Syllable

Lecture 11

The Nature of the Syllable

The syllable is an important unit in the rhythm of speech. It can be identified according to a *phonetical* or *phonological* point of view. The *phonetical* point of view is concerned with the physical production of sounds, whereas the *phonological* one is concerned with abstract units within the context.

The Phonetical Point of View

- ***Phonetically***, **syllables are described as consisting of a center which has little or no obstruction to airflow and which sounds comparatively loud.**

Cont.

- **Before and after this center (that is the beginning and end of the syllable), there will be great obstruction to airflow and/or less loud sound.**

Syllable

beginning

greater obstruction

less loud sound

Center

little/no obstruction

sound is load

end

greater obstruction

less loud sound

Phonetical **there are different types of Syllables**

1. A Minimum Syllable: is a single vowel in isolation which is preceded and followed by silence.

Example:

are **/a:/** ***or*** **/ɔ: /** ***err*** **/ɜ:/**

/m/ (agreement) - /ʃ/ (silent)

2. Syllables with an onset only: more than just silence preceding the center of the syllable.

Example:

bar **/ba:/** ***key*** **/ki: /** ***more*** **/mɔ:/**

3. Syllables with a coda only: more than just silence following the center of the syllable.

Example:

am **/æm/** ***ought*** **/ɔ:t/** ***ease*** **/i:z/**

3. Syllables with an onset & a coda:

Example:

run **/rʌn/** ***sat*** **/sæt/** ***fill*** **/fɪl/**

Syllabicity

A further phonetic property of consonants that may be transcribed is whether the consonant is *syllabic*.

Example

There is a phonetic difference between the n of the American English *cotton* and that of *con*.

n of *cotton* is *syllabic* /ka?n̩/

n of *con* is *nonsyllabic* /kan/

Cont.

There is no simple definition of *syllabic* consonant vs. *nonsyllabic* consonant, save that a *syllabic* consonant forms the peak of a syllable and a *nonsyllabic* consonant does not.

Cont.

The main phonetic correlation of the distinction between *syllabic* and *nonsyllabic* consonant is duration, where *syllabic* consonants are generally longer than the *nonsyllabic* consonants.

Cont.

A number of sonorant (voiced) consonants of English can be *syllabic*.

Example:

bottle /bɑɾl̩/

fur /fr̩/

lesson /lɛsn̩/

- **Generally, one finds *syllabic* sonorants only between consonants and the beginning or end of a word.**
- **Thus in English, final [r] is *nonsyllabic* when it is preceded by a vowel, as in *car* [kar],**
- **and [r] is *syllabic* when preceded by a consonant, as in *copper* [kapr̩].**

Cont.

One can predict the difference between *syllabic* and *nonsyllabic* sonorant in English from surrounding segments.

However, in normal speech American English:

- ***terrain*** **[tərejn] is pronounced as [tr̩ejn] which is distinct from *train* [trejn].**
- ***polite*** **[pəlajt] is pronounced as [pl̩ajt] which is distinct from *plight* [plajt].**

Syllabic **consonants can be predicted by a rule in English.**

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The *Phonological* Point of View

- **It involves looking at the possible combinations of English phonemes.**

- **The study of the possible phoneme combinations of a language is called *phonotactics*.**

a). Initial Position:

- **The word can begin with a vowel, or with one, two or three consonants.**
- **No word begins with more than three consonants.**

b). Final Position:

- **The word can end with a vowel, or with one, two, three or four (very rare) consonants.**
- **No word ends with more than four consonants.**

The Structure of the English Syllable

a). Initial Position:

1. If the first syllable of the word in question is a **vowel**, this initial syllable has a **zero onset**.

2. If the syllable begins with **one consonant**, that initial consonant may be any consonant phoneme except ʒ ; ŋ is rare.

a). Initial Position:

3. Having two or more consonants together is called *consonant cluster*. Initial two-consonant clusters are of two sorts in English:

1. Composed of s followed by a small set of consonants:

sway **/sweɪ/**

smoke **/sməʊk/**

sting **/stɪŋ/**

The s in these clusters is called pre-initial consonant and the other consonant (m, t, and w) is the initial consonant.

2. Begins with set of about 15 consonants, followed by one of the set l, r, w, j:

play /pleɪ/ *try* /traɪ/

quick /kwɪk/ *few* /fju:/

We call the first consonant initial consonant and the second the post-initial consonant.

Three-consonant initial clusters:

split **/splɪt/**

post-initial consonant

initial consonant

square **/skweə/**

pre-initial consonant

stream **/stri:m/**

b). Final Position (final consonant clusters)

1. Here we can have up to four consonant clusters.
2. If there is no final consonant, we say that there is **zero coda**.
3. When there is only **one** consonant, we call it **final consonant**.

Cont.

4. Any consonant may be a final consonant except h, r, w, j.

5. There are two sorts of two-consonant final clusters:

1. Final consonant *preceded* by a pre-final consonant; a small set m, n, ŋ, l, s:

bump	**/bʌmp/**	***belt***	**/belt/**
bent	**/bent/**	***ask***	**/a:sk/**
bank	**/bæŋk/**		

2. Final consonant *followed* by a post-final consonant; also a small set s, z, t, d, θ:

bets **/bets/** ***bagged*** **/bægd/**

beds **/bedz/** ***eighth*** **/eɪtθ/**

backed **/bækt/**

These post-final consonants can be identified as separate morphemes.

Cont.

6. There are two types of final three-consonant clusters:

Three-consonant final clusters:

1. pre-final + final + post-final

helped /helpt/

post-initial consonant

final consonant

pre-final consonant

banks /bæŋks/

bonds /bɒndz/

2. final + post-final 1 + post-final 2

The post-final 2 consonant is one of s, z, t, d, θ .

fifths **/fɪfθs/**

next **/nekst/**

lapsed **/læpst/**

post-initial consonant 2

post-initial consonant 1

final consonant

Cont.

7. a). Most four-consonant clusters can be analyzed as consisting of:

pre-final + final + post-final 1 + post-final 2

pre-final + final + post-final 1 + post-final 2

		pre-final	final	post-final 1	post-final 2
twelfths	twe	l	f	θ	s
prompts	prD	m	p	t	s

Cont.

7. b). a small number of cases of four-consonant clusters consists of a final consonant with no pre-final one:

final + post-final 1 + post-final 2 + post-final 3

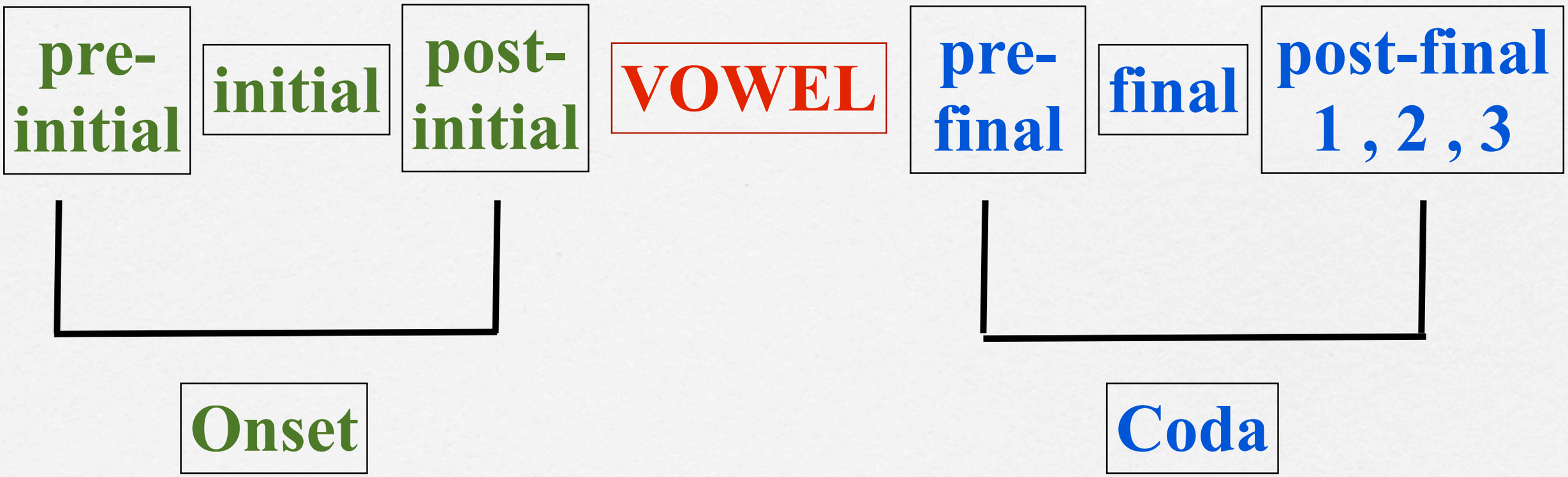
final + post-final 1 + post-final 2 + post-final 3

	final	post-final 1	post-final 2	post-final 3
sixths	sɪ	k	s	θ	s
texts	te	k	s	t	s

Summary

To sum up, we may describe the English syllable as having the following maximum phonological structure:

Summary


pre-initial
initial
post-initial
VOWEL
pre-final
final
post-final 1 , 2 , 3
Onset
Coda

Summary

There must be a VOWEL in the center of the syllable.

Example:

stud.ents **/stju:d.nts/**

Notice that dot is used to mark a syllable.