SPPA 2220
Child Speech Sound Disorders

http://academic.mu.edu/sppa/slong/sppa2220.htm

Language versus speech

• language
  • the systematic, conventional use of sounds, signs, or written symbols in a human society for communication and self-expression
  • an arbitrary system of signs or symbols used according to prescribed rules to convey meaning within a linguistic community [Kent]
• speech
  • the oral medium of transmission for language
  • a system that relates meaning with sound [Kent]

Transcription terminology

• phonetic symbol  sànɛ́tə
• diacritic (mark)  sànɛ́tə
• phonemic (broad) transcription
• phonetic (narrow) transcription

Use of diacritics

• use them only when needed
• use them only to mark what is different from expectations
• use them only to mark inconsistencies in production

Sounds and sound contrasts

• phone
  • the smallest perceptible segment of speech sound
• phoneme
  • the smallest contrastive unit in the sound system of a language
• allophone
  • one of the sound variants within a phoneme class, often used in a specified phonetic context
i ə schwa u
I small cap i caret upsilon
e ə hooked schwa o
ɛ epsilon ɔ hooked ɔ open o
æ ash a script a

Phonemic diphthongs
• əɪ
• ɔɪ
• ɑʊ

Allophonic diphthongs
• ʌʊ
• ɛɪ

Coarticulatory effects on vowel production
• nasalization
  man [mæn]
  mad [mæd]
• reduction
  medicine ['medasɪn]
  medicinal [mæˈdɪsənəl]

manner

place

Distinctive features

phonemes

Terms to identify like sounds
• homorganic: sounds with identical place of articulation
  • [t] and [d] (alveolar)
• homotypic: sounds with identical manner of articulation
  • [f] and [s] (fricative)
• cognates: sounds with identical place and manner but different voicing
  • [k] and [g] (velar stops)
Syllables
- each syllable must contain a **vowel nucleus**
- with vowel reduction, **syllabic consonants** may occur (especially with liquids and nasals)

Word shapes
- VC (vowel initial)
- CV (open syllable with initial singleton)
- CVC (closed syllable with singletons)
- CC(C)V (open syllable with initial cluster)
- VCC(C) (vowel initial with final cluster)
- C(C)(C)V(C)(C) (closed syllable with initial cluster, final cluster, or both)
- 2 syllable
- 3+ syllable

metrical concepts
- weak vowels
  - έ ί ɚ
- strong vowels
  - ι έ ά ο ο ο ο ο ο ο
- metrical strength
  - S strong primary stress
  - s strong secondary stress
  - w weak
- trochaic bias in English

metrical patterns
- S cup, mouth, snake, hit
- Ss bathtub, yellow, airplane
- Sw wagon, table, ladder
- Ssw telephone, Santa Claus
- Swsw television, caterpillar
- wS again, below, today
- wSw pajamas

3 populations of childhood speech disorders
- residual errors
  - do not reflect phonological deficits
  - do not affect intelligibility
  - are not greatly stigmatized
  - are viewed as low priority for funded service

- speech delay
  - phonological deficits affect speech and literacy
  - phonological deficits associated with other cognitive-linguistic deficits
  - reduced intelligibility
  - short-term (75%) and long-term normalization
• special populations
  • speech-hearing mechanism
  • cognitive-linguistic processes
  • psychosocial processes