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Overview on Three Core Theories of Second Language Acquisition and Criticism

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ABSTRACT

In a broader sense, various theories and approaches have been emerged over the years to study and analyze the process of language acquisition. The theories do help to improve our understanding of the acquisition of a second or foreign language. For main schools of thought, which provide theoretical paradigms in guiding the course of language acquisition are Behaviourism, Innatism and Interactionism that were considered to be the heart of current language acquisition theories topics that might be used by teachers of English as a second or foreign language to enhance the learning of their students. However, not many teachers are aware of these theories. Due to the insights of a wide variety of attitudes and interest in the use of these three main theories, the researcher aimed of this paper is to review the main beliefs of them in learning a language. It will also discuss the strengths and weaknesses of each theory; and argue some possible critical reviews on these three central theories.

Key words: Behaviourism, Innatism and Interactionism theories, education, critical review

Introduction

Within the field of education over the last few decades, a gradual, but significant shift has taken place, resulting in less emphasis on teachers and teaching and greater stress on learners and learning. In other words, interest has moved from the teaching methods to applying the appropriate theories, characteristics and the learning processes by which learners acquire knowledge. Since the seventies, research on language learning strategies has deeply flourished. This change has been reflected in various ways in language education and applied theories. Language learning styles, strategies and theories are the key factors that help to determine how and how well our students learn a second or foreign language.

Many persons involved in these educational activities are unaware of the influence of learning theories upon their attitudes and professional practices, a condition that Bloom, (1982) refers to as “ignorance in education.” Yet, all persons who are involved in educational enterprises are profoundly influenced by pervasive theories of learning that are part of the fabric of our culture and society. As both Bloom and Getzels(1982) point out, educators and helping professionals who are unaware of these theories and their influence are less informed and less capable of understanding the constraints and context under which they practice. As a result, they are more prone to being misled or to act in ignorance to the detriment of themselves as well as those they serve.

A second language is generally defined as a language studied in a setting where that language is the main vehicle of everyday communication and where abundant input exists in that language. Whereas, a foreign language is a language studied in an environment where it is not the primary tool for daily interaction and where input in that language is restricted. Traditionally, the term Second Language (L2) is used to refer to either a second or a foreign language. For most people, the main goal of learning a foreign language is to be able to communicate in that language. It is through communication that people send and receive messages effectively and negotiate meaning (Rubin & Thompson, 1994: 131). For this reason, the suitable theories were applied for achieving second or foreign language with especial characteristics and features in the distinctive level of education and study.

1. Behaviorism Theory:

Let start with this main statement that if you had a horse, how would you train it to obey your instruction? Could you use the same approach to teach a second language? Could it be a problem for learning?

This theory’s fundamental basis is depended on the imitating what others say or write. It believes that language learning is a mechanical process and it does not involve mental/ cognitive processes. Based on B.F.Skinner (1930s to the 1950s) who mentioned the Radical behaviorism which included behavioral approach to
Acquisition is a process of experience. Language that is a 'conditioned behavior'; the stimulus response process, as clean slates and language learning that is process of getting linguistic habits printed on these slates. Language philosophy, which came to be called radical behaviorism. B.F. Skinner (1957) also asserts that children start out 'mental life;' not mechanistic; internal states not remitted. He developed a different kind of behaviorist of a Behaviorist for the value of a psychology which concerned itself with behavior in and of itself, not as a environment. He often described even his own behavior as a product of his phylogenetic history, his reinforcement history (which includes the learning of cultural practices) interacting with the environment at the moment.

Early in the 20th century, John B. Watson (1878-1958) argued in his book Psychology from the Standpoint of a Behaviorist for the value of a psychology which concerned itself with behavior in and of itself, not as a method of studying consciousness. This was a substantial break from the structuralist psychology of the time, which used the method of introspection and considered the study of behavior valueless. To a behaviorist, manipulation of the environment is the critical mechanism for learning (e.g., the Little Albert study). To illustrate this point, Watson wrote in 1930, "Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select—doctor, lawyer, artist—regardless of his talents, penchants, tendencies, abilities, vocations and race of his ancestors" (p. 104). This quote routinely appears in introductory texts in education and psychology and is used to illustrate the radical environmental views of behaviorists. Watson, in contrast, studied the adjustment of organisms to their environments, more specifically the particular stimuli leading organisms to make their responses. Most of Watson's work was comparative, i.e., he studied the behavior of animals. Behaviorism is more concerned with behavior than with thinking, feeling, or knowing. It focuses on the objective and observable components of behavior. The behaviorist theories all share some version of stimulus-response mechanisms for learning.

All remember Washo, the intelligent monkey who has learnt some words and behaviors by getting reward such as a piece of banana. Washo has taken a piece of banana by giving a correct answer to her teacher and the reinforcement was the stimulate instrument for her learning: if she was correct it means that she had positive reinforcement and has taken a bonus, conversely, in front of wrong answer she was punishment and take a negative reinforcement. Skinner believed that Punishment is sometimes used in eliminating or reducing incorrect actions, followed by clarifying desired actions. Educational effects of behaviorism are important key in developing basic skills and foundations of understanding in all subject areas and in classroom management. According to behaviorism, knowing is giving the correct response when exposed to a particular stimulus. The behaviorist is not concerned with how or why knowledge is obtained, but rather if the correct response is given. “Learning is defined as nothing more than the acquisition of new behavior the process of classrooms; children were trained to speak by imitating the utterances and words heard around them and similarity and actually the children strengthens are their responses by the repetitions, corrections, and other reactions that adults provide, thus, language is practice based General perception which can be declared that, there is no difference between the way one learns a language and the way one learns to do anything else. Main focus is on inducing the child to behave with the help of mechanical drills and exercises. Learning is controlled by the conditions under which it takes place and that, as long as individual are subjected on the same condition, they will learn in the same condition. In relation to this issue it is brought that Audiolingual methodology (Lado, (1964) that is in the following of behaviorism theory. Based on it, language skills are taught in the order of listening, speaking, reading and writing. The purpose of language learning is to learn how to use the language to communicate. Its focusing is on speech with emphasis on correct pronunciation and intonation. In this theory learning a language means learning the structures of the language and based on dialogues that containing common every day, expressions and basic structures of high frequency – language forms occur not in isolation but in context which vocabulary is kept at a minimum.

Modeling, imitation, repetition and pattern drills are vital techniques in the classroom. And mistakes are to be avoided and immediately corrected. Accuracy is the principal objective of this theory and grammar (i.e. structures) is taught inductively. The syllabus is a series of linguistic items sequentially arranged from simple to complex. Language cannot be separated from culture.

The method which was used is Audio lingual that very near to the behaviorism theory and this method was preferred to use in SLA. There are some characteristics of its especial method for teaching which were recognized very appropriate for this theory.
Audio Lingual Method – Modeling, Imitation, Repetition:

Step 1:

a) Teacher models
b) Teacher- Student dialogue
c) Student-Student dialogue
d) Meaningful tr-st, st-st dialogue

Step 2: Substitution Drills I:

• I’m going to the post office

Step 3: Substitution drill II:

• I’m going to the post office
  * She     He      Ali      My mother     My father
  * They   We     Ali and Ahmad          My mother and father

Step 4: Transformation drills:

* She’s going to the post office - Is she going to the post office?
  He – bank
  They – market
  We - beach

2. Innatist view of Language Learning:

Noam Chomsky (1957) asserted that Language is too complex and language learning occurs too rapidly to be explained through imitation. Children learn more about the structure of their language than they could reasonably be expected to learn on the basis of the samples of language which they hear. Parental correction of children’s errors is inconsistent or even non-existent. Humans are endowed with an innate/inborn ability to learn a language. He believes that children were born with a special ability to discover for themselves the underlying rules of a language system. The innate component of language in human beings is called the Language Acquisition Device / Universal Grammar (LAD/UG). The LAD contains a set of abstract principles common to all languages which enables the child to generate an infinite variety of sentences. As he mentioned samples of the language (input) are necessary to trigger the LAD/UG which then enables the child to discover for himself/herself the rules of the language. Linguistic should study the set of the universal rules, i.e. the underlying competence, not the performance of humans.

In the relation to this matter Stephen Krashen (1985) has Five Hypotheses which emphasized on the Chomsky’s (1957) speech about learning and acquisition.

1) The Input Hypothesis:

a) Acquisition takes place when there is comprehensible input (CI).
b) CI is available when the learner understands messages and when the learner’s attention is focused on meaning.

c) CI = i + 1 = input that contains forms and structures just beyond the learner’s current level of competence.

d) CI does not have to be fine-tuned.

e) Listening/Reading (Input) is crucial to language acquisition. Speaking/Writing (Output) is a result, not a cause of language acquisition.

2) The Acquisition-Learning Hypothesis:

   a) Learning:

   - a conscious process with attention to form and error correction.
   - learned knowledge is not available for natural, spontaneous use; it is available only for controlled processing.
   - learned knowledge cannot be converted into acquired knowledge

   b) Acquisition:

   - a subconscious process during which the learner is engaged in meaningful/natural communication where the focus is on meaning.
   - acquired knowledge is available for natural, spontaneous use.

3) The Monitor Hypothesis:

   a) Learnt language can be put to conscious use through the Monitor.
   b) 3 necessary conditions for the use of the Monitor:
      - Sufficient time
      - Focus on form
      - Knowledge of the rules

4) The Natural Order Hypothesis:

   - Grammatical structures are acquired in a natural, predictable order.
5) The Affective Filter Hypothesis:

a) High motivation & self-confidence, low anxiety = Low affective filter more input is available for acquisition

b) Low motivation & self-confidence, high anxiety = High affective filter less input is made available for acquisition

3. Interactionism Theory:

Interactionists view language learning as the result of “an interaction between the learner’s mental abilities and the linguistic environment.” (Ellis, 1985). In other words, language learning occurs because of the interplay between a person and the environment in which he/she develops. The focus of interactionists is, therefore, on how language and cognitive developments take place within the context of interaction (Goh & Silver, 2004). Interactionists study is based on communication and assistance to children to correct their wrong sentences. It is believed that interactional modifications which take a place in the process of negotiation a communication problem promote comprehensible/modified. According to this theory, tasks in which there is a need for the participants to exchange information with each other endorse interactional modifications. Interactionist believe that comprehensible output promote language acquisition when we attempt to convey a message, but fail and have to try again. We need correct form of utterance to speak and exchange our information will help us to have output.
An example:

NS: Put the duck on the truck.
NNS: Duck? I, where put?
NS: Yes, the duck. Put it on the truck.
NNS: Duck?
NS: Yes, that yellow duck over there. The one that makes a quack, quack sound. Yes, you’ve got it. Put it on the truck.
NNS: Truck? What truck?
NS: That one. The one with wheels.
NNS: Wheels. This?
NS: Yes. Now, put the duck on the truck.
   No, no, not behind it. On top of the truck.

Based on this interaction hypothesis children should be had output after every input (Long (1985). The children have to have output due to their understanding of the lecture and whether they were recognized the difference between the wrong and correct answer (Swain, 1997).

1. Language develops as a result of:

2. i) Interaction between the child & other speakers.
   ii) Interaction between the child’s innate capacities for language and the linguistic environment.

2. Comprehensible input/modified input is necessary for language acquisition.
3. Interactional modifications which take place in the process of negotiating a communication problem promote comprehensible/modified input.

Examples of interactional modifications:

Comprehension checks:
- There was no one there. Do you know what I mean?

Clarification requests:
- It’s pouring out there. Pouring? What do you mean pouring?

Confirmation checks:
- It’s pouring out there. Pouring ... you mean raining heavily?

Self repetition/Paraphrase:
- He was exhausted. He was very tired. He ran seven kilometres non-stop. He was very tired.

Use of extralinguistic features:
- That one. That one over there ... yes, that’s right.
4. Tasks in which there is a need for the participants to exchange information with each other promote interactional modifications.

5. Two-way information exchange tasks and closed tasks promote more interactional modifications than one-way information exchange tasks and open tasks.

(Comprehensible output forces learners to ‘notice’ their linguistic problems and focus on the formal properties of the input)

S1: Her car had a broke. (Linguistic problem)
S2: Had a…what? What do you mean? (Feedback – output is incomprehensible)
S1: you know…car…cannot start. (Learner notices linguistic problem; focuses on form)
S2: Ah…her car has broken down (Input - correct feedback)
S1: Yes, yes…her car has broken down. And… (Learner focuses on form in put )

Critical Evaluation of Language Learning Theory (LLT):

As Skinner, (1957) has especial concentration on behavior, but his concentration naturally turned to human language. His laid out a vocabulary and theory for functional analysis of verbal behavior. He believed human, like animal can learn any languages by using of imitation. Due to this matter, this was famously attacked by the linguist Noam Chomsky (1965), who presented arguments for the bankruptcy of Skinner's approach in the field of language and in general. Skinner did not deny the review, later saying that it was clear to him that Chomsky had not read his book about verbal behavior. Skinner's supporters claim Chomsky's consideration of the approach was superficial in several respects, but the appropriate subject for a study of language was a major point of disagreement. Chomsky (like many linguists) emphasized the structural properties of behavior, while Skinner emphasized its controlling variables.

Criticisms of Chomsky's theories:

Chomsky thus, continues to believe that language is “pre-organized” in some way or other within the neuronal structure of the human brain, and that the environment only shapes the contours of this network into a particular language. His approach, thus, remains fundamentally opposed to that of Skinner or Piaget (1951), for whom language is constructed solely through simple interaction with the environment.

Observations that support the Chomskyan view of language:

Until Chomsky(1965) propounded his theory of universal grammar in the 1960s, the empiricist school that had dominated thinking about language since the Enlightenment held that when children came into the world, their minds were like a blank slate. Chomsky’s theory had the impact of a large rock thrown into this previously tranquil, undisturbed pond of empiricism. Subsequent research in the cognitive sciences, which combined the tools of psychology, linguistics, computer science, and philosophy, soon lent further support to the theory of universal grammar. For example, researchers found that babies only a few days old could distinguish the phonemes of any language and seemed to have an innate mechanism for processing the sounds of the human voice. Thus, from birth, children would appear to have certain linguistic abilities that predispose them not only to acquire a complex language, but even to create one from whole cloth if the situation requires. One example of
such a situation dates back to the time of plantations and slavery. On many plantations, the slaves came from many different places and so had different mother tongues. They therefore, developed what are known as pidgin languages to communicate with one another. Pidgin languages are not languages in the true sense, because they employ words so chaotically—there is tremendous variation in word order, and very little grammar. But these slaves’ children, though exposed to these pidgins at the age when children normally acquire their first language, were not content to merely imitate them. Instead, the children spontaneously introduced grammatical complexity into their speech, thus in the space of one generation creating new languages, known as creoles.

In Chomsky’s view, (1957), the reason that children so easily master the complex operations of language is that they have innate knowledge of certain principles that guide them in developing the grammar of their language. In other words, Chomsky’s theory is that language learning is facilitated by a predisposition that our brains have for certain structures of language. He believes that every child has a ‘language acquisition device’ which encodes the major principles of a language and its grammatical structures into the child’s brain. Children have then only to learn new vocabulary and apply the syntactic structures from the LAD to form sentences. He pointed out that a child could not possibly learn a language through imitation alone, (which opponents argued) because the language spoken around them is highly irregular with subtle distinctions. When children are in the process of acquiring their first language, these are some pieces of evidence that may support innatism. Only a little percentage of the language produced by the child is the result of imitating their parents or caretakers. Children produce novel sentences without having heard them ever before. This means the human brain is wired to produce complex, meaningful language based on a very little amount of information from the outside world. It has been observed that children undergo the same stages when acquiring their first language. For instance, in English, the structure for negative sentences goes through the following stages: 1. no+word / 2. postposed not and some auxiliaries (don’t, can’t) / 3. Emergence of other auxiliaries (doesn’t, won’t, wouldn’t) + correct position of negative particle. Furthermore, there seems to be evidence of some of these stages in different languages (Universal Grammar, UG).

What was important for a behaviorist analysis of human behavior was not language acquisition so much as the interaction between language and overt behavior. In an essay republished in his 1969 book Contingencies of Reinforcement, Skinner (1957) took the view that humans could construct linguistic stimuli that would then acquire control over their behavior in the same way that external stimuli could. The possibility of such instructional control over behavior meant that contingencies of reinforcement would not always produce the same effects on human behavior as they reliably do in other animals. The focus of a radical behaviorist analysis of human behavior therefore shifted to an attempt to understand the interaction between instructional control and contingencies control, and also to understand the behavioral processes that determine what instructions are constructed and what control they acquire over behavior. However, opposition to the UG theory; general trend away from “instinctive” learning and towards “social” learning. Autonomy of language not accepted by many linguists and psychologists. Many linguists disagree with Chomsky’s analysis of grammar Functional grammar Usage-based models of language. On the other hand, (Jackendoff 1994: 26) has some ideas about Chomsky’s theory which, the paradox of language acquisition an entire community of highly trained professionals, bringing to bear years of conscious concentration and sharing of information, has been unable to duplicate the achievement that every normal child accomplishes by the age of ten or so, unconsciously and unaided.

Chomsky on the Nature of Language Acquisition Large-scale sensory deficit seems to have limited effect on language acquisition. Blind children acquire language as the sighted do, even color terms and words for visual experience like “see” and “look.” There are people who have achieved close to normal linguistic competence with no sensory input beyond that can be gained by placing one’s hand on another person’s face and throat. The analytic mechanism of the language faculty seem to be triggered in much the same way whether the input is auditory, visual, even tactual, and seem to be localized in the same brain areas, somewhat surprisingly. These examples of impoverished input indicate the richness of innate endowment — though normal language acquisition is remarkable enough, as even lexical access shows, not only because of its rapidity and the intricacy of result. Thus, very young children can determine the meaning of a nonsense word from syntactic information in a sentence far more complex that they can produce. A plausible assumption today is that the principles of language are fixed and innate, and that variations is restricted in the manner indicated. Each language, then, is (virtually) determined by a choice of values for lexical parameters: with the array of choices, we should be able to deduce Hungarian; with another. The conditions of language acquisition make it plain that the process must be largely inner-directed, as in other aspects of growth, which means that all languages must be close to identical, largely fixed by initial state. Bennett, K. (2007) cited by. (Chomsky 2000. New Horizons: 121-2)

At present little is known on how UG is embodied in the brain. UG is considered as a computational system in the head, but we do not know about the specific operations of the brain itself and what leads to the development of these computational systems.

A plausible view is that language is a distinct and specific part of the human mind and not a manifestation of a more general capacity or ability (of general intelligence). Linguistic capacity rests on a specific module. It is not the sub-product of a general cognitive capacity. Evidence People can “lose their intelligence” and yet they do
not lose their language: substantial retarded children (Williams’s syndrome, 2006) manifest a good grammatical and linguistic competence. On the other hand, highly intelligent people may lack linguistic capacity. The fact that two kinds of abilities can dissociate quantitatively and along multiple dimensions shows that they are not manifestations of a single underlying ability. (Pinker 2003: 23) How does UG work? A black box problem: Something goes in, something comes out, but the process is hidden. The hidden process is self-contained and independent. Analyzing the input and the output can tell us what’s happening in the black box. Chomsky says that the contents of UG explain: a) the nature of syntax b) language acquisition. The description of the grammar and the explanation of how it is learnt are unified in this theory.

Primary linguistic data is input which has its own especial rule. This means all the language the child hears from the child’s environment. The input is critical. Without input at the right stage of maturation, the child’s UG cannot develop into a grammar Evidence: “feral” children e.g. Genie Critical Period Hypothesis (Lenneberg, 2005).

Based on Interactionist View, Interactional modifications promote comprehension, but there is no evidence that comprehension promotes language acquisition. Regarding it, Theory cannot be directly applied in an L2 teaching context: Lack of opportunity for L2 learners to interact with native speakers in an L2 acquisition context. According to Long (1985) input is necessary, but not enough to learn L2 and the children should out whatever they have learned by environment and by acquisition. McLaughlin (1987) believes that there is no clear definition of Krashen’s claim in acquisition-learning therefore, the central claim that Krashen (1985) makes that “learning” cannot become “acquisition” cannot be tested. In addition, McLaughlin (1987) believes that Monitor Model does not work and Krashen has had to place more and more restrictions on the conditions under which it would be effectively. He believes that these restrictions make Krashen’s conceptualization of ‘learning’ of limited usefulness in explaining a learner’s conscious knowledge of grammar. To the integrationists such as Long,(1985) interactive input is more than non - interactive input. Long in his Interaction Hypothesis states that the conditions for second language acquisition are crucially enhanced by having L2 learners negotiate meaning, that is resolve their miscommunication with other speakers, native or otherwise (Long & Robinson, 1998, as cited in Blake, 2000). This negotiation of meaning would leads to modified interaction that include feedbacks like correction, comprehension checks, clarifications, repetitions, recasts and so forth (Carrol, 2000, as cited in Shannon, 2005). Thus, interactionists stress the significance of interactional modifications which occur in the negotiating meaning when communication problems arise. The meaning of ‘negotiating meaning’ needs to be extended beyond the usual sense of simply ‘getting one’s message across can and does occur with grammatically deviant forms and socio-linguistically in appropriate language. Negotiation meaning needs to incorporate the notion of being pushed toward the delivery of a message this is not only conveyed, but also that is conveyed precisely, and appropriately. Being ‘pushed’ in output is a concept parallel to that of i+1 of comprehensible input. Indeed, one might call this the ‘comprehensible output’ hypothesis. (Swain 1985). The output hypothesis claims that the act of producing language (speaking or writing) constitutes under certain circumstances, part of the process of second language learning (Swain 1997). Interactionists agree that Krashen’s comprehensible input is a crucial element in the language acquisition process, but their emphasis is on how input is made comprehensible. (Lightbown & Spada.1998, as cited in Shannon, 2005). Micheol Long (1985) has accepted Krashen’s input hypothesis is necessary, but how to get modified input. The output hypothesis claims that the act of producing language ( speaking or writing ) constitute under certain circumstances, part of the process of second language learning (Merril Swain1997). On the other hand Ellis (1994) states that learners are much more likely to produce output modifications in response to clarification requests than to confirmation requests and repetitions. He also notes experimental studies that have attempted to discover whether negotiation leads to interlanguage development and whether modifications help acquisition, at least where vocabulary is concerned. However, Ellis (1985) points out that there have been no empirical tests of the claim that negotiation of meaning aids the acquisition of new grammatical features. Ellis, (1985) again notes that there is little hard evidence to support the output hypothesis so far, and it is not clear whether pushed output can result in the acquisition of new linguistic features. It should be mentioned that the learners don not enjoy being “pushed” to speak.

Summery:

To conclude, the three views of language learning discussed above stem from the different notions or viewpoints on how a child, in particular acquires or learns a language. To behaviourists, language learning is viewed as a learned behaviour through habit formation, conditioned by the presence of stimuli and strengthens through practices and reinforcement. Innatists, on the other hand, claim that language learning is governed by biological mechanism. Interactionists, instead, take the stand that language learning occurs due to the interplay between a person and the environment in which he/she develops. The different viewpoints on language learning is believed to trigger innovative ideas from among the language teachers to adjust and modify their teaching approaches to better suit the needs of their learners in language acquisition.
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