

Lesson Four: Suprasegmental Phonology

1- English Syllables:

All words can be cut up into units called syllables. The syllable is a unit of spoken language larger than a phoneme. It is a unit of pronunciation uttered without interruption, forming whole or part of a word, and usually having one vowel (or vowel-like) sound, or diphthong sound optionally surrounded by one or more consonants. A word contains at least one syllable. So, there are:

- **Monosyllabic words** (having one syllable) as in **did** /dɪd/, **was** /wɒz/ /wəz/
- **Disyllabic words** (having two syllables) as in **doctor** /dɒktə/, **Friday** /fraɪdeɪ/
- **Trisyllabic words** (having three syllables) as in **difficult** /dɪfɪkəlt/
- **Polysyllabic words** (having four syllables) as in **civilization** /sɪvəlaɪzeɪʃn/

2- Importance of Syllables: most people seem to believe that, even if they cannot define what a syllable is, they can count how many syllables there are in a given word or sentence. Humans seem to need syllables as a way of segmenting the stream of speech and giving it a rhythm of strong and weak beats, as we hear in music. Syllables do not serve any meaning-signalling function in language; they exist only to make speech easier for the brain to process.

3- The Structure of the English Syllable: Syllables have internal structure: they can be divided into parts. The parts are **onset** and **rhyme**; within the **rhyme** we find the **nucleus** (or **peak**) 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/or a coda.

- **The Onset:** the onset is the beginning sounds of the syllable; the ones preceding the nucleus. These are always consonants (we can have one, two or three consonants as an onset) in English. All consonants in English, except [ŋ] can appear as onsets. [ʒ], however, is rare. In the following words, the **onset** is in bold characters (**r**ead, **f**lop, **s**trap).

- If a word contains more than one syllable, each syllable will have the usual syllable parts (**win.dow**, **to.ma.to**, **fun.da.men.tal**).
 - If the first syllable of a word begins with vowel (any vowel may occur, though “u” is rare) we say that this initial syllable has a **zero onset**.
- **Rhyme (or rime):** the rhyme is the rest of the syllable, it can be divided up (Rhyme=nucleus+coda).
- **The Nucleus:** as the term suggests, 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, the nucleus is a vowel (or diphthong) in most cases.
- **The Coda:** is usually one, or more consonants. The coda may be absent in some syllables.
- In English, the syllable structure analysis of the words ‘**read**’, ‘**flop**’, ‘**strap**’ and ‘**window**’, for instance are as follows (the IPA symbols are used to show the sounds in the word/syllable):
- **Read = one syllable**
 Onset= [r]
 Rhyme= [i:d]
 Nucleus= [i:]
 Coda= [d]
 - **Flop= one syllable**
 Onset= [fl]
 Rhyme= [ɒp]
 Nucleus= [ɒ]
 Coda= [p]
 - **Window= 2 syllables**
 First syllable: [wɪn]
 Onset= [w]
 Rhyme= [ɪn]
 Nucleus= [ɪ]
 Coda= [n]
 Second Syllable= [dəʊ]
 Onset= [d]
 Rhyme= [əʊ]
 Nucleus= [əʊ] (this syllable has no coda)

4) - Consonant Clusters:

When we have more than one consonant appearing as either the onset or coda (or both) of a syllable, we call them a **consonant cluster**.

A consonant cluster is a group or sequence of consonants that appear together in a syllable without a vowel between them. It is important to distinguish between consonant clusters and diagraphs with which they are often confused. In contrast to a consonant cluster, a diagraph is a group of two or more symbols which really stand for just one sound (usually a consonant).

In the word *chat*, the letters *c* and *h* appear contiguously but are *not* a consonant cluster, even though both are separate consonants in other contexts (cat; hat). In this instance, *ch* is a diagraph because the *ch* sequence represents a single sound in the underlying English sound system. Examples of consonant clusters are: /sp/ and /ts/ in the word *spots* ---- /spr/ in the word *spray*

As such, we may have initial and final consonant clusters. There are some **patterns** or rules of phonological system concerning syllable structures. Known as **sequence constraints**, they are restrictions on the number and type of consonants that can combine to form syllables and words; they vary greatly from one language to another.

➤ **Initial Consonant Clusters:**

In English, a word or a syllable may begin with up to three consonants, but no more than three. If a word does begin with three consonants, the first will always be [s], the second must be chosen from among the voiceless stops [p t k] and the third from among the sounds [l r w y]. Thus, we get words such as 'squeeze' [skwi:z] in English. We have two kinds of initial clusters: initial two-consonant clusters and initial three-consonant clusters.

- Initial two-consonant clusters are of two sorts. One sort is composed of 's' followed by one of a small set of consonants. Examples of such clusters are found in words like 'sting' [strɪŋ], 'sway' [swei], 'smoke' [sməʊk]. The 's' in these clusters is called **pre-initial** consonant while the other consonants that follow it are the **initial** consonants. The other sort begins with one of a set of about fifteen consonants followed by one of the set 'l, w, r, j' as in 'play' [pleɪ], 'tray' [treɪ], 'quick' [kwɪk], 'few' [fju:]. The first consonant in these clusters is called the **initial** consonant and the second one the **post-initial**.

- Initial three-consonant clusters have a clear relationship with the two sorts of the two-consonant cluster described above. Examples of three-consonant initial clusters are ‘split’ [**splɪt**], ‘stream’ [**stri:m**], ‘square’ [**skweə**]. The ‘s’ in these examples is the **pre-initial** consonant, the ‘p’, ‘t’ and ‘k’ that follow ‘s’ are the **initial** consonant and the ‘l’, ‘r’ and ‘w’ are the **post-initial**.

➤ **Final Consonant Clusters:**

In a syllable’s coda, we have the possibility of up to four consonants. This maximum (four consonants) is more common for one-syllable words.

- If there is no consonant, we say that there is a **zero coda**, as in ‘do’, ‘though’
- When there is one consonant only, this is called, this is called the final consonant. Any consonant can be final in English except ‘h’, ‘r’, ‘w’ and ‘j’ as in ‘cat’, ‘dream’, ‘seen’.
- Two-consonant final clusters are of two sorts. The first one includes **final** consonant preceded by a **pre-final** one. Pre-final consonants in English form a small set: m,n,l,ŋ,s. We can see these in ‘bump’ [bʌmp], ‘bent’ [bent], ‘bank’ [bæŋk], ‘belt’ [belt], ‘ask’ [ɑ:sk]. The other sort of two-consonant final cluster is made of a **final** consonant followed by a **post-final** one. Post-final consonants also form a small set: s,z,t,d,θ. We can see these in examples like ‘bets’ [bets], ‘beds’ [bedz], ‘backed’ [bækt], ‘bagged’ [bægd], ‘eighth’ [eɪθ]
- Final three-consonant clusters are also of two types. The first one is **pre-final** plus **final** plus **post-final**, as set out in the following table:

		Pre-final	Final	Post-final
‘helped’	he	l	p	t
‘banks’	bæ	ŋ	k	s
‘bonds’	bɒ	n	d	z
‘twelfth’	twe	l	f	θ

- The second type shows that more than one post-final consonant can occur in a final cluster: **Final** plus **Post-final 1** plus **Post-final 2**. Post-final 2 is again one of ‘s,z,t,d,θ’.

		Pre-final	Final	Post-final 1	Post-final 2
'fifths'	fi	--	f	θ	s
'next'	ne	--	k	s	t
'lapsed'	læ	--	p	s	t

- Four-consonant clusters can be analysed as consisting of a final consonant preceded by a **pre-final** and followed by **post-final 1** and **post-final 2**.

		Pre-final	Final	Post-final 1	Post-final 2
'twelfths'	twe	l	f	θ	s
'prompts'	prɒ	m	p	t	s

- A small number of cases seem to require different analysis, as consisting of a **final consonant** with **no pre-final** but **three post-finals**.

		Pre-final	Final	Post-final 1	Post-final 2	Post-final 3
'sixths'	sɪ	--	k	s	θ	s
'texts'	te	--	k	s	t	s

End of Lesson Four!