

Theories of Speech & Language Development

The process of speech and language development in infants and children is complex and interrelated. For normal communication to develop, there must be an integration of anatomy and physiology of the speech systems, neurological development, and interactions that encourage infants and children for communication attempts. Language development includes both receptive and expressive language. (Owens, 2012) There are four theories that explain most of speech and language development:

- Behavioural Theory,
- Nativistic Theory,
- Semantic-cognitive Theory, and
- Social-pragmatic Theory.

1. Behaviourist Theory

The behavioural perspective states that language is a set of verbal behaviours learned through operant conditioning. Operant conditioning is a method of changing behaviour so that a desired behaviour is reinforced immediately after it occurs. B.F. Skinner is considered to be the father of the modern behavioural theory. This theory can be applied to many aspects of human learning including speech and language. The theory centres around the idea that children are conditioned by their environment and the reinforcement of their communication.

Behaviourists believe that language behaviours are learned by imitation, reinforcement, and copying adult language behaviours. They consider language to be determined not by experimentation or self-discovery, but by selective reinforcements from speech and language models, usually parents or other family members. Behaviourists focus on external forces that shape a child's language and see the child as a reactor to these forces. (Hulit, Howard, & Fahey, 2011).

Two other concepts that are important for understanding the behaviorist ideas of speech and language development are *imitation* and *practice*. A young child will try to imitate sounds and words he hears his parents say the best he can. When a child says a word that sounds close to what the parents say, they accept and reinforce it. In other words, they begin *shaping* the word until the child can eventually say the word as well as the parents do. An example of selective reinforcement: A child says "mama" when his mother starts to pick him up. The mother is delighted to hear the child say this and gives the child a hug and kiss. The mother says "Mama, that's right, I'm Mama!" The mother's affectionate response makes it more likely that the child will say "mama" again. The mother's response to the child reinforced the behaviour.

B.F Skinner's Behaviourist Perspective

Tackling the issue of language from a different perspective was B.F Skinner, the behavioural psychologist. Simply put, the behavioural perspective postulates that everything we do is dictated by our environment and that our behaviour is a response to external stimuli through operant conditioning, the process through which behaviour changes with positive and negative reinforcement.

B.F Skinner theorized that language acquisition is dictated by our environment and the positive or negative reinforcement we receive from it. Parents, for example, enforce correct usage of a word in children with positive facial or verbal reactions. They play larger roles in our “verbal behaviour,” a concept Skinner describes in his book. Verbal behaviour introduces the concept of functions to words, as well as meanings. For example, a child may know what to call a toilet, but they must also learn what the use of that word will allow them to acquire or express. They’ve heard their parents say this word, but what happens when they say it? Most likely, their parents take them to it. So in this case, the most basic function of the word is to express a need to use the bathroom.

2. Nativistic Theory

The nativistic theory is a biologically-based theory which states that language is innate, physiologically determined, and genetically transmitted. This means that a new-born baby is "pre-wired" for language acquisition and a linguistic mechanism is activated by exposure to language. (Hulit, Howard, & Fahey, 2011). This theory believes that language is universal and unique to only humans and that unless there are severe mental or physical limitations, or severe isolation and deprivation, humans will acquire language. The nativistic theory argues that caregivers do not teach children the understanding of language and do not usually provide feedback about the correctness of their utterances. (Pinker, 1984).

Language Acquisition Device

The main theorist associated with the nativist theory is Noam Chomsky. He came up with the idea of the language acquisition device (LAD). The LAD is a language organ that is hard-wired into our brains at birth. Once a child is exposed to language, the LAD activates.

The main theorist associated with the nativist perspective is Noam Chomsky. Chomsky is a strong advocate for the nativist theory of language development. Before Chomsky's time, language development was largely accepted as being purely a cultural phenomenon that is based solely on imitation. He believed that greater attention should be given to children's innate ability to learn language. Chomsky came up with the idea of the Language Acquisition Device (LAD). The LAD is a language organ that is hardwired into our brains at birth. Because of this, we are born with the ability to understand and develop language. Once a child is exposed to language, the LAD activates. It allows them to understand the rules of whatever language they are exposed to.

3. Semantic-Cognitive Theory

The semantic-cognitive theory is a perspective of language development that emphasizes the interrelationship between language learning and cognition; that is, the meanings conveyed by a child's productions. Children demonstrate certain cognitive abilities as a corresponding language behaviour emerges. (Bloom & Lahey, 1978). The semantic meaning that a person wants to communicate determines the words and word order (syntactic form) the person uses. For example, children know what they want to communicate (cognition) but do not always use

the correct semantics or grammar. Also, children may not know the correct use of a word or understand that a word can have more than one meaning.

4. Social Cognitive Theory

Human infants begin to produce speech at the beginning of the second year of life. Some theories propose that language is acquired by simply recognising statistical properties in linguistic input. Other hypotheses consider the interactive environments in which humans are raised, looking for links between emerging social skills and word learning.

The social-pragmatic theory of language acquisition suggests that the foundation of word learning is an ability to read the intentions of another, especially the intention to communicate (Akhtar and Tomasello, 2000). The theory posits a special role for the ability to respond to joint attention, a form of intention recognition which has been shown to facilitate word learning (Baldwin, 1993). Social-pragmatic theory argues that the cognitive abilities that develop in the second year of life are not merely coincidental, but are an essential component of language acquisition.