

Issues in Fossilization and Stabilization*

Eun-Hee Lee
(Seoul Women's University)

Lee, Eun-Hee. 2009. Issues in Fossilization and Stabilization. *Linguistic Research*, 26(2), 149-168. The main purpose of this paper is to review issues and findings related to different definitions and characteristics of fossilization and stabilization. In 1972, Selinker defined fossilization as a state of language learners' permanent learning-cessation regardless of (1) the amount of exposure to a target language, (2) high motivation to learn or to correct errors, and (3) many chances of practicing a target language. Quite a few researchers have tried to explain this endstate with various theories but none of previous empirical research proved the existence of fossilization yet. Therefore, concepts of stabilization are examined and grammatical subsystems that are prone to long-term stabilization are suggested. The main goal of examining the endstate of interlanguage here is to provide language teachers and researchers with theoretical backgrounds about stabilization and fossilization, so they can better prepare their lessons by knowing the problematic areas in order to prevent learners' persistent errors. (Seoul Women's University)

Key Words fossilization, stabilization, learning-cessation

1. Introduction

The term, fossilization, (Coppieters, 1989; De Prada Creo, 1990; Han, 2004; Lardiere, 1998; Mukattash, 1986; Selinker, 1972, 1993; Selinker and Lamendella, 1979; Valette, 1991) has been used to explain a permanent endstate of learners' interlanguage implying that learners never overcome this endstate of interlanguage regardless of learners' ability, learning opportunities, or their motivation to learn.

When Selinker (1972) defined learners' languages as interlanguage which is different from their target language, he declared that about 95% of the learners would never learn a target language regardless of age, instructions, input or learners' will. This learning-cessation was named as fossilization. Numerous researchers have tried to explain causes or reasons of the endstate. For example, Schmidt (1983) chose external factors such as insufficient written input or

* I appreciate the anonymous reviewers of this journal for their helpful feedback and suggestions. All remaining errors are of my own.

instruction as a main reason for the learning-cessation while Han (2000), Kellerman (1989), or Selinker and Lakshmanan (1992) chose internal factors such as learners' first language (L1) interference to explain the cessation. As none of previous research examined a learner's language acquisition from birth to death, none of them proved the existence of fossilization. In this paper, after previous theories related to definitions, characteristics and reasons of fossilization are reviewed, concepts of stabilization (Han, 2004; Selinker, 1972) are explained. In addition, possible candidates which are susceptible to long-term stabilization are suggested in the later section.

2. Diverse Definitions and Characteristics of Fossilization

2.1 Definitions of Fossilization¹⁾

Some characteristics of fossilization are still controversial, but the key characteristic which researchers who advocate the existence of fossilization agree on, is impossibility of eradication of errors. Even if learners seem to learn a feature, in given certain circumstances such as a high anxiety or exciting situation, they would make errors again on the feature (Selinker, 1972). They seem to learn the feature, but errors occur in a certain situation. The persistency of errors is beyond learners' will and effort to overcome. Tarone (1994) claims that fossilization is inevitable for all learners, so their endstate of language learning is forever interlanguage and can never be a target language.

Han's (2000, 2004) definition is the same as Selinker's (1972) except the age-related issue. According to Lenneberg's (1967) Critical Period Hypothesis, learners after a certain age have difficulty acquiring a second or foreign language. Han claims that full attainment of L2 acquisition among adult learners is impossible regardless of both internal reasons such as motivation and external reasons such as quality of input. Therefore, Han (2004) presumes that fossilization is a characteristic among adult language learners not among children.

Fossilization, a permanent learning-cessation, is different from stabilization which is defined as a temporary²⁾ learning-cessation. According to Long (2003),

1) In this paper, phonological fossilization is not considered.

stabilization is a common phenomenon which can occur during a language learning process. Stabilization can be overcome as language developments proceed even though it can take a long time. According to Selinker (1972), stabilization is often a precursor of fossilization; he claims that fossilization is permanent stabilization of learning.

2.2 Global vs. Local Fossilization

Researchers have not reached an agreement on areas of fossilization either. Selinker (1993) and Tarone, Frauenfelder and Selinker (1976, cited in Han, 2004) claim that fossilization occurred in a whole language system, globally, yet Coppieters (1989), Han (2004) and Lardiere (1998) insisted local fossilization which occurred in some areas, locally. For example, Lardiere (1998) provided evidence of dissociated acquisition procedures among linguistic features, syntax and morphology. Lardiere tape-recorded interviews with her participant 'Patty,' who received a B.A. and an M.A. in the U.S. and was married to an American who was born in China. When the participant was first recorded, she was 32 years old having spent almost 10 years in the U.S. The study analyzed her acquisition of inflectional morphology and her usage of pronominal case. The participant's morphology was fossilized, showing 34% of correct usage while her acquisition of syntax on pronominal case was perfect, 100% of correct usage. Lardiere claims that this result demonstrates syntactic development and morphological development are independent of each other. Dekeyser (2000) also proves that adult learners have certain fossilized features while they perfectly master other features. As seen so far, none of the studies about fossilization provided any empirical research proving whether or not fossilization occurred in an entire language system, globally, for their whole life span.

Coppieters' (1989) example also shows us that fossilization occurs locally. He interviewed both near-native speakers of French and French native speakers in order to examine a hypothesis about whether there were differences among actual language usage, proficiency, and their intuition on grammar. The results indicate that near-native speakers' intuition is significantly different from French native speakers', especially about past tense, while their language usage and proficiency levels were similar. It seems that near-native speakers do not have

2) "Temporary" does not necessarily mean "short-term."

native-like intuition regardless of their proficiency. On the basis of this finding, Coppieters (1989) concludes that fossilization can affect either knowledge or performance which means that fossilization may occur locally.

Even though there are still controversies about whether fossilization occurs locally or globally, and more explanation and research are needed, Han's (2004) local fossilization theory sounds persuasive since many learners easily learn one feature such as the third person singular while they have difficulty in using another feature, a perfect tense. They also make fewer errors when they answer grammatical questions about the third person singular while they tend to drop the -s when they speak.

3. Reasons for Fossilization

3.1 L1 Interference and Critical Period Hypothesis

Many hypotheses were suggested to explain reasons for fossilization, yet none of them are accepted as the absolute truth due to the lack of whole-life span research. According to Han (2004), learners' L1 interference and maturational constraints, Critical Period, are fundamental causes of fossilization. Selinker (1972) also suggests five reasons to explain the causes. Even though none of Selinker's reasons were proved empirically, these are widely accepted to explain fossilization processes. The reasons are "(1) Language transfer; (2) Transfer-of-training; (3) Strategies of second-language learning; (4) Strategies of second-language communication; (5) Overgeneralization of target language (TL) linguistic material" (Selinker, 1972, pp. 216-217). Selinker claims that fossilization is a learning process rather than a product because four reasons except the first reason, language transfer, are related to language learning process.

Selinker and Lakshmanan (1992) believe that more than one factors cause the occurrence of fossilization. They propose Multiple Effects Principle: more than one cause contributes to fossilization and the combination of multiple factors enhances the intensity of fossilization. One factor interacts with other factors such as linguistic, cognitive, psychological, or social variables, which result in different degrees of fossilization among learners whose native languages are the same causing intra-learner differences.

Some representative empirical works in L1 interference, Critical Period, and other external and internal variables are discussed here. First of all, many researchers, including Selinker (1972) and Han (2004), counted L1 interference as one of the main reasons for fossilization. For example, Seliger (1989) examined learners' inability to acquire semantically constrained distributional rules due to L1 interference. Mukattash's (1986) study also supports the theory that L1 interference and effects of input influence a fossilization process. His eighty participants were fourth year students in the department of English Language and Literature at the University of Jordan. Their overall English proficiency was advanced and they were studying to be language teachers. The main topic they studied while they participated in the research was about common English errors among native speakers of Arabic. Even though they were studying the common errors caused by their L1 in the course, they were making the errors in their written reports regardless of their study. In the conclusion section, Mukattash (1986) claims that available systematic input and error correction do not affect advanced adult learners' interlanguage; the participants made the same errors even when they studied the common error types. Corder (1981) claims that learners lose their motivation to elaborate their grammar after fulfilling communication needs with native speakers. Mukattash's participants seemed to have also lost their motivation to improve grammar after reaching certain proficiency.

On the other hand, the main problem of Mukattash's (1986) claim on ineffectiveness of explicit grammar teaching and L1 interference is that the so-called instructor's feedback, lecturing about common errors among Arabic speakers, was not individually provided; the participants learned about the errors in classes, but the instructor did not provide them with individual feedback when they made errors. Many error types in Mukattash's study were from the participants' L1, Arabic, but some of them were just general errors across language learners. As Dulay, Burt, and Krashen (1982) claim that L1 interference can not explain all of learners' errors, fossilization processes required more specific explanations rather than simply blaming learners' L1. Another problem is counting the total number of errors without considering types of errors. Long (2003) argues that researchers need to count types of errors not the total number of errors.

3.2 Socio–Affective Variables

De Prada Creo (1990) suggest a socio-affective variable as a reason for fossilization; he investigated advanced level participants' self-perception as one of the reasons for fossilization. The participants were near-native foreign language teachers who were aware of their learning-cessation, but they all agreed that their foreign language was good enough for their career and communication needs. De Prada Creo (1990) counted Corder's (1981) theory for fossilization as the main reason for fossilization: once learners are satisfied with their ability to communicate, their motivation or desire to be better which prevents fossilization disappears. Therefore, De Prada Creo (1990) concludes that input and output are not as crucial as learners' psychological and cognitive factors, such as motivation, in a fossilization process.

An example of another socio-affective factor is from Schumann's (1978) acculturation problem in a process of fossilization; a degree of social and psychological distance between a learner and a target culture can cause fossilization. Schumann's (1978) participant, Alberto, showed little progress on acquisition of negation after an auxiliary for ten months. According to Schumann, this lack of development is the evidence of fossilization as well as stabilization. The main reason of fossilization is from his social and psychological isolation; Alberto belonged to a low social class, had a few chances to speak English and did not have motivation to learn English. However, Alberto is not an appropriate sample to study fossilization since there was limited input. According to Selinker's (1972) definition, fossilization occurs no matter what kinds of input are around participants, but Alberto did not have enough input which made researchers unable to examine the hypothesis of outbreak of fossilization.

Valette (1991) makes an interesting distinction between "school" learners and "street" learners. School learners systematically learn a language through knowledge about grammar/syntax, yet their vocabulary is limited compared to street learners who learn words extensively from interpersonal communication. Fossilization often occurs more to street learners who have erroneous grammar rules which cannot be eradicated. Street learners' inaccurate grammar becomes systematic, which makes them impossible to undo with repeated practices of inaccurate grammar in communications. Even though street learners are exposed

to authentic input from native speakers, it is beyond their input threshold, which leads to fossilization. School learners' interlanguage is less fossilized because they have fewer chances to practice their speaking, which can help interlanguage to prevent to be fossilized. Skehan (1998) provides an example that can support Valette's claim; he argues that learners' inclination to focus on meaning rather than forms is a main cause of fossilization. Learners tend to value meanings more than forms as they get older, but it deactivates the language acquisition device which contributes to an input process. As a result, their language becomes fossilized.

The idea that school learners end up with fewer fossilized features than street learners needs more explanations. However, it warns a risk of fossilization in current heavy-communication-emphasized language classrooms where teachers often tend to ignore grammar education. One of the biggest current language instructional trends is an attempt to increase chances of communication practices and classroom tasks which can make students interact more. However, Valette (1991) shows concerns about quality of interaction because the number of repetition of phrases/rules or the number of chances of speaking practice may not guarantee accurate/non-fossilized language (Fotos, 1994; Hinkel and Fotos, 2002). Instead, a balanced instruction between grammar emphasized approaches and communicative approaches can be a solution to prevent fossilization (Hinkel and Fotos, 2002).

4. Does Fossilization Exist?

Long (2003) doubts the existence of fossilization and claims that it is only theoretically possible and empirically impossible to differentiate stabilization from fossilization since fossilization has not been proved in a whole life span research yet. The main question is how researchers ensure that learners confront permanent fossilization of learning, not temporary long-term stabilization. For example, to advocate the existence of fossilization, Han (2004) referred to Dr. Chien-Shiung Wu, who came to the U.S. when she was 24 and spent 56 years there until she died at 83. She was a renowned physicist who was able to write numerous academic papers and to communicate in English fluently, but her obituary records her suffering due to her second language, English, in the U.S. regardless of her intelligence and the long duration of stay in the nation. A

problem of this appeal is a lack of evidence since Han did not observe Wu's language use or describe other external language learning environment such as the amount of input or daily interlocutors.

To give empirical evidence about problems of fossilization research, Long (2003) studied Ayoko, a Japanese woman who had lived in Hawaii for 52 years after she moved into Hawaii when she was 22. Her husband was a third-generation Japanese-American who spoke Hawaiian Creole English. She spoke English most of the time both at home and at work; she was a florist for four years and a salesperson for eighteen years. The results show that her English had "numerous lexical gaps, little complex syntax, and many persistent morphological errors" (Long, 2003, p. 509). However, Long (2003) hesitates to sentence fossilization to Ayoko's interlanguage since he could not find systematic error patterns and Ayoko's English was not native-like at all.

Long's (2003) study on Ayoko lasted for about 18 years until 2003, but he failed to give readers information about other important learning variables. For example, he did not report Ayoko's education in Japan. According to Valette's (1991) definition, Ayoko is a street learner whose fossilized features did not have any chances to be fixed through school education in the U.S., and her husband was a Hawaii Creole English speaker which meant that she was exposed to Creole English, not a Standard English. Valette (1991) and VanPatten (1988) claim that fossilization can be encouraged in communication-first situations without accurate knowledge of grammar, which makes learners prone to be ungrammatical.

Long (2003) and Schumann (1978) did not consider participants' socio-affective profiles either. For example, Ayoko in Long's (1997, 2003) study and Alberto in Schumann's (1978) study did not have sufficient written input and their main daily interlocutors did not use Standard Englishes³). Given this inappropriate evidence and participants, Long's (1997, 2003) study also made the same mistake with previous research about fossilization.

As a consequence of lack of empirical studies, researchers have not reached a consensus for the existence of fossilization yet. Long (2003) doubts the existence of fossilization implying that fossilization is controllable while Selinker (1972, 1993) and Han (2004) argue that fossilization is out of learners' will to change or

3) Standard Englishes are Englishes which are spoken in the inner circle countries: American English, British English, Australian English, etc.

improve. Long's (2003) main criticism on fossilization is from the testability of permanence: researchers cannot be so sure that learners will not acquire fossilized features before they die. Even in L1 acquisition, children undergo plateau-like stability for a while before they fully acquire their L1, so it is impetuous for Selinker (1972) and Han (2000) to claim the existence of fossilization.

Another ambiguous part of the theory is from its scope. Fossilization can occur in different subsystems and contexts depending on a learner. Han (2004) claims that there are different levels of fossilization even among learners whose L1 is the same; Long (2003) criticizes that with these putative claims it is impossible to generalize or predict fossilization. A fundamental problem of claiming existence of fossilization is that theories about fossilization are based on assumptions not evidence: the claims are on the basis of inappropriate participants, insufficient data, and inadequate analysis. Long argues that only three studies, Han (1998), Lardiere (1998), and Long (1997, cited in Long 2003), satisfy the qualifications of research about fossilization, but these three longitudinal studies also fail to prove the existence of fossilization since they are not able to prove that interlanguage systems permanently stop improving within their research scope: it is possible for the participants to start to defossilize after their experiments or interviews. Therefore, long-term stabilization, not fossilization, is more appropriate to explain learners' long-term errors or learning plateau with or without fluctuation.

5. Long-Term Stabilization

Han (2004) claims that different combination of linguistic features and variations as reasons for fossilization are possible among different learners since learners whose native languages are the same show different levels of fossilization, but general processes of stabilization across learners can be predictable based on many possible reasons explained so far. Stabilization is an outcome of process rather than product (Han, 2004: Selinker, 1972), and it occurs locally rather than globally. As Selinker and Lakshmanan's (1992) Multiple Effects Principle explains, many factors are possibly involved in long-term stabilization. Han (2004) claims that L1 and Critical Period play critical roles in the initial stage of stabilization. L1, Critical Period and other cognitive factors

such as complexity of rules and/or disconnection between semantics and syntax (no one-to-one correspondence between form and meaning), are involved in stabilization and these features are aggravated when learners participate in inappropriate learning procedures such as avoidance and/or unbalanced development between performance and competence. Language learners tend not to use a certain feature when they are not sure of the appropriate usage. For example, Chinese and Japanese learners in Schachter's (1974) study (cited in Gass and Selinker, 2001) made fewer errors on relative clause production than Persian and Arabic learners did, but it does not mean that Chinese and Japanese learn the feature better or know more than the other groups. They made fewer errors because they used the structure less frequently since they were not sure of the usage and used it very cautiously. Fossilization advocates argue that prediction of fossilization is impossible, but on the basis of previous cognitive research, possible candidates for long-term stabilization are presented in the following section.

6. Prediction of Long-Term Stabilization

Selinker and Lakshmanan (1992) claim that fossilized structures can not be destabilized when multiple factors are involved in the process even with consciousness-raising strategies. In contrast to Selinker and Lakshmanan's claim, Han (2004, p. 120) proposes a possibility of defossilization; "Multiple Effects Principle in that once the multiple factors are known, pedagogic intervention directly targeting the known factors can destabilize the persistent and resistant interlanguage structure, thereby leading to restructuring." Therefore, teachers can better prepare to prevent stabilization if they know the multiple factors in advance.

Many researchers agree that instruction plays an important role in language learning, yet there are many variables to consider: learners' proficiency levels, acquisition order of forms, etc. A relationship between grammatical complexity and stabilization exists in Lardiere's (1998) study. Patty's acquisition of past tense marking in finite obligatory context was unchanged over the eight years while her mastery of pronominal marking was perfect. A possible reason for this problem is complexity of the tense system; pronominal case markings are finite and simple compared to the tense system. Slobin (1996) claims that there are

certain grammatical rules such as aspect, definiteness, or voice of verbs are more difficult to acquire than other rules. Patkowski (1980) refers the Conrad⁴) Phenomenon to claim that it is possible for extremely high advanced learners to acquire native-like proficiency in a couple of areas even though native-like competence in all areas may not be attainable for adult language learners after a critical period.

On the basis of Lado's (1957) Contrastive Analysis Hypothesis, students have been believed to learn a target language easier when there is greater similarity between a target language and a native language. A strong relationship between stabilization and language transfer has been believed, but several exceptions show the opposite cases. Learners have more difficulties to learn target language items which are similar to their L1 (Green & Hecht, 1992; Todeva, 1992) and L1 transfer is not present in every incidence of long-term stabilization unlike Han's (2004) claims. Yip (1995) proposes that stabilized features are either due to learners' L1 or the complexity of target language forms. He claims that target language features can be stabilized if they are too complex to learn even though they are similar to learners' L1.

In addition to the complexity of target language forms, semantic ambiguity can be one of the reasons of long-term stabilization. Silva (1993) analyzed Spanish speakers' personal letters to find reasons for their errors on absence of pronominal subjects. Spanish speakers tend to omit a pronominal subject when there is no risk of misinterpretation and when there is no need to emphasize. Silva claims that when a sentence needs to be articulated semantically, the omission occurs less compared to a situation when there is no need for semantic clarification. When there are fewer chances to misinterpret, learners make more errors. For instance, a noun can indicate the number by putting a plural morpheme at the end, so learners easily make errors on using the definite article in front of a plural noun.

Burns and Soja (2000) also explain learners' avoidance strategies with a mapping problem due to discrepancy between syntax and semantics. To avoid using determiners, their participants used a quantifier such as 'some' or 'many' for countable nouns and 'much' for uncountable nouns. In distributional theories, children just learn syntactic categories such as French gender contrasts or semantically arbitrary distinction without semantic information while semantic

4) Conrad is a famous writer who immigrated in the U.S. after a critical period.

theories claim that children learn a new syntactic category using semantic information. Burns and Soja (2000) advocate semantic theories because of usages of NP-type nouns such as 'church', 'school', or 'camp.' According to distributional theories, children check references first to decide noun types, but in the case of NP-type nouns, determiners decide meanings. For example, there are meaning differences between "I go to school" and "I go to the school." Therefore, children have to decide meaning first to add a determiner or not. Based on these examples, Burns and Soja claim that children do not have a mapping problem between a semantic category and a syntactic category, but adult learners may not have access to this mapping intuition, which cause errors.

Both distributional and semantic theories agree that there is a certain relationship between semantic categories and syntactic categories. Based on the agreement of previous studies, the incongruity between meanings and forms or one-form-yet-multiple-meanings can be best candidates for long-term stabilization. Unlike children, adult learners tend to depend on rules to speak languages, so they may have a learning difficulty or a mapping problem when there is no one-to-one matching between a form and a meaning or there are multiple meanings in one form. The linguistic complexity causes avoidance (Long, 2003), and the avoidance can make their interlanguage enter into long-term stabilized stages.

Han (2004) describes that "certain linguistic items do not lend themselves to a formal analysis, and hence are difficult for teachers to describe and for learners to internalize, typically they have multiple form-function mappings, having one form perform multiple functions or having one function performed by multiple synonymous forms." (p. 138) VanPatten (1996) agrees with this idea that lack of perceptual saliency could cause errors and Skehan (1998) also claims that morphemes that do not have explicit semantic meanings are candidates for stabilization. Morphological features that have low communicative values can become pidginized or stabilized, so communication-based instruction without teaching them can deepen the learning difficulties.

English articles are hard to master as well. The definite article and the indefinite article are the most frequent words in English, but teaching and learning the article system is not as simple as it looks (Butler, 2002). Han (2004) notes that articles are the most complex and the most difficult areas to learn. Pica (1985) also points that the form-function relationship is not transparent in the

article system. Among empirical research about English article acquisition, Geranpayeh (2000) finds that even advanced learners make article errors, so he claims that the article system is a subject of stabilization. Huebner (1985) finds that low level language learners overuse the definite article and learners whose native languages do not have an article system learn how to use the indefinite article slower than learners whose native languages have articles. In addition to the longer learning time, no article group tend not to use the indefinite article until they are sure of the usage (Master, 1997), which can increase the learning time and intensify the state of stabilization.

7. Conclusions

Different definitions and characteristics of fossilization are reviewed to decide whether the term is appropriate to define language students' learning-cessation. As described, existence of fossilization can not be proved because no research related to fossilization have studied a life-long learning-cessation. More research needs to be done to decide the existence. Until then, long-term stabilization is a better term to describe learners' endstate of interlanguage.

Selinker and Lakshmanan (1992) claim that multiple factors are involved in stabilization and there is a possibility of existence of several levels during the process of stabilization. L1 interference or Critical Period may not cause stabilization without other factors such as a psychological factor, avoidance of using a form. During a learning process, stabilization can be worsened if learners keep avoiding using a target form because long-term stabilization is a result of a process not a product. Therefore, input or instruction to encourage usage of appropriate learning strategies can prevent stabilization.

Grammatical categories such as the article system that does not have a salient relationship between a form and a meaning are candidates for long-term stabilization and language learners have difficulties in learning these categories. I believe that there are many other characteristics of stabilization and uncovered grammatical areas which are susceptible to stabilization. Discussed issues in this paper are expected to help teachers to find out possible areas which are prone to stabilization and better pedagogy to prevent long-term stabilization.

References

- Burns, T. & Soja, N. 2000. Children's acquisition of NP-type nouns: Evidence for semantic constraints on productivity. *Language and Cognitive Processes* 15(1), pp.45-85.
- Butler, Y. G. 2002. Second language learners' theories on the use of English articles: An Analysis of the metalinguistic knowledge used by Japanese students in acquiring the English article system. *Studies in Second Language Acquisition* 24(3), pp.451-80.
- Coppieters, R. 1989. Competence differences between native and near-native speakers. *Language* 63(3), pp.544-573.
- Corder, S. P. 1981. *Error Analysis and Interlanguage*. Oxford: Oxford University Press.
- DeKeyser, R. 2000. The robustness of critical period effects in second language acquisition. *Studies in Second Language Acquisition* 22, pp.499-533.
- De Prada Creo, E. 1990. The process of fossilization in interlanguage. Paper presented at the Annual Meeting of the World Congress of Applied Linguistics, Thessaloniki, Greece.
- Dulay, H., Burt, M., & Krashen, S. 1982. *Language Two*. New York: Oxford University Press.
- Fotos, S. 1994. Integrating grammar instruction and communicative language use through grammar consciousness raising tasks. *TESOL Quarterly* 28, pp.323-351.
- Gass, S. & Selinker, L. 2001. *Second Language Acquisition: an introductory course*. Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.
- Han, Z-H. 1998. *Fossilization: An Investigation into Advanced L2 Learning of a Typologically Distant Language*. Unpublished Ph.D. dissertation, University of London.
- Han, Z-H. 2000. Persistence of the implicit influence of NL: The case of the pseudo-passive. *Applied Linguistics* 21(1), pp.78-105.
- Han, Z-H. 2004. *Fossilization in Adult Second Language Acquisition*. Tonawanda, NY: Multilingual Matters Ltd.
- Hinkel, E. & Fotos, S. 2002. From theory to practice: A teacher's view. In E. Hinkel & S. Fotos (Ed.), *New Perspectives on Grammar Teaching in Second Language Classrooms* (pp. 1-12). Mahwah: Lawrence Erlbaum Associates.
- Huebner, T. 1985. System and variability in interlanguage syntax. *Language Learning* 35, pp.141-163.
- Kellerman, E. 1989. The imperfect conditional. In K. Hyltenstam and L. K. Obler (ed.), *Bilingualism across the Lifespan* (pp. 87-115). Cambridge: Cambridge University Press.
- Lardiere, D. 1998. Case and tense in the 'fossilized' steady state. *Second Language Research* 14(1), pp.1-26.
- Long, M. 1997. Fossilization: rigor mortis in living linguistic systems? Plenary address to the EUROSALA '97 Conference, Universitat Pompeu Fabra, Barcelona, May.
- Long, M. 2003. Stabilization and fossilization. In Doughty, C. & Long, M. (ed.) *The Handbook of Second Language Acquisition* (pp. 487-535). Malden, MA: Blackwell.
- Master, P. 1997. The English article system: Acquisition, function, and pedagogy. *System*

- 25(2), pp.215-32.
- Mukattash, L. 1986. Persistence of fossilization. *International Review of Applied Linguistics* 14(3), pp.187-203.
- Patkowski, M. 1980. The sensitive period for the acquisition of syntax in a second language. *Language Learning* 30, pp.449-72.
- Silva, T. 1993. Toward an understanding of the distinct nature of L2 writing: The ESL research and its implications. *TESOL Quarterly* 27(1), pp.657-677.
- Pica, T. 1985. The selective impact of classroom instruction on second-language acquisition. *Applied Linguistics* 6(3), pp.214-22.
- Schachter, J. 1974. An error in error analysis. *Language Learning* 24, pp.205-214.
- Schmidt, R. 1983. Interaction, acculturation, and the acquisition of communicative competence: A case study of an adult. In N. Wolfson and E. Judd (ed.), *Sociolinguistics and Language Acquisition* (pp. 137-74). Rowley, MA: Newbury House.
- Schumann, J. 1978. *The Pidginization Process: A Model for Second Language Acquisition*. Rowley, MA: Newbury House.
- Seliger, H. W. 1989. Semantic transfer constraints on the production of English passive by Hebrew-English bilinguals. In H. Dechert and M. Raupach (ed.), *Transfer in Language Production* (pp. 21-34). Norwood, NJ: Ablex.
- Selinker, L. 1972. Interlanguage. *International Review of Applied Linguistics* 10(3), pp.209-231.
- Selinker, L. 1993. Fossilization as simplification? In M. Tickoo (ed.) *Simplification: Theory and Application, Anthology series* 32, pp.14-28. Singapore: Southeast Asian Ministries of Education Organization.
- Selinker, L. & Lamendella, J. 1979. The role of extrinsic feedback in interlanguage fossilization: A discussion of "Rule Fossilization: A Tentative Model." *Language Learning* 29(2), pp.363-75.
- Selinker, L. & Lakshmanan, U. 1992. Language transfer and fossilization: The multiple effects principle. In S. Gass and L. Selinker (ed.) *Language Transfer in Language Learning* (pp. 197-216). Amsterdam: John Benjamins.
- Skehan, P. 1998. *A Cognitive Approach to Language Learning*. Oxford: Oxford University Press.
- Slobin, D. 1996. From 'thought and language' to 'thinking for speaking.' In J. Gumperz and S. Levinson (ed.), *Rethinking Linguistic Relativity* (pp. 70-96). Cambridge: Cambridge University Press.
- Tarone, E. 1994. Interlanguage. In R.E. Asher (ed.), *The Encyclopedia of Language and Linguistics* 4 (pp. 1715-1719). Elmsford, New York: Pergamon Press Inc.
- Tarone, E., Frauenfelder, U., & Selinker, L. 1976. Systematicity/variability and stability/instability in interlanguage systems. *Language Learning, Special Issue*, 93-134.
- Todeva, E. 1992. On fossilization in (S)LA theory. In Staub and C. Delk (eds.), *Proceedings of the Twelfth Second Language Research Forum* (pp. 216-54). East Lansing, MI: Center for International Programs, Michigan State University.

- Valette, R. 1991. Proficiency and the prevention of fossilization-An editorial. *The Modern Language Journal* 75(3), pp.325-328.
- VanPatten, B. 1988. How juries get hung: Problems with the evidence for a focus on form in teaching. *Language Learning* 38, pp.243-60.
- VanPatten, B. 1996. *Input Processing and Grammar Instruction in Second Language Acquisition*. Norwood, NJ: Ablex.
- Yip, V. 1995. *Interlanguage and Learnability: From Chinese to English*. Amsterdam: John Benjamins.

Eun-Hee Lee

Seoul Women's University
General English Department
623 Hwarangno, Nowon-Gu
Seoul, S. Korea, 139-774
Email: el1@swu.ac.kr
Phone: +82-2-970-7856

Received: 2009. 07. 20

Revised: 2009. 08. 12

Accepted: 2009. 08. 22

부록

설문지

분반 _____ 중간고사 점수 _____ 인터뷰 참여 여부 _____
 인터뷰에 참여 할 수 있으면 연락처를 기입해 주십시오.

■ 모든 질문에 대하여 (3번, 5번 문항 제외) 복수 응답이 가능합니다. 해당사항 있는 것을 모두 표시하십시오.

1. 다음 활동 중에서 선호하는 활동을 선택하십시오

- | | |
|--------------------|--------------------|
| a. 영어 문장 듣기 _____ | f. 요약 _____ |
| b. 단어 퀴즈 _____ | g. 교수 강의 _____ |
| c. 문장 퀴즈 _____ | h. 문법 종합 설명 _____ |
| d. 발표 _____ | i. 단원별 문제 풀기 _____ |
| e. 내용 재구성 활동 _____ | |

2. 다음 활동 중에서 본인의 활동선호도와 관계없이 단원 이해에 도움이 되는 활동을 모두 고르시오.

- | | |
|--------------------|--------------------|
| a. 영어 문장 듣기 _____ | f. 요약 _____ |
| b. 단어 퀴즈 _____ | g. 교수 강의 _____ |
| c. 문장 퀴즈 _____ | h. 문법 종합 설명 _____ |
| d. 발표 _____ | i. 단원별 문제 풀기 _____ |
| e. 내용 재구성 활동 _____ | |

3. 각 활동이 도움이 되는 정도를 표시하십시오.

	전혀아니다	1	2	그렇다 3	4	매우그렇다 5
a. 영어 문장 듣기	1	2	3	4	5	
b. 단어 퀴즈	1	2	3	4	5	
c. 문장 퀴즈	1	2	3	4	5	
d. 발표	1	2	3	4	5	
e. 내용 재구성 활동	1	2	3	4	5	
f. 요약	1	2	3	4	5	
g. 교수 강의	1	2	3	4	5	
h. 문법 종합 설명	1	2	3	4	5	
i. 단원별 문제 풀기	1	2	3	4	5	

4. 다음 활동 중에서 본인의 활동선호도와 관계없이 전반적인 영어 실력을 향상시키는데 도움이 되는 활동을 모두 고르시오.

- | | |
|--------------------|--------------------|
| a. 영어 문장 듣기 _____ | f. 요약 _____ |
| b. 단어 퀴즈 _____ | g. 교수 강의 _____ |
| c. 문장 퀴즈 _____ | h. 문법 종합 설명 _____ |
| d. 발표 _____ | i. 단원별 문제 풀기 _____ |
| e. 내용 재구성 활동 _____ | |

5. 각 활동이 도움이 되는 정도를 표시하십시오.

	전혀아니다		그렇다		매우그렇다
a. 영어 문장 듣기	1	2	3	4	5
b. 단어 퀴즈	1	2	3	4	5
c. 문장 퀴즈	1	2	3	4	5
d. 발표	1	2	3	4	5
e. 내용 재구성 활동	1	2	3	4	5
f. 요약	1	2	3	4	5
g. 교수 강의	1	2	3	4	5
h. 문법 종합 설명	1	2	3	4	5
i. 단원별 문제 풀기	1	2	3	4	5

6. 영어로 단원 문장듣기 활동이 어떤 효과가 있는가?

- a. 영어 발음을 알 수 있다 _____
- b. 듣기 능력을 향상 시켜준다 _____
- c. 읽을 내용에 대한 전반적인 이해를 높여 준다 _____
- d. 별로 도움이 되지 않는다 _____

■ 기타 _____

■ 다른 방식으로 운영된다면 어떻게 운영되길 바라는지 적으시오.

7. 단어 퀴즈가 어떤 효과가 있는가?

- a. 읽을 단원 단어를 미리 학습할 기회가 되어 텍스트 이해에 도움을 준다 _____
- b. 텍스트와 관계없이 모르는 단어를 외울 수 있는 기회가 된다 _____
- c. 어휘 리스트에 있는 단어의 동의어를 외울 수 있는 기회가 된다 _____
- d. 설명에 나와 있는 모르는 영어 단어를 찾아보고 학습하는 기회가 된다 _____
- e. 별로 도움이 되지 않는다 _____

■ 기타 _____

■ 다른 방식으로 운영된다면 어떻게 운영되길 바라는지 적으시오.

8. 문장에 관한 퀴즈가 어떤 효과가 있는가?

- a. 퀴즈 준비 과정에서 문장 구조를 알 수 있게 해 준다 _____
- b. 내가 해석한 것이 맞는 지 확인해 보는 기회가 된다 _____
- c. 문법에 관한 것 (괄호 채우기 등) 을 생각해 보는 기회가 된다 _____
- d. 틀린 점에 관한 피드백이 문장 구조와 해석을 다시 생각해 보게 한다 _____
- e. 별로 도움이 되지 않는다 _____

■ 기타 _____

■ 다른 방식으로 운영된다면 어떻게 운영되길 바라는지 적으시오.

9. 발표가 어떤 효과가 있는가?

- a. 배정 받은 과를 혼자서 해석해 보고 공부하는 기회가 된다 _____
- b. 예습의 효과를 가져와서 발표한 과는 다른 과에 비해 단원이해가 높다 _____

- c. 발표 시 문장을 영어로 발음하는 것이 도움이 된다 _____
 - d. 발표하는 과는 불안감이 높아져서 집중하는데 장애가 된다 _____
 - d. 별로 도움이 되지 않는다 _____
 - 기타 _____
 - 다른 방식으로 운영된다면 어떻게 운영되길 바라는지 적으시오.
-

10. 내용 재구성 활동은 어떤 효과를 가져 오는가?
- a. 해당단원에 대해서 문장 해석에서 벗어나 포괄적인 이해를 높여준다 _____
 - b. group 활동을 통해 다른 친구로부터 도움을 받을 수 있다 _____
 - c. 친구들과의 토론을 통해서 해당단원의 이해에 도움을 준다 _____
 - d. group 활동이어서 지루하지 않다 _____
 - e. 친구들과의 토론을 통해서 잘 못 이해한 문장에 대한 이해를 높여준다 _____
 - f. 별로 도움이 되지 않는다 _____
 - 기타 _____
 - 다른 방식으로 운영된다면 어떻게 운영되길 바라는지 적으시오.
-

11. 요약 활동은 어떤 효과를 가져 오는가?
- a. 해당단원의 포괄적인 이해를 높여준다 _____
 - b. 본인 스스로 능동적으로 학습에 참여하는 기회를 준다 _____
 - c. 영어로 써보는 기회를 통해서 문법에 주의를 기울이게 한다 _____
 - d. group 활동이어서 지루하지 않고 재미가 있다 _____
 - e. 영어로 쓰기에 대한 자신감을 준다 _____
 - f. 친구들과의 의견 교류를 통해서 도움을 받을 수 있다 _____
 - g. summary를 위해서 본문의 전개방식에 주의를 높여준다 _____
 - h. 단원 요약을 함으로써 글의 요지를 보다 정확하게 알 수 있게 한다 _____
 - i. 별로 도움이 되지 않는다 _____
 - 기타 _____
 - 다른 방식으로 운영된다면 어떻게 운영되길 바라는지 적으시오.
-

12. 교수의 문장해석 및 문법 설명 등의 활동은 어떤 효과를 가져 오는가?
- a. 문장 하나하나 해석을 알 수 있는 기회가 된다 _____
 - b. 문장에서의 문법 설명을 통해 문법을 알 수 있는 기회가 된다 _____
 - c. 설명을 통하여 같이 쓰인 기본 구조 및 요지를 알 수 있다 _____
 - d. 관용어를 알 수 있는 기회가 된다 _____
 - e. 단어의 보다 정확한 의미나 사용에 관해서 알 수 있다 _____
 - f. 별로 도움이 되지 않는다 _____
 - 기타 _____
 - 다른 방식으로 운영된다면 어떻게 운영되길 바라는지 적으시오.
-

13. 문법 종합 설명은 어떤 효과가 있는가?

- a. 개별적으로 알고 있는 문법을 종합적으로 비교할 수 있는 기회가 된다 _____
- b. 그냥 지나칠 수 있는 문법에 주의를 기울이게 하는 기회가 된다 _____
- c. 같은 문법을 가진 문장을 모아 설명함으로써 해당문법에 대한 이해를 높인다 _____
- e. 별로 도움이 되지 않는다

■ 기타 _____

■ 다른 방식으로 운영된다면 어떻게 운영되길 바라는지 적으시오.

14. 단원 별 문제 풀기는 어떤 효과가 있는가?

- a. 단원의 내용을 포괄적으로 읽을 수 있게 해 준다 _____
- b. 문장의 뜻을 선명하게 해 준다 _____
- c. 세세한 정보를 빠른 시간에 찾을 수 있게 해 준다 _____
- d. 별로 도움이 되지 않는다 _____

■ 기타 _____

■ 다른 방식으로 운영된다면 어떻게 운영되길 바라는지 적으시오.

기타 건의 사항이 있으면 자세히 쓰시오.

설문에 응해 주셔서 감사합니다.