



**THEORIES OF LEARNING AND SECOND LANGUAGE ACQUISITION (SLA): DISCUSSION OF KEY CONCEPTS**

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**Abstract**

The process of language learning has been influenced by various theories of learning proposed by several theorists from time to time. The major theories are: behaviourism, innatism or cognitivism and constructivism. Behaviourism emphasizes the role of imitation in the process of acquiring language. Behaviourists believe that learning is an observable behaviour, acquired automatically from stimulus and response through mechanical repetition. Hence, as per behaviourism, L2 learning is nothing more than acquiring automatic linguistic habits. Innatism highlights the cognitive abilities of the human brain and claims that all humans have been endowed with an innate system, used in acquiring knowledge of a language which is termed as language acquisition device (LAD). However, these theories fell short in explaining the process of SLA. As a result, constructivist theory emerged in the field of language learning which emphasizes the role of social interaction in the learning of second or foreign language. This paper aims to discuss the theories of learning and their impact on SLA at length.

**Keywords:** Language learning, SLA, behaviourism, cognitivism, constructivism, interactionism

**1. INTRODUCTION**

The process of learning language has been an area of interest for the researchers in various fields like, psychologists, sociologists, linguists, psycholinguists, sociolinguists, etc. Various studies have been undertaken to study the similarities and the differences between the learning of the first language (L1) and the second language (L2). The acquisition of L1 usually happens in the process of growing up with the people who speak the same language. L2 refers to the language that is learnt after learning one language. However, the term L2 may refer to the third, fourth, or the eighth language to be acquired. Researchers have debated over this issue for long with the help of different theoretical models such as Behaviourist, Innatist and Interactionist to explain the phenomena of L1 acquisition and L2 learning (O'Grady & Cho, 2011). This paper aims to explore the theoretical underpinnings of the major learning theories mentioned above and their implications for second language acquisition.

**2. BEHAVIOURISM**

Behaviourism was the predominant psychological theory in the beginning of the twentieth century. B.F. Skinner is considered to be the proponent of this theory. Behaviourists viewed the mind as something that cannot be understood. Skinner (1957) explained the acquisition of first language through a behaviourist experiment. Skinner contended that language is acquired through a stimulus-response-reward process. He emphasized on the role of imitation in the process of acquiring language. Children learn language by imitating parents, by "creating associations between words and real-world objects" (p. 17). Furthermore, he adds emphasis to constant repetition that makes the association become a habit. This theory claims that it is the environment that plays an important role in the process of acquiring language. The theory of Connectionism works in close proximity with behaviourism as it claims that language is a system of patterns, which is acquired by learning mechanisms. For behaviourists language was considered just a behaviour that can be acquired by the general laws of behaviour, like associative learning, reinforcement, and imitation.

**2.1 BEHAVIOURISM AND L2 LEARNING**

Behaviourism introduced the stimulus-response (S-R) theory which tries to explain L2 learning as the acquisition of a set of structures through habit formation (Powell, Honey, & Symbaluk, 2016). Behaviourists believe that learning is an observable behaviour, acquired automatically from stimulus and response through mechanical repetition. Hence, as per behaviourism, L2 learning is nothing more than acquiring automatic linguistic habits. Behaviourism proposes two types of conditioning-classical conditioning and operant conditioning. Classical conditioning is when learning occurs involuntarily with repetition. Operant conditioning is where a favourable response that is expected from a stimulus is rewarded (reinforcement). These two conditionings can be aptly justified in L2 learning. The drilling exercises justify repetition aspect of classical condition and the encouragement seen in the students after being rewarded for a correct response justify the reinforcement aspect of the operant conditioning. Behavioural learning theory considers the learner as a "creature of habit" who can be *manipulated, observed, and described* (Brown, 1994; Gass & Selinker, 1994; Skinner, 1957). Behaviourist influences in second language teaching are manifested in methods such as the audio-lingual approach and situational language teaching.

The limitations of this theory are highlighted by the theorists like, Chomsky, Firth, Halliday, Hymes, Labov, and Krashen, by questioning the practicality of behaviourism and the assumptions put forth about the language structure and learning. The argument says, all the language output is not imitated behaviour. Some of the utterances are created afresh by the learners from

the underlying knowledge of the abstract rules of the language. The primary issue with this theory was the belief that imitation accounts for all the sentences produced in a language. The publication of Noam Chomsky's review of B.F. Skinner's *Verbal Behaviour* in 1959 proved to be a devastating blow for the behaviourist account of language. Chomsky believed that adult language use is not simply a sequence of behaviours or responses. The abstract rules of language underlies in each individual's brain naturally. For Lightbown and Spada (1999), the behaviourist account for second language acquisition is an incomplete explanation for language learning.

### 3. INNATISM

Innatist or nativist theory, also known as rationalism or cognitive psychology came into existence as a reaction to the behaviourist theory. It is rooted in Chomsky's idea of language being innate to human mind. It posed human mind and cognitive processes to be the key in language acquisition. It claimed that all humans have been endowed with an innate system, used in acquiring knowledge of a language which was termed as language acquisition device (LAD). The nativist theory also proposed the concept of universal grammar (UG), which refers to the belief that all languages function on common rules. Aitchison (1974) generalises Chomsky's theory and says that children learn language fast as they have a blueprint of language universals in their brain which lets them know what they have to learn. All they have to learn is the relevant transformations to convert these deep structures into the surface realization of their own language (Aitchison, 1974). Discussing the role of environment, Lightbown and Spada (1999) mentioned that according to innatism the environment makes a basic contribution, the major responsibility is bestowed on the child.

The primary limitation of this theory is reflected in its overemphasis on the cognitive abilities as well as on the syntax, or grammar, and its ignorance of all other aspects of a language learning specifically the role of the environment. This theory was also criticized by interactionists like Piaget (as cited in Pascual-Leone, 1996). This theory refutes the idea that language is a separate module of the mind and believes that language is acquired through physical interaction between the children and the environment. Vygotsky (1978), the proponent of the social interactionist theory supports this view by claiming that the conversations that children have with adults and other children build the origin of both language and thought, where thought is considered as internalized speech. Bloom opposes the innatist idea that children learn superficial word order not the underlying structures (cited in Ekehammer, 1974). Hymes (1972) stated that possessing grammatical knowledge of the language would not make sense if the learner/speaker fails in using it properly in an interaction. This claims that Chomsky's linguistic views are effective to develop a theory of linguistic system, but not necessarily useful for pedagogical practices. This criticism is especially useful for L2 learning as L2 learning is mostly pedagogical in nature.

### 4. CONSTRUCTIVIST SCHOOL OF THOUGHT

Constructivist school of thought is considered to be one of the main foundations influencing trends, approaches and theories concerning SLA. The notions proposed by this school have been instrumental in the emergence of the interactionist approach of SLA. The major theorists associated with this school of thought are Jean Piaget and Lev Vygotsky. Constructivism emerged as an eminent paradigm only towards the last part of the twentieth century. The two branches of constructivism are cognitive and social. The cognitive version of constructivism, introduced by Piaget, emphasizes on the importance of learners constructing their own language output. Piaget believes, "learning is a developmental process that involves change, self-generation, and construction, each building on prior learning experiences" (Kaufman, 2004, p. 304)

Social constructivism introduced by Lev Vygotsky emphasizes the role of social interaction and cooperative learning in the construction of both cognitive and emotional images of reality. The champion of social constructivism, Vygotsky (1978), advocated the view that children's social interactions with their environment are the major construct behind their thinking and meaning-making (Kaufman, 2004, p. 304). The two major constructivists Piaget and Vygotsky differ in the extent of emphasis they assign to social context. Piaget (1972, cited in Brown, 2000) stressed more on individual cognitive development as an independent act. Social interaction was claimed only to be a trigger in the development at the right moment in time. On the other hand, Vygotsky (1978, cited in Brown, 2000) emphasized that social interaction was the major construct behind the cognitive development. Hickmann (1986) mentioned that Piaget's cognitive perspective assigns social interaction a secondary role, whereas in Vygotsky's social interactionist perspective, social interaction is given the primary role for development. Piaget believes, language is context-independent and it is an instrument for abstract reasoning. In Vygotsky's perspective, language acquisition is context-dependent and social interaction is primary in the acquisition process. Kaufman (2004) citing Vygotsky (1978) claims that meaning is constructed socially and it emerges out of the learner's interactions with their environment.

Several researches show the importance of interactionism theory in the SLA. Theorists such as: Hatch (1978), Krashen (1985), and Long (1996) have emphasized on the role of interaction in SLA. Long's (1996) interaction hypothesis and Krashen's (1985) Input Hypothesis are instrumental in providing the theoretical base for the use of interaction in SLA. The next section discusses the theory of interactionism and its implications for the language curriculum in details which forms the theoretical background of this research.

### 5. INTERACTIONISM

Interaction is an important element in second language acquisition (SLA). Social-interactionists view language as a systematic cultural activity learned through interaction with others. In other words, interactionists emphasize the predominance of environmental factors in language acquisition. Vygotsky is the founder of the interactionists' perspective of language acquisition. According to him, social interaction plays a crucial role in the learning process and learners try to construct new output through socially mediated interaction (Brown, p. 287). The most important concept advanced by Vygotsky was the notion of a **zone of proximal development (ZPD)** in every learner. ZPD refers to the gap between learners' existing developmental state and their potential development with the help from their environment. The ZPD is an important concept of social constructivism as it emphasizes the capabilities of a learner to accomplish targets with the assistance of more competent peers or adults (Slavin, 1995, Karpov & Haywood, 1998). Vygotsky's ZPD has been applied in a number of foreign language instruction models (Lantolf, 2000;

Nassaji & Cumming, 2000; Marchenkova, 2005) in second language learning contexts of both adult and child. Mikhail Bakhtin (1986, 1990), a Russian literary theorist closely allied to Vygotskian social constructivist perspective captured the attention of SLA researchers and practitioners (Hall, Vitanova, & Marchenkova, 2004). Bakhtin stated that language is a part of the social and cultural context, and its primary function is to serve as a mode of communication. This description provided increasing emphasis to sociocultural dimensions of SLA in the early years of the new millennium.

Long, another eminent interactionist, also believes in the importance of comprehensive input. The interaction hypothesis proposed by Long emphasizes the importance of comprehensible input as an important factor in second language acquisition. He weighs interactive input more than non-interactive input. In addition, Long highlights the role of interactional modifications that happen during solving communication problem by negotiating meaning (Ellis, 1994). Larsen-Freeman and Long (1991) argue in favour of the interactionist views to be more powerful than other theories as they consider both innate and environmental factors while explaining language learning.

In the interactional approach to L2 proposed by Long (1981), input refers to the linguistic forms (morphemes, words, utterances) presented to the non-native speaker. Long introduced the Interaction Hypothesis which states that interaction facilitates SLA as the linguistic modifications that occur during the conversation provide learners with necessary comprehensible linguistic input. Krashen's input hypothesis also emphasizes on the importance of comprehension of input in SLA. Both the input and the interaction hypothesis agree on the point of the value of modifications in discourse to facilitate learner comprehension. Long's work (1981, 1983) showed how the native speakers (more competent speaker in case of SLA) modified their interactions more often and more consistently to provide comprehensible input to non-native speakers (less proficient speakers). This helped the non-native speakers in learning language better.

## 6. KEY CONSTRUCTS OF INTREACTIONISM

### (i) Input

According to Gass & Mackey (2015) what input the learner is given is an important component of most of the theories of language acquisition, including the interactionist approach. Interactionist researchers have paid special attention to the input that learners receive. They have categorised the input as being naturalistic, pre-modified (i.e. simplified and/or elaborated), or interactionally modified. The input has enormous effects on the comprehension and L2 development. Long's (1981) interaction hypothesis claims that comprehensible input aids the learning in L2 through negotiation of meaning. Research has proved that interactionally modified input is more beneficial in terms of comprehension (e.g. Pica, Young & Doughty 1987; Loschky 1994). Ellis & He 1999; Mackey (1999) believe that interactionally modified input has better impact on L2 acquisition than premodified or unmodified input, as interactionally modified input is considered to be an optimal type of input for acquisition.

### (ii) Negotiation for meaning

Whenever there is a problem in communication, the communicators resort to negotiation of meaning to avoid breakdown in communication. Long (1996) states that negotiation for meaning is the heart of the interaction hypothesis. He believes, the breakdown in communication is the driving force to improve learner comprehension and L2 development through negotiating meaning. The key components of negotiation for meaning are clarification requests, confirmation checks, and comprehension checks. These are considered to be the primary discourse moves which have been investigated thoroughly in research studies that aimed to examine the occurrence of negotiation in communication (e.g. Ellis, Basturkmen & Loewen 2001a; Loewen 2004; Gass, Mackey & Ross-Feldman 2005). Confirmation checks are communication practices that aim to ensure that the input has been heard correctly. Confirmation checks often include a question such as "*Do you mean X?*" or the repetition of the problem source with rising intonation. Clarification requests aim to elicit additional information from the interlocutor to clarify the meaning in communication. It often takes the form of a question like "*What do you mean?*". The last type of negotiation for meaning is comprehension checks, which is used to ensure the understanding of the input by the learner. Comprehension checks often take the form of a question like "*Do you understand what I'm saying?*".

### (iii) Negotiation of form

Negotiation of form often consists of feedback with corrective intent (Lyster 1998). Corrective feedback which is didactic in nature occurs when the teacher, attends to the learner's utterance having linguistic problem, no matter whether the meaning is clear. Several researches have proposed major distinctions concerning corrective feedback, which includes (i) negative versus positive feedback (Leeman 2003), (ii) input-providing versus output-prompting feedback (Lyster 2004; Goo & Mackey 2013; Lyster & Ranta 2013), and (iii) explicit versus implicit feedback (Sheen & Ellis 2011; Lyster et al. 2013). Negative evidence helps the learners know what is not acceptable in the target language, whereas positive evidence presents samples of well-formed utterances. Leeman (2003) supports the importance of positive feedback but Schachter (1991) argues in favour of negative evidence to be an important component of corrective feedback. Input-providing feedback presents the correct linguistic form to the learners. On the other hand, output-prompting corrective feedback attempts to elicit correct linguistic form from the learner. Empirical investigation done by Long (2007), Goo & Mackey (2013) claims the superiority of input-providing feedback where as Lyster (2004), Lyster & Ranta (2013) argue in favour of output-prompting feedback, yet some other studies (e.g. Loewen & Nabei 2007) have also found both to be equally effective. Hence, Lyster & Ranta (2013) & Ellis (2017) suggest that teachers should not restrict themselves to any particular feedback type, rather they should provide varieties of feedback types in the classroom. Investigating on the distinction of explicit-implicit feedback Long (1996, 2007) & Goo & Mackey (2013) suggest that relatively implicit feedback should be given in the form of recast so that the flow of communication is not interrupted. Long (2015) states that recasts have proven to be beneficial for both first language acquisition and SLA. However, researchers like Lyster (2004), Ellis, Loewen & Erlam (2006), Loewen & Philp (2006), and Lyster & Ranta (2013) argue in favour of more explicit types of corrective feedback, which may take the form of explicit correction or metalinguistic information. They suggest such feedbacks are likely to be noticed by learners and thus have better possibility to influence the learner's progress.

### (iv) Output

The construct "output" refers to the language that learners produce during interaction. Swain's (1985, 1995, 2005) Comprehensible Output Hypothesis has a strong impact on the importance of output in interaction and its role in SLA. However, Krashen (1982, 2003) does not assign an important role for the language production in L2 development. Swain's Comprehensible Output Hypothesis claims that output is not only a representation of L2 development but it is a crucial factor for L2 development.



Swain presents several reasons why output is important for L2 development. First, the learners need to be encouraged to produce syntactically complex and accurate utterances, which ensure the learners' understanding of various linguistic functions of language. Second, through output learners can test their linguistic hypotheses and receive feedback. Depending on the type of feedback (positive or negative), they can work on their hypothesis. Third, Swain claims that output enables learners to control and internalize linguistic knowledge. Finally, output facilitates production & practice and, thus, aids fluency and automaticity as it involves language use (see DeKeyser 2001; Lyster & Sato 2013; DeKeyser 2017a).

#### (v) Attention

Unlike the previously discussed constructs which are discorsal, this one is cognitive in nature. Schmidt's noticing hypothesis (1990, 1995, 2001) which plays an integral part in the interaction approach, claims that L2 learning is dependent on awareness. Similarly, Robinson (1995, 1996, 2003) claims that attention is essential for L2 learning as it keeps the encoded language input active in memory and brings to use while necessary. Although interactionists could not agree on the nature of these constructs, there is general consensus that the cognitive construct like attention, awareness, and the related construct of noticing are vital part of the L2 learning process (Gass & Mackey 2015: 191).

All the above constructs play a vital role in a language learning situation. These can be used as parameters to analyse the classroom activities of the current research. Long (1983), and others believe that conversational interactions facilitate SLA. Defining the role of negotiation in learning, Pica (1994) states that, when learners and their interlocutors anticipate or experience difficulties in message comprehensibility, they use negotiation techniques like modification and restructuring (p.495). A variety of modifications like linguistic simplification, conversational modifications such as repetition, clarification, and conformation checks may be used to gain understanding. As cited in Blake (2000) the interaction hypothesis of Long and Robinson suggest that negotiation of meaning gives rise to comprehension of meaning and hence the learners focus on the linguistic features. This is seen to be beneficial for SLA.

Lightbrown and Spada (1999) emphasize on the application of Vygotsky's socio-cultural theory of human mental processing to exemplify the role of interaction in SLA. The concept of ZPD developed by Vygotsky (1962) has great implications in the SL teaching and learning. According to this idea, the scaffolding structures such as modelling, repetition, and linguistic simplification used by more advanced speakers of the language like the peers or teachers boost the second language learning.

Taking into consideration the psycholinguistic benefits of peer interaction Philp et al. (2014) argued that peer interaction gives learners 'a context for experimenting with the language' (p. 17). Philp et al. (2014) claimed peer interactions felt to be generally less stressful than teacher-led interaction, as it is less likely to be carefully monitored (Philp et al. 2014: 198). Sato's (2013) study on "learners' perceptions of peer interaction", found that learners were not worried about making errors while interacting with each other, especially in comparison to a conversation with the teacher. It is observed that a greater comfort level increases the amount of overall language production that leads to more opportunities for language practice. An increased comfort level positively affects learners' L2 processing.

H.G. Widdowson, N. Brieger, M. Ellis, Ch. Johnson, J.M. Dobson, J. Comfort, D. Nunan have advocated the importance of using different forms of interactive activity in the L2 classroom. W. Rivers (1996) emphasizes the effectiveness of cooperative learning. Rivers describes two types of cooperative learning. One is full participation of both teacher and student in a classroom work. Another form of cooperative learning implies small-group activity, large group instruction, interacting in pairs, sharing information, etc among the students and the teacher may play the role of an advisor, guide, helper, supporter, and partner in cooperative venture. Teachers may treat the students as partners and involve them in making decisions about selecting activities to carry out, suggesting topics or selecting books to read (M. Williams and R. Burden, 1997).

## 7. CONCLUSION

The study of language acquisition, whether first or second language, has been greatly influenced by these major theories. The prominent figures of these schools of thought are Skinner, Chomsky, and Vygotsky respectively. Each of these theories has highlighted the role of a specific aspect in the process of language acquisition. For example-Behaviourist theory emphasizes the role of the environment, focusing on the concepts of imitation and habit-formation. The innatist theory considers the role of human mind and cognitive processes to be the main reason in language learning. Various critics ruled out these two theories to be suitable for SLA due to their inability to address the problems of a non native language learner. Interactionist approach emerged as a reaction to the previous theories of learning. It took the advantage of both the behaviourist and innatist theories to emphasize the role of social interaction in language learning. Interactionism, under the constructivist school of thought is suitable for second language learners as it advocates learning by participating in communicative activities. According to this approach, learners should be presented with comprehensible input through negotiation or modification in order to enable them to learn the language. Lightbown and Spada (1999) describe the emphasis given by the interactionists to the role of the modification of interaction in conversations to be the primary means to language acquisition.

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