1 phonetics

- the study of speech sounds
- focus on the production and acoustic properties
- “the scientific study of speech sounds, their form, substance and perception and the application of this study to a better understanding and improvement of linguistic expression” Edwards, 1999

2 Who needs a working knowledge of sounds of American English?

3 Major Goal of Phonetics

- To describe important differences in production and perception of meaningful utterances
- and the nature of variation in the production and perception of these sounds
- translation: only sounds that make a difference in meaning and why this difference occurs.

4 How can speech be studied?

- Two necessary components
  - your ear
  - a system of recording what you hear

5 Major Branches of Phonetics

- Historical phonetics - sound changes
- Physiological phonetics - sound production
- Acoustic phonetics - nature of sound
- Perceptual phonetics - listener’s perception
- Experimental phonetics - lab study
- Clinical Phonetics - application of above

6 Systems of Written Language

- first alphabet, 4000 years ago = pictographs
- logorams - egyptian hieroglyphics
- phonograms
- Greek alphabet
- Roman alphabet

7 Vowels - start thinking about the vowel sound in each of these words:

- hat
- head
- quiet
- bit
- pen
- few
8 Problems with Roman Alphabet
- challenges in spelling and pronunciation
  - oral language changes rapidly, written language slowly
  - English developed from mixture of European language--thus borrowed words
  - American English continues to change, absorbing new words

9 continued
- Inadequacy of sound symbol system/ more sounds than symbols
- although spelling changes, sounds are the same
- different sounds for same spelling
- some letters in words have no sound
- words spelled the same but pronounced differently or spelled differently but pronounced the same

10 What’s going on here?
- Bow/bow
- cab, tack, ache
- pneumonia
- bare
- told, tomb, woman
- site

11 Different number of letters/sounds
- Which words have only two sounds?
  - Though buy off ought wry axe tough itch
  - pew shoe low know cough ash
- Which words have only three sounds?
  - Caught laugh shoot throw fade
  - sauce shin saw half box church
  - sting quick taught wrong shape

12 How many sounds in each of these words
- fill freeze tried fight gnaw feather wait
- palms mix shift foreign reached clams highly

13 Which of the 2nd and 3rd words ends with the same sounds as the first?
- Fix- tick, less Blow - now, toe
- fan - scene, condemn Charm - warn, thumb
- **Was** - fleas, fuss  **Tease** - fuse, cease
- **Walked** - fast, wagged  **Dismay** - quay, croquet
- **Breathe** - tooth, smooth
- **Frog** - huge, fatigue  **Cough** - through, tough

14 Solutions
- spelling reform efforts
- special alphabets

15 International Phonetic Alphabet
- designed to represent sounds not spelling
- one symbol/sound
- used worldwide
- many symbols from Roman alphabet, some from Greek, some specially designed
- see Table 2.1, page 12