

Understanding Second Language Acquisition (SLA)

Introduction

How does one learn a new language, after having acquired their native language in early childhood? Before we get into our topic, however, let's look at the terminology. The most commonly used term regarding the acquisition of additional languages remains *SLA – Second Language Acquisition*. Though the theories that we will look at apply equally well to the acquisition of third, fourth and more languages, the word “second” is still dominant. And what about *foreign* languages? The differences between *second language* and *foreign language* contexts are lessening with globalization. Whereas in the past sometimes foreign language classes were more focused on learning *about* the language than actually *using* the language, the emphasis even in foreign language settings is increasingly more on communicative skills.

And that brings us to the second term that we need to address: *acquisition*. The phrase “language learning” is probably more familiar to most people than “language acquisition”. In some of the theory that we will discuss, however, these are two different things. *Acquisition* is the term used to imply language learning that takes place through exposure to and usage of the language, and is sometimes linked to true communicative competence. *Learning*, on the other hand, may refer more to knowing *about* a language – having information about its grammar, vocabulary and pronunciation -- but perhaps not being able to use it for communicative purposes.

Some Theories of Language Learning

We will consider four different language acquisition perspectives, taken from Lightbown and Spada (2006).

The Behaviorist Perspective

Second language theorists quickly applied Skinner's ideas on behaviorism in *first* language acquisition to the learning of additional languages, and this perspective had a significant influence on second language education during the middle part of the 20th century. The most well-known approach¹ to emerge from behaviorism was *audiolingualism*, or the Audiolingual Method (ALM). Audiolingualism focused heavily on drills and repetition. Language labs and the repetition and emphasis on pronunciation that they could provide flourished as drilling, repetition and memorization became equated with language learning.

Though behaviorism has taken a back seat to newer theories of language learning, it does provide a good explanation for the development of *automaticity* in language learning—the ability to use some language automatically and without much conscious thought. Without automaticity, we would have to think of every word and structure that we spoke, and the cognitive load would make it very difficult to communicate.

The Innatist Perspective

Noam Chomsky's (1959) theory of *universal grammar (UG)* in first language learning also led to SLA applications. Chomsky did not make direct claims concerning whether or not UG played a role in second language learning, but many other researchers have. The *critical period hypothesis (CPH)*, likewise, has been applied to the acquisition of additional languages with frequent but unsubstantiated assertions that it explains why adults have a harder time learning languages than children. This commonly believed notion may not be based in fact, as explained in the article "Common Misconceptions". And the CPH itself, where additional languages are concerned, is not supported by research. Hakuta, Bialystok and Wiley (2003) conducted a study designed to show a decline in language acquisition after puberty, but found no such decline. They concluded that the CPH was not supported for SLA.

Probably the most well-known second language theorist associated with the innatist perspective is Stephen Krashen (1977, 1981) and his *monitor model*. He described this model in terms of five hypotheses:

1. **The acquisition–learning hypothesis:** We *acquire* language through exposure, but we *learn* language through study.
2. **The monitor hypothesis:** The *acquired* system initiates utterances, but the *learned* system monitors and edits them.
3. **The natural order hypothesis:** Language features are acquired in a predictable sequence, which is roughly the same for all language learners. (This concept has also been called the *internal syllabus*.)
4. **The input hypothesis:** Acquisition occurs when the learner is exposed to language that is comprehensible but a bit above the learner's current operational level. In other words, the learner needs to receive *comprehensible input*. From this hypothesis we get Krashen's famous "*i + 1*" model, where *i* represents the learner's current level (which we can call the *independent* level) and *+1* represents the step above that level.
5. **The affective filter hypothesis:** A person's general emotional state affects language learning, either facilitating or hindering it.

During the latter part of the 20th century, Krashen's ideas were instrumental in moving language learning from rules and drills to *communicative* methodologies (often known as *communicative language teaching, or CLT*). Still widely followed today, communicative methods focus on learning language through real communication, rather than through isolated rules and drills.

The Cognitivist Perspective

Since the 1990s, the psychology of SLA has been theorized and researched, with an emphasis on cognition. Critics of Chomsky and Krashen have argued that all language learning can be accounted for by more general learning theories.

In terms of SLA, some key insights have grown from the cognitivist perspective. The *interaction hypothesis* has taken the field beyond Krashen's theory of comprehensible input, to an understanding that the interaction associated with the input may be what prompts language learning. Mere input could be achieved, for example, by listening to a recording of a dialogue taking place in a market between a buyer and a seller. But far more learning takes place, interactionists propose, if the learner is a participant in such a dialogue, whether in real life or in a classroom simulation. Because meaning is *negotiated* through interaction, speakers engage in comprehension checks, requests for clarification, and repetition. These strategies result in more comprehensible input and thus in greater learning.

Another key insight stemming from this area of research is the importance of *noticing* or *awareness*. Some researchers claim that nothing is learned until it is noticed. For example, a student will not internalize the *-ed* word ending as the way we talk about the past until he begins to notice the *-ed* endings on verbs. Noticing alone does not result in learning, but it is seen as necessary for learning. The recognition that part of a teacher's role may be to help students notice or become aware of certain grammatical features has resulted in the development of a strategy known as *focus on form*. This strategy normally is employed within communicative learning contexts. While students are focused primarily on the meaning of language, the teacher will also take advantage of teachable moments to draw students' attention to critical structures and forms that are used to communicate meaning.

A key concept that encompasses the theories under discussion is *cognitive constructivism*. As an outgrowth of Swiss psychologist Jean Piaget's (1951/1946) work in cognitive development in the mid 1900s, cognitive constructivism says that people mentally construct meanings that make sense to them, and this is how they learn. Such an approach to language learning is evident if a teacher chooses *inductive* (examples to rules) rather than *deductive* (rules to examples) learning activities, believing that the most effective and long-term language learning takes place when learners actively construct their own understandings.

The Sociocultural Perspective

Some researchers have focused more on the social conditions that promote language learning than on what actually happens in the brain. Vygotsky (1978) proposed that learning takes place when an individual interacts with an *interlocutor* who is a more knowledgeable peer or teacher within his or her *zone of proximal development*. Vygotsky's ZPD is much like Krashen's notion of *i+1*. However, the ZPD focuses on the interaction, while *i+1* refers to the level of language input, be it through interaction or not.

Vygotsky's work has often been linked to *social constructivism*. Whereas cognitive constructivism focuses on the mental construction of understanding, social constructivism focuses on the collaborative construction of meaning, through social interaction. (See Reyes & Vallone, 2008, for a more in-depth look at both forms of constructivism in English language teaching.)

As English language teachers and researchers have begun to emphasize the sociocultural nature of language learning, new concepts are emerging. For example, Merrill Swain (1985) extended Krashen's

input hypothesis by creating an *output hypothesis*. She argues that it is only as students attempt to formulate comprehensible output that they notice and revise their own language use.

With the proliferation of computer and other technological sources for language acquisition, some have predicted that real flesh and blood language teachers may no longer be needed in the future. Happily, research is building which confirms the importance of human interaction in language learning. Kuhl (2010) reports that even in the area of pronunciation, which has been relegated to independent work in language labs for decades, social conditions are favored for language acquisition. “Adults can improve nonnative phonetic perception when training occurs under more social learning conditions” (Kuhl, 2010, p. 725).

Putting together the theories

The theories and research presented above are not mutually exclusive. In fact, they all have some validity, and can explain different parts of the language acquisition puzzle. Behaviorism may explain our learning of the words and language chunks that we hear frequently. Clearly we do pick up language at least partially due to exposure to meaningful input, as the innatists would claim. Cognition no doubt plays a role when we stop to think about which verb tense to use, or where an adjective belongs in relation to a noun. And the fact that we learn language by using it socially, in communication with others, would rarely be questioned. In short, each of these theories has built on the others, and likely all are relevant in any comprehensive explanation of language acquisition.

Brain Research

As we saw in the reading on first language acquisition, the cutting edge in language acquisition is in the area of brain research. Researchers are not only investigating the first language acquisition of infants, but also the acquisition of additional languages by individuals of all ages. TESOL International Association hosted a webinar with Francis Bailey and Ken Pransky entitled “Implications and Applications of the Latest Brain Research for English Language Learners and Teachers”. According to Bailey and Pransky, brain research is confirming many of our theories. For example, brain studies are substantiating the following:

- It is language *use* that results in language acquisition – not discrete item learning. Students have to speak to develop speaking, write to develop writing, etc.
- The affective filter is important! Emotional factors override intellectual input.
- Working memory is our most fragile memory system, and is limited in time and capacity to about seven new items in one period, such as a typical class period.
- Long-term vocabulary learning only happens by using the words in context.
- Our working memory is smaller in our L2 than in our L1, and is most efficient when working with patterns. This is why it is so important to learn new words and structures in context.
- We can process a lot more information if we can “chunk” it. Some “chunks” of language should be rote learned to the point of automaticity. For example, it is helpful to learn “at night” and “in the morning” as memorized chunks.

- Attention is important in language acquisition. We don't learn passively, but actively. Attention span can be calculated as age plus or minus two minutes. In other words, a ten-year-old has an attention span of 8-12 minutes.
- Students often experience cognitive overload in language classes. Signs of overload include confusion, distraction, expressions of frustration and failure to connect new information to old.
- Students can process more information if it is meaningful.

Conclusion

From theories, to credible research studies and now to actually viewing the language learning brain through new technology, we are beginning to have fairly solid evidence of how people acquire additional languages. We can say with a great deal of certainty now that language is *not* acquired by just memorizing words and grammar. Language must be used through *reading, writing speaking and listening* in order for acquisition to take place. We also know that computers will not replace English teachers any time soon, as the human factor *does* make a difference. There is still much to learn, but we can be very confident about what we *do* know!

References

- Bailey, F. & Pransky, K. (2013). "Implications and Applications of the Latest Brain Research for English Language Learners and Teachers". Webinar provided by TESOL International Association.
- Chomsky, N. (1959). Review of "Verbal Behavior" by B.F. Skinner. *Language*, 35, pp 26–58.
- Hakuta, K., Bialystok, E. & Wiley, E. (2003). Critical evidence: A test of the critical-period hypothesis for second-Language acquisition. *Psychological Science*. (14)1, pp. 31-38.
- Krashen, S. (1977). Some issues relating to the monitor model. In H. D. Brown, C. A. Yorio, & R. H. Crymes (Eds.), *On TESOL '77* (pp. 144–158). Washington, DC: TESOL
- Krashen, S. (1981). *Second language acquisition and second language learning*. New York: Pergamon
Available from http://www.sdkrashen.com/SL_Acquisition_and_Learning/index.html
- Kuhl, P.K. (2010). Brain Mechanisms in Early Language Acquisition. *Neuron*. 67(5), pp. 713–727.
- Lightbown, P. M., & Spada, N. (2006). *How languages are learned*. Oxford: Oxford University Press.
- Piaget, J. (1951/1946). *Play dreams, and imitation in childhood*. New York: Norton. (Originally published as *La formation du symbole chez l'enfant*. Neuchâtel: Delchaux et Niestlé.)
- Reyes, S. A., & Vallone, T. L. (2008). *Constructivist strategies for teaching English language learners*. Thousand Oaks, CA: Corwin Press.
- Skinner, B. F. (1957). *Verbal behavior*. New York: Appleton-Century-Crofts.

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235–253). Rowley, MA: Newbury House.

Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.

ⁱ The terms *approach*, *method*, and *technique* are used in different ways by different authors.