UNIT 4

THEORIES OF LANGUAGE LEARNING

PLATO

- Plato (c. 427–347 BCE) was a prominent ancient Greek philosopher who founded the Academy in Athens, one of the earliest institutions of higher learning in the Western world.
- Plato was a student of Socrates and the teacher of Aristotle, making him a central figure in the development of Western philosophy.
- Plato's dialogues often featured Socrates as the main character, discussing complex ideas in a conversational style.
- Major Works: The Republic, Phaedo, Symposium, Timaeus, The Apology, Meno
- Meno: Investigates the nature of virtue and whether it can be taught. Plato's Problem, also known as the Meno Paradox, is introduced in the dialogue Meno.
- It is written in the form of dialogue between Socrates and Meno.

PLATO'S PROBLEM

- It is the term given by Noam Chomsky.
- In the context of language learning, the problem suggests that the linguistic input (what learners hear and see) is often not enough to account for the depth and complexity of language knowledge they acquire.
- Essentially, the theory argues that learners must have some innate linguistic knowledge or ability that allows them to understand and produce language beyond what is simply presented to them.
- Origins and Concept:- Plato's Problem originates from Plato's philosophical question about how humans can possess knowledge that seems to surpass their experiences.
- In language learning, it refers to the puzzle of how learners—especially children—can acquire complex language skills rapidly and accurately, despite limited and imperfect input.

PLATO'S PROBLEM

- Innate Knowledge Hypothesis:- Noam Chomsky adapted Plato's Problem to linguistics, suggesting that humans have an innate linguistic capacity, often referred to as "Universal Grammar."
- According to this theory, humans are born with an inherent set of linguistic principles that guide language learning, making it possible to quickly grasp grammar and syntax.
- Poverty of the Stimulus:-This concept argues that the linguistic input available to children is insufficient (or impoverished) to explain their successful acquisition of language.

PLATO'S PROBLEM

- Chomsky developed his 'Standard theory' to resolve this issue.
- He presented this idea in his work 'Aspects of the Theory of Syntax'
- He developed and revised the same as 'extended standard theory' during late 1970s.
- These theories proposed that the mind of the human infant is endowed with a "format" of a possible grammar.

NOAM CHOMSKY'S PRINCIPLES AND PARAMETERS (P&P)

- Noam Chomsky's Principles and Parameters (P&P) approach is a theory within the field of generative grammar that explains how humans acquire language.
- Principles: Principles are universal grammatical rules that apply to all languages. They are innate, meaning that all humans are born with these linguistic principles pre-wired into their brains.
- For instance, the principle that sentences contain subjects and predicates is universal across languages.
- Parameters: Parameters are language-specific options that vary from one language to another. They can be thought of as switches that are turned on or off depending on the language a person is learning.
- According to Chomsky, children are born with an innate understanding of the principles of language. Through exposure to a specific language, they adjust the parameters based on the linguistic input they receive.

- The Cartesian theory of language production is rooted in the ideas of René Descartes, a 17th-century French philosopher, mathematician, and scientist.
- While Descartes himself did not formulate a specific theory of language production, his ideas on mind-body dualism and the nature of human thought have influenced later discussions on how language is produced.
- The term Cartesian linguistics was coined with the publication of Cartesian Linguistics: A Chapter in the History of Rationalist Thought (1966), a book on linguistics by Noam Chomsky.

- Key Concepts in Cartesian Theory Related to Language Production
- Mind-Body Dualism: Descartes famously posited that the mind and body are two separate substances: the mind is non-material and concerned with thought, while the body is physical and operates in the material world.
- He argued that the mind possesses unique, innate abilities, including the capacity for abstract thought and reason, which are fundamental to language production.
- Innate Ideas: Descartes believed in the existence of innate ideas—knowledge that is inherent in the mind and not acquired through sensory experience.

- He suggested that certain principles of reason and knowledge are naturally embedded within human consciousness, laying the groundwork for later theories that propose innate linguistic structures.
- Rationalist Approach to Language: Descartes emphasized that language is a product of rational thought, rather than sensory experience alone, distinguishing humans from animals.
- Creativity and Infinite Expressibility: Descartes observed that humans can generate an infinite number of sentences and ideas, even ones they have never heard before. This creativity in language production suggests that humans have an inherent ability to form new expressions.

- Freedom from Instinct: According to Cartesian thought, humans possess a unique freedom from rigid, instinctual behavior, which is different from other animals whose behaviors are heavily dictated by instinct.
- In the context of language, this suggests that human language use is not merely a set of fixed responses to stimuli, but rather a creative, generative process.
- Humans can produce and understand an infinite variety of sentences, including those never encountered before, highlighting a flexible use of language beyond instinctual behaviors.

- Universality: Chomsky argues that there are universal features underlying all human languages, stemming from innate cognitive structures. This aligns with the Cartesian view that certain aspects of the mind are universal across humanity.
- Chomsky's concept of Universal Grammar (UG) proposes that all languages share a common underlying structure, which supports the notion that humans are born with innate linguistic knowledge.
- This universality also underscores the idea that language is a fundamental and shared human trait, not specific to any one culture or society.

- Deep Structure: This level represents the underlying meaning or semantic content of a sentence. Deep structure is considered abstract and more universal across languages, reflecting the intended message or proposition of a sentence.
- Surface Structure: This level represents the actual form or structure of a sentence as it is spoken or written. It includes the grammatical and syntactical elements that shape how the sentence is constructed. Surface structure is more concrete and language-specific, detailing the arrangement of words, phrases, and clauses that convey the deep structure's meaning.

JOHN LOCKE

- John Locke (1632–1704) was an English philosopher and physician, widely regarded as one of the most influential Enlightenment thinkers and the "Father of Liberalism."
- His work laid the foundation for modern theories of empiricism and political philosophy.
- In his major work, An Essay Concerning Human Understanding (1690), Locke argued that human knowledge derives from sensory experience and that the mind is a "tabula rasa" or blank slate at birth.
- John Locke's theory of Tabula Rasa, or the "blank slate," is a foundational concept in his philosophy, particularly his views on human knowledge and learning.
- In essence, Locke argued that individuals are born without any preexisting knowledge or innate ideas, and that all knowledge is acquired through experience.

TABULA RASA

- Mind as a Blank Slate: Locke believed that at birth, the human mind is a tabula rasa, or a blank slate, meaning it has no innate ideas or knowledge.
- According to this view, the mind starts as a blank canvas that is shaped by sensory experiences and reflections throughout life.
- Empiricism: Locke was an empiricist, meaning he believed that all knowledge comes from sensory experience.
- He argued that our ideas and concepts arise from two sources: sensation (external sensory experiences) and reflection (internal contemplation on those experiences).

TABULA RASA

- Rejection of Innate Ideas: Locke's theory was a direct challenge to the notion of innate ideas, a concept endorsed by philosophers like Plato and Descartes.
- He rejected the idea that we are born with pre-existing knowledge, such as mathematical principles or moral truths. Instead, he argued that everything we know comes from interacting with the world.
- Simple and Complex Ideas: According to Locke, the mind begins by forming simple ideas derived from basic sensory experiences, such as the color red or the sensation of coldness.
- These simple ideas can then be combined and abstracted to create complex ideas, like the concept of beauty or justice, through processes such as comparison, combination, and abstraction.
- Role of Experience: Locke emphasized that all knowledge and understanding are built up through cumulative experiences over time.
- He believed that education and environment play crucial roles in shaping the mind and character, as they provide the experiences that form the content of knowledge.

TABULA RASA

- Empirical Learning Basis: Since tabula rasa suggests that individuals are born without innate knowledge, it implies that language learning occurs entirely through exposure, practice, and interaction. This supports theories that prioritize real-world language exposure, such as Behaviorism and Sociocultural theory, which view language as a skill acquired through imitation, reinforcement, and social interaction.
- Individual Differences in Language Acquisition: Since tabula rasa suggests that the mind is shaped by unique experiences, it supports the idea that language acquisition varies based on individual differences in exposure, motivation, and environment.
- Role of Instruction and Interaction: The concept supports the idea that language learning can be enhanced through structured input and guided practice. Constructivist approaches, like Vygotsky's Sociocultural Theory, build on this by suggesting that social interaction, scaffolding, and collaborative learning are essential in acquiring language skills.

B F SKINNER

- B F Skinner (1904–1990) was an American psychologist, behaviorist, author, and social philosopher, widely known for his pioneering work in Behaviorism.
- Born on March 20, 1904, in Pennsylvania, Skinner initially studied English literature but shifted his focus to psychology after being inspired by the work of Ivan Pavlov and John B. Watson.
- He completed his Ph.D. in psychology at Harvard University in 1931.
- He authored several influential books, including "The Behavior of Organisms" (1938), "Walden Two" (1948), and "Beyond Freedom and Dignity" (1971).

IMITATION THEORY

- B.F. Skinner's Imitation Theory, also known as the Behaviorist Theory of language acquisition, posits that children learn language primarily through imitation, reinforcement, and conditioning. Skinner argued that language acquisition is not an innate ability but rather a behavior learned through interaction with the environment.
- Imitation: Children learn language by copying the speech and sounds they hear from caregivers and others around them.
- Reinforcement: When children produce correct or desired language, they receive positive reinforcement (such as praise, attention, or other rewards), which encourages them to repeat the behavior. Incorrect language usage might be ignored or corrected, gradually shaping the child's language patterns toward accuracy.
- Operant Conditioning: Skinner believed that language development follows the principles of operant conditioning, where behaviors are modified by their consequences. Positive reinforcement strengthens behaviors, while negative consequences weaken them.

KEY POINTS

- Language as a Learned Behavior: Skinner argued that language is not an innate ability but rather a learned behavior. He suggested that children acquire language through interactions with their environment, observing and imitating the speech of those around them.
- Role of Imitation: Imitation is central to Skinner's theory of language acquisition. Children learn language by copying words, phrases, and structures they hear from others, especially caregivers.
- Reinforcement and Feedback: Skinner emphasized the importance of reinforcement in learning language. When children use language correctly, they often receive positive reinforcement, such as praise or approval, which encourages them to continue using those words or phrases. Incorrect use may be ignored or corrected, which gradually shapes their language use towards accuracy.

KEY POINTS

- Operant Conditioning: Skinner viewed language acquisition as a form of operant conditioning, where language behaviors are shaped by consequences. For instance, a child may learn to say "milk" when they receive milk in response, reinforcing the association between the word and the object.
- Stimulus-Response Associations: According to Skinner, language is developed through stimulus-response associations. A stimulus (e.g., seeing a toy) might prompt a verbal response (e.g., saying "toy"), which, if reinforced, strengthens the association between the word and the object.
- The Importance of Environmental Influence: Skinner believed that the environment plays a crucial role in language development. He argued that language learning depends on the child's exposure to language and the responses they receive from others, rather than any inborn linguistic capacity.

TERMS

- Operant Conditioning: A learning process in which the strength of a behavior is modified by reinforcement or punishment.
- Reinforcement: A consequence that strengthens or increases the likelihood of a behavior. There are two types:
- Positive Reinforcement: Adding a pleasant stimulus to increase a behavior.
- Negative Reinforcement: Removing an unpleasant stimulus to increase a behavior.
- Punishment: A consequence that weakens or decreases the likelihood of a behavior. There are two types:
- Positive Punishment: Adding an unpleasant stimulus to decrease a behavior.
- Negative Punishment: Removing a pleasant stimulus to decrease a behavior.

NO&M CHOMSKY

- Innate Language Ability: UG proposes that humans have an inborn capacity for language. This innate structure enables children to learn complex grammatical systems quickly and effortlessly, often faster than they could if language were purely learned from their environment.
- Language Acquisition Device (LAD): Chomsky suggested a hypothetical "device" in the brain called the LAD, which facilitates language acquisition. This mechanism helps children form sentences and understand grammar rules without being explicitly taught.

NO&M CHOMSKY

- Universal Principles: UG posits that all languages share certain core principles, or grammatical structures, that are common across different languages. For example, concepts like "nouns" and "verbs" are found universally, even though the rules governing their use may differ between languages.
- Parameters: While there are universal principles, UG suggests that languages vary in specific "parameters," which can be set differently depending on linguistic input. For instance, word order varies across languages (like subject-verb-object in English versus subject-object-verb in Japanese), but UG provides a framework that allows for these variations within a universal structure.

NO&M CHOMSKY

- Poverty of the Stimulus: A key argument supporting UG is that children often learn language structures they have not explicitly encountered in their input. This phenomenon suggests that linguistic ability is not solely acquired from environmental exposure, reinforcing the idea of an innate grammatical foundation.
- Cross-Linguistic Similarities: UG explains why there are remarkable similarities in grammatical structures across unrelated languages. These shared structures point to a universal framework that governs how languages are constructed and understood.
- Critical Period Hypothesis: UG theory suggests that there is an optimal period for language acquisition, typically in early childhood. During this time, the brain is especially receptive to linguistic input, enabling faster and more complete acquisition of grammar.

ACCULTURATION MODEL

- Schumann's Acculturation Model, developed by John Schumann in 1978, explains how social and psychological factors impact the acquisition of a second language (L2).
- Schumann argued that successful language learning occurs through acculturation, the process of adapting to and integrating into a new culture.

ACCULTURATION MODEL

- Social Distance: Schumann identified social distance between the learner's native culture and the target language culture as a key factor. Social distance refers to the degree of closeness or connection a learner feels toward the target culture. Less social distance, or greater integration into the target language community, generally leads to better language acquisition.
- Psychological Distance: Alongside social distance, Schumann emphasized psychological distance, which is how comfortable or motivated a learner feels toward the target language and culture. High levels of anxiety, low motivation, or negative attitudes increase psychological distance and hinder language learning.

FACTORS AFFECTING SOCIAL DISTANCE

- Dominance and Subordination: If the learner's group is viewed as subordinate or marginalized by the target language group, greater social distance may exist, affecting the learner's motivation.
- Integration Strategies: The extent to which learners seek integration (assimilation or adjustment) into the target culture influences acculturation. Different strategies include assimilation (fully adopting the target culture), integration (adapting while retaining elements of the native culture), and preservation (limiting adaptation).
- Group Size and Cohesion: Smaller, cohesive groups may retain their original language and culture more strongly, which can hinder acculturation into the new language culture.
- Length of Residence: Prolonged exposure and residence in the target language environment typically reduce social distance and improve language acquisition.

AFFECTIVE FACTORS

- Motivation: High motivation to learn the target language, whether for personal, professional, or social reasons, positively impacts language acquisition.
- Attitude: A positive attitude toward the target language and its speakers enhances the likelihood of successful language learning.
- Culture Shock: Experiencing culture shock can increase psychological distance, causing anxiety and reluctance to engage with the target language community.

STEPHEN KRASHEN

- Stephen Krashen (born May 14, 1941) is an influential linguist, educational researcher, and emeritus professor at the University of Southern California (USC).
- Monitor Model is a five-part theory (Acquisition-Learning Hypothesis, Monitor Hypothesis, Natural Order Hypothesis, Input Hypothesis, Affective Filter Hypothesis) explaining how people acquire and use second languages.

MONITOR MODEL THEORY

- Acquisition-Learning Hypothesis: Krashen makes a clear distinction between language 'acquisition' and 'learning'. Acquisition is a subconscious process, similar to how children learn their first language, where learners naturally absorb the language through meaningful interactions. In contrast, learning is a conscious, formal process involving explicit knowledge of language rules. According to Krashen, acquisition is the more powerful and effective process for developing language proficiency
- Monitor Hypothesis: This hypothesis posits that the "learned" language serves only as a monitor or editor for the "acquired" language. In other words, conscious knowledge of grammar rules can be used to make corrections and adjustments, but only when there is sufficient time, a focus on form, and knowledge of the rules. Krashen believes that overreliance on this monitoring function can hinder natural language production and fluency..

MONITOR MODEL THEORY

- Natural Order Hypothesis: Krashen suggests that language is acquired in a predictable order, regardless of the learner's age, background, or language environment. Some grammatical structures are naturally acquired earlier than others, and this order is consistent across different learners.
- Input Hypothesis: It states that language acquisition occurs when learners are exposed to language input that is slightly beyond their current level of proficiency, which he terms "i+1" (where "i" is the learner's current level, and "+1" represents input that is just beyond that level).
- Affective Filter Hypothesis: Krashen asserts that emotional factors like motivation, anxiety, and self-confidence play a critical role in language acquisition. A high affective filter, often due to stress or lack of motivation, can block comprehensible hindering language learning. Conversely, a low affective filter allows input facilitating natural language development.

JEAN PIAGET

- Jean Piaget, a Swiss developmental psychologist, is renowned for his work on cognitive development, not specifically for second language learning.
- His theories on how children construct knowledge have influenced approaches to language learning, including second language acquisition (SLA).
- Piaget believed that language is not an isolated skill but is rooted in cognitive development.
- Thought precedes language, meaning that cognitive processes and mental representations lay the groundwork for language acquisition.

STAGES OF COGNITIVE DEVELOPMENT

- Sensorimotor Stage (0-2 years): In this stage, children primarily understand the world through their senses and actions. Language emerges toward the end of this stage, around 18-24 months, as children start to use words to represent objects and events they have experienced.
- Preoperational Stage (2-7 years): At this stage, children begin to use symbols, including language, to represent their environment. Their vocabulary grows rapidly, but their thinking is still egocentric.
- Concrete Operational Stage (7-11 years): Children's thinking becomes more logical and organized, but it is still concrete. They can understand complex sentence structures and use language to describe tangible concepts. This stage supports the development of more complex linguistic skills, including grammar and syntax.
- Formal Operational Stage (11 years and up): In this final stage, children develop the ability to think abstractly and hypothetically. Their language use becomes more sophisticated, allowing them to discuss abstract ideas and hypothetical situations

- Piaget emphasized that children actively construct knowledge by interacting with their environment. Language, then, is a tool for children to express the knowledge they have constructed.
- Egocentric Speech and Socialized Speech: Piaget noted that children initially engage in egocentric speech, speaking mostly about themselves or their immediate experiences. As they progress, they gradually adopt socialized speech, where they use language to communicate with others and consider different perspectives.
- Schema Development: Piaget described schemas as mental frameworks that help children organize information. As children encounter new experiences, they either assimilate the information into existing schemas or accommodate by adjusting their schemas.

LEV VYGOTSKY

- Lev Vygotsky, a Russian psychologist, emphasized the role of social interaction and culture in cognitive and language development.
- Unlike Piaget, who focused on individual cognitive stages,
 Vygotsky believed that language is acquired through interaction with others and is deeply influenced by cultural context.

- Social Interaction as the Foundation: Vygotsky argued that language acquisition is fundamentally a social process. Children learn language through their interactions with caregivers, teachers, and peers, who introduce them to the sounds, vocabulary, and structure of language.
- The Zone of Proximal Development (ZPD): Vygotsky introduced the concept of the Zone of Proximal Development, which is the gap between what a child can do independently and what they can accomplish with guidance or assistance from a more knowledgeable person.
- Role of Scaffolding: Scaffolding refers to the temporary support provided by adults or more capable peers to help children perform tasks within their ZPD.

• Private Speech and Inner Speech: Vygotsky observed that young children often talk to themselves out loud, a phenomenon he called private speech. Private speech is a self-guided dialogue that helps children plan actions and solve problems. As they grow, this private speech becomes internalized as inner speech, or silent, mental language. Inner speech plays a key role in self-regulation, thought processes, and cognitive development.

STRUCTURE OF THE ZPD

- The ZPD represents the difference between what a learner can do without help and what they can achieve with guidance or support.
- Tasks the learner can do independently: These tasks are well within the learner's abilities. The learner can complete them without assistance and may not learn much from repeating these tasks alone.
- Tasks within the ZPD: These are tasks the learner can perform with support but not independently. Working within this zone encourages growth because it involves new challenges that stretch the learner's current abilities.
- Tasks beyond the ZPD: These are tasks too difficult for the learner to accomplish, even with help. Attempting these tasks may lead to frustration rather than productive learning.

THANK YOU