

SYLLABLE IN PHONOLOGY

- Words can be cut up into units called **syllables**.
- **Syllable** is a unit of spoken language consisting of a single uninterrupted sound.
- Humans seem to need syllables as a way of segmenting the stream of speech and giving it a rhythm of strong and weak beats.
- Syllables exist only to make speech easier for the brain to process.
- A word contains at least one syllable.

Determine how many syllables are in the following words:

- Emily
- Trevor
- Suzy
- Restroom
- Recess
- Book
- Environment

Syllables and their parts

- The parts are **onset** and **rhyme**; within the rhyme we find the **nucleus** and **coda**.
- Not all syllables have all parts; the smallest possible syllable contains a nucleus only.
- A syllable may or may not have an onset and a coda.

Onset (O)

- **Onset:** the beginning sounds of the syllable; the ones preceding the nucleus.
- These are always consonants in English. The nucleus is a vowel in most cases, although the consonants [r], [l], [m], [n], and the velar nasal (the 'ng' sound) can also be the nucleus of a syllable.

Rhyme (R)

- **Rhyme** (or **rime**): the rest of the syllable, after the onset (the underlined portions of the words above). The rhyme can also be divided up:



Rhyme = nucleus + coda

Nucleus (N)

- is the core or essential part of a syllable. A nucleus must be present in order for a syllable to be present.
- In English and most other languages, most syllable nuclei are **vowels**.
- The English liquids [r l] and the nasals [m n] can be the nuclei of syllables under certain conditions. [r] can be a nucleus as easily as a vowel, in any position: the words 'bird', have [r] as the nucleus; in other words, there is no vowel in the pronunciation of these syllables, even though they have one in the spelling.

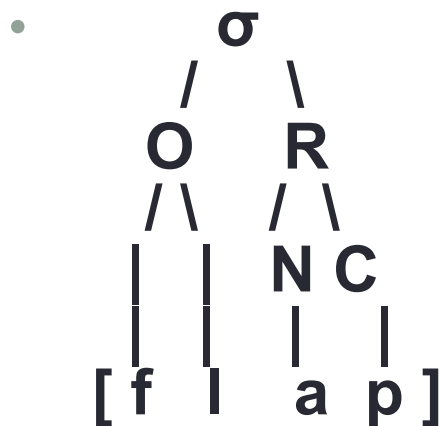
[brd]

- [l] and the nasals [m n] become syllable nuclei when they follow an alveolar consonant in the last syllable of a word. This happens in the relaxed or casual rather than very formal articulation of the word. Compare casual vs. formal pronunciations of 'button', 'bottle', 'bottom'.

• Coda (C)

- Coda is the ending sound of the syllable, the ones preceding the nucleus.
- These are always consonants in English.
- Onsets are strongly preferred over codas
- Consonants in codas are weakened: think of what happens to r in many English dialects (car [kaa] versus red). Coda consonants are much longer. They affect stress patterns.

- Linguists often use tree diagrams to illustrate syllable structure. 'Flop', for example, would look like this (the word appears in IPA symbols, not English spelling). 's' = 'syllable'; 'O' = 'onset'; 'R' = 'rhyme'; 'N' = 'nucleus'; 'C' = 'coda'.
- The syllable node at the top of the tree branches into Onset and Rhyme; the Onset node branches because it contains two consonants, [f] and [l]. The Rhyme node branches because this syllable has both a nucleus and a coda.



Steps to determine the diagram:

- a. Determine the nucleus (N)
- b. Add Rhyme (R) on the ordinate of the nucleus
- c. Determine the onset (O) and the coda (C).

If a syllable has the coda, it is called as **closed syllable**

Example : cap, sit, man

If a syllable doesn't have the coda it is called as **open syllable.**

Example : he, she, me

Draw, the syllable structure of the following words:

apron

basic

began

begin

depend

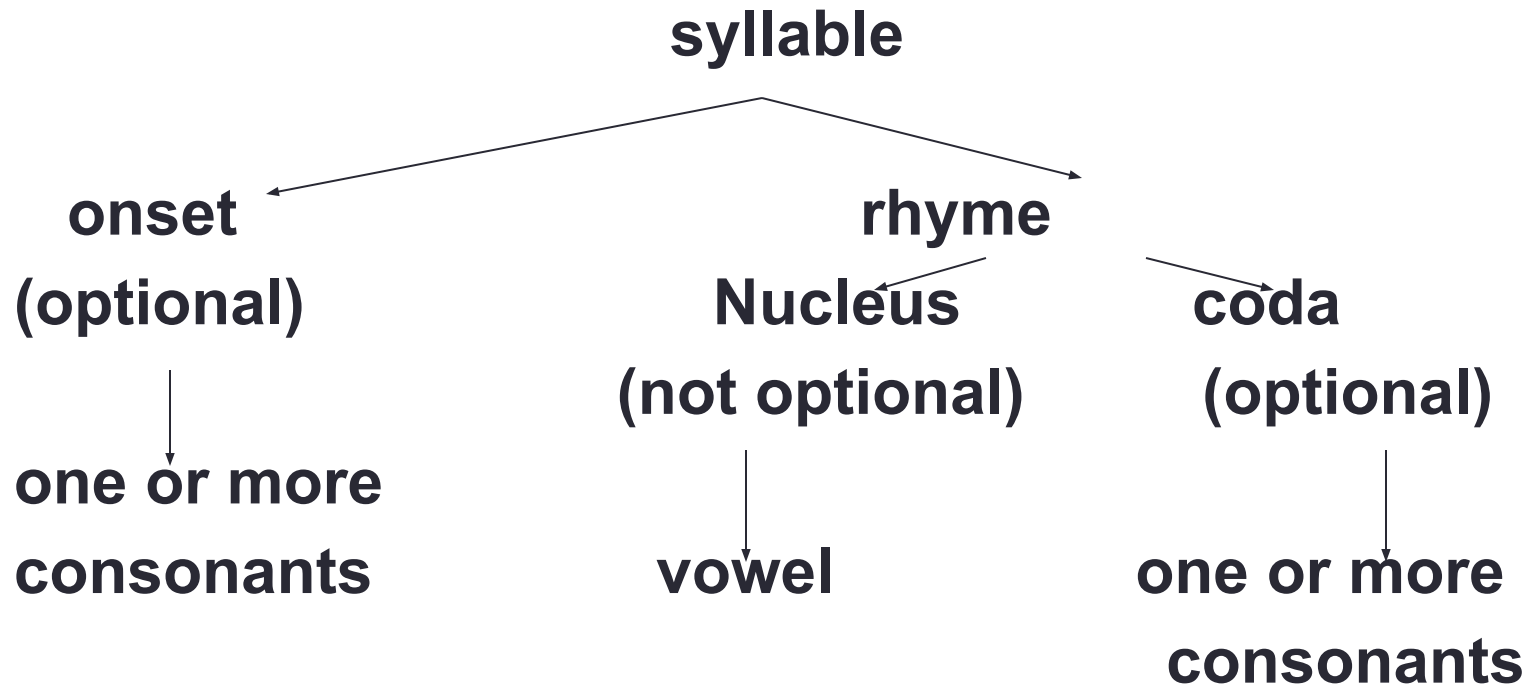
even

hotel

Syllables and Clusters

- A syllable must contain a vowel or a vowel-like sound.
- The most common type of syllable in a language has a consonant as well.
- When describing syllables:
 - C = consonant
 - V = vowel

Coda, onset and nucleus



syllables

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graph TD; A[syllables] --> B[open syllables]; A --> C[closed syllables]; B --> D[Syllables which end in a vowel and no coda]; C --> E[syllables which end in a coda 'consonants'];
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open syllables

**Syllables which end
in a vowel and
no coda**

closed syllables

**syllables which
end in a coda
'consonants'**

- **Consonant clusters:**

both the onset and the coda can consist of more than one consonant

e.g. green (CCVC)

street (CCCVC)

post (CVCC)

Syllabic consonants

- Sometimes when a vowel is elided a consonant can become a syllabic nucleus.
- Only a consonant in the coda can become a syllabic nucleus.
- Only the following actual consonants can become syllabic nuclei:
 - /l m n/

Syllables and stress

- Some syllables are more prominent than others.
- These are termed 'stressed' syllables.
- Stress is related to the location of a syllable in a word.

Exercise

Which is the stressed syllable in the following words?

income

stupid

induce

Phantom