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THE LANGUAGE ACQUISITION DEVICE PROPOSED BY NOAM CHOMSKY: THE PROCESS OF ACQUIRING LANGUAGE DURING EARLY CHILDHOOD.

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Abstract: This article explores Noam Chomsky's Language Acquisition Device (LAD) through a linguistic lens and examines its influence on early childhood language development. While Chomsky's approach poses significant challenges to the LAD Theory, it has nevertheless spurred the creation of various alternative theories. The core principles associated with LAD have significantly shaped the study of language acquisition, leading to advancements in linguistics. This article provides comprehensive background information on LAD and explores methods for language acquisition in early childhood. The conclusion remains open-ended due to considerable criticism of this theory, offering scholars further avenues for research.

Keywords: Language Acquisition Device (LAD), early childhood, language acquisition, linguistics, Chomsky

УСТРОЙСТВО ОСВОЕНИЯ ЯЗЫКА, ПРЕДЛОЖЕННОЕ НОАМОМ ХОМСКИМ: ПРОЦЕСС ОСВОЕНИЯ ЯЗЫКА В РАННЕМ ДЕТСТВЕ

Аннотация: В данной статье рассматривается Устройство Освоения Языка (Language Acquisition Device — LAD), предложенное Ноамом Хомским, с лингвистической точки зрения, а также его влияние на процесс овладения языком в раннем детстве. Несмотря на значительную критику, направленную в адрес теории LAD, она послужила основой для появления множества альтернативных подходов. Базовые принципы LAD оказали существенное влияние на исследования в области усвоения языка и способствовали развитию лингвистики. В статье представлена подробная информация о концепции LAD и обсуждаются методики овладения языком в раннем

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возрасте. Окончательные выводы остаются неопределёнными из-за продолжающихся дискуссий, что открывает дополнительные перспективы для дальнейших научных исследований.

Ключевые слова: Механизм освоения языка (LAD), раннее детство, овладение языком, лингвистика, Хомский

NOAM CHOMSKY TAKLIF ETGAN TILNI O'ZLASHTIRISH QURILMASI: ERTA BOLALIKDA TILI O'ZLASHTIRISH JARAYONI.

Annotatsiya: Ushbu maqola Noam Chomskyning Tilni Oʻzlashtirish Mexanizmi (Language Acquisition Device — LAD) nazariyasini lingvistik nuqtai nazardan tahlil qiladi hamda uning erta bolalik davrida tilni egallashga boʻlgan ta'sirini koʻrib chiqadi. Garchi Chomskyning yondashuvi LAD nazariyasiga nisbatan sezilarli tanqidlarni yuzaga keltirgan boʻlsa-da, bu nazariya turli muqobil qarashlarning shakllanishiga turtki boʻlgan. LADga asoslangan fundamental tamoyillar tilni oʻzlashtirish boʻyicha olib borilgan tadqiqotlarga katta ta'sir koʻrsatgan va lingvistikaning rivojlanishiga xizmat qilgan. Mazkur maqolada LAD haqida keng qamrovli ma'lumotlar beriladi hamda erta bolalik davrida tilni oʻzlashtirish metodikasi muhokama qilinadi. LAD nazariyasiga qaratilgan keskin tanqidlar sababli, ushbu maqolaning xulosasi aniq emas, bu esa olimlarga mavzuni yanada chuqurroq oʻrganish imkoniyatini beradi.

Kalit soʻzlar: Tilni oʻzlashtirish mexanizmi (LAD), erta bolalik, tilni egallash, lingvistika, Chomsky

Introduction:

Noam Chomsky, whom some have labelled as the 'father of modern linguistics, invented the concept of the LAD as part of a challenge to behaviourist theories of how we pick up language. He suggested that LAD is a built-in feature in the human brain that enables children to acquire a language quickly. Linguists have long been fascinated by first language acquisition. Although technology has evolved, giving us a better understanding of the process, it has not made it any easier. If anything, it becomes more elaborate. What is certain, however, is that the human brain plays an enormous part, and everybody learns a language in their own way and on their own time, even if they are following the same rough outline. This article seeks to delve deeper into the LAD and explore its role in children learning languages.



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Literature Review:

Learning a language is a fascinating linguistics and cognitive science topic! One of the most influential theories in this area is the concept of a Language Acquisition Device (LAD) proposed by Noam Chomsky. He argued that humans are naturally equipped to learn languages, suggesting that children possess a universal 'trans-language capacity'—an innate cognitive framework that helps them navigate their linguistic surroundings and reproduce patterns with remarkable skill. Subsequent studies have built on this idea, exploring how this natural talent interacts with other parts of the language learning system. Here, we review significant contributions to Chomsky's LAD theory and the child's journey in acquiring language, alongside evidence that both supports and challenges this concept.

In Chomsky's perspective, there is an inherent mechanism in the human brain dedicated to language acquisition (Chomsky, 1965). It is proposed as universal, meaning any child can learn their language, no matter the linguistic sounds they are exposed to. He also introduced the idea of Universal Grammar (UG), suggesting that all languages share a common structural foundation. For Chomsky, exposure to language is crucial before the Language Acquisition Device (LAD) can kick in (Chomsky, 1981). He noted that the ability of children to grasp complex sentence structures without explicit teaching is strong evidence for an inborn language faculty.

Research supporting Chomsky's theory indicates that language development is a biological process shared across all human societies. Despite varying language inputs for children in different environments, they still follow a predictable path in their language development. This aligns with Chomsky's Language Acquisition Device (LAD) theory and has significantly influenced linguistic studies, providing compelling evidence that a built-in cognitive mechanism facilitates children's language learning.

Pinker (1994) summarises studies on Creoles that emerge under unique social conditions, concluding that children can create intricate grammar systems without complete linguistic input. This supports the idea of a genetic predisposition for language (Bickerton, 1984). Populations speaking Creole languages, particularly those formed among young children or language-deprived individuals in the Caribbean, demonstrate the existence of the Language Acquisition Device (LAD) (McWhorter, 2000).

Cognitive scientists, such as Pinker (1994), and psychologists, like Fodor (1983), also argue that language acquisition is deeply rooted in cognitive abilities. Pinker described language as an "instinct," emphasising that the mechanisms through which children learn

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language are pre-programmed in their brains. This view complements Chomsky's, who believes that language learning is not solely reliant on environmental factors.

However, Chomsky's LAD theory has not been without its criticisms. One notable critique comes from connectionist models, which suggest that first language acquisition can be understood through general cognitive processes unrelated to the Language Acquisition Device (LAD). Researchers like MacWhinney (2004) have proposed that children learn language by recognising patterns in their surroundings and gradually absorbing them as they interact with the language. From this point of view, the brain's general learning abilities are sufficient for language development. Critics also emphasise the crucial role of human interaction in language learning. According to Vygotsky (1978) and Bruner (1983), social interactions and relationships with parents are crucial for language growth. They described 'scaffolding' as the support adults provide to help children acquire language through conversation, feedback, and guidance.

The Language Acquisition Support System (LASS) concept broadens Chomsky's (1965) LAD framework to include the social context. It suggests that while children may have some inherent predispositions, their social environments play a vital role in shaping how they produce and comprehend language (Bruner, 1983). This emphasis on social interaction enriches our understanding of language development.

While Chomsky focused on the biological underpinnings of grammatical progression, some contemporary linguists investigate how these biological frameworks collaborate with real-world experiences. Recognising the influence of child-directed input and social dynamics in our discussions is essential. Tomasello (2003) posits that although children may possess general cognitive skills that facilitate language learning, the input from parents and their social settings is vital for linguistic development. He states that children learn by observing, imitating, and practising within social contexts, developing their understanding of grammar and syntax from these interactions.

Bilingual studies, such as those by Genesee (2004), demonstrate the remarkable adaptability of language acquisition, even under challenging circumstances. Bilingual children raised from birth in two languages acquire both effortlessly, demonstrating that language development processes can thrive in diverse situations. This perspective challenges the notion of innate language-acquisition mechanisms, instead emphasising the importance of learning and interaction in language acquisition.



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Chomsky's ideas regarding the Language Acquisition Device (LAD) and Universal Grammar have significantly contributed to our understanding of language learning, highlighting that children possess innate traits that facilitate their development of language skills. Nevertheless, these theories face significant challenges. While the LAD theory emphasises the biological foundation of language, recent research highlights the crucial role of environmental input and social engagement in language acquisition. The conversation continues, with modern theories merging natural mechanisms with cognitive and social learning within early childhood language development. Both cognitive wiring and environmental factors play crucial roles in the development of language. This emerging understanding calls for further research into these aspects of environmental influence on children's linguistic acquisition.

Research Methodology: This article used theoretical research to analyse Chomsky's existing theories and critiques of them. A thorough literature review was done on the referenced work to show the role of LAD during the language acquisition phase. The analysis compares language acquisition between monolingual and bilingual children using the Language Acquisition Device (LAD).

Analysis and Results: LAD has five main phases of language acquisition, highlighting how Chomsky's theoretical framework facilitates language acquisition across the developmental stages. These five stages include the Pre-linguistic Stage, the One-Word (Holophrastic) Stage, the Two-Word Stage, the Telegraphic Stage and the Later Multiword Stage (Study.com, n.d.).

The **pre-linguistic stage** occurs from birth until about 12 months. In this phase, monolingual and bilingual infants communicate through cooing, babbling, and reacting to sounds around them. Although they are not forming meaningful words, they are attuned to the phonological characteristics of all human languages. Over time, their perception narrows to the sound they hear the most (Kuhl et al., 2006). Monolingual infants will narrow their auditory system to a single language. In contrast, bilingual infants' LAD supports dual phonological systems, allowing the child to maintain sensitivity to a broader range of sounds (Byers-Heinlein & Werker, 2009). This shows Lad's flexibility when processing multiple languages.



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Between 12 and 18 months, children enter the <u>one-word or holophrastic stage</u>. At this point, single words convey their thoughts or desires; for instance, saying "juice" may mean "I want juice." LAD connects sounds to meanings, a process known as lexical mapping. This stage highlights the child's growing vocabulary control and developing cognitive skills that aid in representing objects and symbolic actions (Lightbown & Spada, 2013). Monolingual children show faster vocabulary development in their single language. According to Pearson et al. (1993), Bilingual children typically divide their vocabulary between their two languages, resulting in a smaller vocabulary in each language. However, their total vocabulary size is comparable to that of the monolingual children. Bilingual children demonstrate the ability to associate words in different languages, such as "dog" and "perro", within the same context, without confusion, and can thus handle multiple lexical mappings (Clark, 2009).

The <u>telegraphic or two-word stage</u> occurs between 24 and 30 months. During this stage, children produce telegraphic speech characterised by short sentences. Monolinguals will omit less critical words, such as articles and auxiliary verbs, but despite this, the sentences maintain a logical word order and complex meanings. For example, "Daddy go work" instead of "Daddy is going to work". According to Owens (2016), children use language to express intentions, ask questions and describe actions during this phase. LAD guides the child in mastering more complex grammatical structures during this stage. Bilingual children will mix the two languages; this phenomenon is referred to as code-mixing (Genesee, 2002). This does not mean that the bilingual children are confused about the languages. This demonstrates LAD's ability to process and sort grammatical structures from both languages concurrently. As their language proficiency increases, these children separate the two languages and their syntactic rules.

Lastly, from around 30 months onward, the child will enter the <u>Later Multiword Stage</u>. Sentences will become increasingly complex for both monolingual and bilingual children, and their vocabulary will expand more rapidly. Bilinguals often develop proficiency in both languages, mainly when actively used in the child's environment. LAD has helped internalise numerous syntactic and morphological rules, allowing children to create longer, grammatically accurate sentences. Again, Lightbown & Spada (2013) emphasise that this phase reflects the building blocks of previous stages and the ongoing role of language refinement. Bialystok (2001) concludes that bilinguals may develop metalinguistic awareness earlier than



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monolinguals, because they can think of language as a system by comparing the two languages they use.

Conclusion and Recommendations:

This progression of learning language, from babbling to stringing together complex sentences, is consistent in all cultures. The LAD is an aid in both monolingual and bilingual acquisition, in different ways. Monolinguals experience one set of influences, while bilinguals manage two intersecting systems. The LAD's flexibility facilitates first language learning in diverse environments. This variation serves as an informative tool that helps to better understand the cognitive and neural flexibility of early language development. It demonstrates the roles that natural factors play in communication.

It is not unjust to raise a child with two languages. In contrast, it makes it easier for the child to become bilingual later in life. It also allows the child to be multilingual at a later stage, not due to necessity, but choice. It does not add any additional pressure on a child to be raised bilingual due to LAD and the natural mechanisms embodied in a human brain from birth.

Recommendations suggest exposing children to an additional language at an early age. Sometimes, the mother speaks to the child in a specific language, while the father speaks to the child in a different one. By doing this from a young age, the child associates a specific language with each of their parents and will continue to communicate with their respective parents in different languages throughout their life. Another concern for parents is code-mixing. This is just a phase and will pass. It is a positive sign that the child is actively learning both languages and has begun to understand the rules of each. When raising a child as bilingual, both languages should be used constantly, so that the child hears them repeatedly. As soon as one language is spoken more than the other, the child will move toward the language spoken more often.

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