Syllable structure
Rogers p. 88-93

• Syllables: usually easy to agree on how many syllables make up an English word
  – Harder sometimes to agree on ‘boundary’ between two syllables
• Simple scheme can be used to represent ‘possible English word’
  – Can be applied easily to any possible English word
• Starting point is possible one syllable words

Phonetics more than Cs and Vs

• Additional things necessary to characterize phonetic patterns of English
• 1) Phonotactics
  – Restrictions on what C and V patterns go together to making up syllables and words
• 2) Prosodics (suprasegmentals)
  – Stress
  – Intonation

Basic structure

Two main divisions of syllable
Onset -- all consonants before the vowel
Rhyme (sometimes spelled rime)
  nucleus - vowel or diphthong
  coda - consonants following vowel (if any)
Multisyllable words

- Two principles yield unique syllable structures
  - 1) Maximize onsets
    - As many consonants as possible get ‘stuck’ to onset of syllable
    - Maximum determined by possible one-syllable words
  - 2) Avoid rhymes ending in lax vowels

Open and closed syllables

- Open syllables are syllables that end in a vowel or diphthong
  - i.e. those that have a rhyme with a nucleus but no coda consonants
- Closed syllables are syllables that end in a consonant
  - i.e. they have rhymes with coda consonants
Example ‘strained’

Example ‘butter’
Max onset only leaves bad first syllable!!

Example ‘Picture’

Example ‘butter’
Fix: Ambisyllabicity
Principle of ambisyllabicity (Rogers p. 93)

“In an unstressed syllable, the first consonant of the onset also serves as the coda of the preceding syllable.”

Beyond syllable structure

- There’s more to phonetics than consonants, vowels and syllable structure
- Major missing ingredients stress and intonation
  - We will concentrate on simplest cases
  - Necessary to fully understand stress

Example ‘Pantry’

Treatment simplified version of Ladefoged

- Stress
- There may really only be three basic kinds of English vowels
  - Full (primary) stressed vowels
  - Full (non-primary stressed) vowels
    - Most vowels labeled by Rogers as ‘secondary stress’ are actually these
  - Reduced vowels
    - Very short, limited inventory… obscure quality
Additional factor ‘tonic syllables’

- Every utterance consists of one or more intonational phrases
- Every intonational phrase has a ‘tonic’ syllable: The one most prominent syllable of the phrase
- A tonic syllable is always centered on a full primary-stressed vowel

Our working system

- Primary stressed syllables involve some excursion of the pitch contour
  - See sense 2 and 3 of definition at http://www.mw.com/cgi-bin/dictionary?book=Dictionary&va=excursion
  - One primary stressed syllables is the tonic syllable
    - It has ‘extra punch’
    - Tonic syllable is often the last primary stress in the intonational phrase
- Other full vowels may occur in non-primary stressed syllables
  - I will use the ‘secondary stress’ symbol when we need to emphasise this
  - This will only mean a ‘full non-primary stressed vowel’
    - These cause no appreciable excursion of the pitch, just a return toward the baseline pattern

The complication

- The tonic syllable is the most prominent full, primary stressed syllables
- Other stressed syllables may sound less prominent and may be interpreted as ‘secondary stresses’
- Some linguists thing there can be many grades of stress

Our working system-- reduced vowels

- Reduced vowels will sometimes be noted explicitly by use of special symbols
  - [a] [a] are always used for reduced vowels
  - Note: Rogers sometimes uses [ə] in full vowels
    - I will use[ə] or [ə] for the full vowel
  - Two other vowels also occur in reduced syllables
    - [i] a reduced, short, centralized version of [i]
    - [i] a reduced, short, centralized version of [i]
- Alternately reduced vowels will sometimes be noted explicitly by use of IPA extra short diacritic or micron: [’] and full non-stressed vowels may be indicated by a macron [’]
Minimalist intonation

- Intonation is quite a complex topic in English
- There is not full agreement on exactly how to describe it
- There are clearly several different types of rising and falling patterns with different potential meanings
- What do want to you name the dog?
  - John: ‘Napoleon.’
  - Mary ‘Napoleon?’
  - John (definitively): ‘Yeah. Napoleon(!)’
  - Timmy: ‘Napoleon??? I want to call him Spot.
- This is a topic that takes a long time to explore properly
  - Beyond our scope.

Simple falling intonation pattern

- Examples: Mark tonic syllable with *
  - The man with a dog’
    - [ðə 'mæn wiðə *daʊ]
  - The man with a dog.
    - [ðə *mæn wiðə ,daʊ]
  - The man with a dog.
    - [ðə ,mæn wiðə *daʊ]

Simple falling intonation pattern

- We will consider only the most ‘prosaic’ pattern for now
- Mainly to see how it interacts with stress.
  - We may examine some additional patterns later.
  - Mark tonic syllable with * before a primary stress mark

Live transcription

- SPECIAL -focus on stress and intonation
  - Mark tonic primary stress
  - Other primary stress
  - Secondary stress
  - Explicitly mark reduced syllables*
  - 4th transcription quiz.
    - I will demonstrate it frequently in class
- GENERAL TRANSCRIPTION
  - Mark primary stress
  - Do not confuse reduced syllables with full ones
    - (Some leniency for /æ/, /ɜ/, /ʌ/ and /ə/
  - Do not ‘promote’ reduced vowels.
    - ‘promenade’ should never have a [e] in the second syllable