## Theory of Phonology

## The Syllable

## Plan:

1. The Syllable as a phonetic and phonological unit.
2. Theories of Syllable Formation \& Syllable Division.
3. Functional Characteristics of the Syllable.
4. Graphic Characteristics of the Syllable.

Do such words as
have one syllable or two?

fire
meal
schism

## Where is the boundary between the syllables in the word



## ma-ster

mas-ter



mast-ter

?

## 1. The Phonetic Syllable.

The stream of speech is characterized by differences in sonority from one point to the next.

## Which factors cause these sonority differences?

-Voicing (vocal cords vibration)
-The amount of air expelled from the lungs
-The resonance quality of sounds

## A hierarchy of English sounds

 according to their degree of sonority.- Vowels
among vowels, the open ones are more sonorous than the close ones
- Liquids /l/, /r/
- Nasals
- Other consonants among consonants, the voiced ones are more sonorous than the voiceless ones


## 2. The Phonological syllable.

The syllable is defined as the lowest phonological construction into which phonemes are combined.

## It consists of three segments:

- a central segment (the nucleus or peak of the syllable)
-an initial segment (the onset)
-a final segment (the coda)

The syllable may be defined as a segment of speech containing a peak of sonority.

## 2. Theories of Syllable Formation \& Syllable Division

- The vowel theory.

There are as many syllables in a word as there are vowels.

- The expiratory theory.

There are as many syllables in a word as there are expiration pulses.

- The sonority theory.

There are as many syllables in a word as there are peaks of prominence or sonority.

## Scale of Sonority

- Low vowels /a:, O:, P, x/
- Mid vowels /e, E:, q, A/
- High vowels /i:, I, u:, V/
- Semi-vowels /w, j/
- Sonorants /l, r, m, n, N /
- Voiced constrictive consonants $/ \mathbf{v}, \mathbf{z}, \mathbf{Z}, \mathbf{D} /$
- Voiced plosive consonants /b, d, g/
- Voiceless constrictive consonants \& affricates /S, C, G, f, s, h, T /
- Voiceless plosive consonants /p, t, k/


## 3. Functional Characteristics of the Syllable.

As a phonological unit the syllable performs three functions:

1. Constitutive
2. Distinctive
3. Identificatory

## Constitutive function

- Syllables constitute words, phrases and sentences through the combination of their prosodic features:
loudness - stress pitch - tone duration - length


## Syllables may be:

- stressed- unstressed
- high, mid, low, rising, falling
- long, short tempo


## Distinctive \& Differentiatory Function

- Is revealed through the phenomenon of "juncture".
Close juncture occurs between sounds within one syllable
Open juncture occurs between two syllables


## Mark the type of juncture in:

- ice cream
- a nation
- an Asian
- it swings
- до дела ли
- о Толе
- доделали
- от Оли

American scientists H.A. Gleanson, L.S. Harris, K. Pike Consider the open juncture a separate segmental phoneme.

They include / + / into the inventory of phonemes as a separate differentiatory unit.

We +loan we'll + own

$$
\begin{aligned}
& a+\text { coke } \\
& \text { I + feel }
\end{aligned}
$$

## Identificatory Function

- This function is conditioned by the pronunciation of the speaker.
- The listener can understand the exact meaning of the utterance only if the syllabic boundary is perceived correctly "syllabodisjuncture".
e.g.
pea stalks - peace talks
my train - might rain


## 4. Graphic Characteristics of the Syllable.

Division of words into syllables in writing (syllabographs) is based on 1). morphological principles:
the part of a word which is separated, should be either a prefix, or a suffix, or a root (morphograph).
e.g. speak-ing, utter-ance, un-known
2). syllabic structure of words
e.g. un-pre-ce-den-ted
3). the meaning of words
e.g. house-work, spot-light

## Structural properties of the syllable

A syllable may be formed by :

- a vowel (V)
- a vowel and a consonant (VC)
- a consonant and a sonorant (CS)

Unlike the Russian language some consonants in English may form syllables:

- in unstressed final position preceded by a noise consonant [l],[m],[n] become syllabic
- E.g. little ['IltI]
blossom ['bIPsm] garden ['gRdn]


## Types of syllabic structure

- V - fully open
- VC - finally closed
- CV - initially covered
- CVC - fully closed


## Examples of English syllable types:

- V - fully open
- VC - finally closed
- CV - initially covered
- CVC - fully closed
$\rightarrow$ /E: / err
$\rightarrow$ / It / it
$\rightarrow / n q V /$ no
$\rightarrow / n q V t /$ note


## Give examples of different types of syllables:

- CVC
- CVCC
- CVCCC
- CCCVC
- CVCCCC


## The number of syllables in the English word

 can vary from one to eight :- / bPks / box
- / 'sltt / city
- / 'fxmIII / family
- / slm'pllsItt / simplicity
- / 'An'nxCqrqlI / unnaturally
- / 'InkPm"pxtl'bll|tl / incompatibility
- / 'AnIn"telIGl'bll|tl / unintelligibility


## Useful Rules for Syllable Division

1. Never divide a word of one syllable.
2. Never divide a word within a syllable.
3. Never divide a word so that one of the parts is a single letter.
4. Never divide a an ending of two syllables (a suffix) such as -able, -ably, fully.
5. Never divide a word so that an ending of two letters such as -ed,-er, -ic begins the next line.
(Exception-ly)
