

Theory of Phonology

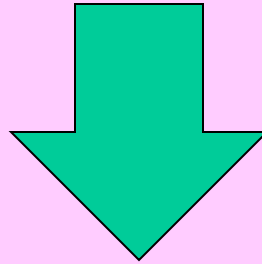
The Syllable

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?



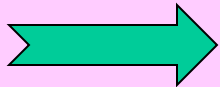
fire
meal
schism

Where is the boundary between the syllables in the word

master



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:**, **l**, **u:**, **V**/
- Semi-vowels /**w**, **j** /
- Sonorants /**l**, **r**, **m**, **n**, **N** /
- Voiced constrictive consonants /**v**, **z**, **Z**, **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

tempo

Syllables may be:

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

Distinctive & Differentiatory Function

- Is revealed through the phenomenon of “**junction**”.

Close junction occurs between sounds within one syllable

Open junction occurs between two syllables

Mark the type of juncture in:

- **ice cream**

- **a nation**

- **it swings**

- **до дела ли**

- **о Толе**

- **I scream**

- **an Asian**

- **its wings**

- **доделали**

- **от Оли**

American scientists H.A. Gleason, 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

a + coke

I + feel

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 ['lɪtl]
blossom ['blɒsm]
garden ['gɑːdn]

Types of syllabic structure

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

Examples of English syllable types:

- **V** – fully open → / **E:** / err
- **VC** – finally closed → / **It** / it
- **CV** – initially covered → / **nqV** / no
- **CVC** – fully closed → / **nqVt** / 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
- / **'sItl** / city
- / **'fxmIlI** / family
- / **slm'plIsItl** / simplicity
- / **'An'nxCqrqIl** / unnaturally
- / **'InkPm"pxtl'bIlItl** / incompatibility
- / **'AnIn"teIlGI'bIlItl** / 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**)