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College of Education and Language  
English Language Section**



## **(Unique features of the first language acquisition process)**

**Assessment of Under Graduate Research Project at Lebanese French University**

**Research submitted to the University Research Committee / College of Education and Languages, Department of English. As a partial fulfillment requirement for a bachelor's degree in education.**

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# Certification

I certify that this study was prepared by students (**Yad Sadeeq Mohammed, Mabast Maghdid Mohammed, Rayan Ahmed Mawlud, Eman Mushtaq Jawdat**) under my supervision at the College of Education and Languages, General Education Department, Lebanese French University in partial fulfillment of the requirements for the degree of Bachelor in Education.

**Name of the supervisor**  
**Yuliia Igorevan Bakai**

**Signature**

# Dedication

To whom I prefer it to myself, and why not; you sacrificed for me And spared no effort to make me happy always (My beloved mother). We walk the paths of life, and there remains who dominates our minds in every path we take. The owner of a good face, and good deeds. He didn't spare me all his life (Dear Father). To my friends, and all those who stood next to me and helped me with everything they had, and on many levels I present this research to you, and I hope that it will satisfy you.

## **Yad Sadeeq Mohammed**

We walk the paths of life, and there remains who dominates our minds in every path we take. The owner of a good face, and good deeds. He didn't spare me all his life (Dear Father). And spared no effort to make me happy always (My beloved mother).

## **Mabast Maghdid Mohammed**

To my friends, and all those who stood next to me and helped me with everything they had, and on many levels I present this research to you, And spared no effort to make me happy always (My beloved mother).and I hope that it will satisfy you. He didn't spare me all his life (Dear Father).

## **Rayan Ahmed Mawlud**

To the two candles that burned to illuminate our paths with light, giving, love and hope. And to those who dedicated their lives to building and educating us despite the hardship without fatigue or tirelessness. To those who worked hard and found to draw for us the lines of the future (our beloved fathers) ... To the one who put her hand on my hand and fixed my forearm, not writing the first letter and the first word Sea of tenderness and giving (our beloved mothers)

## **Eman Mushtaq Jawdat**

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# Abstract

Language is something that humans use to communicate with each other. It is a valuable tool that we use to understand the thoughts of others. The most important contrast in behaviorism's history is between Watson's initial "methodological behaviorism" and later variants of behaviorism that were influenced by his ideas and referred to as "neo behaviorism."

- 1) "Psychology, in the behaviorist's view, is a field of natural science that is totally objective experimental.
- 2) The prediction and management of behavior are its theoretical objectives. Its methods do not include introspection in any significant way, and the scientific validity of its results is not based on how readily they may be interpreted in terms of consciousness.

As a result, the social interactionism approach places a strong emphasis on the interaction between the learner's internal mechanisms and the linguistic environment in the formation of language. In accordance with this idea, learning is the consequence of interactions between the learner's mental faculties and the verbal information. a skill that results from putting one's aptitudes and abilities to use during the course of the relatively lengthy period in which a kid learns to manage the system's physical components, such as words and sounds and grammatical rules, as well as to infuse them with meaning: Before a youngster can use language creatively, they must first understand the rules. The L1 effect is negative in most cases because no two languages have the same linguistic characteristics. If so, L2 would be supported by L1, for example Hindi and Urdu are almost grammatically similar. Their structures and vocabulary also have some similarities.

## الملخص

اللغة هي شيء يستخدمه البشر للتواصل مع بعضهم البعض. إنها أداة قيمة نستخدمها لفهم أفكار الآخرين. التناقض الأكثر أهمية في تاريخ السلوكية هو بين "السلوكية المنهجية" الأولية لواتسون والمتغيرات اللاحقة من السلوكية التي تأثرت بأفكاره ويشار إليها باسم "السلوكية الجديدة".

(١) علم النفس ، من وجهة نظر السلوكيين ، هو مجال من العلوم الطبيعية التي هي تجريبية موضوعية تماما .  
(٢) التنبؤ وإدارة السلوك هي أهدافها النظرية. لا تتضمن أساليبها الاستبطان بأي طريقة مهمة ، ولا تستند الصلاحية العلمية لنتائجها إلى مدى سهولة تفسيرها من حيث الوعي.

نتيجة لذلك ، يركز نهج التفاعل الاجتماعي بشدة على التفاعل بين الآليات الداخلية للمتعلم والبيئة اللغوية في تكوين اللغة. وفقا لهذه الفكرة ، فإن التعلم هو نتيجة للتفاعلات بين القدرات العقلية للمتعلم والمعلومات اللفظية. مهارة تنتج عن استخدام قدرات الفرد وقدراته خلال الفترة الطويلة نسبيا التي يتعلم فيها الطفل إدارة المكونات المادية للنظام ، مثل الكلمات والأصوات والقواعد النحوية ، بالإضافة إلى غمرها بالمعنى: قبل أن يتمكن الشاب من استخدام اللغة بشكل إبداعي ، يجب عليه أولا فهم القواعد. يكون تأثير L1 سلبيا في معظم الحالات لأنه لا توجد لغتان لهما نفس الخصائص اللغوية. إذا كان الأمر كذلك ، دعم L2 بواسطة L1 ، على سبيل المثال الهندية والأردنية متشابهة نحويا تقريبا. هياكلهم ومفرداتهم لديها أيضا بعض أوجه التشابه.

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# **Chapter one: Theoretical Background of the First Language Acquisition**

Language is something that humans use to communicate with each other. It is a valuable tool that we use to understand the thoughts of others. Everybody can talk, so it is not really mysterious or special when we notice that some people are better at speaking than others. However, when we realize that nobody has yet been able to create a perfect imitation of human language ability, that becomes much more interesting. (Chomsky, 1972)

## **1.1 The Notion of First Language Acquisition**

When we learn a new language, it takes time. It's a process, not an instantaneous thing like we've all experienced with our mother tongue. Most of us remember putting a lot of effort into learning our first foreign language, but we tend to remember the effort we put into learning a second language better. Understanding the underlying processes can be valuable to teachers and learners of a second language. It can help teachers with their teaching methods, and both teacher and learner can be more patient and enjoy exploring the new language. But, while all speakers achieve native proficiency in their first language, they don't or can't always achieve it in their second language (Author, 2013).

The first language acquisition is the process of learning the language that everyone learns from birth or even before birth. Children learn their mother tongue very quickly and very easily with a rapid and effortless transition from the “initial state” to the “final state”. Most children learn basic grammatical rules of the target language by the time they are three. But it takes a long time to become a competent speaker. and although to become an original speaker is a fast and efficient process (Ibid).

For all 6,000 languages of the world, one explanation that Noam Chomsky has put is one of the universal grammars that is very abstract, complex, and valid (Christensen, 2019:p 26). There should be a common ground on which all languages are built, as we know, everyone has the ability to learn any language in the world, so according to Noam Chomsky, childbirth has all the connections in the mind to learn their first language grammar, including some changes that can be formed according to the characteristics of their mother tongue. . That means that their



inborn knowledge and not a gradual learning process make them observe the grammatical rules of their first language (Ibid).

In L1, the acquisition process is a largely unconscious process closely connected with cognitive maturation. This means that as children mature so does their language.

The sounds babies produce to communicate happen almost automatically and involuntarily. The most efficient way to get attention and for parents to attend to their baby's needs is probably to cry. It's one way to inform parents that their child needs food, that their diapers are full, that they're ill, that a tooth is coming in, or that they might just be bored and looking for attention(Ibid).

## **1.2 The Nature of Behaviorism**

There are several possibilities as to how this relationship can occur. According to Watson's traditional theory of behaviorism (ibid), the stimulus is said to "elicit" the behavior. It proposed that a response was triggered by the existence of a stimulus. If the stimulus happened often and frequently enough, the response would eventually become automatic because it would have been practiced. Another explanation of how habits are formed can be found in Skinner's neo-behaviorism. Given that it was not always possible to identify the stimulus that caused a given reaction, Skinner downplayed the significance of the stimulus. He emphasized the effects of the answer instead (Author, 2013: 500).

To further develop Skinner's theory, we might say that a child responds to a stimulus—an utterance or a piece of language—by producing a response. When the response is appropriate or proper, the hearer or teacher reinforces it by giving it praise, a prize, or their approval. As a result, the chance of expected behavior rises, which increases the likelihood that someone, will imitate it. In contrast, the youngster will be discouraged if they give an unsuitable or inaccurate response. (i.e. negatively reinforced) and the chance that the behavior will stop. As a result, that phrase won't be applied to the same circumstance. To put it another way, a kid mimics language that they hear. If they get positive reinforcement, they will keep practicing and imitating that phrase until it becomes "habitual." If they experience negative reinforcement, on the other hand, they will stop imitating and eventually stop (Islam, 2013: p 500).

## **1.3 Types of Behaviorism**

The most important contrast in behaviorism's history is between Watson's initial "methodological behaviorism" and later variants of behaviorism that were influenced by his ideas and referred to as "neo behaviorism."<sup>(1)</sup>

### **1.3.1 Methodological Behaviorism**

The most important contrast in behaviorism's history is between Watson's initial "methodological behaviorism" and later variants of behaviorism that were influenced by his ideas and referred to as "neo behaviorism."

- 1) "Psychology, in the behaviorist's view, is a field of natural science that is totally objective experimental. The prediction and management of behavior are its theoretical objectives. Its methods do not include introspection in any significant way, and the scientific validity of its results is not based on how readily they may be interpreted in terms of consciousness.
- 2) The behaviorist sees no distinction between man and the brute in his pursuit of a unitary theory of animal response. Even with its sophistication and complexity, human behavior is merely one component of behaviorists' overall research strategy (Watson, 1913: p 158).

### **1.3.2 Radical Behaviorism**

B.F. Skinner founded radical behaviorism, which shared the methodological behaviorist belief that behavior prediction and control should be the main objectives of psychology. While agreeing that such private occurrences could not be utilized to explain conduct, Skinner advocated that they should be discussed in the analysis of behavior. Skinner, like Watson, recognized the importance of internal mental events. The degree to which environmental circumstances affect behavior is a key area of distinction between methodical and radical behaviorism. Watson's (1913) According to methodological behaviorism, the mind is a blank slate from birth. Radical behaviorism, in contrast, accepts the idea that organisms are born with

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<sup>1</sup>) General Psychology, at [http:// sites.google.com/site/ferlasicologacom/home](http://sites.google.com/site/ferlasicologacom/home)

innate tendencies and, as a result, acknowledges the significance of genes and biological elements in behavior. (Watson, 1913: 158)

### **1.4.1 Impact of Behaviorism**

The behavioral psychology was influenced by several philosophers. Among them are Clark Hull, the author of the drive theory of learning, and Edward Thorndike, a pioneering psychologist who defined the law of effect (Morris, 2013: p 73-107).

Many therapeutic methods have their roots in behavioral psychology. After 1950, behavioral psychology moved into more of a supporting role, although its concepts are still crucial today. Even now, behavior analysis is frequently employed as a therapy strategy to assist kids with autism and developmental delays in learning new skills. It commonly uses techniques like shaping (rewarding behavior that is closer to the intended behavior) and chaining (breaking a task down into smaller parts, then teaching and chaining the subsequent steps together) (Schreibman, 2015: p 45).

Visualizing a certain theory or notion can be challenging at times in psychology, however behaviorism does not have this problem. The focus of behaviorism is on how people behave and how that behavior might change as a result of their surroundings. It is a branch of psychology that goes beyond merely attempting to look inside the brain, which is why it fascinates me so much. Instead than having to connect them to some bizarre contraption to examine their brain's neurons, you can really detect changes in a person if their environment changes. Behavioral psychology, a more recent method of behavior analysis, places more emphasis on how punishment and reinforcement influence behavior (Kirsch, 2014: p 29).

### **1.4. The Theory of Cognition and Language Acquisition**

The purposeful use of learning methods is seen in a cognitive view of learning as a crucial component of the process of second language acquisition. Learning methods are unique approaches to knowledge processing that help in comprehension, assimilation, and retention. The

behaviorist view of language acquisition, which regards language acquisition as an automatic, unconscious process, is strongly opposed to this explanation of language learning<sup>(2)</sup>.

Cognitive scientists contend that language develops with other general cognitive skills including memory, concentration, and problem-solving. When language does start to develop, it often happens in a set of universally recognized phases in most kids (Goodluck, 1991). It is possible that language is developing alongside other cognitive abilities given the common progression through these language stages. The four stages of language development, for instance, are typically experienced by infants and toddlers:

1. Pre-language stage (3 to 10 months) where a child makes a lot of ‘cooing’ and ‘babbling’;
2. The holophrastic stage (12 to 18 months) where a child starts to comprehend a single unit of utterance like ‘milk’, ‘eat’, ‘dad’, ‘brother’;
3. Two-word stage (18 to 20 months) where a child, through a process of acquiring two nouns or a noun and a verb (noun + verb), begins pairing two words together such as ‘baby chair’, ‘mommy eat’, ‘cat bad’;
4. The term "telegraphic speech stage" (defined as occurring before the age of three) refers to a stage in which a kid puts words together, even if they are not in the right order. Despite not being a complete statement, it has a comparable meaning to sentences like "cookie I desire" and "toy me fall."

For his four phases of cognitive development, Jean Piaget is renowned. Since children do not think like adults, he held that they must first actively establish their own knowledge of the world via their interactions with the environment before they can start to develop language. A youngster must first comprehend a notion before learning the specific language that represents it. For instance, a youngster initially learns the meaning of a notion like "cat" before learning the words to express it. It is almost difficult for a young kid to express ideas that are cognitively foreign to them, therefore a child must first learn about their surroundings before they can relate language to their previous experiences (Purba, 2018).

According to Piaget's cognitive theory, children's language reflects how their capacity for logical thought and reasoning has evolved through time. In this approach, Piaget's stages illustrate the primacy of cognitive development over language development as well as the gradual growth of language as a child moves through each stage of cognitive development. The first two phases of Piaget's theory apply to infants and toddlers. The most frequent discussion of these phases is cognitive development. We'll go into how they relate to language development below.

## **1.5 Social Interaction Theory and Language Acquisition**

In line with Piaget's cognitive theory, children's language shows how their capacity for logical thinking has changed over time. To put it another way, Piaget's phases show how cognitive development drives language development and how language changes over time as a child's cognitive development progresses through each stage. Young children and newborns are the focus of Piaget's first two stages of his theory. Of these stages, cognitive growth is the one that is most frequently discussed. They will be related to language development in the following sentences (Social Interaction, 2015, Language and Learning - Social Interaction (weebly.com)).

One of the foremost theorists of social interactions, Bruner argued that interactions between young children and people with linguistic expertise play a critical role in molding a child's acquisition of language (Emmit, 2015). Additionally, he recognized the significance of giving the language learner adequate help throughout the early learning phases through a method he called scaffolding.

The social interactionist hypothesis, which is based on ideas from both the behaviorist and mentalist schools of thought, is a compromise between them. The hypothesis, which acknowledges that early interactions between newborns and caregivers are a key aspect in language development, incorporates a social component as well as the concepts from the two preceding conflicting hypotheses. An approach to language learning known as social interactionist theory emphasizes the environment and context in which language is learned. Instead of grammar, which should follow next, it concentrates on language pragmatics. With this method, feedback is always possible because the novice speaker and the experienced speaker coexist in a negotiated relationship (Author, 2013: 504).

Theory The social interaction theory is predicated on the notion that infants learn language via social interaction and exposure to language in their environment. Children naturally want to socialize, and it is from these encounters that language learning and development take place. Children's language development is aided in social interactions by adults and kids who have more knowledge. Learning a language happens in conjunction with exposure to the language as more seasoned language users identify, describe, and discuss items. (e.g., people, things, and animals); actions (swimming, drinking, and cutting); activities (such as gatherings, sporting events, and parades); and the mental states of others (feelings, beliefs, and knowledge) (Levey, 2019: 36).

As a result, the social interactionism approach places a strong emphasis on the interaction between the learner's internal mechanisms and the linguistic environment in the formation of language. In accordance with this idea, learning is the consequence of interactions between the learner's mental faculties and the verbal information. This theory offers a novel perspective that is heavily influenced by social concepts and does not preclude either behaviorist or mentalist points of view. Contrary to Chomsky, who places more emphasis on the evolution of grammar, and Skinner, who emphasizes the active linguistic environment, the social interactionist approach is more interested in the pragmatics of language (Islam, 2013: 505).

# Chapter Two: Stages of First Language Acquisition in the Middle

## 2.1 From Birth to 18 Month

Between the ages of nine and eighteen months, the stage takes place. The newborn starts to learn and utter single words at this period. These words first concentrate on fundamental requirements and pursuits as well as names and identifiers like "mama" and "dada." (Hutauruk, 2015 : 54)

Anwar's vocabulary has grown significantly since he was 18 months old, according to the data. These results also demonstrate that there is a significant gap between production and understanding in addition to the fact that comprehension comes first. The idea that kids understand language before they can speak it is totally supported by this.

A child's first word is thought to come at the age of one according to several research on language development. According to several other research, children who are brilliant have advanced speech development, but children who are impaired take longer to acquire speech. The information we have indicates that Anwar's speech patterns were not as advanced as those of brilliant children by the time she was 18 months old. At that time, she could generate 15 words and understand roughly 80 words.( Salim, Mehawesh, 2014 : 22)

The two-word stage is available for kids after their vocabulary reaches roughly 50 words. In a few weeks, the two-word phase will be over. The grammatical components of two-word sentences are often always placed in the proper positions by children. Holophrase was used to start the conversation; telegraphic speech, which uses two-word phrases, is now being used. The following are some instances of two-word expressions: "Mommy chair," "nice dog," "give cookie," etc. Early syntactic structures and other linguistic formulations are first tested by children. Using telegraphic speech, what was started with holophrase is continued.( Zahradníková, 2011 : 29)

## **2.2 From Birth to 18 - 24 Month**

Children should be combining two or three signs or phrases using the grammar they observe or hear at home.<sup>(3)</sup> Between the ages of 18 and 24 months is when this period takes place. As kids get more adept at speaking in single words, they start stringing words together to create short sentences and expressions like "give me" or "I want."

According to this theory, children start to construct real two-word sentences, where the relationships between the words exhibit clear syntactic and semantic relationships and the intonation contour of the two words extends over the entire utterance rather than being separated by a pause between the two words. The "conversation" that follows exemplifies the types of patterns present in the children's utterances at this time. A youngster at this age can essentially already make the consonant sounds [j], [p], [b], [d], [t], [m], and [n]. (Hutauruk, 2015 : 54)

These distinctions had a major impact on vocabulary growth; for example, higher input at 18 months was linked to higher processing speed (i.e., quicker word recognition), which predicted a larger vocabulary at 24 months. (Kidd& Donnelly, 2020 : 323)

## **2.3 From Birth to 24-30 Month**

When a toddler starts to speak phrases longer than two words, these phrases feature constituent structures that are hierarchical and resemble the syntactic structures seen in sentences created by adult grammar. These phrases appear to be "sentence-like."(Ibid)

Between the ages of 24 and 30 months is when telegraphic development takes place. Children are capable of speaking lengthier sentences with more than two components. A young child would remark, "The cat stood up on the table," for instance. Although proper grammar is still lacking at this point, it is clear from the sentence that the cat is not just on the table but also standing up. The capacity to comprehend simple directions, such as two-part commands like "go to your table and grab your books," also develops in the kid.

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<sup>3</sup> ) GENERAL LANGUAGE DEVELOPMENT <https://www.in.gov/health/cdhhe/files/ideal-general-language-development.pdf>, p 5



## 2.4 Multi-word Stage

Children go into the multi-word stage at 30 months. To better express their ideas, they construct phrases that are more and more complicated. In order to create more semantically sound sentences, they also start using morphemes. For instance, they are aware that when referring to many pets, "dogs" should be used instead of "dog." Between the ages of 24 and 30 months is when the telegraphic stage takes place.( Author, 2022)

ELLs must also acquire their second language far more quickly than their first in order to succeed. Children learn a first language over the course of around twenty-four months before being expected to speak two-word sentences. For ELLs, this period is reduced to only a year. Twelve months is just not enough time for many students to absorb and grasp a totally new language, especially those adjusting to a new home in a new country. A more favorable learning environment for ELLs may be created by being patient, kind, and concentrating on your students' strengths rather than their faults.(4)

## 2.5 Periods of Language Acquisition

While some of the phases may briefly overlap one another, it has been seen that the transitions between them are often fairly abrupt. (Hutauruk, 2015 : 52)

A specific "critical era" of cerebral growth is also when the linguistic capability functions best. Additionally, the phrase "language acquisition" is frequently used indefinitely to refer to the process that ends in one knowing their original tongue (or native languages).

a skill that results from putting one's aptitudes and abilities to use during the course of the relatively lengthy period in which a kid learns to manage the system's physical components, such as words and sounds and grammatical rules, as well as to infuse them with meaning: Before a youngster can use language creatively, they must first understand the rules.

Language development differs at several stages during this time period. (Ibid)

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<sup>4</sup> ) The Stages of Language Acquisition for ELLs at <https://www.continentalpress.com/blog/language-acquisition-stages-ells/>.

The predicted stage for psychological development is reached at different times during a child's life, and language development follows biology and chronology plans as normal youngsters travel in diverse directions. During the early years, different grammatical elements are acquired based on natural arrangements or Lenberg (1967), who is renowned for his critiques who discuss the crucial areas for language learning, supports the approach. Those who attempt to learn a language often find that they don't fully grasp it. It occurs around the puzzle on the opposite side of this point. (Safitri, 2020 : 164)

The Critical Period Hypothesis (CPH), first proposed by Lenneberg in 1967, remains the foundation for the majority of research on age-related aspects of language learning. Several theories have suggested a neurological basis for language acquisition; of these, Lenneberg's CPH remains the most widely used. The CPH asserts that the window of time within which a language may be learned perfectly is finite. Regardless matter how much time is invested later, only those who learn morphology, phonology, and syntax in the years prior to puberty are able to grasp it. This idea is the foundation for the widely held belief that children are more adept at acquiring native-like pronunciation in second languages. (Castello, 2015 : 6).

The history of infant language research has been split into three key eras by David Ingram:

- (1) Studies of the time diaries (1876-1926)
- (2) The duration of large-scale study periods (1926-1957)
- (3) The duration of the longitudinal research (1957- present)

We would refer to these eras as the ancient, middle, and contemporary periods of old child language studies, respectively, in the absence of more acceptable terms. The study of one child's language during the old era contrasts with the study of several children's or subjects' languages during the middle era. The "rule-based description" of children's language has come under more scrutiny in the current day. (Salim & Mehawesh, 2014 : 18)

## **2.6 Middle Period of Child Language Studies**

Madorah Smith (1926) conducted the first research, focusing on sentence length, vocabulary increase, and proper articulation. McCarthy conducted similar research (1926). McCarthy interacted with regular kids, just like Smith did. Following these investigations, twins were examined by Day (1932) and Davis (1937), brilliant children were examined by Fisher (1934), and children from lower and middle class were compared by Young (1941). The finest of these investigations—those with a high sample size—is Templin's (1957), which "marks the end of these research as done over 31-year span." (Ingram, 1989:15)

## **2.7 Modern Period of Child Language Studies**

"Longitudinal language sampling" is a feature of this time period. As stated, it is a technique for gathering information on language learning in which "the kid is visited at predefined intervals for a suitable amount of time with the objective of obtaining a representative sample." (Ingram, 1989:21)

The first longitudinal studies were conducted in the late 1950s, and researchers like Martin Braine (Walter Reed Hospital in Bethesda, Maryland), Wick Miller, Susan Ervin, and Lois Bloom (Columbia University), as well as Susan Ervin and Wick Miller (University of California), became interested in these studies. Braine looked into the "two-word" utterances made by three kids named Andrew, Gregory, and Steven. For the purpose of collecting data systematically, Steven also employed a tape recorder. Miller and Ervin (1964), Bloom (1970), and Brown (1973) all conducted investigations on the basis of systematic visits, which involved making frequent visits to their participants at specified times for predefined lengths of time. (Ingram, 1989:18)

# Chapter Three: Language and Brain

## 3.1 Language and Thought

The current debate about the relationship between language and thought has been with us for centuries and can be traced back to Greek philosophy. In Plato's philosophy of language, language is related to thought. The unquestionable assumption that language could ideally take shape was a view that persisted into the Middle Ages and was revived in the Age of Enlightenment. The big question is whether language influences the nature of this relationship and how we divide and categorize the world we experience. (Gumperz & Levinson 1996).

Humans are the only species with language, yet their evolution does not appear to involve any peculiar evolutionary mechanism unique to humans. Human language evolution relies on natural selection acting on genetic biological variation (Lieberman, 2016 : 127).

Language is the human ability that distinguishes us from other animals. Unlike animals, humans have formal communication structures. Researchers believe that human language requires flexibility in creating and using signals, which is why language is unique to humans. (Danielle, 2020).

There is some reason to believe that thought processes, although perhaps influenced by the forms of language, cannot be literally determined for isomorphic representations of linguistic representations. . One is the common ambiguity of words and sentences. Bat, bank, and bug all have multiple meanings in English and are therefore associated with many concepts, but the concepts themselves are clearly distinct in thought, which manifests among other things in the fact that one can consciously construct a pun. Furthermore, some linguistic expressions, including the pronouns (he, she) and the index (here, now), depend mainly on context to interpret them, while the thoughts that they are used to express often more specific. Our words frequently lack distinctions that are present in thought because they are semantically general. For example, the word "uncle" in English does not specify whether the person is related to the speaker by blood or marriage, or whether he is related from the mother's or father's side. However, the speaker usually knows the necessary details. In fact, lexical elements frequently have many interpretations that vary depending on the context in which they are used (He has a square face;

The room is heated), and their precise understanding in various situations depends on inference. When we open an envelope, can, umbrella, or book, for instance, the indicated action is fundamentally different from when we undertake the same action but for a different reason, such as opening the window to allow the cat in or the evening air in. Additionally, there are instances where verbal output fails to fully convey a notion or proposition. Finally, the use of implicatures and other forms of pragmatic inference assures that, in spite of speakers typically meaning what they say, they are unable to express exactly what they intend. To borrow a sentence from the Mad Hatter (Gleitman & Papafragou, 2012 : 505).

One of the books in the Routledge Modular Psychology series that discusses cognitive psychology is *Language and Thought*. Cognitive psychology is sometimes described in a variety of ways, but is generally known as "the scientific study of the thinking mind." As a result, cognitive psychology encompasses a wide range of study fields, including those in perception, attention, memory, language, and thought. Since they serve as the conduit for our social and mental life, language and thought are at the center of all human endeavors. It is impossible to envision living without language since we use it to connect with others and to keep track of our own ideas. Language controls our social and cognitive activities in some way. The use of language and the capacity for reasoned reasoning are often seen as being characteristics that set humans apart from other animals. For instance, Chomsky believes that language "is a vital component of what it is to be human, and it is part of what distinguishes us from other creatures." We seem to be different from other animals in that our mental processes are complicated and inherently different in nature. Thus, the subjects covered in this book are fundamental to cognitive psychology and perhaps even to mankind. (Lund, 2003 : 1-2)

The word "thought" is not frequently regarded as a technical term. It makes generic reference to human thought and the conceptual byproducts of such thought. Sometimes, along with cognition, such mental activity has been interpreted to include emotion and "conation" (action, volition, striving—the will to do something). Language, of course, reflects a specific system of thinking in this meaning of thought as mental activity, thus our comparison is truly between language and other components or types of mind. Thought itself appears to be necessary and only personal. (Kronenfeld, no year).

## 3.2 Location of Language in the Brain

Overall, cortical stimulation studies clearly show that language organization is different in monolinguals compared with bilinguals, and that distinct areas are specific to different languages. These studies also support the idea that language is primarily located in the left hemisphere of the brain (in right-handed people - some variation occurs in left-handed people) and that there is a difference in location. accuracy of language regions in the brain. The key issue is the extent to which these variations are the product of brain insults, especially if the insult occurs early in development. (Fletcher,others.2000 : 45).

The location of the second active domain differs not only for the same language between individuals, which is consistent with previous MSI studies from our laboratory, but also for the same participants. Interlingualism is consistent with cortical stimulation studies. Therefore, since this alteration is evident in the MSI maps of normal subjects, it cannot be attributed to encephalopathy as in cortical stimulation studies. (Ibid).

All these converging sources suggest that Wernicke's region, although important for auditory processing, is not the primary site of language comprehension; language comprehension involving several left TMJ regions outside of Wernicke's area, as well as the left frontal lobe; and language-related frontal areas extend beyond traditional Broca's area to include much of the medial and lateral prefrontal cortex (Binder, 1997 : p 359).

Wernicke's area is an area of the cerebral cortex involved in speech and involved in spoken and written language. They are so named because of Carl Wernicke, a German neuroscientist, who discovered that this region is involved in the pronunciation of words and syllables. While Broca's area is also an area of the frontal lobe of the brain that is involved in speech production. It was labeled as such because of Pierre Paul Broca, who noticed impaired speech in two patients with sustained trauma to this region. Ardila argues that the Broca complex is not a language-specific region and that it becomes active in certain nonverbal activities, such as mental imagery of grasping movements. Thompson-Schill analyzed the various shortfalls observed in the Broca area claim case: pronunciation, syntax, selection, and verbal working memory, suggest that there may be more than a single function of Broca's area.(Ardila,2011: 5)

Diffuse imaging is an advanced technology that reveals the main pathways of neurons that connect different brain regions. Diffuse imaging scans depict axons – long fibers that extend from the cell body of a neuron to transmit impulses to the next cells in the row. It works by detecting how water molecules found naturally in brain tissue move along axons. Diffuse imaging cannot detect which neurons are firing. But when the scientists compared the scattering with fMRI, they were able to locate the fibers that connect the clusters of activity that are activated during the language task. (<sup>5</sup>).

### **3.3 Interference between L1 and L2**

Many researchers have studied the writing strategies of L1 and L2 and found that there are similarities between the two. When less proficient writers write in a second language, it may not be easy for them to port their L1-based strategies and use their L1 resources for certain problems, such as idea generation, monitoring and studying vocabulary. L2 readers have access to their L1 and often use their L1 as a reading strategy. (Karim & Nassaji, 2013 :117-134).

Silva (1993) conducted an experimental study to test writing in L1 and L2. The participants in this study had a variety of conditions. At least 27 different N1s were represented. The participants were university students in the United States who possessed highly developed English proficiency and demonstrated multiple levels of writing ability. Silva mentions that his research demonstrated that writers asked to work at L1 and L2 focus more on fabric production in L2 than in L1 and found content production at L2 more complex. and less prosperous. Much of the material created in L2 is not used in student writing (Silva, 1993). In addition, Silva finds that writers are arranging less, to a full and limited extent. Comprehensiveness indicates that the writer treats the topic from many different points of view. Restriction means that the writer treats his syntactic and lexical alternatives within his or her own written background. According to Silva (1993), L2 writers set fewer goals and have more difficulty organizing the material generated (L1 writers do not have this problem). In general, writing adult L2 is less efficient than writing L1. For lower-level concerns, the L2 script is more stylistic and less complex in its formation. Although there are many differences in reading L1 and L2, Jiang reports that if

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<sup>5</sup> ) From Scalpels to Scanners: Studying the Brain's Language SystemAt :  
<https://www.amnh.org/explore/videos/humans/language-in-the-brain/understanding-language-in-the-brain>.

learners have a good background in L1 and their reading skills and strategies have developed, they will apply these skills and strategies as they read at L2.

The relationship between first language acquisition (L1) and second language (L2) has been the subject of research for decades. Gass and Selinker define L1 acquisition as the process by which a child acquires his or her first language, while L2 acquisition is the process of learning another language after acquiring the first language. (Gass & Selinker, 2008). One of the research directions under this topic is how L1 affects L2 acquisition. This effect occurs because when an L2 learner wants to communicate in the target language, whether spoken or written, they tend to rely on the structure of their first language. Therefore, if the constructs are very different, it will likely make many errors indicating L1 interference in L2 acquisition. (Dechert, 1983).

L2 can affect L1 in the form of loan transfer, convergence, transfer, restructuring transfer and attrition L1 (Pavlenko, 2003). These five phenomena contribute significantly to the influence of the second language on the first language. found that learners' FL level will affect their L1 as learners transition. Some other researchers believe that L2 will affect L1 although not all aspects of L1 are affected by L2, see examples (Jarvis, 2003; Harada, 2003). Therefore, we did not reduce the effect of L2 on L1.

Linguistic interference refers to the rearrangement of the linguistic system due to the introduction of extraneous elements into the most structural areas of the language (Weinreich, 1968). The term interference is also known as handover, interference 11, linguistic interference and meaning interference. (Odlin, 2013).

Arguing that there are two types of assignment; positive handover and negative handover. Positive transfer is the correct way to say it, because the first and second languages have the same structure. In contrast, negative displacement refers to an error caused by old habitual behavior that is different from newly learned behavior. Positive transfer is predicted to occur when the same patterns in LI and FL lead to correct pronunciation, while negative transition will occur when different samples cause errors in language production. . Noise, on the other hand, is called a transition effect (Callies, 2015: 130). In other words, the transliteration of the mother tongue is called interference.



Overlapping is a deviation of the target language because it knows more than one language. (Dulay et al. 1982) explains that the overlap is distinguished into psycholinguistic and sociolinguistic. Psychological use the term intervention refers to the learner's habit of learning something new. Meanwhile, in social linguistics, overlap refers to language interactions, such as language borrowing and language transformation by agreement. (Lott, 1983: 256)

## Conclusion

- 1) Visualizing a certain theory or notion can be challenging at times in psychology, however behaviorism does not have this problem. The focus of behaviorism is on how people behave and how that behavior might change as a result of their surroundings.
- 2) The social interactionist hypothesis, which is based on ideas from both the behaviorist and mentalist schools of thought, is a compromise between them. The hypothesis, which acknowledges that early interactions between newborns and caregivers are a key aspect in language development, incorporates a social component as well as the concepts from the two preceding conflicting hypotheses.
- 3) When a toddler starts to speak phrases longer than two words, these phrases feature constituent structures that are hierarchical and resemble the syntactic structures seen in sentences created by adult grammar. These phrases appear to be "sentence-like."
- 4) Children should be combining two or three signs or phrases using the grammar they observe or hear at home.
- 5) Overall, cortical stimulation studies clearly show that language organization is different in monolinguals compared with bilinguals, and that distinct areas are specific to different languages.
- 6) The participants were university students in the United States who possessed highly developed English proficiency and demonstrated multiple levels of writing ability.
- 7) The L1 effect is negative in most cases because no two languages have the same linguistic characteristics. If so, L2 would be supported by L1, for example Hindi and Urdu are almost grammatically similar. Their structures and vocabulary also have some similarities.
- 8) Thus, spoken Hindi and spoken Urdu are mutually intelligible, but the two alphabets are so different that, if they did not know, written Hindi and written Urdu would not be mutually intelligible.
- 9) The role of similarities and differences was first formed who It is believed that when two languages are similar, learning L2 is facilitated, but when they are different, inhibition occurs that makes it difficult for learners to learn L2

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حكومه تی هه ریمی کوردستان  
وهزاره تی خویندنی بالا  
زانکۆی لوبنانی فره نسی  
کۆلیژی پهروه رده و زمان  
به شی زمانی ئینگیزی

(تایبه تمه ندیه کانی یه که م پرۆسه ی به ده ستهینانی زمان)

هه ئسه نگاندنی پرۆزه ی توێژینه وه ی ده رچوووان له زانکۆی لوبنانی فره نسی

توێژینه وه پیشکه شکراره بو لیژنه ی توێژینه وه ی زانکۆ / کۆلیژی پهروه رده و زمان - به شی زمانی  
ئینگیزی. وهک به شیک له داواکاری بو پروانه ی به کالۆریۆس له پهروه رده دا.

ئاماده کراوه له لایهن:

یاد صدیق محهمه د

مه به ست مه غدیید محهمه د

ره بیان نه حمه د مه ولود

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به سه ره په رشتی:

یولیا ئیگورفان باکای

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