

Introduction to Linguistic Phonetics

What is Phonetics?

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What is Phonetics?

- The study of speech sounds.
- There are three main areas research in phonetics:
 - 1 Speech *articulation*: how speech sounds are produced using articulators
 - 2 Speech *acoustics*: what sounds are like in the air
 - 3 Speech *perception*: how our auditory and cognitive systems interpret sounds

What is Phonology?

- **Phonology** is the other subfield of linguistics that studies speech sounds.
- Phonology is concerned with how the sounds we produced are organized in linguistic systems (i.e., Language and languages) and sound structures (e.g., syllables, words, and phrases).
- We will cover some phonology in this class, but the main focus is phonetics.

What we will cover in this course

- Understand the basic concepts and terminology of phonetics.
- Learn about the articulatory, acoustic, and perceptual aspects of speech sounds.
- Gain familiarity with the methods and tools used in phonetic research.
- Explore the relationship between phonetics and other subfields of linguistics.

- **Phonetic transcription** is a way of visually representing speech sounds using symbols.
- The most common system for phonetic transcription is the **International Phonetic Alphabet (IPA)**.
- The IPA provides a unique symbol for each distinct sound (or phoneme) in human language.
- We will learn how to use the IPA to transcribe speech sounds accurately.

Why do we need a system for phonetic transcription?

Let's talk about the elephant in the room.

Why do we need a system for phonetic transcription?

English orthography is a mess.

How many sounds?

- How many sounds are in the English word “Tables”?

How many sounds?

- How many sounds are in the English word “Tables”?
 - 5?
 - 6?

How many different pronunciations?

- How many different pronunciations do you have for:

How many different pronunciations?

- How many different pronunciations do you have for:
 - “heal”
 - “hill”
 - “heel”

How many different pronunciations?

- How many different pronunciations do you have for:
 - “pool”
 - “pull”

- English spelling is not a reliable guide to pronunciation; it is often inconsistent and ambiguous.
- Is it the worst spelling system?
- Most languages don't require that you do spelling tests in school.

Same spelling, different sounds

- Examples:
 - lead (to guide) vs lead (a type of metal)
 - shoes vs goes
 - tomb vs comb vs bomb
- The same letter or combination of letters can represent different sounds in different words.
- A good transcription system would allow us to represent each of these sounds differently.

Different spelling, same sound

- Examples:
 - heavy, friend, any, bury, leopard (all have the vowel sound “eh”)
 - sun, love, button, cup, does, some, touch (all have the vowel sound “uh”)
- The same sound can be represented by different letters or combinations of letters in different words.
- A good transcription system would allow us to represent each of these sounds the same way.

“Silent” letters

- Examples:
 - know, gnome
 - psychology, thyme
 - wrap, hour
- Some letters in words are not pronounced at all.
- A good transcription system would allow us to ignore these letters and only represent the sounds that are actually pronounced.

Dialectal differences

- Examples:

- The vowel sound in “cot” and “caught” is pronounced the same in some dialects (e.g., Western American English) but differently in others (e.g., Southern American English).
- The final sound in “car” is pronounced with a rhotic “r” in some dialects (e.g., General American English) but not in others (e.g., British English).

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- The same word can be pronounced differently by speakers of different dialects or even by the same speaker in different contexts.
 - Urban Utahn English pronunciation of the “t” in “mountain” can vary between a clear “t” sound in formal speech and a glottal stop (i.e., the sound you make when you say “uh-oh”) in casual speech.

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- The same word can be pronounced differently by speakers of different dialects or even by the same speaker in different contexts.
- A good transcription system would allow us to represent these differences accurately.

We need a system that allows us to represent each distinct sound with a unique symbol, regardless of how it is spelled or pronounced.

1 sound = 1 symbol
1 symbol = 1 sound

Question

Is this a problem for just English; what about other languages (provide examples)?

- Find two other people in the room and discuss this question for a few minutes.
- Appoint someone in your group and be prepared to share your thoughts and/or examples with the class.

The International Phonetic Alphabet (IPA)

- The IPA is a standardized system of phonetic notation that was initially created by the International Phonetic Association in the late 19th century.¹
- The IPA provides a unique symbol for each distinct sound in human language.
- The IPA is used by linguists, speech-language pathologists, singers, actors, and others who need to accurately represent speech sounds.
- BUT: The IPA is not perfect; it has limitations and challenges.

¹The most recent version (2018) of the IPA chart can be found on our Canvas page under Resources.

Your tasks for next time

- Complete the exit ticket for today on Canvas by 12:30pm.
- Read Reetz & Jongman (2009) Chapter 2.
 - There will be a discussion post on Canvas for this reading (This counts as class participation)
- Complete Quiz 0 by Friday at 11:59pm.
- Complete Homework 1 by Tuesday at 8:30am.
- Be ready to dive into Articulation and the IPA next time!

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