



Implication of IL Fossilization in Second Language Acquisition

Xueping Wei

Graduate School of Foreign Language, Beijing Language and Culture University

10#215, 15 Xueyuan Road, Beijing 100083, China

Email: Xueping.wei@gmail.com

Abstract

Since the phenomenon of fossilization in interlanguage is proposed by Selinker in 1972, it has drawn much attention and commonly acknowledged at home and abroad. This paper introduces the definition, classification, presentation, and causal factors of fossilization in an attempt to help Chinese students better understand the phenomenon and avoid its influence by the proposal of some suggestions.

Keywords: Fossilization, Interlanguage (IL), Target Language (TL), Second Language Acquisition (SLA)

1. Notion of Fossilization

Selinker first put forward the notion of fossilization in the paper *Interlanguage* in 1972. He noted that 95% of L2 learners failed to reach the same level of L1 competence from his observation. This kind of phenomenon is defined by Selinker (1972) as fossilization. Fossilization, a mechanism...underlies surface linguistic material which speakers will tend to keep in their IL productive performance, no matter what the age of the learner or the amount of instruction he receives in the TL.

Selinker and Lamendella (1978) redefined fossilization as a permanent cessation of IL learning before the learner has attained TL norms at all levels of linguistic structure and in all discourse domains in spite of the learner's positive ability, opportunity, and motivation to learn and acculturate into target society.

The notion of fossilization has been interpreted differently by different scholars since it was proposed. For instance, there are terms like backsliding, stabilized errors, learning plateau, typical error, persistent non-target-like performance, de-acceleration of the learning process, ingrained errors, systematic use of erroneous forms, cessation of learning, structural persistence, ultimate attainment, long-lasting free variation, persistent difficulty, and inability to fully master target language features describing the similar meaning, which lead to confusion for quite a long time.

This paper is also based on some commonly accepted concept about fossilization. (1) it may appear at different language levels; (2) it may occur at different learning stages among age groups; (3) it may be either structure fossilization or competence fossilization; (4) it is usually manifested as the deviant forms from the TL norms; (5) there are soft and hard degrees of fossilization.

2. Classification of Fossilization

2.1 Individual fossilization and group fossilization

According to Selinker (1978), interlanguage fossilization falls into two categories, namely individual fossilization and group fossilization. The former is the persistence of individual learner's IL development, while the latter is the plateau in the diachronic development of a community language.

Usually, individual fossilization consists of two types: error reappearance, and language competence fossilization. Error reappearance refers to the inappropriate interlanguage structures that are thought to have been corrected but continue to appear regularly. It can be found in IL of beginners or learners with low proficiency. Language competence fossilization refers to the plateau in the development of L2 learners' phonological, grammatical, lexical and pragmatic competence. It is found in L2 learners who have been learning TL for a long period of time and arrived at a relatively high level. In fact, repeated errors are often the demonstrations of competence fossilization.

If fossilized language competence becomes pervasive in a community, group fossilization comes into being. Such pervasion often leads to a new dialect. Indian English and Singapore English are good cases in point.

2.2 Temporary fossilization and permanent fossilization

Selinker also classified fossilization into temporary fossilization and permanent fossilization. (See Figure 1)

Temporary fossilization, also called stabilization, indicates that fossilized interlanguage consists of learning plateaus,

“where development of given TL features is simply ‘arrested’ or ‘inhibited’ for shorter or longer periods of time. (Sims, 1989) It has become one of the heated topics in the current fossilization studies.

Permanent fossilization takes place as a result of social, psychological and interactive variables. Researchers that temporarily arrested IL development can be susceptible to defossilization. It has also been referred to by Sims as soft fossilization or jellification.

3. Types of Fossilization

Fossilization is a linguistic phenomenon in its own right and manifested as deviant forms from TL. It occurs at all levels, from phonological layer to pragmatic layer.

3.1 Phonological fossilization

The difference of phonology is possibly the greatest difference between languages. Phonological fossilization refers to the repetition of phonological errors which result from the incorrect acquisition of pronunciation of L2, usually affected by L1. In English, there are certain pronunciations such as [θ] which do not exist in Chinese. Therefore, it is difficult for Chinese English learners to pronounce this consonant [θ] correctly. It is often heard that Chinese students say “*Thank [snk] you*” instead of “*Thank [θæŋk] you*”. When such phonological errors are repeatedly made and eventually stay stable in the incorrect manner, phonological fossilization occurs.

3.2 Morphological fossilization

English has got a variety of changes in morphology and therefore has various grammatical morphemes. The most common problems lay in two aspects, inflectional morpheme and article. The third-person singular *-s* is a facet of syntactic agreement such as *drinks* and is suffixed to lexical verbs and auxiliaries such as *has*. However, there are other markers for third-person singular, such as *buses, crises, and criteria*. Since such linguistic phenomenon does not exist in Chinese, it often leads Chinese students to forget the transformation or to misuse the form. Articles are also big headaches for Chinese students, because there are no corresponding words or expression in Chinese. When and where to put which article stays as a mystery for certain amount of learners even those who with higher proficiency.

3.3 Syntactic fossilization

Different languages have their own syntactic rules. The most typical manifestation of syntactic fossilization among Chinese students is presented in tense. Chinese does not have obvious tense differentiation, whereas English has present tense and past tense in general that can be further divided into sixteen categories. Not to mention complicated marker system for past tense and past participle tense, it often takes time for Chinese students to decide the right kind of tense. In the situation that they cannot make clear distinction, they have to turn to their instinct for help from time to time and thus fossilization occurs.

3.4 Semantic fossilization

Semantic fossilization refers to the use of language forms that exist in TL but do not represent the meanings L2 learners intend to express in the context. For example, the word *individualism* is commendatory in the capitalism world but derogatory in socialism China, *dragon* is the symbol of evil in the western culture but the symbol of power in China. If a Chinese wants to describe a past patient but forget the word *die*, he may use *go to the west*, the euphemism form for *die*, but western listeners may feel confused.

3.5 Pragmatic fossilization

Due to the close relationship between pragmatics and semantics, fossilization in the two aspects is interrelated and overlapping. A pragmatic deviance is also termed “pragmatic failure” by Thomas (1983). In her view, pragmatic failure takes place in the cross-cultural communication and refers to the “inability to understand what is meant by what is said”. Inappropriate language use results in misunderstanding, embarrassment, and even insult.

4. Causal Factors of Fossilization

Selinker contends that “the most interesting phenomena in IL performance are those items, rules and sub-systems which are fossilizable in terms of the five processes: Language transfer, transfer of training, strategies of second language learning, strategies of second language communication, and overgeneralization of TL linguistic material.” (Ellis, 1999: 351) He also states that combinations of the five processes produce entirely fossilized IL competence.

4.1 Language transfer

Selinker (1972) believed that some language rules in the learner’s IL are transferred from his/her L1. The errors in the use of L2 result mainly from L1, and the difference between L1 and the L2 is the reason for the occurrence of errors. That’s why the transfer of L1 rules can lead to fossilization.

The transfer of L1 can be positive or negative. Positive transfer refers to that the similarities shared by the L1 and L2 help second language acquisition. Likewise, negative transfer refers to the differences between L1 and L2 that interfere

second language acquisition. The negative transfer of L1 is what the behaviorists believe to be proactive inhibition; that is to say, the influence of what has been previously learned appears in the context of and interrupts what is learned afterwards.

Then Selinker and Lakshamanan examined adult and child L2 learners that illustrate aspects of TL that are candidates for fossilization (e.g., clauses with no tenses, IL morphological forms). In all cases, language transfer seems to be either the main factor or a cofactor. Their study clearly shows that there is a link between fossilization and language transfer.

4.2 Training transfer

Graham (1981) suggested that one of the major causes for fossilization of incorrect language forms is the lack of formal instruction in English. This researcher argued that “learning simply by contact has led many students to devise IL or idiosyncratic languages with rules often wildly different from those of Standard English”. A similar position was voiced by Valette who made a distinction between “street” learners and school learners. She claimed that “fossilization often occurs among ‘street’ learners who have had extensive opportunity to communicate successfully albeit with inaccurate lexical and syntactic patterns. As a result, their errors have become systematized and are almost impossible to eradicate” (Valette, 1991). “Street” learners are never corrected, nor do they correct themselves.

Valette’s conclusions are shared by Higgs and Clifford’s position. These researchers remarked that learners at Government language schools are “hopelessly stranded on various sorts of developmental plateau” (Sims, 1989). Higgs and Clifford called those learners “terminal cases.” They explained that “these learners have been affected by prior language experience of some informal nature...such as street learning in the target culture, which then inhibits their progress in formal classroom instruction” (Sims, 1989, 65).

Moreover, Higgs and Clifford argued that “contemporary approaches to second language teaching...place a premium on communication, often at the expense of accuracy; under such methodologies, learners will tend to fossilize at relatively low levels, because systematic errors in their IL will usually go unremediated” (Sims, 1989, 65). In conclusion, they argued that in the absence of formal instruction, some areas of L2 learners’ IL appear to be at least stagnant if not necessarily fossilized. Likewise, they claimed that particular L2 structures can be candidates for fossilization, while others are not. Incorrect teaching method can prevent successful second language learning in the sense that the use of inadequate teaching methodologies has also been suggested as an explanation for the occurrence of fossilization.

4.3 Learning strategy

In the process of learning a second language, fossilization caused by the incorrect application of learning strategies is the most common. Sims (1989) suggested that “someplace along the IL continuum, inappropriate or misapplied learning strategies could lead to fossilization of some features (phonological, morphological, syntactic, lexical, psycholinguistic, or socio-cultural).”

Learning strategies refer not only to the overall strategies but also to the explicit methods the learner adopts in the process of second language learning, and the former is more likely to cause fossilization of language competence. The appropriate application of learning strategies helps process the TL input and therefore improves L2 learning quality. Some learners, however, may turn to learning strategies to such an extent as overgeneralization, simplification, incomplete rule application and inadequate declarative knowledge of L2.

According to Sims, the repeated use of unsuccessful strategies, i.e., those strategies which do not enable completion of a given language learning task, could impede a learner’s progress. Finally, Sims concluded that the “proposed relationship of fossilization and learning strategies... could be a key to the remediation of systematized errors, as the role of the learner information processing in the second language acquisition process becomes more clearly understood” (Sims, 1989).

4.4 Communication strategy

As Ellis (2002) defined, the cognitive component of procedural knowledge is composed of the various mental process involved in both internalizing and automatizing new L2 knowledge and using L2 knowledge along with other knowledge sources to communicate in L2. It’s evident that these processes involve L2 learning and using, where the former concerns learning strategy and the latter communication strategy.

In real communication, learners may turn to communication strategy, a systematic skill that a speaker resorts to while having difficulties in expression to keep the communication going on. Unfortunately, sometimes such “successful use of communication strategies will prevent acquisition”, Ellis (2002) said, for the learner may become so “skillful” in making up for lack of linguistic knowledge by the use of various communication strategies such as avoidance or paraphrase.

Also, the learner inclines to simplify the target language, especially to simplify the grammatical rules, for instance, the use of the articles, plural forms and the use of tenses. And this reflects the unsatisfactory effect of communicative teaching methods. If the learner pays too much attention to the fluency but neglects the accuracy, some language errors

can be easily fossilized. If the learner only stresses the cultivation of communicative competence but neglects the language competence, his/her language competence can also be easily fossilized.

4.5 Overgeneralization

Overgeneralization (Ellis, 2000) involves the use of existing L2 knowledge by extending it to new IL forms. It happens when people apply a grammatical rule across all members of a grammatical class without making the appropriate exceptions. In fact, language overgeneralization always indicates the ignorance of rule restrictions, including semantic restrictions of lexis or other linguistic items. For instance, using the *-ed* suffix to indicate past tense for verbs like "go" and "think."

The reason for which overgeneralization is important in L2 acquisition is that it leads to failure in detecting the errors for language learners. The phenomenon always occurs unconsciously. Without timely instruction and correction, the errors will stay for as long as it can do.

4.6 Others

There is no consensus concerning the actual causes of fossilization. As broadly conceived, the causal factors fall into the following categories: environmental, cognitive, neurobiological, and socio-affective. And in turn, on the whole, all of these causal factors can be put into two groups: internal factors and external factors. (Han, 2003: 104) (See Table 1)

5. Fossilization Reduction

5.1 Adoption of proper learning strategies

A lot of the research has been based on the assumption that there are "good" learning strategies. Although this concept is questionable, there are successful learners. Their learning experience is of great value to others.

First, successful learners appear to use strategies more frequently and in qualitatively different ways than learners who are less successful. For example, memory strategies are used in vocabulary learning and dictionaries are used in vocabulary testing. Second, successful language learning involves attention to both form and meaning. Good language learners appear able to switch the focus of their attention while they are performing a task. They tend to treat language as a system by making effective cross-lingual comparisons, analyzing the target language, and using reference books. Third, different kinds of learning strategies may contribute to different aspects of L2 proficiency. Thus, strategies that involve formal practice may contribute to the development of linguistic competence, while strategies involving functional practice aid the development of communicative competence. L2 learners need to employ strategies flexibly by selecting those strategies that are appropriate for performing a particular learning task.

5.2 Reduction of negative transfer of L1

It is quite obvious in beginning learners of English as a second language because of their insufficient knowledge of the target language. Therefore, Krashen (1983) suggested that the learners are not expected to use the target language too early until the learners' oral competence is facilitated with sufficient input and without relying on their native language to form systems. Otherwise, some inappropriate expressions can be fossilized. Corder (1978) pointed out that the native language of the learners offers various hypotheses concerning the target language, and only through abundant input of the target language can the negative transfer of the native language be lessened. The learners should not be encouraged to read paragraphs or articles and to analyze the grammar or the usage of the words in each sentence, for the reason that context is very important in mastering vocabulary, and the sufficient input of the target language is the effective method to overcome the negative transfer of native language.

5.3 Exposure to TL and TL culture

Natural exposure to TL has similarly been proposed as a factor that promotes L2 learning and therefore helps learners overcome fossilization. One way to expose learners to the natural target language is by allowing them to stay for some time in the native environment abroad. While this is not possible for the majority of L2 learners, they need to seek exposure to TL and TL culture in other ways.

As suggested by Krashen (1982), providing sufficient and optimal input from the very beginning should be the right way to reduce fossilization. First, multimedia instruments are highly recommended. Those materials not only contain standard pronunciation, but also reflect target culture. Second, textbooks with original passages by foreign authors should be adopted in that its way of thinking and expression can help L2 learners better understand and master the language.

6. Conclusion

Fossilization is an inevitable state in and has significance influence on second language acquisition. It deserves our attention and research to solve fossilization problems in all aspects of language. Only in this way can the level of English teaching and learning be improved.

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Table 1. A Taxonomy of Putative Causal Factors of Fossilization

External	Environmental		Eg. Absence of instruction, lack of input
Internal	Cognitive	Knowledge representation	Eg. L1 influence, lack of access to UG
		Knowledge processing	Eg. Lack of attention
		Psychological	Eg. Avoidance, simplification
	Nero-biological	Eg. Age, lack of talent	
	Social-affective	Eg. Lack of acculturation	

Table 1 is a simplified summary of the explanation.

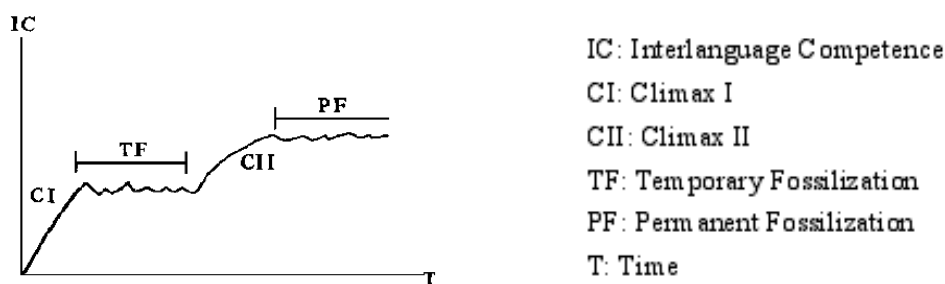


Figure 1. Temporary Fossilization and Permanent Fossilization