SUPRASEGMENTAL PHONEMES
Suprasegmental Phonemes

- A phoneme is the smallest *segment* of sound that has the power to change the meaning; eg. consonants, vowels, diphthongs.

- In contrast with isolated phonemes, connected speech is characterized by continual modifications or alterations in *stress* and in *intonation*.

- Stress, intonation and rhythm are *suprasegmental* phonemes.
Speech communication is done via

- **segmentals**
  - phonemes, phones, allophones

- **suprasegmentals**
  - Stress, intonation, pitch, rhythm
  - necessary for speech communication
  - independent of segmental features (vowels and consonants)
Aspects of Pronunciation

- sounds
- rhythm
- intonation
- Phonetic symbols
- stress
Stress

A stressed syllable in a word is generally spoken with more articulatory force, resulting in a syllable that is *louder, longer in duration*, and *higher in pitch* than an unstressed syllable.
Word Stress

When the nucleus of the syllable(s) is produced in a reduced form, the syllable is said to be unstressed. Bold syllables in the following words are stressed:

- riddle, button, melon, manage
- person, zebra, happy, sedate
- surround, pretend, contain, remind
Sentence Stress

The last word in the sentence tends to stand out or have more emphasis (cf. primary sentence stress).

- *I like his* "style."
- *Bill and Jane went* "home."
- *If I get* "caught, I will get in* "trouble."
But phrases and sentences do not always end with a stressed word. Certain words in a sentence will usually receive emphasis or stress depending on:

- the level of importance of that word in the sentence (i.e., content vs. function words);
- the speaker’s intent of the message being conveyed (i.e. contrastive stress).
Sentence Stress (cont.)

Sentences with a different stress

1. I want **two** return tickets to London.
2. I want two **return** tickets to London.
3. I want two return tickets to **London**.
Sentence stress & content/function words

- **Content words** tend to (but not always) receive sentence stress; **function words** usually do not receive stress.

  - *I’m glad to "see you.*
  - *I’d like a "word with you.*
Contrastive stress

The use of sentence stress to indicate a speaker’s particular intent is termed contrastive stress.

- I want "iced coffee.
- I want iced "coffee.
- "Sheila purchased a new red sedan.
- Sheila "purchased a new red sedan.
- Sheila purchased a "new red sedan.
- Sheila purchased a new red "sedan.
Sentence Stress: given vs. new information

- Sentence stress also plays an important role in distinguishing the type of information being presented by a speaker.
- The words that provide new information to the listener would typically be stressed.

A: What did you have for lunch?
B: I had a "hamburger and "french fries for lunch.
Primary and secondary sentence stress

- The "boys ‘jumped into the ‘pool.
- The ‘boys "jumped into the ‘pool.
- The ‘boys ‘jumped into the "pool.
Which words should be stressed?

- Usually stressed (Content Words):
  - nouns
  - verbs (excluding be, have, do)
  - adjectives
  - adverbs (including not)
  - demonstrative pronouns (this, that, these, those)
  - interrogative pronouns (who, when, why, etc.)
Which words should be stressed? (cont.)

- Usually unstressed (Function Words):
  - articles (a, an, the)
  - simple prepositions (to, of, in, etc.)
  - personal pronouns (I, me, he, him, it, etc.)
  - possessive pronouns (my, his, your, etc.)
  - relative pronouns (who, that, which, etc.)
  - conjunctions (and, but, that, as, if, etc.)
  - the verbs be, have
  - auxiliary verbs (will, would, shall, should, can, could, may, might, must, etc.)
Which words should be stressed?
(cont.)

More on the verbs *be, do, have*:

- He is resigning.
- Do you see it?
- Harry is my best friend.
- Barbara has a lovely smile.

- I thought he was smarter than he *is*.
- All movies aren’t made in Hollywood, *are* they?
Which words should be stressed? (cont.)

- She is a "social worker.
- She is a ‘social "worker.

- to split "up, to put "on
- to "look at him, to "listen to him
- ‘What are you putting "on?
- ‘What are you "looking at?
Intonation

Intonation consists of pitch contours peaking on the stressed syllable of the last content word in each phrase.

A pitch contour is related to the height or lowness of a tone in comparison to surrounding tones.

Ex. “Really?!“

Try exaggerating the pitch contour.
Tone groups

Long sentences will usually have more than one tone group. Tone groups in longer sentences are signaled by a slight pause in the utterance (indicated in writing with a comma, dash, or semicolon).

- Yes!
- Not now.
- You took my umbrella, didn’t you?
- I got a blue scarf, not a red one.
- I need apples, pears, and tomatoes.
- The boys, who ate the candy, got sick.
Types of intonation contours: Falling

- Falling intonation contours are indicative of the finality of an utterance.

- **falling** and **rise-fall**
  - *The boys went home.* (unemotional statement)
  - *The boys went home.* (declarative statement)
Types of intonation contours: Rising

- Rising intonation contours usually indicate some uncertainty on the speaker’s part.

- Rising intonation contours are typical of *yes-no* questions, incomplete thoughts.
  - *Are you coming?*
  - *When I got work, I became ill.*

- Rising intonation contours are also common when reciting a list of items.
  - *My favorite colors are red, blue, and green.*
  - *Richie, Darren, and Williams came along.*
Three basic types of intonation

- The falling intonation
- The rising intonation
- The level intonation
Intonation Patterns

- Fall
- Rise
- Fall-Rise
- Rise-Fall
- Level
Transcription of intonation

/ rise
\ fall
∧ rise-fall
∨ fall-rise
∧\ rise-fall-rise
Each of these may express particular attitudes

- Fall: neutral statement
- Rise: neutral question, doubt
- Fall-Rise: surprise, skepticism
- Rise-Fall: emphatic statement
- Level: boredom, disinterest
Fall: neutral statement, conclusion

- E.g. Have you seen Ann?
- Yes. (Falling intonation indicates ‘I have answered your question and do not intend to add anything else’)
Rise: questioning, doubt, desire to continue conversation

- E.g. Have you seen Ann lately?
- Yes… (Rising intonation indicates ‘I want to continue the conversation, I am curious’)
Rise-Fall: emphatic statement, irritation, command

- Do I really have to clean my room?
- Yes!
Fall-Rise: surprise, scepticism

- Ann and Peter were on good terms at the party
- Oh yes?

Yes
Level: boredom, lack of interest

- Can you remember Peter Jackson? The other day in the office I invited him for dinner, he’ll be coming tomorrow.
  Yes.

- Yes
Rhythm

- Stresses tend to recur at regular intervals.

- *The ‘boy is ‘interested in en ’larging his vo "cabulary.*

- ‘Great ‘progress is ‘made "daily."
Stress-timed vs. Syllable-timed languages

- English is a stress-timed language

- ‘Dogs ‘eat "bones.
- The ‘dogs ‘eat "bones.
- The ‘dogs will ‘eat "bones.
- The ‘dogs will ‘eat the "bones.
- The ‘dogs will have ‘eaten the "bones.