

# Exploring Communication Disorders

## History

Behavioral Theory



B.F. Skinner  
(1904-1990)

Nativistic Theory



Noam Chomsky  
(1928)

Interactionist Theory



Piaget (1896-1980)  
Vygotsky (1896-1934)

- Speech and language are behaviors learned through **interaction with the environment**
- Very little internal structure of learning
- Primarily driven by the ability to make associations
  - Stimuli from the environment become associated with internal responses and symbols (written words)
- Language acquisition:
  - Statistical learning
  - Reinforcement
- Emphasizes the acquisition of language as an **innate physiologically determined, and genetically transmitted phenomenon**
- Our innate ability for language comes from the Language Acquisition Device (LAD)
  - Opposite of the blank slate theory posed by Locke
- **Cognitive, innate, and social aspects** of the individual's experience are necessary
- An interaction between language-learning and cognition
- Language is an expression of more general cognitive human activities (semantic-cognitive)
- Language structures emerge as a result of the continuing interaction between the child's current level of cognitive functioning and their linguistic and non-linguistic environment (social-pragmatic)

# Development

Typical language  
development

- Stage 1: 0-12 months
  - Perception
  - Cooing, babbling, echolalia (repeating sounds)
  - Vocal play
  - Jargon
  - Facial expressions and body language to communicate
- Stage 2: 12-24 months
  - First true words
  - Intentional and meaningful speech
  - Attach words to things
  - Holophrastic language (abbreviating words)
  - 3-5 word sentences
- Stage 3: 2-5 years
  - Intelligibility at 75%-95%
  - Motor speech sounds fully developed
  - Understands that words can have more than one meaning
  - Grammar and syntactical rules introduced
- Stage 4: 6-12 years
  - Pragmatics
  - Complex and elaborate forms of language
  - Figurative language

# Bilingualism

Bilinguals in the world	<ul style="list-style-type: none"><li>● 50% of the world is bilingual - 3.5 billion</li><li>● 54% of Europe is bilingual - 401 million</li><li>● 74% of young people aged 15-24</li><li>● 21% speak another language at home</li><li>● Applying knowledge from one language to another language</li><li>● Same words in different languages with the same meaning</li><li>● The young child has had exposure to two languages since birth</li><li>● When an individual is exposed to another language usually after the age of three and the natural language is established<ul style="list-style-type: none"><li>○ Early sequential bilingual: after age three or four</li><li>○ Late sequential bilingual: after puberty</li></ul></li></ul>
Transfer	
Cognates	
Simultaneous Bilingualism	
Sequential Bilingualism	
Second Language Acquisition	<ul style="list-style-type: none"><li>● Universal Theory (Eimas, 1971): infants are born with the abilities to perceive the range of human speech sounds</li><li>● Werker and Tees (1984):<ul style="list-style-type: none"><li>○ Infants: English 0;6 to 1;0</li><li>○ Stimuli: babies could distinguish the differences between Hindi dental vs. retroflex stops and Salish sounds</li><li>○ The older the children got, the less they could distinguish between sounds in different languages</li></ul></li><li>● Bilingualism is not static; changes with the amount of exposure (input)</li><li>● Protracted Development: one advances quicker than the other</li><li>● Language Attrition: one language gets forgotten</li><li>● Language Acquisition: one language does not advance</li><li>● Often experience delayed milestones</li><li>● Vocabulary size in one language usually minimal</li><li>● Mixing of the languages is normal</li><li>● Silent period</li><li>● Telegraphic period</li><li>● Sentences with mistakes and low fluency</li><li>● Fluent with minor differences</li><li>● Native-like speech</li></ul>
Types of Bilingualism	
Bilingual Children	
Second Language Acquisition	
Closure Process	<ul style="list-style-type: none"><li>● Bilingual brains are constantly creating a closure to understand concepts in the languages they know</li><li>● Codeswitching: alternating between two languages in a single sentence</li></ul>
Interaction Between Languages	