Language Development

- What is language?
  - Puzzle of language development
  - Elements of language
- Language acquisition
  - Preverbal communication
  - Speech perception
  - Speech production

What is Language?

Language: a system that relates sounds (or gestures) to meaning.
Language serves a wide range of purposes for the developing child

Goal of Language Development

Communicative competence = the ability to convey thoughts, feelings and intentions in an organized way that sustains and regulates human interactions

- Receptive language
- Productive language

Cues Children use to Solve the Language Puzzle

- Statistics
- Whole object principle
- Categorizing principle
- Mutual exclusivity principle
- Joint attention
The Elements of Language

• Phonology: the system of sounds in a language
  – Rules for putting phonemes together
  – Rules of intonation

Phonemes =
  the smallest sound units of a language

The Elements of Language

• Morpheme: the system of units of meaning involved in word formation

Morphemes =
  the smallest units of meaning

The Elements of Language

• Semantics: the meaning of words and their combinations

The Elements of Language

• Syntax: how words are combined to form phrases
The Elements of Language

- Pragmatics: Social rules of communicating language effectively in different contexts

Preverbal Communication

- Parent-baby face to face ‘dialogues’
- Communicative gestures

Assessing Early Language Development

*Indications of normally developing infant speech*

- Understanding at least some things that are heard
- Producing sounds at around 7 months
- Using gestures to communicate
- Pretending to use language

Speech Perception

- From birth infants are sensitive to the sounds of language
- Prefer human language sounds
- Distinguish between phonemes
- Sensitive to prosody
- Attend to statistical regularities in native language!
- Prefer ‘infant-directed speech’
Cultural Dimensions

Do people everywhere say “ba-ba-boo” to their infants?

Words differ but ways spoken are similar

Basic similarities across cultures and in some facets of language specific to particular types of interactions

Quantity of speech differ by cultures

Boys will be boys and girls will be...sweethearts?

Gender differences:
Parental language varies by child gender

Boys
• More firm, clear, and direct responses

Girls
• More diminutives
• More warm phrases
• More diversionary responses

Hey, hey...what do you say?

Speech Production

• Cooing (2 months)
• Babbling (4-12 months)
• One-word stage (12 months)
• Two-word stage (18-24 months)
• Vocabulary Explosion (18-24 months)
• Using grammatical rules
  — Overregularization
Speech Production

• Using grammatical rules
  – The ‘Wug’ test

Comprehension Precedes Production

Supporting Early Language Learning

With infants
- Respond to coos and babbles.
- Establish joint attention.
- Use child-directed speech.
- Play social games.

With toddlers
- Play make-believe together.
- Have frequent conversations.
- Read often and talk about books.
Three Views

- **Learning theory**: Language as a learned skill
- **Nativist approach**: Language as innate skill
- **Interactionist**: Best of both worlds (or theories)

Relationship Between Language and Thought

- **Symbolic function**
- **Language** allows preschoolers to:
  - Represent actions symbolically
  - Think beyond present to future
  - Consider several possibilities at the same time

Linguistic-Relativity Hypothesis

- Language shapes and may even determine the way people of a certain culture perceive and understand the world
  - Sapir-Whorf Hypothesis
- Language is the *cause* of thought

Speech Production

- Bilingual language development
  - Slower to start speaking
  - Sometimes mix up the two languages
  - Reach the rest of the language milestones at the same rate as monolingual children
  - Larger overall vocabulary (fewer words per language)
Speech Production

• Bilingual Advantage
  – Better understand words as arbitrary symbols
  – More cognitively flexible