

First Language Acquisition and Second Language Learning

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1. First Language Acquisition and Innateness Hypothesis

Fromkin et al. (1999:347) discussed that “it is clear that children acquire their first language without explicit learning.” Because children acquire their first language without special teaching and without the need for special learning, we consider that there could be biological foundations in human language, hence the ‘innateness hypothesis.’

The discussion of the innateness hypothesis goes back to Chomsky (1965), where he claimed that human beings have Language Acquisition Device to acquire their first language. As to an innate ability of human beings in acquiring their first language, Cook (1988:72-73) discussed that:

To make an analogy, a seed is planted in the ground, which grows and eventually flowers; the growth would not take place without the environment; it needs water, minerals, and sunshine; but the entire possibility of the plant is inherent in the seed; the environment only dictates the extent to which its inherited potentialities are realized. Knowledge of language needs experience to mature; without it nothing would happen; but the entire potential is there from the start.

As Cook (1988) compared human language to the seed of a plant, language acquisition is considered to be more akin to growing than to learning. On this point, Chomsky (1980: 134) stated that

In certain fundamental respects we do not really learn language; rather grammar grows in the mind.

Thus, language acquisition is considered to be the maturing of the mind according to a preset biological clock, and language is insisted to be part of the human inheritance, and also to be in our genes (Cook 1988:73).

Chomsky's innateness hypothesis is said to have generated a lot of research into child language acquisition. Fromkin et al. (1999:340-341) discussed that children do not produce sentences that could not be sentences in some human language, although they will make a lot of mistakes in their early sentences. And the factors of ease and rapidity of acquisition despite impoverished input, and uniformity across children and languages has led to the innateness hypothesis of child language acquisition. This hypothesis posits that not only is the human species genetically prewired to acquire language, but that the kind of language is also determined (Fromkin et al. 1999:340-341). The principles referred to as universal grammar (or UG) are considered to determine the class of human languages that can be acquired unconsciously, without instruction, in the early years of life. Fromkin et al. (1999:341) concluded that there seems to be little doubt that the human brain is specially equipped for acquisition of human language grammars.

2. Features of First Language Acquisition

In this section, some of the features of first language acquisition are discussed, and we will consider how children learn their first language without explicit learning.

First, from the beginning of their life, children are exposed to their first language. There is a tremendous amount of information concerning that language, gained in a great variety of 'context.' The parents and care-takers will speak to the child, and s/he listens to the language without noticing s/he is participating in listening practice.

Second, children will begin to manipulate muscles to create sounds that reflect a language. When they babble, they develop multiple muscles in the thorax, throat, larynx, mouth, lips, tongue and so on. These speech muscles gradually develop until neurological pathways have been developed facilitating the production of the sounds of the first language. Children do these muscle exercises unconsciously.

Third, they will utter a few words to indicate concrete things around them. And during this stage we can observe that they over-generalize a word's meaning, which is

explained below:

Overgeneralisation is, as noted earlier, a regular process in language acquisition. In addition to producing words such as *bringed*, *goed*, and *doed* children also overgeneralise the meaning of words. They may learn a word such as *papa* or *daddy* which they first use only for their own father and then extend its meaning to apply to all men. After the child has acquired their first 75 to 100 words, the overgeneralised meanings become narrowed until the meanings of these words are those of the other speakers of the language (Fromkin et al. 1999:337).

It is reported that children typically begin with one-word utterances which function as holophrases (i.e. express whole propositions), and that they gradually extend the length of their utterances, passing through stages when the bulk of their speech consists of first two-word, then three- and four-word utterances (Ellis 1994:77).

Finally, along with their psychomotor development, they somehow extract the rules of their first language. And they systematically acquire the various syntactical and morphological rules of that language.

Although children make a lot of mistakes in the process of acquiring their first language, the adults around them accept it as quite natural for them to make mistakes. First language acquisition usually occurs within a very loving environment where the child is the focus of attention of parents and other adults around her/him. The caretakers (i.e. parents, etc.) will willingly modify the child's language, encourage her/him to produce language, and correct the mistakes s/he made. All of these kinds of teaching are taken for granted as natural in the process of bringing up the child and the adults are not consciously aware that they are teaching the language, nor is the child aware that s/he is learning the language from them.

Many of the processes through which children acquire their first language are still unknown, however, learning language is an obligatory task for them, just as is developing the ability to walk. It is evident that there is no explicit awareness for them in learning the language. Since language development occurs as part of their daily interaction with the world around them, we do not regard them as acquiring the first language by explicit learning.

When Fromkin et al. (1999:347) discussed that children acquire their first language without explicit learning, the phrase 'without explicit learning' has several meanings besides the biological and physical factors.

These are, when children acquire their first language,

- 1 they have no fixed syllabus,
- 2 they don't attend a class,
- 3 they don't usually use a textbook nor dictionaries, and
- 4 they are generally not aware that they are acquiring a language.

Therefore, the first language is not a subject of study for them, but rather an instrument by which they satisfy wants and needs, or the means of interacting between self and others. Since children do not seem to be aware of learning the first language, they can be said to learn their first language without explicit learning.

3. Learning/Acquisition Hypothesis

Krashen (1982, 1985) made a distinction between acquisition and learning, which is summarized below.

1. Acquisition is a subconscious process similar to children's acquiring their first language.
2. Learning is a conscious process that results in 'knowing about' language.
3. Learning does not become acquisition. There is no interface between them.

His claim that there is no interface between learning and acquisition should be criticized because it is difficult to distinguish between learning and acquisition. If acquisition is defined as more fluent and automatic language behavior, learning would surely become acquisition, though there are many different levels of proficiency.

Krashen (1982:11) claimed that we only "learn" small parts of our first language in school. But this claim can be questioned because there are so many hours of first language classes at school in each country. For instance, Japanese children have Japanese classes almost every day in elementary school, junior high school, and high school. Considering the fact that there are many people in this world who do not go to school and cannot read nor write their first language, it is evident that we learn many skills related to our first language in school. Especially reading and writing abilities are developed through school education. Not only do we learn how to read and write our first language, but also we learn contents in our speech at school, which means

that we can speak and understand a great variety of concrete and abstract things in all areas of our first language by virtue of school education.

4. Features of Second Language Learning

In this section we will discuss some features of second language learning. Here the word 'second language learning' is used to mean that it occurs after first language acquisition has occurred.

4.1 Interference of First Language

It has been pointed out that there is interference from the first language in acquiring native-like pronunciation of a second language. Since adult second language learners have already developed speech muscles patterns for first language, they have to begin consciously to develop another set of patterns for the second language. They have to overcome patterns that have been established and learn to move the muscles differently for certain sounds.

As long as a learner's pronunciation is understandable and s/he is able to communicate with others in the target language, native-like pronunciation is said not to be necessary. However, if there were some wrong patterns of pronunciation which are attributed to their mother tongue, it will be useful to help learners notice and correct them.

In the next sub-section, we look at some tendencies that learners often fall into because of the interference of their first language.

4.2 Interlanguage

The term 'interlanguage' was used by Selinker (1972). Roughly speaking, learner's second language is considered to be 'interlanguage.' Interlanguage can be analyzed in each field of phonology, and syntax, etc.. In the following, interlanguage of Japanese learners' English as second language is taken up.

Many Japanese learners tend to pronounce English words using a Japanese style of pronunciation. Some typical examples of this are that a vowel is inserted after a consonant, where it properly should not be. Look at Table 1 below.

Table 1
Inserting a vowel after a consonant

	Words	Pronunciation in English dictionary	Pronunciation of some learners'
1	gray	/grei/	/gure:/
2	stress	/stres/	/sutoresu/
3	dress	/dres/	/doresu/
4	beef	/bi:f/	/bi:fu/

As pronunciation in English dictionary shows, a consonant is followed by another consonant, such as in 1 /gr-/ and 2 /st-/. And a word finishes with a consonant (without a vowel), such as in 2 /-s/, 3 /-s/, and 4 /-f/.

On the other hand, in Japanese learners pronunciation, a consonant is often accompanied with a vowel, which are shown in the right side in Table 1.

This phenomenon is caused by the interference of first language pronunciation patterns. In the Japanese pronunciation system, a consonant is usually a set with a vowel, which is the main cause of inserting a vowel after a consonant. Explaining the differences between Japanese and English pronunciation systems, by showing them these contrasts can help them be more conscious of their accents.

Another inclination, which is shown in Table 2 below, is observed in some learners.

Table 2
Inserting a long vowel at the end of a word

	Words	Pronunciation in English dictionary	Pronunciation of some learners'
5	maker	/meikər/	/me:ka:/
6	printer	/printər/	/purinta:/
7	heater	/hitər/	/hi:ta:/

In Japanese, the above words are used as loan words. And loan words are usually written in *katakana*, one of the two kinds of *kana* script used for Japanese syllabary writing. And a prolonged sign is often included at the end of a word written in *katakana*, which causes learners to express a long vowel that the original English word does not have. Japanese learners are pulled by the prolonged sign of the loan word written in *katakana*, which results in the error of adding a long vowel at the end of a word.

Interlanguage can be observed in the field of syntax. Japanese learners sometimes omit the object of a verb. Look at the following examples:

- 1 * Where did you buy? (Where did you buy them?)
- 2 * How did you get? (How did you get it?)
- 3 * I found! (I found it!)
- 4 * I'll visit this afternoon. (I'll visit him this afternoon.)

These mistakes are considered to be caused by the interference of Japanese syntax. In Japanese, it is usual to omit the object in a sentence. The omitted object is considered to be quite evident for both hearer and speaker, and its context gives them such a clear cue of what the object is that it is not necessary to mention it.

Another examples of systematic mistakes that learners of English tend to make are shown below:

- 5 * I thinned that it was good.
- 6 * It costed \$32.
- 7 * I drived from Los Angeles to San Francisco.
- 8 * I maked cookies.
- 9 * I catched the ball.
- 10 * I choosed this one.
- 11 * I kepted it.
- 12 * I was mistaked.

These systematic errors are caused by the over-application of rules related to regular verb forms.

As these examples of learners' mistakes show, interlanguage does exist. Learners of second language tend to apply their first language's systems as illustrated above. However, adult learners have the analytical ability to know the differences between the two languages and be able to modify their second language in regards to both pronunciation and syntax.

Krashen (1982:16) insisted that conscious learning is available only as a "Monitor," which can alter the output of the acquired system before or after the utterance is actually spoken

or written. This is called “Monitor hypothesis.” Monitor hypothesis posits that our ability to produce utterances in another language comes from our acquired competence, from our subconscious knowledge, and that learning, conscious knowledge, serves only as an editor, or Monitor (Krashen 1985).

Although it is difficult to tell whether a person is monitoring her/his utterance using the knowledge from conscious learning, the point of Monitor hypothesis is that it is acquired competence that initiates normal, fluent speech utterances. To change the knowledge from conscious learning into acquired competence, learners need to work hard practicing model sentences over and over again until they master them.

As to acquiring syntax and morphology, it has been observed that young adults are better than children at learning syntax and morphology (Burstall 1975; Harley 1986; Snow & Hoefnagel-Hohle 1978). And on several planes —literacy, vocabulary, pragmatics, schematic knowledge, and even syntax —adults have been shown to be superior learners (Scovel 1999). Brown (2000:69-70) also wrote that there is absolutely no evidence that an adult cannot overcome all disadvantages except accent.

5. Authentic Materials

Considering that second language learning should be more like first language acquisition, second language learners need to be exposed to “real” second language, which is referred to as “authentic materials”. Rogers and Medley (1988:468; cited in Hadley 2001:189-190) considered authentic materials as “language samples” that reflect natural use of the language by native speakers. They grouped authentic materials into video, audio, and print media resources, etc.. Geddes and White (1978:137; cited in Hadley 2001:190) made a distinction between two kinds of authentic materials: (1) unmodified authentic materials, which refer to language that occurred originally as a genuine act of communication, and (2) simulated authentic materials, which refer to language produced for pedagogical purposes but which exhibits features that have a high probability of occurrence in genuine acts of communication.

As is well known recently, the Internet provide another good resources for authentic second language material. For example, we can read tremendous news articles on the Internet. Some of online newspapers and their URLs are listed below (cited in Cheetham 2004:197-199):

The New York Times (<http://www.nytimes.com/>)

The Los Angeles Times (<http://www.latimes.com/>)

The Independent (<http://news.independent.co.uk/>)

Australian Newspapers Online (<http://www.nla.gov.au/npapers/>)

The Japan Times (<http://www.japantimes.co.jp/>)

The Daily Yomiuri (<http://www3.yomiuri.co.jp/main/main-e.html>)

The Asahi Evening News (<http://www.asahi.com/english/>)

Although it is easy to get authentic materials on the Internet, there are some points that teachers should pay attention to in using such materials.

First of all, students often tend to panic when they see the flood of “unknown” English on the Web. Geddes and White (1978; cited in Hadley 2001:188) caution that using only unedited, nonpedagogical materials in the classroom would seem to create more problems than it would solve, since materials are often difficult to select, obtain, or sequence for learners at lower proficiency levels. Since unmodified authentic material is often random in respect to vocabulary, structure, functions, content, situation, and length, it would be impractical for classroom teachers to integrate successfully into the curriculum (Geddes and White 1978:37; cited in Hadley 2001:188). Also, authentic materials may be very frustrating for beginners (Ur 1984, Dunkel 1986; cited in Hadley 2001:188) and listening to material that is beyond the learner’s comprehension can be anxiety-producing (Meyer 1984, Byrnes 1984, Joiner 1986; cited in Hadley 2001:188-189). To avoid these problems, teachers need to help students to concentrate on a chosen article, or use only a part of it so that its length is limited for the learners.

Secondly, as Hadley (2001:210) has rightly pointed out, before a teacher has students access a Web site, s/he should verify that the site is still active. Since so many Web sites are apparently temporary or transitory, it is necessary to check. The easiest way to avoid this problem is just printing out the article which a teacher plans to use and handing out the printed copy in class.

Thirdly, an article should be carefully and pedagogically chosen so that it matches the learners’ level of proficiency. As to the appropriate level of difficulty in learning second language, Krashen’s (1982) input hypothesis says that:

We acquire by understanding language that contains structure a bit beyond our current level of competence ($i+1$). This is done with the help of context or extra-linguistic information.

It is noted that [i] of [i+1] means the present acquisition stage, and [+1], a little more difficult level, which is understood by contextual guessing. Learners are expected to acquire second language by “going for meaning.”

6. Individual differences

Differences among individuals have some impact on the attainment in second language learning. In the following sub-section, the factors of intelligence, aptitude, attitude, and age are discussed.

6.1 Intelligence

The study of the role of intelligence in second language learning by Genesee (1976) showed that the more academic type of tests correlated with the IQ measure but there were no significant correlation between the IQ measure and achievement in listening and speaking. And Genesee stated that intelligence is correlated to academic language skills but not to communicative language skills. Genesee and Hamayan (1980) also stated that intelligence is less strongly correlated with the second language learning of children presumably because children at that age are less concerned with the academic language skills.

6.2 Aptitude

According to Carroll (1981), aptitude is not a single characteristic, but rather, it is a combination of more than one characteristic. And Carroll (1981:105) scored an aptitude by evaluating the four abilities below:

- 1 Phonetic coding ability--- the ability to identify distinct sounds, to form associations between those sounds and symbols representing them, and to retain these associations.
- 2 Grammatical sensitivity-- the ability to recognize the grammatical functions of words (or other linguistic entities) in sentence structures.
- 3 Rote learning ability for foreign language materials--- the ability to learn associations between sounds and meanings rapidly and efficiently, and to retain these associations.
- 4 Inductive language learning ability--- the ability to infer or induce the rules governing a set of language materials, given samples of language materials that

permit such inferences.

Carroll (1981:86) stated that aptitude is relatively fixed over long periods of an individual's life span, and that relatively hard to modify in any significant way. However, this assertion is questionable because there could be many chances for learners to develop their aptitude. When a learner has a concrete objective, which s/he is willing to attain, the aptitude evaluated by the four abilities above can be improved. Or, as Cheetham (2004:110-115, 126-130, etc.) stressed that necessity is a very important factor to master a language, a pressing need has a significant correlation with improving these abilities.

On the other hand, Pimsleur, Sundland, and R., M. (1964) claimed that language aptitude consists of the following three components:

- 1 verbal intelligence,
- 2 motivation, and
- 3 auditory ability.

And they found out that poor auditory ability, rather than lack of verbal intelligence or motivation, is frequently the cause of foreign language learning difficulties. However, when a learner has poor auditory ability, it is important to develop other abilities so that other abilities make up for the less developed ability.

Reinforced verbal intelligence or having strong motivation must contribute to improved auditory ability also. It is evident that verbal intelligence such as knowing some words and phrases is useful, or even indispensable, to catch and understand these words and phrases through auditory ability.

6.3 Attitude

The concept of attitude includes one's motivation and sociological factors. According to Gardner (1985:10), motivation is the extent to which an individual works or strives to learn the language because of a desire to do so and the satisfaction experienced in this activity. And Gardner and Lambert (1972) sub-divided motivation into integrative motivation and instrumental motivation. Integrative motivation is a type of motivation that is based on the individuals themselves, that is, their personalities and attitudes. Personalities are related to the issues of learner's anxiety, extroversion/ introversion, empathy, and self esteem, etc.. And instrumental motivation is concerned with

more tangible goals, such as getting a good job and traveling overseas. Integrative motivation is considered to have an influence upon the rate and eventual attainment in second language learning. Integrative motivation highly reflects a learner's nature. Learners who are willing to identify with target language people and participate in target language culture make progress in the target language. There are many successful second language learners who began learning as adults, even after puberty. Such learners keep learning and have strong motivation.

Sociological factors are also sub-divided into sociopolitical factors and cultural factors. As Schumann (1978) discussed about sociopolitical factors, the following conditions are taken into consideration: 1) The target language group and the second language group regard each other as equals, 2) the target language group and the second language group both share social institutions, 3) the second language culture has many common elements with the target language group's culture, and 4) the second language group intends to stay in the target language area for a long time or permanently, etc.

6.4 Age

According to Spolsky (1989:98), the question that needs to be asked is not whether older or younger learners do better, but rather what goals are suitable at various ages and what conditions lead to greater success in learning specific parts of the second language at various ages.

7. Concluding Remarks

First language acquisition is essential for all human beings, and there is a great level of necessity and expectation placed on children in acquiring their first language. When they are very young, listening and speaking abilities are developed at home. And later on, especially reading and writing abilities are improved at school.

On the other hand, second language learning usually starts at school, where it is a subject of study, and students are evaluated according to the degree of attainment, as well as other subjects. As a subject of study at school, it is important to set suitable goals for students. Not only improving language abilities that students are not good at, but also strengthening language abilities that they are good at and interested in is also important.

References

- Brown, H. Douglas.
2000 *Principles of Language Learning and Teaching* (4th ed.). New York: Addison-Wesley Longman, Inc..
- Burstall, C.
1975 "Factors Affecting Foreign-Language Learning: A Consideration of Some Relevant Research Findings." *Language Teaching and Linguistics Abstracts* 8:105-125.
- Byrnes, Heidi.
1984 "The Role of Listening Comprehension: A Theoretical Base." *Foreign Language Annals* 17: 317-34.
- Carroll, Jhon.
1981 "Twenty Five Years of Research on Foreign Language Aptitude." In K. C. Diller (Ed.) *Individual Differences and Universals in Language Learning Aptitude* pp. 83-118. Rowsley, Mass.: Newbury House.
- Cheetham, Dominic.
2004 *Rechūningu Eigo Shūtokuhō (Re-Tuning: New Practice of English Learning)*. Tokyo: Chikuma Shobō.
- Chomsky, Noam.
1965 *Aspects of the Theory of Syntax*. Cambridge, Mass.: MIT Press.
1980 *Rules and Representations*. Oxford: Basil Blackwell.
- Cook, Vivian James.
1988 *Chomsky's Universal Grammar: An Introduction*. Oxford: Basil Blackwell.
- Dunkel, Patricia.
1986 "Developing Listening Fluency in L2: Theoretical Perspectives and Pedagogical Considerations." *The Modern Language Journal* 70, ii: 99-106.
- Ellis, Rod.
1994 *The Study of Second Language Acquisition*. Oxford: Oxford University Press.
- Fromkin, Victoria, David Blair and Peter Collins.
1999 *An Introduction to Language* (4th ed.). Sydney: Harcourt Australia Pty Ltd.
- Gardner, R. C.
1985 *Social Psychology and Second Language Learning: the Role of Attitude and Motivation*. London: Edward Arnold.
- Gardner, R. and Lambert, W.
1972 *Attitudes and Motivation in Second Language Learning*. Rowsley, Mass.: Newbury House.
- Geddes, Marion and Ron White.
1978 "The Use of Semi-scripted Simulated Authentic Speech in Listening Comprehension." *Audiovisual Language Journal* 16, iii: 137-45.
- Genesee, Fred.
1976 "The Role of Intelligence in Second Language Learning." *Language Learning* 26 (2),

- 267-280.
- Genesee, Fred. and Hamayan, E.
1980 "Individual Differences in Second Language Learning." *Applied Psycholinguistics*, 1, 95-110.
- Hadley, Alice Omaggio.
2001 *Teaching Language in Context*. Boston, MA: Heinle & Heinle.
- Harley, Birgit.
1986 *Age in Second Language Acquisition*. Clevedon, Avon: Multilingual Matters Ltd..
- Krashen, Stephen.
1982 *Principles and Practice in Second Language Learning and Acquisition*. Oxford: Pergamon Press.
1985 *The Input Hypothesis: Issues and Implications*. California: Laredo Publishing Co Inc..
- Meyer, Renée.
1984 "Listen, My Children, and You shall Hear..." *Foreign Language Annals* 17, iv: 343-44.
- Pimsleur, P., Sundland, D., and R., M.
1964 "Underachievement in Foreign Language Learning." *International Review of Applied Linguistics* 2, 113-150.
- Rogers, Carmen V. and Frank W. Medley, Jr.
1988 "Language with a Purpose: Using Authentic Materials in the Foreign Language Classroom." *Foreign Language Annals* 21, v: 467-88.
- Scovel, Thomas.
1999 "'The Younger the Better' Myth and Bilingual Education." In Gonzalez, Roseann and Iidiko Melis (Eds.) *Language Ideologies: Critical Perspectives on the English Only Movement*. Urbana, IL: National Council of Teachers of English.
- Selinker, Larry.
1972 "Interlanguage." *International Review of Applied Linguistics* 10 (3), 209-31.
- Snow, C. and M. Hoefnagel-Hohle.
1978 "The Critical Age for Language Acquisition: Evidence for Second Language Learning." *Child Development* 49:1114-1128
- Spolsky, Bernard.
1989 *Conditions for Second Language Learning*. Oxford: Oxford University Press.
- Ur, Penny.
1984 *Teaching Listening Comprehension*. Cambridge: Cambridge University Press.