1 Language Acquisition

Early Language Acquisition
Later Language Acquisition
Processes of Language Acquisition

2 Early Language Acquisition

- Prelinguistic communication
- Early phonology
- One word at a time
- Early grammar

3 The social context of preverbal infants

- Speech to children prior to birth

-- Children in utero hear their mothers' speech and may respond to it.

- Speech to children in the first year of life

--Child-directed speech, baby talk, motherese
--higher in pitch, more variable in pitch, and more exaggerated intonational contours
--encourage infants to participate in conversations (See example on p. 243)

4 Prelinguistic gestures

- Development of communicative intent

-- Around 8 months of age, infants begin to use gestures in a communicative manner.
--Criteria to indicate communicative intent:
---1. Waiting 2. persistence 3. development of alternative plans

- Beginning of intentional communication

--- request
--- assertion

5 Communicative competence and early comprehension

- Children seem to comprehend language in a manner similar to how they produce it, with attention given to concrete manipulations of objects in the immediate environment.
- Young children often respond to complex speech by using a simple, action-based comprehension strategy.
- Children use their understanding of the cognitive meaning of the situations to help figure out what adults are saying.
- Meaning precedes and guides both comprehension and production.

6 Early phonology

- The child's first attempts at producing sounds have more to do with practicing with the sound system than with communicating with others.
- The errors are systematic.
- Fis phenomenon
- discrepancy between natural and imitated speech

7 The development of speech perception

- Categorical perception in infancy

- Adult listeners can distinguish sounds from different phonemic categories but not sounds from the same category.
- When the second member came from a different phonemic category, the infants' rate of sucking increased sharply, indicating the infants perceived the change.

8 Infant speech perception

- Infants are born with the ability to discriminate the phonetic contrasts of any of the world languages.
- The ability to perceive phonemic distinctions from other languages declines in the strength during the first year of life.

9 More on Infant speech perception

- 3-day-old infants can identify their own mothers' voices.
- 4-day-old infants can distinguish between utterances in their maternal language and those of another language.
- 4.5-month-old infants can recognize their names.

10 The development of speech production

- Cooing –2 months
- Babbling

-- 6-7 months: duplicated babbling (*babababa)*

-- 11-12 months: variegated babbling (*bigodabu)*

- Transition to speech –by the end of first year

--greater moter control

--cognitive maturation

--realize "things have names!"

- Idiomorphs—personalized words

→creative, consistent

11 Phonological processes in early words (Table 10-1, p. 254)

- Reduction
- Coalescence
- Assimilation
- Reduplication
- Why?

12 Causes of errors

- Perceptual difficulty
- Children who fail to pronounce particular sounds correctly may have failed to perceive them correctly.
- But, usually children with normal hearing are able to discriminate sounds .A child might be able to point correctly to a coat and a goat even while calling them both "goat."
- Articulatory difficulty
- Limited processing load

13 One word at a time

- Children usually utter their first words at around 12 months of age.

- Their utterances consist of single words till later half of the second year.
- They typically have acquired 14000 words by age 6, on average 8 words a day.

14 Early words

- Here and now
- Bias toward objects that change or move in response to their reaction
- Children's initial productive words are similar.

---Phonological composition

---Noun bias

---Reflect input directed to them

15 Unconventional word/meaning mapping

- Overextension
- Underextension
- Reasons

1. their conceptual categories may actually differ from those of adults
2. Retrieval problems
3. Not yet acquire the proper label
4. Use analogically to comment on similarities they have noticed
5. humor

16 The Role of Adult Speech

- When adults look at and label objects that are visible to children, children assume the label refers to the adult focus of attention, and make an initial object-label mapping.
- Naming games
- Basic-level categories

-----Similarities within categories

-----The most general level at which objects are similar because of their forms, functions, component parts or motions.

17 Cognitive constraints

- Whole objects bias
- Taxonomic bias
- Mutual exclusivity bias

18 Holophrases

- Approaches to holophrases
- Implicit sentences with grammatical knowledge
- no grammatical knowledge implicit in a sentence. Use the environment as the rest of their utterance
- One-word speakers are capable of using either intonation or gesture to accompany their single words.
- Semantic relations in one-word speech (Table 10-2, p.260)

19 Early grammar

- Children begin to speak in word combinations by about 2 years of age, and over the course of the next few years, they make impressive advances in grasping the grammar of their native language.
- The early grammatical development are similar in all of the world's languages
- Basic child grammar is a universal construction of children learning their native language.

20 Measuring syntactic growth

- Mean length of utterance (MLU)—average length of a child's sentences scored on transcripts of spontaneous speech.
- Length is determined by the number of morphemes.
- Rules for calculating MLU

21 Stages of syntactic growth

- Stage I: MLU 1.0 ~ 2.0
- Stage II: MLU 2.0~2.5
- Stage III: MLU 2.5~3.0
- Stage IV: MLU 3.0~3.5
- Stage V: MLU 3.5~4.0

22 Index of productive syntax

- 100 spontaneous speech utterances from a child
- On the score sheet, mark the use of a variety of structures in four categories: noun phrases, verb phrases, questions and negation forms, and sentence structure.
- The score is the total number of points awarded for each structure

23 Two-word utterances

- novel and unique
- dominated by content words
- telegraphic speech
- consistent word order
- semantic relations (Table 10-3, p264)

24 Acquiring grammatical categories

- Semantic bootstrapping
  subject→ agent
- Maratsos suggests that children do this by observing grammatical operations that given linguistic forms take.
  e.g., Verbs take -ed.

25 Comprehension and production

- Diary studies
- Act-out tasks

- Picture-choice tasks
- Preferential looking paradigm
- Comprehension is in advance of production
- Cues: prosody, semantics, syntax, environmental and social context

26 Individual differences

1
- Referential strategy
- Nouns in immediate context
- Words→ sentences
- Part→ whole

2
- Expressive strategy
- Social interaction
- Diverse vocabulary
- Complete unanalyzed units
- Sentences → words
- Whole → part

27 Causes for individual differences

- Hemispheric differences
- Cognitive style
- Environmental factors