



Theories Illuminating Aspects of SLA, the Elephant Begging All Description

Hossein Heidari Tabrizi¹ and Abbas Jalilnejad Masooleh²

¹Department of English, Isfahan (Khorasgan) branch, Islamic Azad University, Isfahan, Iran.

²English Department, Islamic Azad University, Khorasgan Branch, Isfahan, Iran.

ARTICLE INFO

Article history:

Received: 24 June 2015;

Received in revised form:

1 August 2015;

Accepted: 13 August 2015;

Keywords

SLA, Acquisition, Learning, Theory, Linguistics, Socio-cultural.

ABSTRACT

Researchers have long studied how learners produce a new language system (SLA). Theories of SLA, which make the language learning process easier to understand, have roots in such fields as linguistics, sociolinguistics, psychology, neuroscience, and education. To explain how someone acquires a second language, these theories investigate questions of cognition, questions of social influences, and so on. Researchers have commonly acknowledged no one overarching theory of SLA yet, because to express an all-embracing theory of SLA is an extremely intricate undertaking that is beyond research done individually; just as several men found it impossible to fully grasp the elephant in the dark and interpreted the huge animal differently because their palms were not large enough, understanding SLA procedure is enormously complicated and it commands the involvement of various disciplines, from linguistic theory to anthropology to brain science, and the procedure is not yet actually grasped. By collecting previous challenges to explain SLA, this paper attempted to help researchers and teachers shed about the shortcomings of the complementary theories in order to integrate linguistic, psychological, and social perspectives on SLA; this paper may hopefully express the idea of incompleteness, not the fallacy, of these models and may provide a deeper and broader view of the acquisition process, and the findings may suggest some guidelines for L2 learning and teaching.

© 2015 Elixir All rights reserved.

Introduction

SLA, an area of applied linguistics that has a long history, studies the human ability to learn languages. According to de Bot, Lowie, and Verspoor (2005), SLA researchers try to deal with such questions as:

1. How are additional languages learned after learning the first language?
2. What are the similarities and differences between L1 and L2 learning?

Theories of SLA, which make the language learning process easier to understand, are rooted in such fields as linguistics, sociolinguistics, psychology, neuroscience, and education. Researchers belonging to each of these areas have different ideas:

1. Linguists deal with the differences and similarities between the languages that are learned, and the learner's competence; they have concerned themselves with *what* is learned.
2. Psycholinguists underline the mental processes in acquisition; they have wanted to know *how* knowledge is acquired.

According to Doughty & Long (2003a: 4), researchers acknowledge that SLA takes place in a social context and believe that it can be affected by that context. However, they also recognize that language learning, like any other learning, is ultimately a matter of change in an individual's internal mental state. As such, research on SLA is increasingly viewed as an area of cognitive science.

Mitchell, Myles & Marsden (2013) believe that linguistic and psycholinguistic have been the prevailing theoretical influences in SLA. While more socially oriented views have sometimes been suggested, they have remained more or less unimportant in the field.

3. Sociolinguists emphasize the learner's linguistic performance or the communicative competence. They have tried to find out *why* some learners are more successful than others. Atkinson (2011) believes that SLA is truly an intricate phenomenon that apparently no single theory can provide us with a full understanding of it. Long (1993) estimates that "there are between 40 and 60 theories of SLA". He points out the diversity of sources of SLA theories, and the different domains they embrace:

SLA theories also differ in source drawing upon work in linguistics (Cook 1988), pidgin & Creole studies (Schumann 1978), sociolinguistics (Tarone 1983), psychology (Clahsen 1987), neurolinguistics (Lamendella 1977), cognitive science (Gasser 1990), social psychology (Giles & Byrne 1982), and combinations thereof (Hatch, Flashner & Hunt 1986). They also differ in scope, or the range of data they attempt to explain. Some address naturalistic acquisition only (Schumann 1978), some instructed only (Ellis 1990), some both (Krashen 1985); some children (Wong-Fillmore 1991), some adults (Bley-Vroman 1989), some a specific cognitive capacity, such as metalinguistic awareness (Bialystok 1991); some a specific psychological process, such as transfer (Eckman 1985), restructuring (McLaughlin 1990), or implicit learning (Hulstijn 1989); some a specific linguistic system, such as phonology (Major 1987) or the lexicon (Hudson 1989), some a specific sub-system, such as word order (Meisel, Clahsen, & Pienemann 1981), speech act behaviour (Wolfson 1988), or interrogative structures (Eckman, Moravcsik, & Wirth 1989). (Long 1993:226-227)

Ellis (1986), Selinker and Lamendella (1978), Schumann (1983), McLaughlin (1987) believe that there should be no problem as long as the various theories are complementary not

oppositional. However, Long (1993), Gregg (2000), Crookes (1992), and Beretta (1991) believe that there is a problem. Because the field of SLA is interdisciplinary, having an overarching theory is not imagined in the predictable future. However, it seems wiser to benefit from the strong points of the following SLA theories and ignore their shortcomings in order to enjoy an integrated view that may give us a complete understanding of SLA process.

Theories of SLA

Behaviorism

Behaviorism generated a stimulus-response (S-R) theory, which deems language as a set of structures and acquisition as a matter of habit formation. It disregards internal mechanisms, and notices the linguistic environment and the stimuli it produces. Learning is a visible behavior which is mechanically acquired by means of stimulus and response in the form of mechanical repetition. Therefore, acquiring a language is acquiring automatic linguistic habits. According to Johnson (2004: 266), "Behaviorism challenged the role of mental processes and viewed learning as the ability to inductively discover patterns of rule-governed behavior from the examples provided to the learner by his or her environment". Larsen-Freeman and Long (1991) consider that S-R models offer "little promises as explanations of SLA, except for perhaps pronunciation and the rote-memorization of formulae". This view of language learning led to research on contrastive analysis, especially error analysis mainly focusing on the interference of first language on the target language. It also brought about interlanguage studies, as the simple comparison between first and second language did not explain the language produced by SL learners. Noam Chomsky (1959), who generated the cognitive revolution, heavily criticized this environmental-oriented approach to language acquisition because it did not take into account certain properties of language, especially creativity.

Universal Grammar Theory

UG is highly accepted as part of the child's L1 language making capacity, but its status in SLA has been stormily argued. The most leading theory has been Universal Grammar Theory by Chomsky. The UG model of principles, key properties which all languages share, and parameters, properties which can differ between languages, has been the source of much SL research; learning the grammar of a second language is just a matter of setting the correct parameters. The *pro-drop* parameter decides whether sentences must have a subject in order to be grammatically correct. This parameter can have two values: *positive*, in which case sentences do not necessarily require a subject, and *negative*, in which case subjects must be present. In German the sentence "*Erspricht*" (he speaks) is grammatical, but the sentence "*Spricht*" (speaks) is ungrammatical. In Italian, however, the sentence "*Parla*" (speaks) is grammatically correct (Cook, 2008: 35).

In describing SLA, the main shortcoming of Universal Grammar is that it ignores the psychological processes in language learning. UG is only concerned with setting parameters not, not with *how* they are set. Moreover, UG considers learner's performance irrelevant. Gregg believes that the domain of Ellis' models is irrelevant since performance is the data, and cannot probably form part of the phenomena which a theory of SLA should explain. But theories of SLA should not limit themselves to an explanation of how second language learners gain L2 grammar knowledge; they should explain how second language learners capably acquire the aptitude to communicate in the L2. Therefore, the domain of SLA theories should be far broader than Chomsky's, it also needs to explain performance.

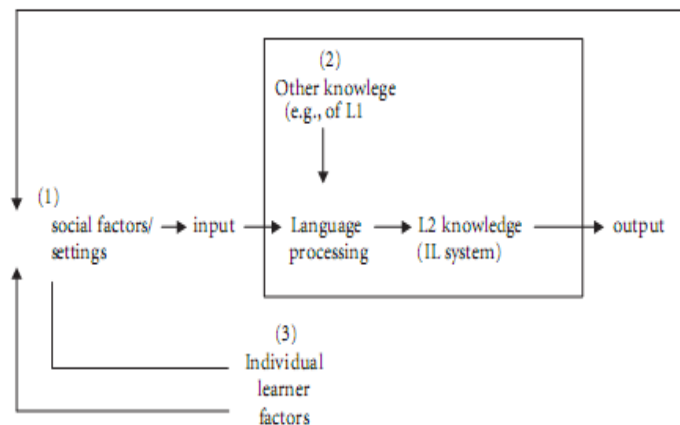


Figure 1. A framework for explaining L2 acquisition from Ellis (1994:194)

Ellis considers such factors as the external environment, the learner's existing knowledge, and individual learner factors important. Mitchell, Myles and Marsden (2013: 96) state that this approach only deals with the learner as a processor of a mind which contains language and not as a social being. The research supported by UG theory works mainly with experiments in the form of grammaticality and acceptability judgments. However, they further believe that the UG has played an outstanding role in helping us with understanding of the acquisition of morphosyntactic properties in SLA, and it can be expected to make highly valuable contributions to this field. Hymes (1972), arguing against Chomsky, proposed that knowing a language engages more than knowing a set of grammatical, lexical, and phonological rules. Learners need to develop communicative competence or the ability to use or perform the language, in order to use the language effectively. Hymes' notion of language performance was examined by a number of practice-oriented educators, who believe that target language is vehicle for communication, not just an object to be studied.

Regarding the role of UG in SLA, there are some options. One is that it is basically the same as for L1 acquisition. Another is that it is different because L2 learners are differently successful. Thirdly, it is different because L2 and L1 competence are qualitatively different. These positions lead to different views regarding the role of UG in L2 acquisition. These are *a) the complete access view* that states that the whole of UG is available to second language learners, in the same way as it is to first language learners, *b) the no access view* or *Fundamental Difference Hypothesis* which argues that first language acquisition and adult second language acquisition are fundamentally different. Fundamental FDH lies on two related claims: First, adult L2 acquisition is very different from L1 acquisition. Second, this difference arises because whereas L1 features make use of their language faculty, adult L2 learners resort to general learning strategies. According to this position, adult L2 learners do not have access to UG. L1 and L2 acquisition are fundamentally different: Children always obtain complete grammatical knowledge of their native language, but adult L2 learners apparently rarely achieve full target language competence: In spite of their positive ability, rich linguistic input, opportunity, and motivation to learn and acculturate into target society, many learners do not achieve full native-speaker competence—there are grammatical and lexical errors in their L2 production and they fail to achieve a native-like pronunciation; they fossilize. Unlike first language acquisition, which is uniformly successful across children, adult L2 learners show significant variation in their language learning success. First language acquisition is constrained and guided by innate

mechanisms (UG) and is not really influenced by external factors. SLA, especially with adults, is apparently influenced by *a. L1 transfer*, *b. individual differences*, and *c. social-communicative contexts of learning*. The FDH claims that there is probably a 'critical period' for language acquisition, after which such things as UG is not available for learning language, *c) the partial access view* which claims that adult L2 learners have access to parts of UG. For example, functional features that are not realized in the first language such as strong Infl or gender, for English first language learners of other languages which possess these features cannot be acquired, and *d) the dual access view*, advanced by Felix (1985), states that adults have continued access UG.

Monitor Model

One model of SLA that was influenced by Chomsky's theory of first language acquisition was Stephen Krashen's (1982) Monitor Model. He first described this model in the early 1970s, at a time when there was increasing displeasure with language teaching methods based on behaviorism. Krashen described his model in terms of five hypotheses: *a) Acquisition versus Learning Hypothesis*: A hot distinction is the one between acquisition and learning. Krashen and Terrell (1983) defined *acquisition* as the product of a 'subconscious' process, very similar to the one children use in learning their first language, and *learning* as the product of formal teaching, which results in 'conscious' knowledge about the language. Krashen argues that only subconscious *acquisition* can lead to fluency. But the difference cannot be so simple. Schmidt (1990: 134) has found 'subconscious' misleading. The claim that 'learned' knowledge cannot switch to 'acquired' is unreal because many people have had their conscious L2 knowledge automatized to become acquired through practice (McLaughlin, 1987; Schmidt, 1995). Swain claims that comprehensible input is necessary but insufficient for successful SLA. *b) Monitor Hypothesis/ Theory* distinguishes two distinct processes in second and foreign language development and use. The Monitor Hypothesis states that *learning* has only one function, and that is as a monitor or editor and that learning comes into play only to make changes in the form of our utterance, after it has been produced by the acquired system. Acquisition initiates the speaker's utterances and is responsible for fluency. Therefore, the Monitor can change the output of the acquired system before or after the utterance, but the utterance is initiated entirely by the acquired system. But such monitoring cannot take place in real time because of the pressures of conversing in the second language. Krashen's Monitor Hypothesis has been criticized for that reason. The problem with such claims is that they are impossible to test empirically. *c) Natural Order Hypothesis* states that children acquiring their first language acquire linguistic forms, rules, and items in a similar order. For example, in English children acquire progressive -ing, plural -s, and active sentences before they acquire third person -s on verbs, or passive sentences. This is said to show a natural order of development. In second language and foreign language learning grammatical forms may also appear in a natural order, though this is not identical with the order of acquisition in first language learning. Although there is evidently some truth in such a statement, it has been criticized for being too strong. Krashen's Natural Order Hypothesis has also been criticized for being based almost exclusively on the morpheme studies. Farhady (1981) states that Krashen himself found contradictions among the results reported in morpheme studies. *d) Affective Filter Hypothesis* covers the ground of the Acculturation Model and states that learners are emotionally blocked by negative attitudes toward learning a

second language. Krashen claims that if this Affective Filter is high, it does not allow language to reach the LAD, and acquisition does not occur. Krashen claims that the best acquisition occurs when anxiety is low, or in contexts where the Affective Filter is low. He believes that the strength of the Affective Filter rises with puberty. The filter decides which language model the learner will choose, which part of the language the learner will pay attention to, and how fast the language will be acquired. If the teacher believes that the Affective Filter exists, he will try to keep it low. Teachers who overemphasize correctness over message may contribute to the filter's 'thickness'. Krashen's Affective Filter remains vague and atheoretical. For example, many self-conscious adolescents suffer from low self-esteem and may have a 'high' filter. Are they therefore all bad language learners? And are all the confident and extrovert adults, with a 'low' filter, good language learners? Clearly, they are not. *e) Input Hypothesis*, Learners' most direct source of information about the target language is the target language itself. When they come into direct contact with the target language, this is referred to as "input." When learners process that language in a way that can contribute to learning, this is referred to as "intake." In common with connectionism, Krashen sees input as essential to language acquisition. Generally speaking, the amount of input learners take in is one of the most important factors affecting their learning. However, it must be at a level that is comprehensible to them. In his Monitor Theory, Krashen advanced the concept that language input should be at the "i+1" level, just beyond what the learner can fully understand; this input is comprehensible. This has been criticized on the basis that there is no clear definition of i+1, and that factors other than structural difficulty such as interest or presentation can affect whether input is actually turned into intake. When language learners are at different levels of proficiency in a classroom, the teacher cannot possibly fine-tune for all the variations in level present in the classroom.

In vocabulary acquisition research, however, the concept has been quantified; Nation (2001) reviews a range of studies which show that in order for extensive reading to be valuable, about 98% of the words in a text should be known before. He, in contrast to emergentist and connectionist theories, follows the innate approach by applying Chomsky's Government and binding theory and concept of UG to second-language acquisition. He does so by proposing a Language Acquisition Device that uses L2 input to define the parameters of the L2, within the constraints of UG, and to increase the L2 proficiency of the learner. In addition, Krashen's Affective Filter Hypothesis (1982) holds that the acquisition of a second language is stopped if, when receiving input, the learner has a high degree of anxiety: A part of the mind filters out L2 input and prevents uptake by the learner, if the learner feels that the process of SLA is threatening. SLA theories find input necessary, but they have underscored the importance of input but with various degrees of emphasis or through different names: Gass (1997) believes that SLA and FLA cannot simply occur without the presence of input of some sort; Krashen (1987) states that input alone is sufficient to acquire either of the languages. On the other hand, Long (1996) believes that input should be negotiated, or flooded (Sharwood Smith, 1994), or noticed through output saliency (Schmidt, 2001). Input is sometimes referred to as cue in competition model (MacWhinney, 2004) and sometimes as comprehensible or modified one in Krashen's (1987) and Long's sense (1996) and sometimes in the form of affordance (Van Lier, 2000).

1. Krashen's Model : Input → LAD → Output

2. VanPatten's Model: Input → Intake → Developing System → Output

3. Gass's Model : Input → Apperceived Input → Comprehended Input → Intake → Integration → Output

The following three theories can be named Interactionist SLA theories as they conceive language learning as social practices.

Interaction Hypothesis

Long suggests that using the target language in *interaction* makes language acquisition quite easier. The Interaction Hypothesis, similarly to Krashen's Input Hypothesis, claims that comprehensible input is important for language learning. It claims that the effectiveness of comprehensible input is greatly increased when learners have to negotiate for meaning (Ellis, 1997: 47–48). Interactions often result in learners receiving negative evidence (Ellis, 1997: 47–48; Richards & Schmidt 2002: 264). When learners say something that their interlocutors do not understand, after negotiation the interlocutors may model the correct language form. In doing this, learners can receive feedback on their production and on grammar that they have not yet mastered. Richards and Schmidt believe that the process of interaction may also help learners receive more input from their interlocutors than they would otherwise. When learners clarify things that they do not understand, they may have more time to process the input they receive. Confirmation and comprehension checks, and clarification requests that serve as triggers can lead to better acquisition of new language forms. But our daily experience disagrees with such an assumption. Depending on the really social situation, some participants may be reluctant to negotiate. In real negotiation, interlocutors do not enjoy equal status and power. Some may be more interested in negotiating than the others, which, in turn, may affect the quantity and quality of the negative feedback. In interactionist approach, input plays a much more important role than in theories based on UG, and learners are both cognitively and socially involved. Larsen-Freeman and Long (1991: 266) state that the interactionist views are more powerful than other theories "because they invoke both innate and environmental factors to explain language learning".

Output hypothesis

Output hypothesis attributed to the work of Merrill Swain is part of the general interaction research tradition which also includes modified input and negotiation of meaning both of which Swain claimed were necessary but not sufficient for acquisition. Swain is in direct contrast to Krashen's input hypothesis claim that output is the result of acquisition not its cause. She claims that meaningful output and meaningful input are equally necessary to language learning. However, little correlation has been found between learning and quantity of output. Swain proposed that production, especially *pushed output*, may encourage learners to move from semantic (top-down) to syntactic (bottom-up) processing. Whereas comprehension of a message can take place with little syntactic analysis of the input, production forces learners to pay attention to the means of expression especially if they are pushed to produce messages that are concise and socially appropriate. Learners can fake it, so to speak, in comprehension, but they cannot do so in the same way in production. Production requires learners to process syntactically; they have to pay some attention to form. According to Swain 'forced output' furthers acquisition because:

a) it encourages *noticing*—learners may notice the gap between what they want to say and what they believe they know. In other words, the noticing function relates to the possibility that when

learners try to communicate in their still-developing target language, they may encounter a linguistic problem and become aware of what they do not know or know only partially. Such an encounter may raise their awareness, leading to an appropriate action on their part, b) it encourages *hypothesis testing*—which in turn may result in either a communication breakdown, 'forcing' the learner to reformulate the utterance, or simply in useful feedback from a native speaker. Put differently, the hypothesis-testing function of output relates to the possibility that when learners use their still-developing target language, they maybe experimenting with what works and what does not work. Moreover, when they participate in negotiated interaction and receive negative feedback, they are likely to test different hypotheses about a particular linguistic system, and c) it operates as a *metalinguistic* function—encouraging learners to think about linguistic information. The metalinguistic function of output relates to the possibility that learners may be consciously thinking about language and its system, about its phonological, grammatical, and semantic rules in order to guide them to produce utterances that are linguistically correct and communicatively appropriate. Output contributes to language acquisition. What is not yet clear, however, is whether output assists learners to acquire new linguistic forms or only to automatize use of partially acquired forms.

Sociocultural Theory (SCT)

Sociocultural theory was originally coined by Wertsch in 1985 and derived from the work of Lev Vygotsky in Moscow from the 1920s onward. SCT is the notion that human mental function is from participating cultural mediation integrated into social activities (Lantolf & Beckett, 2009: 459-475). Social perspectives generally hold that SLA benefits from the active engagement of learners in interaction, or participation in communicative events. McKay and Wong (1996) state that the development of sociolinguistic and contextual approaches in L2 research over the past decade shows a growing recognition that learning language is a more intricate procedure than just acquiring linguistic structures. Firth and Wagner (1997) have also criticized SLA research for "ignoring social context", and suggest that SLA research should stop its concern about what goes on in the learner's mind and pay more attention to social factors. This theory claims that interaction facilitates language learning, and all of learning is seen as basically a social process which is grounded in sociocultural settings like schools, family life, peer groups, work places, and so on. Socioculturalists claim that these environments shape the most important cognitive activities in which people engage. In SLA, research sociocultural theory has been used as a framework for analyzing tasks and activities. Given the same task, not all students will interpret it in the same way and consequently their behavior in relation to that task will vary with its interpretation. Lantolf and Thorne (2007: 217-218) believe that the principles of the SCT can also apply to SLA. They explain that "SCT is grounded in a perspective that does not separate the individual from the social and the individual emerges from social interaction and as such is always fundamentally a social being".

Competition Model

Competition Model, first outlined in 1982 by Bates and MacWhinney, questions the two essential bases which most of the theories lie on: innateness, and a formalist approach to language. The Competition Model, in contrast to Chomsky's Principles and Parameters model, considers language learning as non-modular and non-specific: It results from the same kinds of cognitive mechanisms as those involved in other kinds of learning. Moreover, in contrast to Chomsky, Bates and

MacWhinney, do not separate the linguistic form of language from its function; they claim that the two are inseparable. The third difference between the Competition Model and Chomsky's theory of UG is that while Chomsky offers a theory of competence, Bates and MacWhinney offer a theory of performance. The Competition Model is concerned with how language is used: It does not accept the formalist approach to language; it approves the functional approach to linguistics, and considers language to be constructed through use. Some of the major cognitive theories of how learners organize language knowledge are based on analyses of how speakers of various languages analyze sentences for meaning. MacWhinney, Bates, and Kliegl (1984) found that speakers of English, German, and Italian showed varying patterns in identifying the subjects of transitive sentences containing more than one noun. English speakers depend closely on word order; speakers of Italian on agreement and stress, and German speakers used morphological agreement, the animacy status of noun referents, and stress. MacWhinney et al. interpreted these results as supporting the Competition Model, which states that individuals use linguistic cues to get meaning from language, rather than relying on linguistic universals. According to this theory, when acquiring an L2, learners sometimes receive competing cues and must decide which cue or cues is or are most relevant for determining meaning. The Competition Model uses connectionist models to model the interactions between lexical mappings. Connectionism rejects the assumption made by nativists that the brain is a symbol processing device similar to a digital computer, and argues that the brain relies on a type of computation that emphasizes patterns of connectivity and activation. In keeping with the empiricist approach he adopts, MacWhinney uses evidence from studies in the field of cognitive neuroscience to help build his model.

Emergentist Model

The growing interest in connectionist views and associative learning is reflected in the development of what has been named the "emergentist" approach to SLA. Ellis explains that such emergentists as MacWhinney and Ellis believe that the complexity of language emerges from relatively simple developmental processes being exposed to an huge and complex environment. The Competition Model is a good example of an emergentist approach, rejecting the nativist UG account of language, and the nativist belief that human beings are born with linguistic knowledge and a special mechanism of language learning. In emergentist accounts of language acquisition, knowledge is not seen as rules, nor is there any distinction drawn between declarative and procedural knowledge. Probably the most influential emergentist model in SLA is connectionism, which affords a unified model of cognition, straddling the traditional competence/performance distinction. The competition model is another emergentist theory of L2 acquisition and is completely compatible with connectionist theory.

Noticing Hypothesis

'Attention' is another characteristic that some believe to have a role in determining the success or failure of language processing. Schmidt (1990) states that although explicit metalinguistic knowledge of a language is not always essential for acquisition, the learner must be aware of L2 input in order to gain from it. In his noticing hypothesis, Schmidt posits that learners must notice the ways in which their interlanguage structures differ from target norms. His understanding is in harmony with the constant process of rule formation found in emergentism and connectionism. Schmidt's influential paper on the role of consciousness in second language learning argues

that "noticing is the necessary and sufficient condition for converting input into intake" (Schmidt, 1990:130). Schmidt proposes that a) the frequency that a feature occurs in the input, b) the salience of that feature, c) the developmental readiness of the learner to that feature, and d) the demands of the task which may or may not allow sufficient attention to spotlight the feature and then process it influence noticing. Critics of the hypothesis have pointed out that to notice everything about an L2 would be impossible and that some learning must take place without conscious effort and that perhaps it is more the metalinguistic aspects of an L2 that are learned only by noticing.

Adaptive Control of Thought Model or ACT Model

According to Tavakoli (2012), Anderson (1980) developed a cognitive model which attempts to describe how humans store and retrieve knowledge. The ACT model is the foundation of skill-learning theory that distinguished between two types of knowledge: declarative and procedural knowledge. The former is usually explicit and capable of being expressed verbally; it includes the kinds of grammar rule that a linguist might formulate. By contrast, the former is implicit; it includes the ability to process language without necessarily being able to put into words the rules that are being applied. Learning begins with declarative knowledge (information is gathered and stored) and slowly becomes procedural (people move toward the ability to perform with that knowledge). Afterward, people move to a stage in which they can function effortlessly with the procedural knowledge. A number of researchers in SLA have used the model to help understand how knowledge of L2 develops and within this view, the development of linguistic skill is considered the development of a complex cognitive skill. Language learning then is considered a form of skill learning that must develop both in terms of developing declarative knowledge of the language, but also in developing automaticity which leads to more fluent language performance. Within SLA, the claim is that learners move from declarative to procedural knowledge through three stages.

Anderson's model gives a comprehensive framework for SLA. It explains certain constructs of SLA (proficiency, transfer, metalinguistic awareness, interlanguage, acquisition vs. learning, language retention) in terms of cognitive theory, and puts the process in the wider context of cognitive development. It also touches upon the problem of storage of linguistic information in memory and mental processes accompanying language production, setting the direction for further research. The major drawback of Anderson's model is its complexity, which turns it into an abstract reasoning far from application in the language classroom, unlike Krashen's model.

Acculturation Model

This environmental-oriented proposed by Schumann (1978) explains the process of second language acquisition from the social perspective. It is not innatist but environmentalist in principle. Acculturation is defined as "the second language learners' social and psychological integration with the speakers of the second language" (Chastain 1988: 105). The major claim is that second language learners acquire the SL only to the degree that they acculturate. The proficiency level in SL (and particularly communicative competence) depends on the social and psychological distance that the learner perceives between him/herself and the second language speakers. The shorter the distance, the higher is the level of proficiency; the closer they feel to the target speech community, the better learners will become 'acculturated' and the more successful their language learning will be. According to Schumann, pidginization in L2 acquisition results when learners fail to acculturate to the target-

language group. In this model, instruction is set apart from acculturation and is less important in the SLA process than acculturation.

Social distance concerns the extent to which individual learners become members of the target-language group and, therefore, achieve contact with them. Psychological distance concerns the extent to which individual learners are comfortable with the learning task and constitutes, therefore, a personal rather than a group dimension. Among the factors which affect psychological distance are language shock, cultural shock, motivation, and ego permeability. The social factors are primary. The psychological factors mainly come into play where social distance is indeterminate: where social factors constitute neither a clearly positive nor a negative influence on acculturation. The social factors, affecting the learner as a member of a group, are of primary importance for the process of acculturation. Schumann (1978) enlists various factors that shorten the social distance:

- The target language and L2 groups view each other as socially equal.
- The target language and L2 groups are both desirous that the L2 group will assimilate.
- Both the target language and L2 groups expect to share social facilities (low enclosure).
- The L2 group is small and not very cohesive.
- The L2 group's culture is congruent with that of the target language group.
- Both groups have positive attitudes to each other.
- The L2 group envisages staying in the target language area for an extended period.

The psychological factors, mainly affective in nature, are of secondary importance. The following factors affect the psychological distance:

- language shock (learner's confusion when using L2)
- culture shock (learners disorientation as a result of culture differences)
- motivation

Social and psychological distances determine how much input the learner will be exposed to, and how much input will be converted into intake. Schumann believes that the level of language proficiency the learner achieves strictly depends on the degree of acculturation. He distinguishes three functions of language, which may also be considered as the three stages of language development:

- communicative function
- integrative function
- expressive function

The learners who are not able to shorten the social and psychological distance use their L2 only for the communicative function. Their L2 becomes fossilized in the very early stages of language development. A low degree of acculturation is also believed to lead to the development of pidgin.

Because the model focuses on relative success of learners (i.e., how far along learners get in acquisition), it does not provide any explanation or insight into the internal processes responsible for the acquisition of an L2. That is, it does not attempt to explain why there are developmental sequences or acquisitional orders, for example, and what causes them. In addition, it fails to acknowledge that factors like integration and attitude are not fixed and static but dynamic and fluctuate in accordance with the learner's changing social experiences. Although both social and psychological factors remain important in acquisition, the Acculturation Model lost favor by the early 1980s as research increasingly turned its attention toward

linguistic and psycholinguistic approaches to explaining acquisition phenomena. Schumann's Acculturation Model is based on social and affective factors of SLA. It does not provide any explanation for various mental processes accompanying SLA. The most important advantage of the Acculturation Model is drawing the language researchers' attention to the role of social and psychological factors in SLA. Unfortunately, the Acculturation Model is empirically untestable as it is impossible to measure such constructs as 'perceived social distance' or other affective factors of SLA. The second drawback of Schumann's model is its primary application for the naturalistic SLA; however, most of his claims may refer to classroom environment as well.

Doughty and Long (2003) propose that Schumann's model only applies to L2 acquisition in the natural settings. They claim that, in FL learning, the situation is quite different because most social and affective variables lose their importance in conscious learning. Therefore, the Acculturation Model cannot be used directly for purposes of working out a methodology for FL instruction.

Farhady (1981) states that according to this model, variables excluding acculturation are of minor or modest importance for SLA. For example, instruction is supposed to have no key role in SLA. Schumann (1978a) states:

"... educational institutions are really only free to manipulate teacher, method, and text variables. I believe that these variables are so weak in terms of the total language learning situation that no matter how much we attempt to change them, we will never achieve much more success than we are achieving now" (p.31).

Farhady believes that the acculturation model explains the most important factors involved in SLA. This model is attractive because it attempts to explain the potential "whys" of SLA. However, the model should answer some questions. Schumann himself states that the model only accounts for language learning under conditions of immigration. He also warns the reader about variables other than acculturation which may influence SLA. Farhady further claims:

"... the model is problematic, however, in that the concept of acculturation and what it entails is too complex to be operationally defined and experimentally tested. However, this complexity does not imply that we should abandon our attempts to measure or explore acculturation factors".

Socio-educational Model

Gardner developed a model of L2 learning which hypothesizes that the social and cultural setting in which learners grow up decides the attitudes and motivational orientation they hold toward the target language, its speakers, and its culture. These in turn affect learning outcomes. Unlike acculturation model, which was designed to account for the role that social factors play in natural setting, Gardner's model was developed to explain L2 learning in classroom settings. The model seeks to interrelate four aspects of L2 learning: *a) the social and cultural milieu, b) individual learner differences, c) the setting, and d) learning outcomes.* As such, it goes beyond purely social factors. The strength of Gardner's model is that it explains how setting is related to proficiency: one of the primary goals of any social theory of L2 acquisition by positing a series of intervening variables like attitude, motivation, self-confidence and by trying to plan how these are interrelated and how they affect learning. Explanation of how particular settings highlight different factors that influence attitudes, motivation, and achievement is missing from the model, although Gardner realizes the need to pay close attention to the social setting to

find other factors. Moreover, no mention is made of the concept of interlanguage development and how this takes place through the process of social interaction in the model. Gardner's model only is concerned about final proficiency, measured mostly by language tests of various kinds. It considers neither the kinds of developmental patterns nor the social aspects of variability in learner language. The model, therefore, cannot explain why learners develop in the way they do. However, for further research, Gardner's model should be considered as an initial point.

Implications for L2 learning and teaching

Saville-Troike (2006: 180) states that "... our findings about SLA suggest the following general guidelines for L2 learning and teaching:

- Consider the goals that individuals and groups have for learning an additional language.
- Set priorities for learning/teaching that are compatible with those goals.
- Approach learning/teaching tasks with an appreciation of the multiple dimensions that are involved: linguistic, psychological, and social.
- Understand the potential strengths and limitations of particular learners and contexts for learning, and make use of them in adapting learning/teaching procedures.
- Be cautious in subscribing to any instructional approach which is narrowly focused or dogmatic. There is no one "best" way to learn or teach a second language.
- Recognize achievement in incremental progress. And be patient. Learning a language takes time." Rome was not built in a day. Time and hard work are necessary for such a difficult task.

Conclusion

The SLA models in this paper attempt to characterize SLA, provide an explanation concerning different processes in SLA, and specify various factors influencing SLA. None of the models are able to offer a complete explanation of SLA that would engage all the aspects: the role of environment, interaction, social factors, affective factors, mental processes, etc. The acculturation model attempts to answer questions dealing with the "whys" of SLA. The neurofunctional perspective may eventually explain "how" SLA occurs. The monitor theory deals with the ways a second language is learned/acquired and performed, the discourse approach attempts to develop strategies for researching the relationship between linguistic input to and output from second language learners in authentic situations. Each model has its own place in the whole process of SLA, and would look at SLA from slightly different point of view. The abundance of factors affecting SLA is probably the reason why a complete model does not exist as it would be too intricate to be graspable. This paper, by collecting previous attempts to explain SLA, may hopefully convey the idea of incompleteness, not the incorrectness, of these models and may provide a deeper and broader view of the acquisition process.

References

- [1] Anderson, J. R. (1976). *Language, Memory, and Thought*. Hillsdale: Erlbaum.
- [2] Anderson, J. (1980). *Cognitive psychology and its implications*. San Francisco: Freeman. Anderson, J. R. (1992). "Automaticity and the ACT* theory". *American Journal of Psychology* 105 (2): 165–180. doi:10.2307/1423026. JSTOR 1423026.
- [3] Bates, E., & MacWhinney, B. (1982). Functionalist approaches to grammar. In E. Wanner & L.

[4] Beretta, A. (1991). Theory construction in second language acquisition. Complementarity and opposition. *Studies in Second Language Acquisition* 13(3).

[5] Bialystok, E.; Smith, M. S. (1985). "Interlanguage is not a state of mind: An evaluation of the construct for second-language acquisition". *Applied Linguistics* 6 (2): 101–117.

[6] Bialystok, E. (1994). "Analysis and control in the development of second language proficiency". *Studies in Second Language Acquisition* 16 (2): 157–168.

[7] Chastain, K. (1988). *Developing Second-Language Skills: Theory and Practice*. New York: Harcourt Brace Jovanovich Publishers.

[8] Chomsky, N. (1959). A review of B. F. Skinner's *Verbal Behaviour*. *Language* 35: 26–58.

[9] Chomsky, N. (1996). *Powers and Prospects: Reflection on Human Nature and the Social Order*. London: Pluto Press.

[10] Christiansen, M. H.; Chater, N. (2001). "Connectionist psycholinguistics: Capturing the empirical data". *Trends in Cognitive Sciences* 5 (2): 82–88.

[11] Cook, V. J. (1993). *Linguistics and Second Language Acquisition*. Basingstoke: Macmillan.

[12] Cook, Vivian (2008). *Second Language Learning and Language Teaching*. London: Arnold.

[13] Crookes, G. (1992). Theory format and Second Language Acquisition theory. *Studies in Second Language Acquisition* 14(4).

[14] Davis, K. (1995). Qualitative theory and methods in applied linguistic research. *TESOL Quarterly*, 29, 427–454.

[15] de Bot, K., Lowie, W., and Verspoor, M. (2005). *Second language acquisition: An advanced resource book*. New York: Routledge.

[16] DeKeyser, R. M. (1997). "Beyond explicit rule learning: Automatizing second language morphosyntax". *Studies in Second Language Acquisition* 19: 195–222.

[17] Doughty, C. J., & Long, M. H. (2003a). The scope of inquiry and the goals of SLA. In C. J. Doughty & M. H. Long (Eds.), *Handbook of second language acquisition* (pp. 3–16). Malden, MA: Blackwell.

[18] Doughty, C. J., & Long, M. H. (eds) (2006). *The Handbook of Second Language Acquisition*. Oxford: Blackwell.

[19] Ellis, N. C. (1999). Cognitive approaches to SLA. *Annual Review of Applied Linguistics* 19: 22–42.

[20] Ellis, N. (2002). "Frequency effects in language processing". *Studies in Second Language Acquisition* 24 (2): 143–188.

[21] Ellis, R. (1989). Sources of intra-learner variability in language use and their relationship to second language acquisition. In S. Gass, C. Madden, D. Preston and L. Selinker (eds), *Variation in Second Language Acquisition*, Volume II: *Psycholinguistic Issue*, 22–15. Clevedon: Multilingual Matters.

[22] Ellis, R. 1994. *The Study of Second Language Acquisition*. Oxford: OUP.

[23] Eubank, L. and Gregg, K.R. (2002). News flash—Hume still dead. *Studies in Second Language Acquisition* 24(2): 237–248.

[24] Ellis, R. (1997). *Second Language Acquisition*. Oxford: Oxford University Press. pp. 47–48.

[25] Ellis, R. (1997). SLA and language pedagogy: An educational perspective. *Studies in Second Language Acquisition*, 19, 93–116.

[26] Ellis, R. (2005). "Measuring implicit and explicit knowledge of a second language: A psychometric study". *Studies in Second Language Acquisition* 27 (2): 141–172.

- [27] Farhady, H. (1981). On the plausibility of second language acquisition models. Retrieved from <http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?>
- [28] Felix, S. (1985). More evidence on competing cognitive systems. *Second language research*, 1, 47-72.
- [29] Firth, A., and Wagner, J. (1997). On discourse, communication, and (some) fundamental concepts in SLA research. *Modern Language Journal* 81(3).
- [30] Gardner, R. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold.
- [31] Gass, S. M. (1997), *Input, Interaction, and the second language learner*, Lawrence Erlbaum Associates, Publishers, Mahwah, NJ.
- [32] Gass, S. M. and Selinker, L. (2008). *Second Language Acquisition: An Introductory Course*. Second edition. Mahwah, NJ: Lawrence Erlbaum Associates.
- [33] Harrington, M. (1987). Processing transfer: Language-specific processing strategies as a source of interlanguage variation. *Applied Psycholinguistics* 8: 351-377.
- [34] Gleitman (Eds), *Language acquisition: The state of the art* (pp. 173-218). Cambridge: Cambridge University Press.
- [35] Gregg, K.R. (1990). The variable competence model of second language acquisition and why it isn't. *Applied Linguistics* 11(1).
- [36] Gregg, K. R. (1996). *The logical and developmental problems of second language acquisition*. In W. Ritchie and T. Bhatia (eds), *Handbook of Second Language Acquisition*. San Diego: Academic Press, 49-81.
- [37] Gregg, K.R. (2000). A theory for every occasion: Postmodernism and SLA. *Second Language Research* 16(4).
- [38] Hatch, E. (1978). "Acquisition of Syntax in a Second Language." In *Understanding Second and Foreign Language Learning*, edited by Jack Richards, 34-70. Rowley, Mass.: Newbury House.
- [39] Hulstijn, J. (1989). Implicit and incidental second language learning: Experiments in the processing of natural and partly artificial language. In H.W. Dechert and M. Raupach (eds), *Interlingual Processes*. Tübingen: Gunter Narr.
- [40] Hulstijn, J. H. (2005). "Theoretical and empirical issues in the study of implicit and explicit second-language learning". *Studies in Second Language Acquisition* 27 (2): 129-140.
- [41] Hymes, D. (1972). On communicative competence. In J. Pride & J. Holmes (Eds.), *Sociolinguistics*. Harmondsworth, UK: Penguin Books.
- [42] Jordan, G. (2004). *Theory construction in second language acquisition*. Amsterdam: John Benjamins.
- [43] Jordens, P. (1980). Interlanguage research: Interpretation or explanation. *Language Learning* 30(1).
- [44] Krashen, S. (1980). The input hypothesis. In J. Alatis (ed.), *Current Issues in Bilingual Education*. Washington DC: Georgetown University Press.
- [45] Krashen, S. (1982). *Principles and Practice in Second Language Acquisition*. Pergamon Press. ISBN 0-08-028628-3. Retrieved 2010-11-25.
- [46] Lantolf, J. P., & Beckett, T. G. (2009). Sociocultural theory and second language acquisition. *Language Teaching*, 42(4), 459-475.
- [47] Lantolf, J. P., & Thorne, S. L. (2006). *Sociocultural theory and the genesis of second language development*. New York: Oxford University Press.
- [48] Lightbown, P. M. & Spada, N. (1999). *How Languages are Learned*. Oxford: Oxford University Press.
- [49] Lightfoot, D. (1989). The child's trigger experience: Degree-0 learnability. *Brain and Behavioral Sciences*, 12, 321-75.
- [50] Long, M.H. (1983c). Does second language instruction make a difference? A review of research. *TESOL Quarterly* 17(3): 359-3.
- [51] Long, M.H. (1993). Assessment strategies for SLA theories. *Applied Linguistics* 14(3).
- [52] Long, M.H. (1996). The role of the linguistic environment in second language acquisition. In W. Ritchie and T. Bhatia (eds), *Handbook of Research on Second Language Acquisition*, pp.413-68. New York: Academic Press.
- [53] MacWhinney B (2004). 'A multiple process solution to the logical problem of language acquisition (plus commentaries).' *Journal of Child Language* 31, 883-914.
- [54] MacWhinney, B.; Bates, E.; Kliegl, R. (1984). "Cue validity and sentence interpretation in English, German, and Italian". *Journal of Verbal Learning and Verbal Behavior* 23 (2): 127- 150.
- [55] McKay, S. L. and Wong, S. C. (1996): Multiple discourses, multiple identities: investment and agency in second-language learning among Chinese adolescent immigrant students. *Harvard Educational Review*, 66, 577-608.
- [56] McLaughlin, B. (1987). *Theories of Second Language Learning*. London: Arnold.
- [57] McLaughlin, B. 1990. "Conscious" versus "unconscious" learning. *TESOL Quarterly* 24: 617- 634.
- [58] Mitchell, R., Myles, F & Marsden, E. (2013). *Second language learning theories*. London: Arnold.
- [59] Nation, Paul (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.
- [60] Ortega, L. (2007). Second language learning explained? SLA across nine contemporary theories. In B.
- [61] VanPatten and J. Williams (eds), *Theories in Second Language Acquisition. An Introduction*, pp. 225-50. Mahwah, NJ: Lawrence Erlbaum.
- [62] Ortega, L. (2008). *Understanding second language acquisition*. London: Hodder Education.
- [63] Richards, J. and Schmidt, R. (eds). (2002). "Interaction Hypothesis". *Longman dictionary of language teaching and applied linguistics*. London New York: Longman. p. 264. ISBN 978-0-582-43825-5.
- [64] Saville-Troike, M. (2006). *Introducing second language acquisition*. UK: Cambridge University Press.
- [65] Schmidt, R. W. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11, 127-158.
- [66] Schmidt, R. W. (1994). Deconstructing consciousness in search of useful definitions for applied linguistics. *AILA Review*, 11, 11-26.
- [67] Schmidt, R. (Ed.). (1995a). Consciousness and foreign language learning: A tutorial in the role of attention and awareness in learning. In R. Schmidt (Ed.), *Attention and awareness in foreign language teaching and learning*. Honolulu: University of Hawai'i Press.
- [68] Schmidt, R. (2001), Attention, In: *Cognition and second language instruction* (2nd ed.), 3-32, CUP, Cambridge.
- [69] Schumann, J. (1978). *The Pidginization process: a model for second language acquisition*. Rowley: Newbury House.
- [70] Schumann, J. (1983). Art and science in second language acquisition research. *Language Learning* 33.
- [71] Schwartz, B. (1990). Unmotivating the motivation for the Fundamental Difference Hypothesis. In H. Burmeister and P.L. Rounds (eds), *Variability in Second Language Acquisition*. Eugene OR: University of Oregon.

- [72] Schwartz, B.D. (1993). On explicit and negative date effecting and affecting competence and 'Linguistic Behavior'. *Studies in Second Language Acquisition*, 15, 147–63.
- [73] Sharwood Smith, M. (1994), *Second language learning: Theoretical foundations*, Longman, London. Slabakova, R. (2010). "Semantic Theory and Second Language Acquisition". *Annual Review of Applied Linguistics* 30: 231–247.
- [74] Tarone, E. (1988). *Variation in Interlanguage*. London: Arnold.
- [75] Tavakoli, H. (2012). A dictionary of language acquisition. Tehran: Rahnama Press.
- [76] Ullman, M. T. (2001). "The declarative/procedural model of lexicon and grammar". *Journal of Psycholinguistic Research* 30 (1): 37–69.
- [77] van Lier, L. (2000). From input to affordance: Social-interactive learning from an ecological perspective. Oxford: Oxford University Press.
- [78] VanPatten, Bill; Benati, Alessandro G. (2010). *Key Terms in Second Language Acquisition*. London: Continuum. ISBN 978-0-8264-9914-1.
- [79] Vygotsky, L. (1978). *Mind in society*. Cambridge, MA: Harvard University
- [80] Wertsch, J. V. (1985). *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard University Press.
- [81] White, L. (2003). *Second Language Acquisition and Universal Grammar*. Cambridge: Cambridge University Press.

- [82] Williams, J. (1999). "Memory, attention and inductive learning". *Studies in Second Language Acquisition* 21: 1–48. doi:10.1017/s0272263199001011.

Authors Information



Hossein Heidari Tabrizi is an assistant professor of TEFL at the English Department of Islamic Azad University, Khorasgan Branch (IAUKB), Isfahan, Iran. His research interests include Testing, Translation studies, Discourse Analysis, and Sociolinguistics. He has published several articles both nationally and internationally.



Abbas Jalilnejad Masooleh is currently a PhD candidate in Applied Linguistics at Islamic Azad University of Isfahan (Khorasgan) Branch, Iran. He has been a faculty member at the Islamic Azad University, Lahijan Branch since 1996. He received his B.A. in Translation from Allameh Tabatabaei University, Tehran, in 1991, and his M.A. in TEFL from University of Teacher Education in 1995.