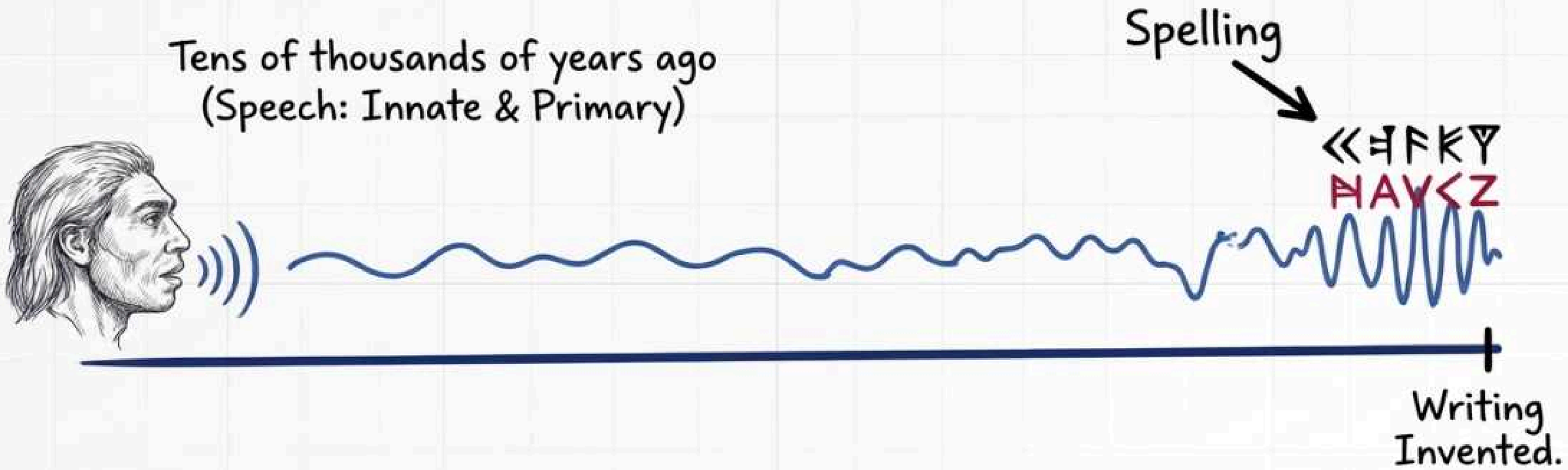
Language Patterns (Meaningful Differences)



Phonetics describes the physical sounds. **Phonology** asks which differences actually matter to speakers ((**the origin of the phoneme**).)

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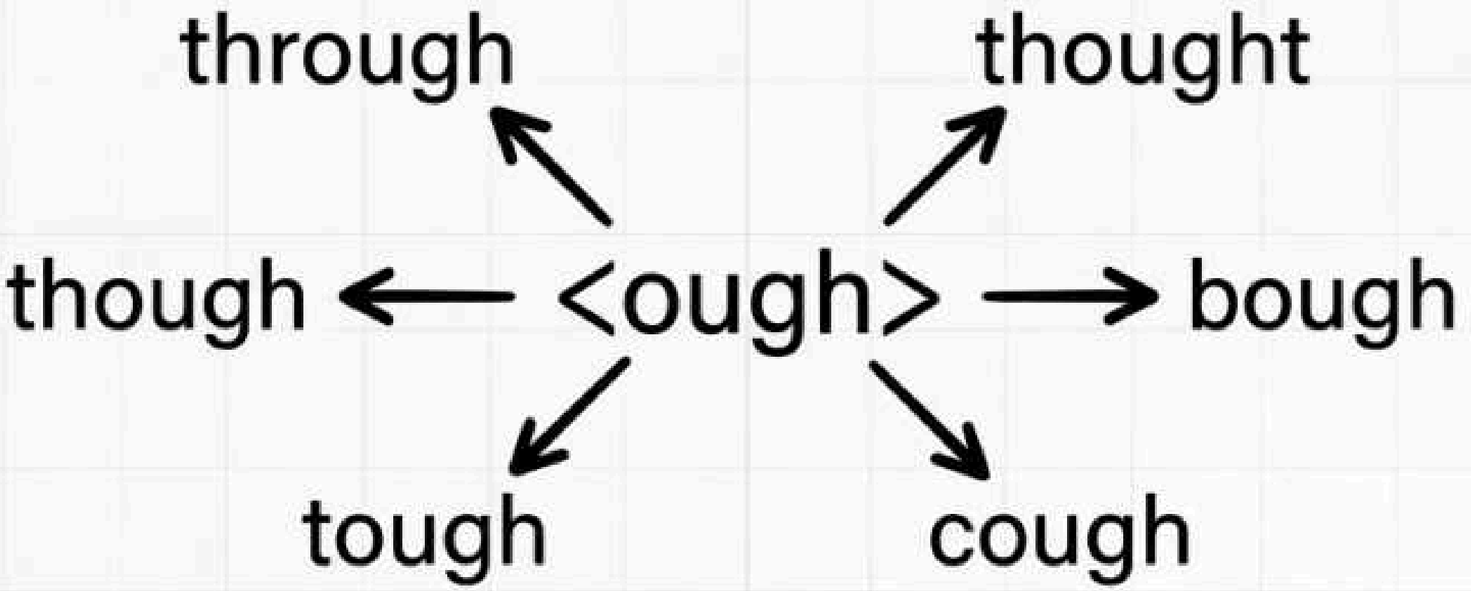
¶ 1.3



Every healthy child learns to speak without lessons.
Writing is a late invention; many languages still have none.
Spelling is merely a convention layered on sound.

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¶ 1.4



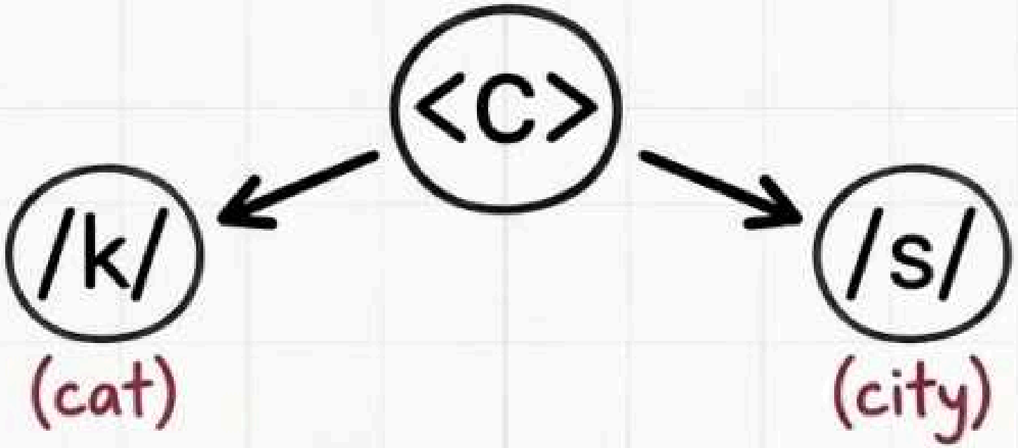
<gh> + <o> + <ti> = <ghoti>

(from tough) (from women) (from nation) (pronounced fish)

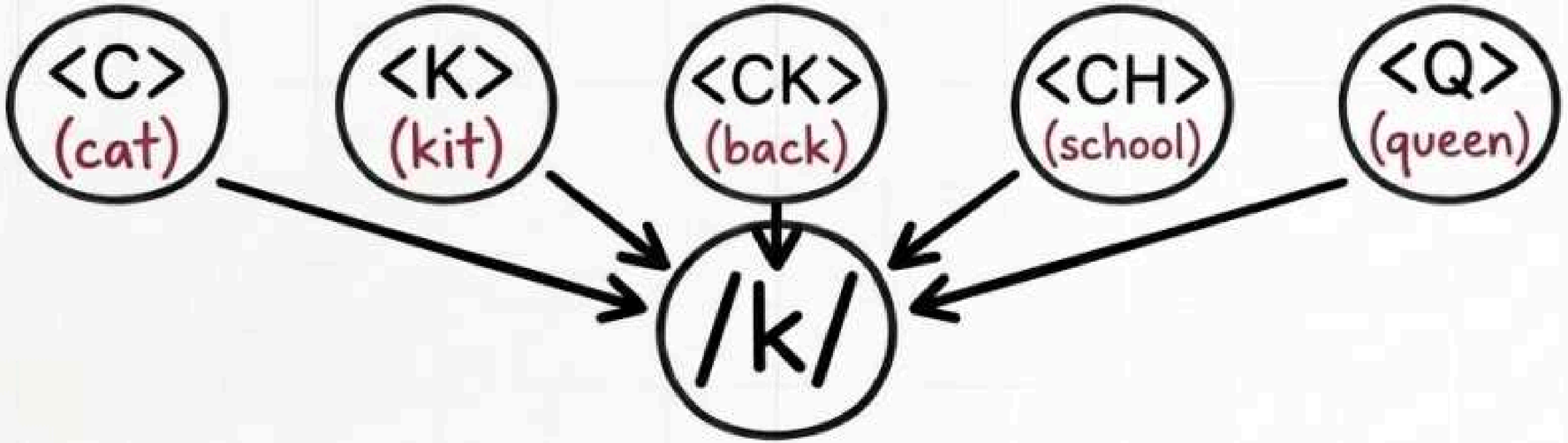
The spelling code is loose because spelling and sound continually drift apart.

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1 Letter = Many Sounds



Many Spellings = 1 Sound



Gemini Notebook

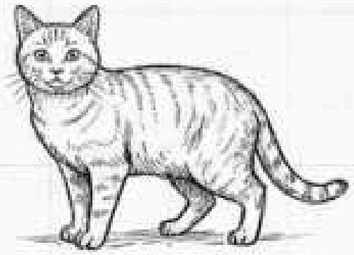
¶ 1.6

A

[ay] ≠

Letter Name

Letter Sounds



vowel of cat



vowel of father



weak vowel schwa (about)

A Vital Distinction: A letter name is not a letter sound.

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¶ 1.7

<W> = double you

<H> = aitch



Using Letter Names in Phonetics

Letter names are simply words used to talk about symbols.
Some lack the target sound entirely (like H and W).
Phonetics never uses letter names to describe sounds.

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¶ 1.8

1 SYMBOL = 1 SOUND

1886: Language teachers in France found the International Phonetic Association (IPA) to fix Aɒekentfation to fix spelling confusion. Thiilse the srowby-dring. The core principle: one symbol for each sound, and one sound for each symbol. Revised and used worldwide.

Gemini Notebook

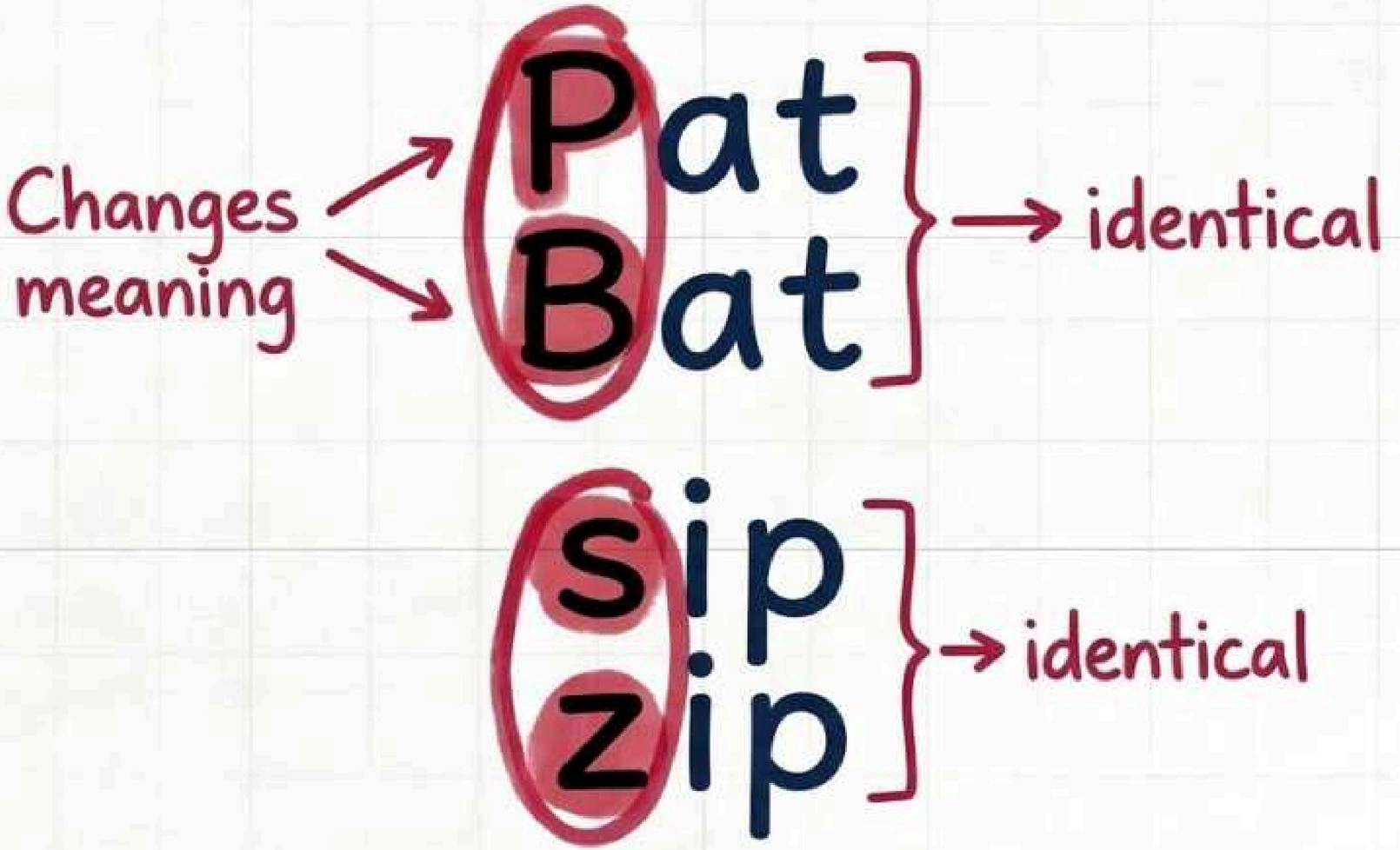
¶ 1.9

/ /	[ ]	< >
Phonemic	**Phonetic**	**Spelling**
Records only sounds that distinguish words.	Records finer physical detail.	Encloses standard written letters.

<cat> vs /kæt/

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¶ 1.10



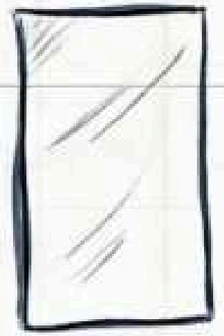
Phoneme: The smallest unit of sound that can change a word's meaning. Identified through minimal pairs (two words differing in just one sound).

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¶ 1.11

pin





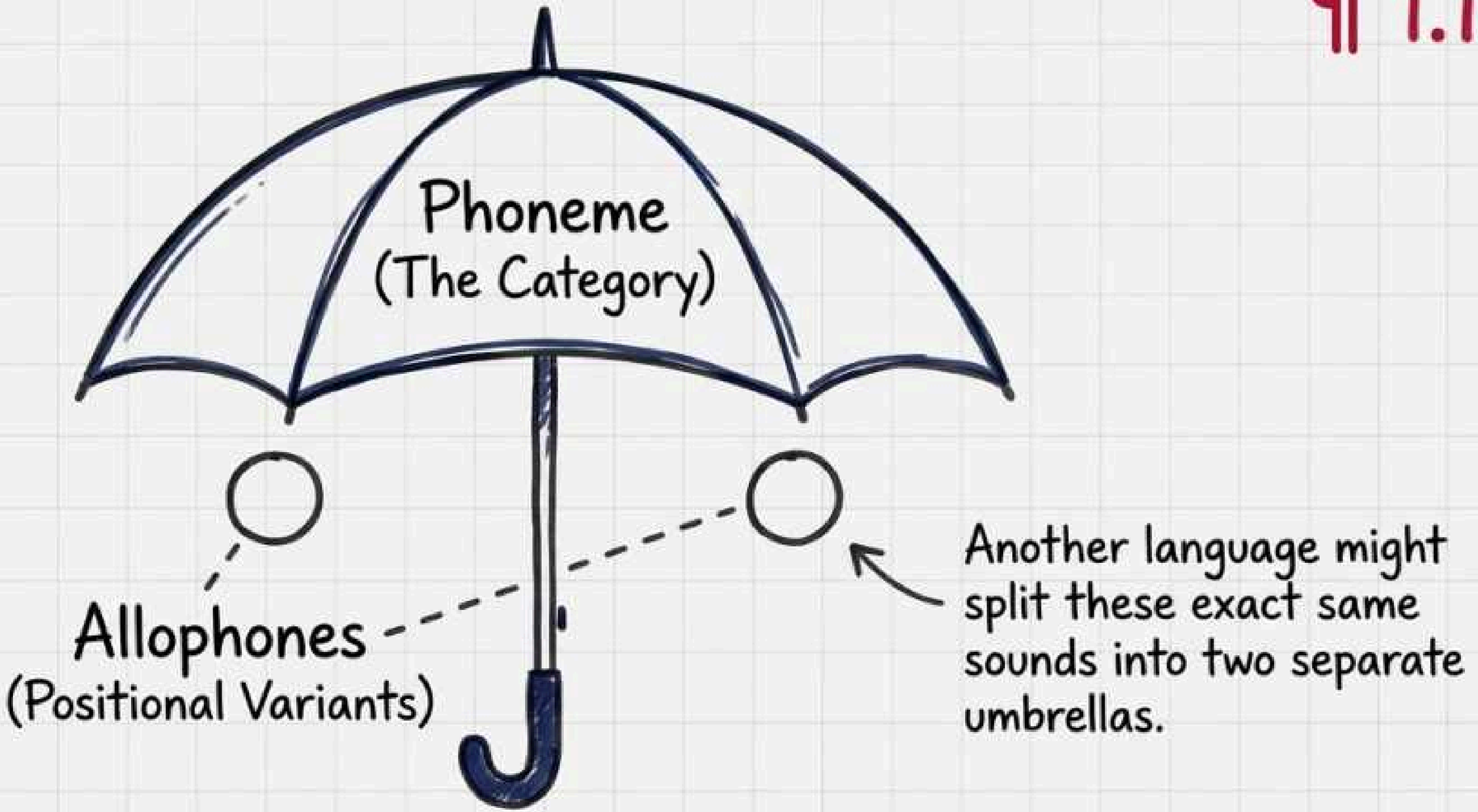
spin



Not every difference in sound is a difference in phoneme. The “p” in pin has a puff of air (aspiration); the “p” in spin does not. Swapping them never changes the word in English, so speakers rarely notice.

Gemini Notebook

¶ 1.12



Phonetics describes the physical sounds (allophones). Phonology describes how a specific language sorts them into listener categories (phonemes).

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Always count sounds, not letters.

¶ 1.13

<ship> (4 letters) ≠ /ʃɪp/ (3 sounds)

<box> (3 letters) ≠ /bɒks/ (4 sounds)

<queen> (5 letters) ≠ /kwi:n/ (4 sounds)

<knight> (6 letters) ≠ /naɪt/ (3 sounds)

Gemini Notebook

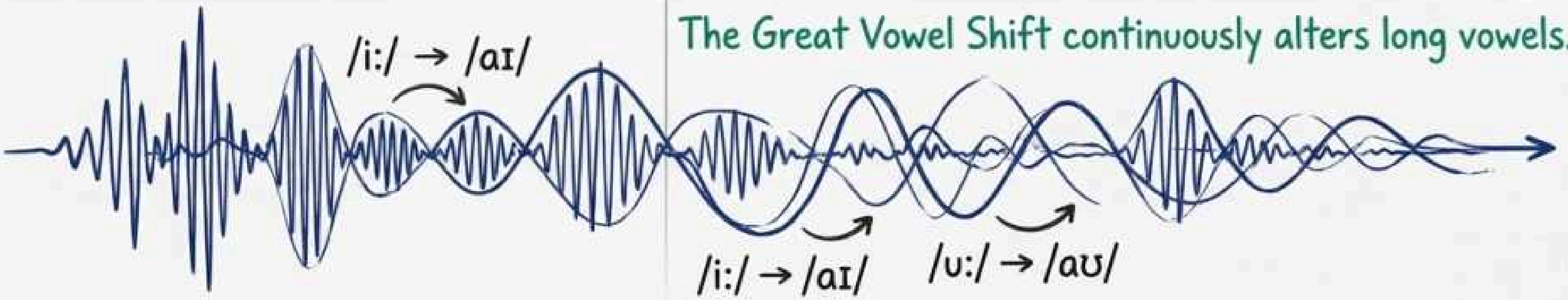
Spelling



Late 1400s:
Spelling Freezes.

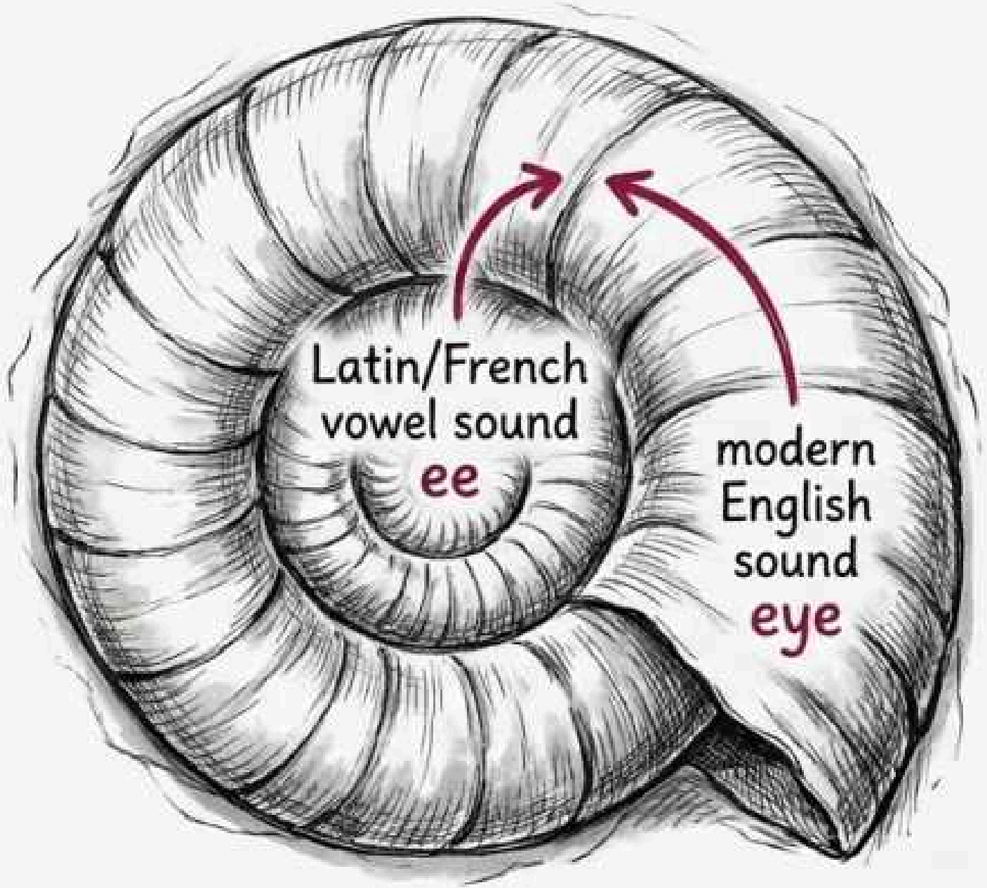
Speech

The Great Vowel Shift continuously alters long vowels.



Why is spelling so out of step? Spelling preserves the sounds of an earlier age. The silent ***K*** and ***GH*** in *knight* were once pronounced.

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English letter names are historical fossils of the Great Vowel Shift. In Latin, French, or Spanish, ‘I’ is named *ee*. In English, the shift morphed that old *ee* into *eye*.

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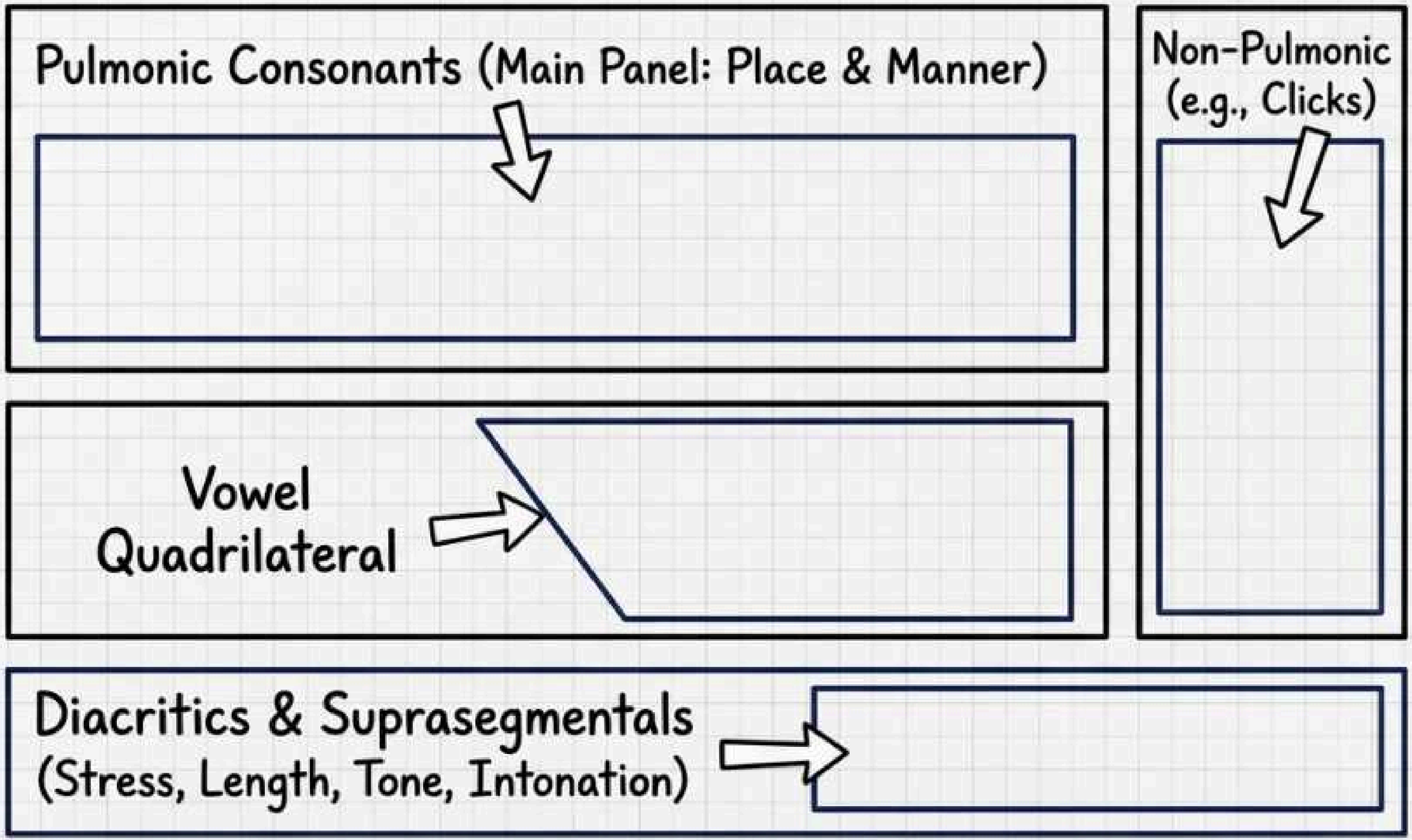


['aɪ.pi.eɪ]
IPA
[ju.nɪ.vər.səl
'stæn.dərd]



Because no spelling system is reliable, linguists need a neutral standard. Dictionary respellings vary by publisher. The ***IPA*** means the exact same thing everywhere, for any language.

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The IPA Chart Layout. Everything you will learn in this course has a specific place on this single page.

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¶ 1.18



mat + [silent E] = mate

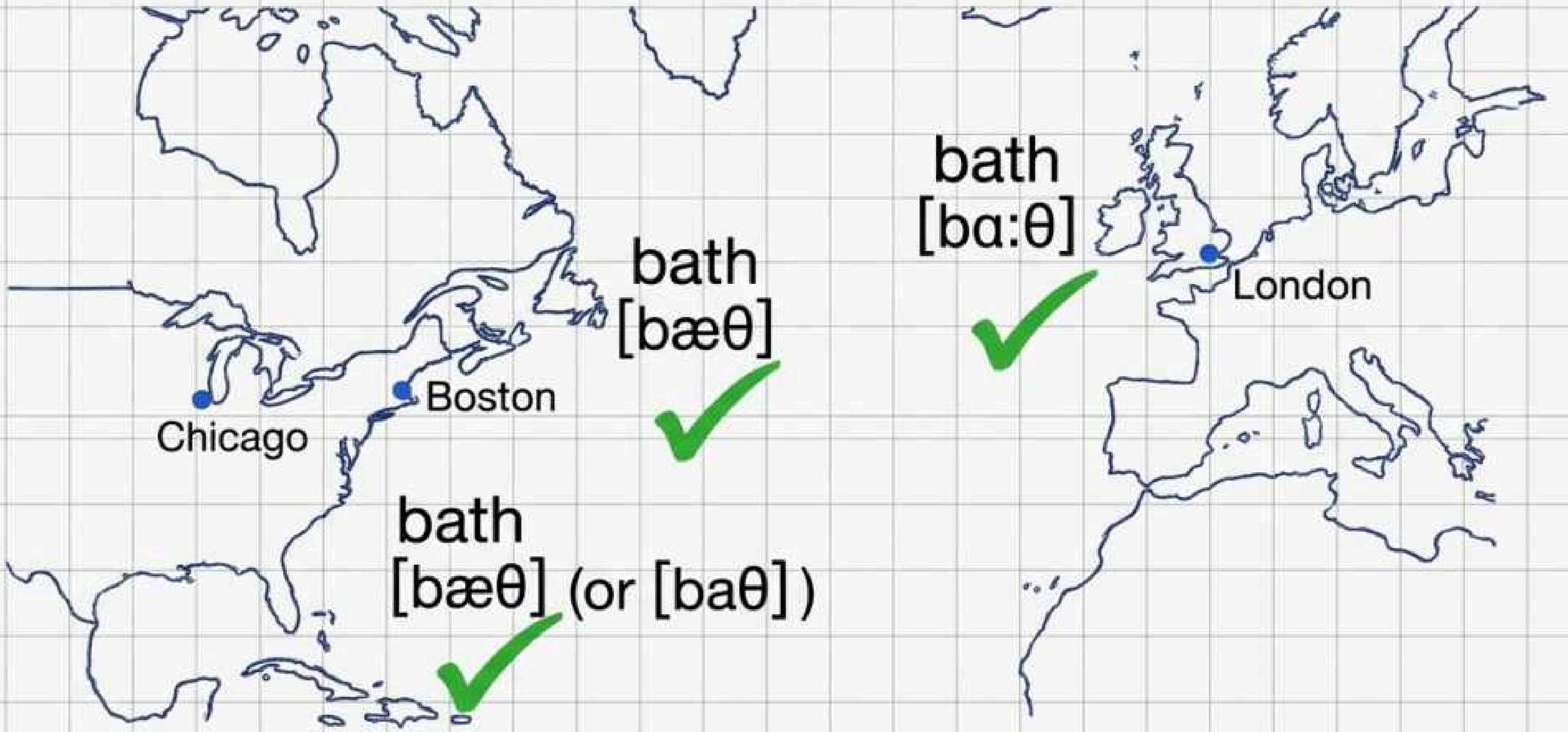


bit + [silent E] = bite

English spelling is not entirely random; it follows historical patterns that carry information. Learn the patterns, and treat the exceptions as history.

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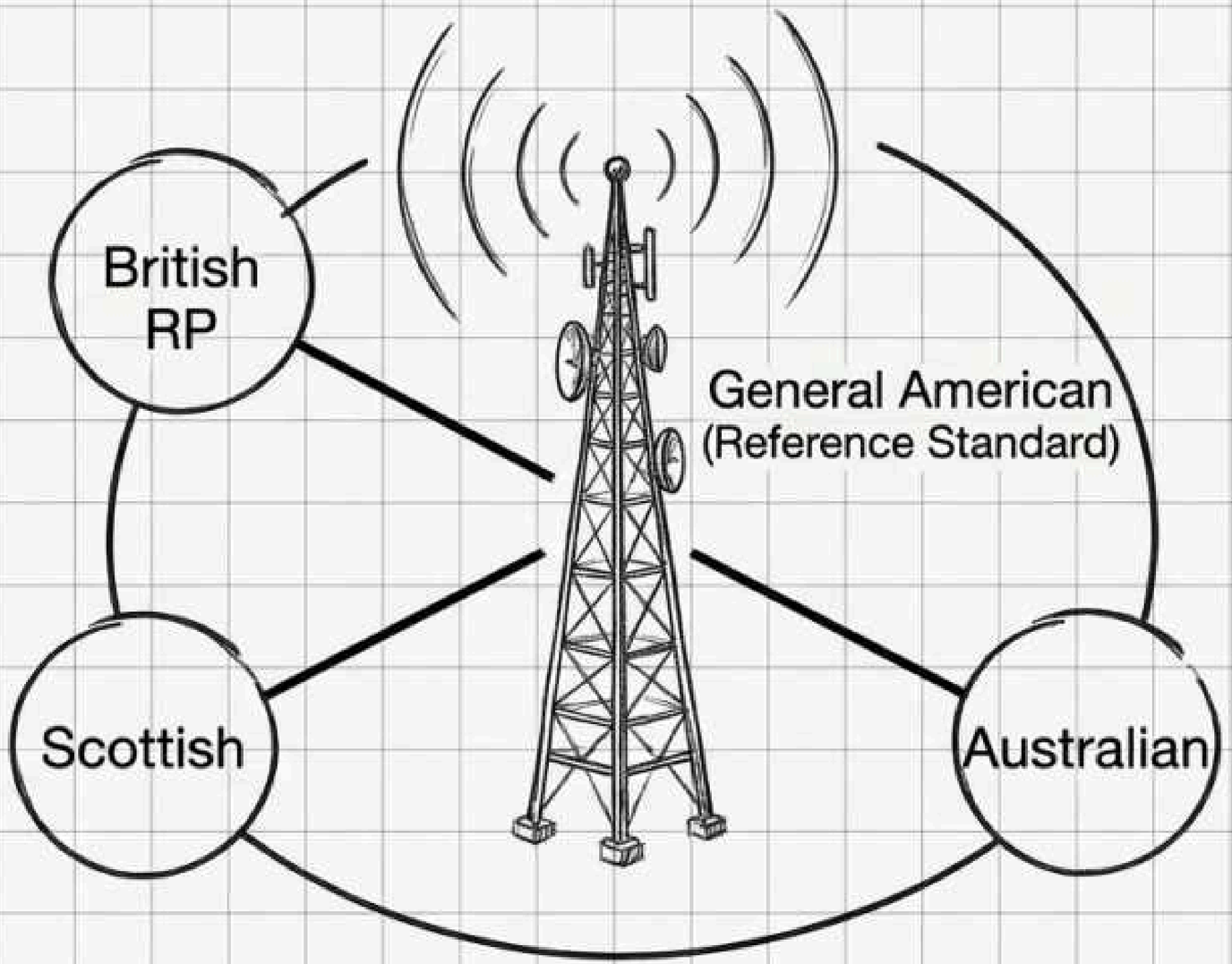
¶ 1.19



Speakers differ by region, age, and community. Phonetics treats each accent as a complete, legitimate system. Our job is to describe, not to judge.

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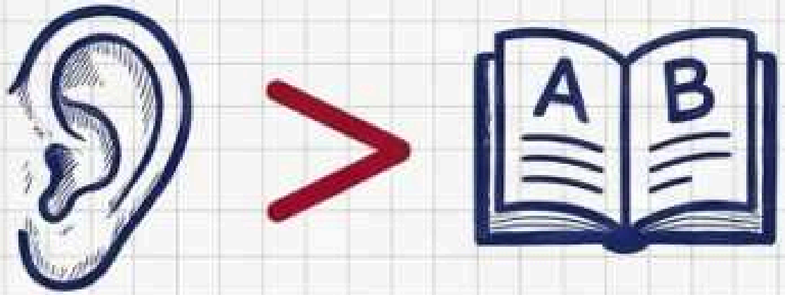
¶1.20



General American is the accent of most U.S. national broadcasting. It is not special or superior—it is simply a convenient baseline. All other accents are equally systematic.

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Phonetics vs Spelling



- Count Sounds, Not Letters

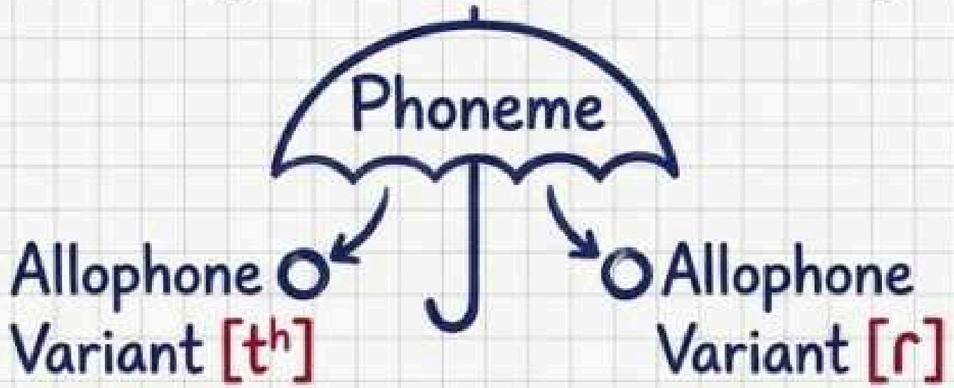
Letter Names ≠ Sounds

A ≠ [ay]

The Brackets

/	phonemic	/
[	phonetic	]
<	spelling	>

Categories vs Reality



1 Symbol = 1 Sound.

Gemini Notebook