CHAPTER III: The Learning Theories

I. Learning Definition

There is no one simple definition of learning. Learning, in fact, is a complex concept that is defined differently according to the context in which it is being discussed. In a psychological definition by Smith (1993), learning is viewed as "a change in behaviour or potential behaviour that occurs as a result of experience".

II. Learning Theories

a. BEHAVIOURISM

The first half of the twentieth century was dominated by a view, which saw learning as a matter of habit-formation. Influenced by the work of theoreticians such as John B. Watson, or B.F. Skinner (who based their theory in experiments carried out by the Russian psychologist Ivan Pavlov), Behaviourists saw learning as stemming from habit formation. To them, effective learning was a matter of reinforcing good habits, while errors were seen as bad habits.

Skinner understood language as a series of habits to be acquired. He denied that the mind or internal cognitive processes could have any kind of role in learning. To him, because internal mental processes could not be observed, they were rendered ineffective to analyze. Instead, he posited, we should focus on the overt, observable effect of those mental states and study them as proof of learning. Skinner's theory of learning, and particularly language learning, was laid out in a book that became the main reference for educators around the world. In 1957, he published *Verbal Behavior* through the US-based Copley Publishing Group. While this book was the peak of his research and a synthesis of his life's work, it would also be his downfall.

b. CHOMSKY'S CONTRIBUTIONS

According to Chomsky, behaviorism cannot account for the fact that children produce original sentences they have never heard before or above and beyond any language they have been exposed to before. To Chomsky, there should be something else, beyond overt behaviour that accounts for the capacity to learn and use language. In his view, we are born with a predisposition to learn and use language. Hence, his view of language and language learning is termed

"innatism." This realization led Chomsky to hypothesize about the existence of an innate Language Acquisition Device (L.A.D.) responsible for supporting the existence of a Universal Grammar (U.G.). This UG shapes all human languages in much the same way as we are born with the ability to learn to run. Chomsky's ideas took the world of language learning by storm, and although he based his research only on L1 acquisition and explicitly claimed that he was "frankly, rather skeptical about the significance, for teaching languages, of such insights and understandings, as have been attained in linguistics" (Chomsky, 1966: 152), his ideas also had an impact on L2 learning and teaching.

c. CONSTRUCTIVISM

Constructivism originated in the work of epistemologist Jean Piaget. Piaget was interested in **discovering the origin of knowledge** or, in other words, **how we come to know the world.**

Piaget's theory relies heavily on a cognitive view of the processes involved in learning. He carried out his studies with children and adolescents and concluded that learning is a matter of two interrelated processes: **assimilation and accommodation**. Assimilation is the taking of new information or experiences and incorporating them into our existing "knowledge bank" or schemata. Encountering this new information causes an imbalance in our schemata. Hence, through an experiential process we progressively accommodate this new knowledge or experience so as to reestablish balance in our cognition through a process called accommodation. This process entails changing our existing schemata or ideas, as a consequence of new knowledge or experience.

However, the best-known part of Piaget's theory is that of the stages of development:

• Sensorimotor stage (birth to 2 years of age)

Children experience the world through their five senses. During this stage children are very egocentric, i.e. they cannot perceive the world through others' points of view. During this stage, children move from simple reflexes to progressively developing control over their senses.

• Preoperational stage (2 to 7 years of age)

During this stage, motor skills are developed. Children are still egocentric, but this tendency decreases as they become older and begin to take perspective. Children's **imagination is at its peak** during this period but **they cannot think logically**, yet.

• Concrete operational stage (7 to 11 years of age)

During this stage, children **begin to think logically** if presented with practical, concrete aids. They are also **able to "decenter**," that is to say, to perceive the world from others' point of view. **The egocentric phase disappears**.

• Formal operational stage (11 to 16 years of age and onwards)

It is during this stage that **children develop their abstract thinking** and are fully capable of using logical thinking. Egocentrism has disappeared and is replaced by a feeling of belonging to groups.

Piaget's ideas about learning and development have left an important imprint in education. His ideas became really potent during the second half of the twentieth century and spurred the "student centered" movement in Pedagogy., and they were used as the basis for models of language acquisition such as Krashen's Input Hypothesis.

d. STEPHEN KRASHEN

Stephen Krashen is a linguist and researcher. During the late 1970s and early 1980s he developed a model of language acquisition, which borrows heavily from the work of Chomsky and Piaget and is also influenced by the work of the Russian psychologist Lev S. Vygotsky. Krashen's work posits that language is acquired in a natural way. He makes a parallelism between the learning of the first language and the learning of the second language. His theory of language acquisition is built around a series of hypotheses. These hypotheses speculate about the process of language development taking examples from the interaction between children and their caretakers and how this interaction affects the way in which children develop their language. His five hypotheses are the following:

i. Acquisition/Learning Hypothesis

Krashen sustains that there are two ways in which we develop language skills. We can do it in a natural way, through sustained exposure to the language and an emphasis on comprehension or through conscious focus on language features. He calls the first process "language acquisition" and in his theory, it is the stronger of the two in that it has supposedly more lasting effect than the second process. The second process involves the learner consciously working, studying

the different systems and committing that information to memory. Krashen calls this process "language learning" and he claims that it is less effective than language acquisition.

ii. Monitor hypothesis

When we acquire language we are able to do so because we possess an internal mechanism, which allows us, as our process of acquisition develops, to identify correct and incorrect statements. This can be equated with Chomsky's L.A.D. in that it is an innate capacity inherent to all humans. However, there are different kinds of "monitor users." Krashen describes **monitor over users** as those speakers who are constantly

assessing and planning what they are going to say. In this scenario, their expression is slow and cumbersome.

In contrast, there can be **monitor under users**, who are very fluent but who are very inaccurate in their use of the language. Krashen assumes that both these situations can be remedied if we focus on acquisition more than learning, since acquisition is supposed to foster **optimal monitor use: subconscious intuitive knowledge of correctness.**

iii. Input hypothesis

According to Krashen, we understand input, which is comprehensible, that is to say, input which is only slightly above our current level of understanding. He posits the formula i+1 to represent comprehensible input. In this formula, "i" stands for input, or language the learner is exposed to. The "+1" element in the formula refers to the difference between what learners actually know and what they can understand but do not yet know. This relates heavily to the next hypothesis: Natural Order.

iv. Natural Order hypothesis

In Krashen's model, language acquisition occurs through predictable stages and following a predictable path, which is not affected by direct instruction. In other words, teachers may teach students a new grammar item but, if it is not the one specified in the sequence of acquisition, it will not be learned. In this sense, he considers that all humans go through the same predictable path in acquiring new syntactic features of the target language and he offers a list of these features

for English. In his elaboration of the "i+1" formula, the "+1" refers to the next syntactic feature in his path to acquisition.

v. Affective filter hypothesis

In this final hypothesis, Krashen attempts to explain why different learners exposed to the same comprehensible input show different levels of acquisition of that input. The affective filter is a kind of barrier to acquisition, which goes up when the student is tense, angry, threatened, over-faced or just has a negative attitude to the language. The filter stays down when the learner is relaxed and well motivated. When the filter is "up" the learner cannot pay attention to the learning because he or she is uncomfortable. However, when the filter is "down" the learner is able to focus on meaning and the language learning experience at hand.

E. LEV S. VYGOTSKY THEORY

No analysis of learning theory or language learning would be complete without addressing the contributions of Lev S. Vygotsky. Working at the same time as Piaget, and also adopting the view that language acquisition was driven by external factors rather than being led by an innate acquisition device, Lev Vygotsky believed both first and second languages are learned via social interaction. Learning a language requires *mediation* by a more able party (such as a parent, teacher or more knowledgeable peer) who provides a supportive framework (or 'a mediated learning experience') for the learner until the new knowledge is *appropriated*, at which point learning has occurred and the mediation can be removed.

Learning is therefore seen as a 'joint enterprise' involving two or more people, so that whereas learners are unable to function independently, they can function successfully if given assistance. In devising this 'sociocultural learning' theory, Vygotsky referred to a learner's *Zone of Proximal Development* (ZPD), this being the difference between what learners can do by themselves and what they can do with the help of others.

Vygotsky's theory of learning has also other important ramifications. He explained that all forms of human cognition happen first as external forms of social mediation and become internalized through interaction with others and

the use of psychological tools. To him, language is one of the most important of these tools. To him, language and thought start as two separate processes in the child. However, through **socialization**, the child progressively acquires control over the language (through interaction with parents, caretakers and other speakers) so that it becomes a tool for thinking. Once the child is able to "think in words" his thinking develops in such a way that the more he thinks, the more his language also develops. **So, language is both a tool for and a product of thinking.**

Contrary to Piaget's view, Vygotsky emphasized that in order for development to occur, learning must precede it. He cites examples of children of different ages playing together in which a child who is not supposedly "organically ready" to do something learns how to do it through the mediation of a play partner who can.