

Scottish International Conference on Multidisciplinary Research and Innovation – SICMRI 2025

FIRST LANGUAGE ACQUISITION: THE FOUNDATIONS OF HUMAN COMMUNICATION

Sevara Tangirova

Tashkent Social Innovation University

Abstract: First language acquisition refers to the natural process through which humans acquire their native language during early childhood, typically without formal instruction. This phenomenon is central to understanding the relationship between language, cognition, and human development. Researchers such as Noam Chomsky, Jean Piaget, and Lev Vygotsky have provided different theoretical perspectives on how language emerges — from the innate mechanisms proposed in Chomsky's Language Acquisition Device (LAD) to the social interactionist views emphasizing communication and environment. The process involves several stages: pre-linguistic sounds, babbling, one-word utterances, two-word combinations, and eventually complex grammar. Studies in psycholinguistics and neurolinguistics demonstrate that children acquire language universally and systematically, suggesting that linguistic ability is an inherent human capacity. Understanding first language acquisition not only contributes to linguistics and psychology but also supports education, speech therapy, and multilingual development.

Keywords: Language acquisition, Chomsky, child development, linguistics, communication, cognitive development.

Language is one of the most remarkable features of human cognition, distinguishing humans from all other species. The process of first language acquisition — the way children naturally acquire their mother tongue — has fascinated linguists, psychologists, and educators for centuries. This process occurs spontaneously and unconsciously, typically during the first five years of life, when the child's brain is most receptive to linguistic input. Unlike learning a second language, first language acquisition happens without formal teaching, which makes it one of the most profound examples of the human mind's ability to organize complex information.

The study of language acquisition is deeply connected to the question of nature versus nurture. Scholars have long debated whether linguistic ability is primarily an innate biological capacity or a product of environmental influence and social interaction. Each major theory of language development contributes to understanding different aspects of this process.

The nativist theory, pioneered by Noam Chomsky, argues that humans are born with an inherent ability to acquire language. He proposed the existence of a Language Acquisition Device — a mental mechanism that enables children to generate grammatical structures they have never heard before. According to Chomsky, this innate grammar, called Universal Grammar, explains why children across all cultures learn language following similar patterns and stages. This perspective highlights that the human brain is pre-programmed for linguistic competence, and language is not merely learned but biologically unfolded.

In contrast, the behaviorist theory advanced by B. F. Skinner suggests that language learning is based on imitation, reinforcement, and conditioning. From this viewpoint, children acquire language by mimicking adults and receiving positive reinforcement when they use words correctly. Although this theory helped to explain early learning behaviors, it has been criticized for underestimating the child's creativity and the complexity of linguistic structures that cannot be explained by imitation alone.

Scottish International Conference on Multidisciplinary Research and Innovation – SICMRI 2025

Another influential approach is Jean Piaget's cognitive theory, which links language development to broader intellectual growth. Piaget believed that a child must reach a certain level of cognitive maturity before acquiring specific linguistic forms. Language, in this view, is not separate from thought but a reflection of it. As children's understanding of the world develops, their linguistic ability grows in parallel.

Lev Vygotsky introduced the social interactionist theory, emphasizing that language arises from communication and social interaction. He argued that speech first serves a social function — helping children interact with caregivers — and later becomes internalized as inner speech, supporting independent thought. Vygotsky's concept of the Zone of Proximal Development (ZPD) shows that children learn best through guided interaction with more knowledgeable individuals, highlighting the cultural and communicative dimensions of language learning.

Despite differences among theories, researchers agree that first language acquisition follows universal developmental stages. During the pre-linguistic stage (0–12 months), infants produce cooing and babbling sounds that gradually resemble the phonemes of their native language. Around 12–18 months, they enter the holophrastic or one-word stage, using single words to express complete meanings (e.g., “milk” for “I want milk”). By two years of age, children typically reach the two-word stage, forming simple combinations such as “mama go” or “big car.” As vocabulary expands, they begin to use telegraphic speech, omitting small function words but expressing complex ideas. Eventually, by age four or five, children master complex syntax, question formation, and morphological rules.

Neurolinguistic research supports the existence of a critical period for language development. According to Eric Lenneberg, the brain's plasticity is highest in early childhood, allowing effortless language acquisition. After puberty, this capacity declines, which explains why adults often struggle to achieve native-like fluency in a second language. Studies of children deprived of linguistic input — such as the famous case of Genie — further confirm the importance of early exposure to language.

Understanding first language acquisition has profound practical implications. In education, insights from this field help teachers create child-centered learning environments that respect natural language development. In speech therapy, knowledge of acquisition stages aids in diagnosing and treating language disorders such as aphasia or dyslexia. In bilingual and multilingual contexts, studying how children acquire multiple languages simultaneously enriches curriculum design and language policy. Moreover, advances in neurolinguistics and artificial intelligence continue to draw inspiration from the mechanisms of human language learning, contributing to machine translation and cognitive modeling.

Ultimately, first language acquisition represents more than linguistic development — it is a process through which children enter the social and cultural world. Through language, they learn to think, express emotions, and participate in society. Every child's acquisition of their mother tongue reflects the unity of biological inheritance and social experience, making it both a universal and uniquely human phenomenon.

In conclusion, first language acquisition stands as one of the most significant achievements of human development, reflecting the intricate interaction between biology, cognition, and social experience. It is not a mechanical process of imitation but a creative and adaptive act of meaning-making. Children, regardless of their cultural or linguistic background, follow remarkably similar developmental patterns, demonstrating the universality of the human capacity for language. This universality reinforces Chomsky's idea of an innate linguistic faculty, yet the

Scottish International Conference on Multidisciplinary Research and Innovation – SICMRI 2025

diversity of world languages and the influence of environment highlight the equally powerful role of social interaction and context, as emphasized by Vygotsky and other constructivist theorists.

Furthermore, first language acquisition provides a mirror through which scholars can explore the essence of human intelligence. It shows how thought and language grow together, shaping not only communication but also perception, reasoning, and emotional expression. From the first cry of an infant to the complex grammar of a preschooler, language serves as a tool for connecting the self to the world — transforming isolated experience into shared understanding.

The study of first language acquisition continues to evolve with advances in neurolinguistics, psycholinguistics, and computational modeling. Modern technologies such as brain imaging and artificial intelligence offer new opportunities to examine how linguistic knowledge is represented in the brain and how it can be simulated in machines. These developments not only deepen theoretical understanding but also have practical implications for education, early childhood intervention, and bilingual learning programs.

Ultimately, the phenomenon of first language acquisition reveals that language is at the heart of what it means to be human. It is both a biological gift and a cultural creation — a bridge between thought and society, individuality and community. By studying how humans acquire their first language, we gain insight into the fundamental nature of learning, creativity, and communication itself. Thus, language acquisition remains not merely a topic of linguistic study but a cornerstone of understanding human existence and intellectual potential.

References:

1. Brown, R. (1973). *A First Language: The Early Stages*. Harvard University Press.
2. Chomsky, N. (1965). *Aspects of the Theory of Syntax*. MIT Press.
3. Chomsky, N. (1980). *Rules and Representations*. Columbia University Press.
4. Clark, E. V. (2009). *First Language Acquisition*. Cambridge University Press.
5. Crystal, D. (2003). *The Cambridge Encyclopedia of the English Language*. Cambridge University Press.
6. Gleason, J. B., & Ratner, N. B. (2017). *The Development of Language* (9th ed.). Pearson Education.
7. Hoff, E. (2014). *Language Development* (5th ed.). Cengage Learning.
8. Lenneberg, E. H. (1967). *Biological Foundations of Language*. Wiley.
9. Lightbown, P. M., & Spada, N. (2013). *How Languages are Learned* (4th ed.). Oxford University Press.
10. Piaget, J. (1959). *The Language and Thought of the Child*. Routledge & Kegan Paul.
11. Pinker, S. (1994). *The Language Instinct: How the Mind Creates Language*. William Morrow.
12. Skinner, B. F. (1957). *Verbal Behavior*. Appleton-Century-Crofts.
13. Tomasello, M. (2003). *Constructing a Language: A Usage-Based Theory of Language Acquisition*. Harvard University Press.
14. Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.
15. Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, 17(2), 89–100.
16. Saxton, M. (2010). *Child Language: Acquisition and Development*. Sage Publications.
17. Kuhl, P. K. (2010). Brain mechanisms in early language acquisition. *Neuron*, 67(5), 713–727.
18. Snow, C. E., & Ferguson, C. A. (Eds.). (1977). *Talking to Children: Language Input and Acquisition*. Cambridge University Press.