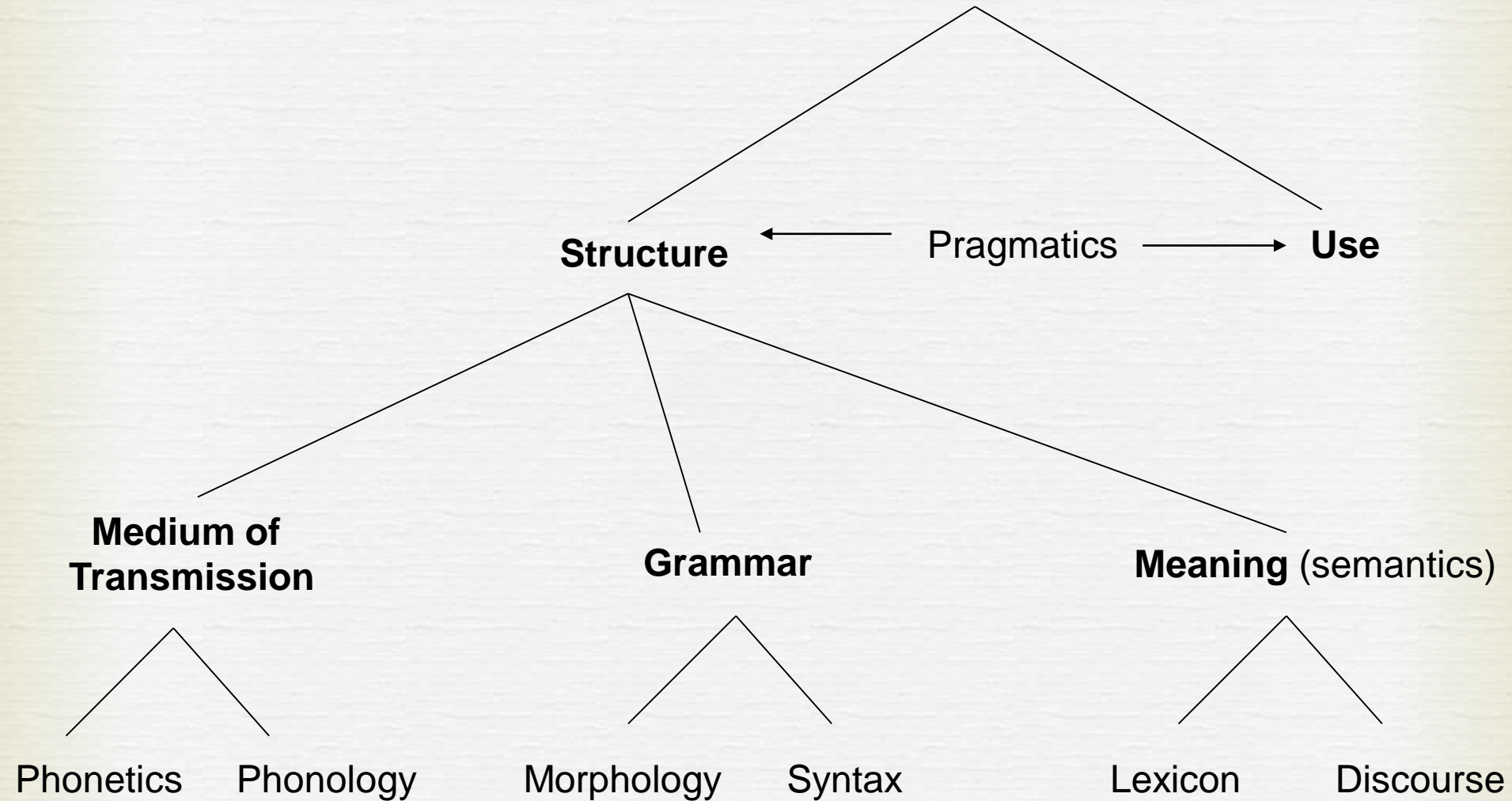


ENGLISH PHONETICS AND PHONOLOGY

Lesson 3A

Introduction to Phonetics and Phonology

Structure of Spoken Language (from Crystal 1997)



Branches of Linguistics



- ❧ Phonetics and Phonology
- ❧ Morphology and Syntax
- ❧ Semantics
- ❧ Pragmatics

Branches of Linguistics



❧ **PHONETICS:** The study of speech **sounds**. (Articulatory, Acoustic, Auditory)

❧ **PHONOLOGY:** The study of the **sound patterns** of a language. Phonemes (vowels and consonants)

Prosody (stress, rhythm and intonation)

❧ **MORPHOLOGY:** The study of **word structure**.

❧ **SYNTAX:** The study of **sentence structure**. (Phrase, clause and sentences)

❧ **SEMANTICS:** The study of **meaning**. (Denotations, Connotations, Ambiguity and Implications)

❧ **PRAGMATICS:** The study of the **intended meaning** (Discourse Analysis)

Why study phonetics and phonology?

- ❧ Of particular importance for learners of English as a Second Language (ESL) because it has a practical application
- ❧ English has a far larger characteristic of phonemes than other languages like Standard Italian
- ❧ English is not a phonographic language, i.e. spelling generally does give a clear indication of pronunciation

Standard British English v. Standard Italian



	English	Italian
Pure Vowels	12	7 (5)
Diphthongs	8	4
Consonants	24	19

English is not a phonographic language

❧ Many sounds have several different spellings,
e.g. *go, though, foe, slow, boat*;

Or *George, Joe, badge, village*

❧ Many “same spellings” have different sounds,
e.g. <ough>: *though, cough, bough, through, thought, and enough*.

Is English spelling really so erratic?

- ❧ 83% of English words have predictable spelling
- ❧ However, the remaining 17% is comprised of the most commonly used, everyday words
- ❧ Therefore the greatest difficulties are faced by the learner at the start
- ❧ English has always resisted spelling reforms and academies to set standards
- ❧ English spelling became fixed in the 16th-17th c. with the arrival of printing. Many of the printers were Flemish and had little knowledge of the language
- ❧ English has borrowed extensively from other languages and has tended to maintain original spelling

What is the difference between phonetics and phonology?



❧ Phonology deals with the sound systems languages, e.g. how speech are organized into systems in different languages, how sounds are combined, the relation between them and how they affect each other.

❧ Phonetics deals with the physical realisation of the elements of the sound system, e.g. how the sound is physically produced (articulatory phonetics), or the acoustic characteristics of the speech sound (acoustic phonetics)

What is the difference between phonetics and phonology



☞Phonetics:

Phonetics deals with production, transmission and reception of all human speech sounds in general with no particular reference to any one language.

☞Phonology:

Phonology deals with the ways those sounds are organized in a particular language. It is a subcategory of phonetics.

Why the study of Phonetics is important?

❧ A knowledge of Phonetics is a requisite for a learner of the English language.

❧ This knowledge enables him/her:

1. To give a true description of sounds of English and how they are made.
2. To point out the mistakes in learner's pronunciation and help them to learn the correct form.
3. To differentiate sounds of English from those of the mother tongue.

Branches of Phonetics



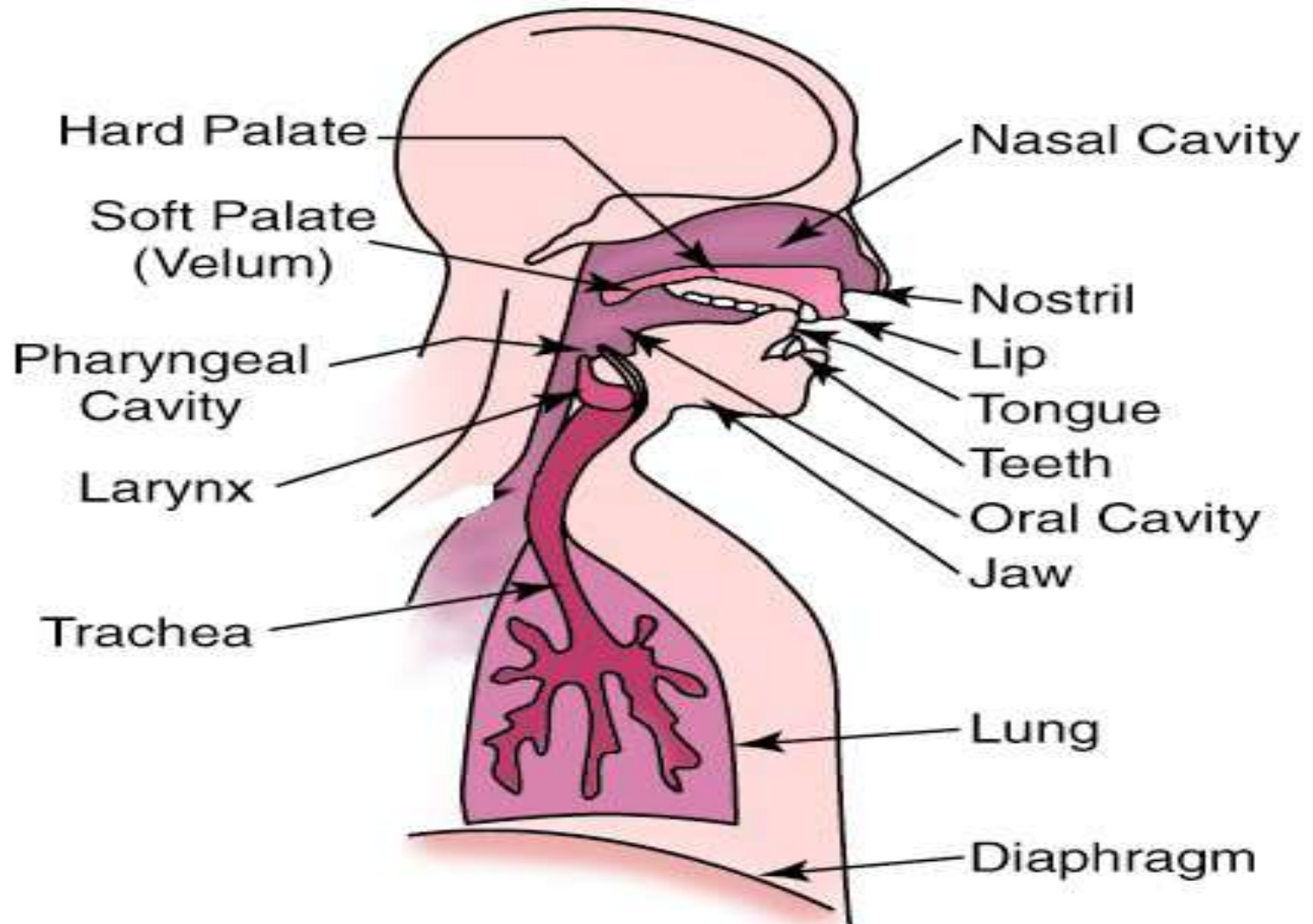
☞ The study of phonetics can be divided into three main branches.

1. **Articulatory Phonetics**(How sounds are produced?) It is concerned with the positions and movements of the lips, tongue, and other speech organs in producing speech. It analyses how the various speech sounds are articulated by vocal organs.

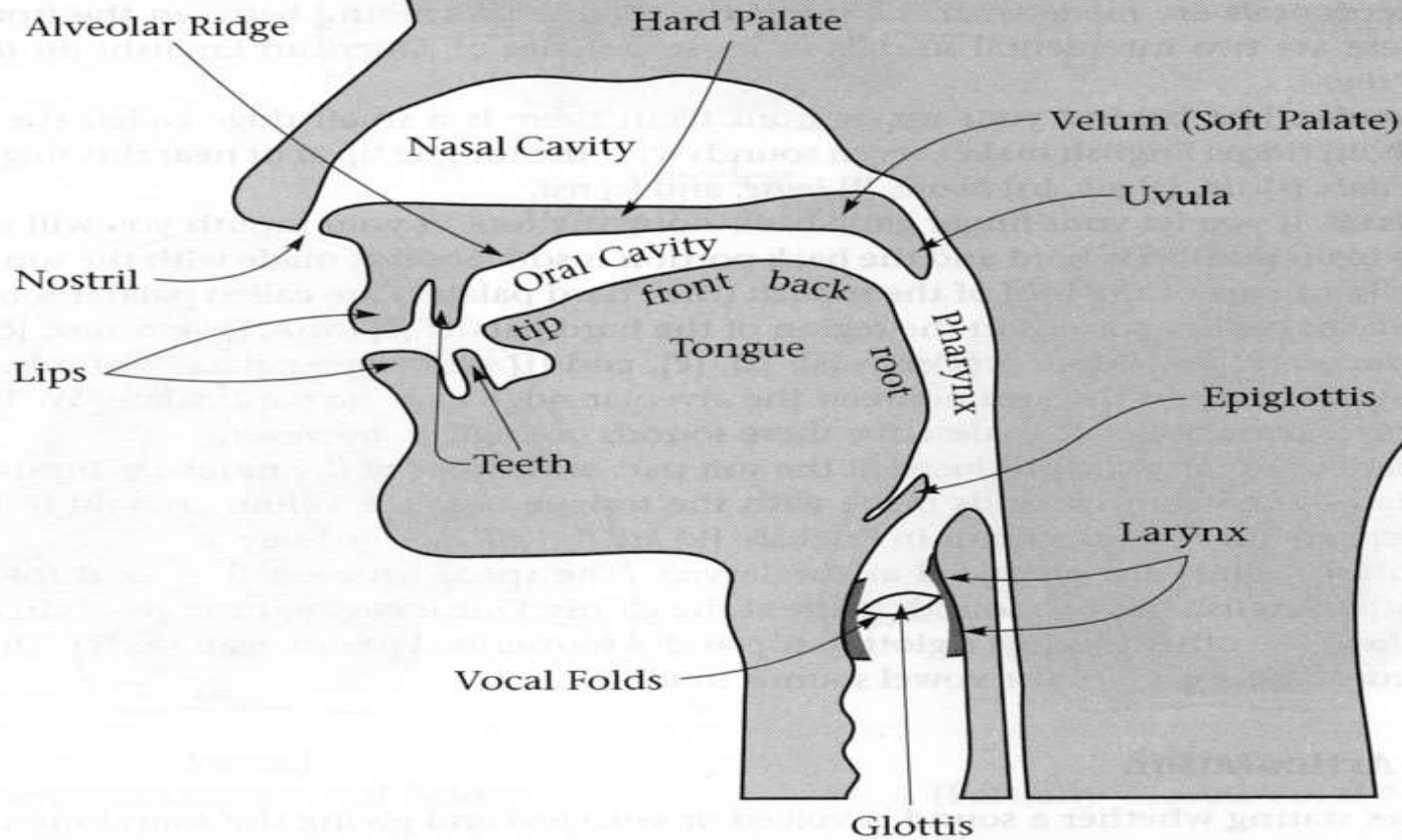
2. **Auditory Phonetics**(How sounds are received?) Auditory Phonetics is the study of hearing and the perception of speech sounds.

3. **Acoustic Phonetics**(How sounds are transmitted?) It studies the physical properties of speech sounds as transmitted between the mouth and ear.

Production of Speech Sound



Vocal Tract



THE THREE SOUND SYSTEMS



❧ The Respiratory System:

The respiratory system (initiation process) comprises the lungs, the muscles of the chest and the wind pipe. The role of the respiratory system in relation to the production of speech sounds is that the out flowing air stream initiated by the lungs is used for speech production.

❧ The Phonatory System:

This system consists of the larynx and the vocal cords. The air-stream released by the lungs, and comes up through the windpipe.

❧ The Articulatory System:

❧ This system refers to the vocal tracts through which the air - stream ends at the mouth/nose before it escapes into the atmosphere. (pharynx- soft palate – hard palate- teeth ridge – tongue- lips, etc)

Branches of phonology



There are four branches :-

- ❧ **Segmental phonology** :- It analyses speech into discrete segments, such as phonemes.
- ❧ **Supra- segmental phonology** :- It analyses those features which extend over more than one segment such as intonation , stress.
- ❧ **Diachronic phonology** :- It studies the patterns of sound system through the history of language.
- ❧ **Synchronic phonology** :- It studies the patterns of sound regardless of the process of historical change.

Key concepts: the *phone*



- ❧ the *phone*: a physical realisation of a speech sound
- ❧ It is the smallest , perceptible , discrete segment of sound in the stream of speech.
- ❧ It is the minimal unit of speech.
- ❧ It is enclosed within square bracket i.e [p]
- ❧ Phoneme :- Phoneme is the smallest , distinctive and segmental unit of sound. It is the minimal distinctive unit in the sound system of a language .
- ❧ It is enclosed within slants i.e / p /
- ❧ Phonemes /p/ and /b/ are similar in place of articulation and manner of articulation but differ in voicing. So they are two phonemes.

Key concepts: the *phone*

me
æ

- ❧ The smallest speech sound that has linguistic value
- ❧ When a series of phones are similar in terms of articulation and can be distinguished from another group in terms of meaning and collocation, the group is given a name e.g. /t/. This is a phoneme.
- ❧ The phoneme is an abstract term, specific to a particular language.



❧ Allophone : - Allophone is a variant of a phoneme. The allophones are very similar to each other ; they do not change the meaning of a word and they don't occur in the same phonetic environment.

for example :- Syllable initial as opposed to syllable final.

❧ All allophones are phones but all phones are not allophones.

The difference between a phoneme and an allophone



- ❧ If one allophone is exchanged with another, e.g. if seen is produced with lip rounding, the word, while perhaps sounding a bit strange, is still comprehensible.
- ❧ If one phoneme is swapped with another, e.g. seen is produced with a /b/, instead of a /s/, the meaning of the word changes- they function contrastively

Syllable



- ❧ A syllable is a unit of sound composed of :-
- ❧ a central peak of sonority (usually a vowel), and the consonants that cluster around this central peak.
- ❧ The syllable is a basic unit of speech studied on both the phonetic and phonological levels of analysis.
- ❧ A syllable is a unit of organization for a sequence of speech sounds. For example, the word water is composed of two syllables: wa and ter. A syllable is typically made up of a syllable nuclear (most often a vowel) with optional initial and final margins (typically, consonants).

Types of Syllables

- ❧ There are six types of syllables: ❧
- ❧ A **closed syllable** ends in a consonant. The vowel has a short vowel sound, as in the word *bat*.
- ❧ An **open syllable** ends in a vowel. The vowel has a long vowel sound, as in the first syllable of *apron*.
- ❧ A **vowel-consonant-e syllable** is typically found at the end of a word. The final e is silent and makes the next vowel before it long, as in the word *name*.
- ❧ A **vowel team syllable** has two vowels next to each other that together say a new sound, as in the word *south*.
- ❧ A **consonant-le** syllable is found in words like *handle*, *puzzle*, and *middle*.
- ❧ An **r-controlled syllable** contains a vowel followed by the letter r. The r controls the vowel and changes the way it is pronounced, as in the word *car*.

Syllable structure



☞ Syllable structure, which is the combination of allowable segments and typical sound sequences, is language specific.

☞ Parts Description Optionality

☞ Onset: Initial segment of a syllable: Optional

☞ Rhyme: Core of a syllable, consisting of a nucleus and coda (see below) Obligatory

☞ Nucleus: Central segment of a syllable: Obligatory

☞ Coda: Closing segment of a syllable: Optional