Impacts of Second Language Classroom Instruction on IL Fossilization

Jinan WANG

College of English, Shanghai International Studies University
550 Dalian RD (W), Shanghai 200038, China
E-mail: wangjinan3@hotmail.com

Abstract:

For the past three decades, there has been a rather widespread conviction among second language (L2) teachers and researchers that instruction prevents fossilization, yet little is known as to whether instruction can also have any negative impact on learning. This paper tries to give a comprehensive analysis of the potential positive and negative impact of instruction on learning. It reveals that instruction, not being omnipotent, if carried out improperly, can inhibit learning due to the existence of three major sources of constraints on classroom learning: input (from teacher talk, teaching materials and peer talk), teaching strategies (teaching objective, teaching procedures), and practice opportunities.

Key Words: Instruction, Fossilization, IL, Teaching strategies
1. INTRODUCTION

1.1 Statement of the Problem

Early in 1972, Larry Selinker put forward the term of “fossilization” in his interlanguage (IL) theory. As fossilization is a universal phenomenon in SLA and it is derived from multiple factors, the attempt to seek out the causal factors and defossilization measures has become a hot research area during the last two or three decades. Researches have been pouring in from both home and abroad. However, most researches focus on the theoretical analysis of the causal variables of fossilization; very few have explored deeply the relationship of classroom instruction and fossilization.

Meanwhile, there seems to be overwhelming evidence that second language instruction plays an essentially positive role in learners’ L2 development. And at the same time there is a wide conviction among second language researchers and instructors that second language instruction will help learners progress more rapidly through developmental stages, and it can destabilize interlanguage grammars that have fossilized (Ellis, 1999). The claim advanced by R. Ellis (1989) is just a case in point:

[1] Learners will fail to acquire the more difficult rules (e.g., inversion and verb-end) once they have achieved communicative adequacy. Learners may need form-focused instruction to make them aware of grammatical features that have little communicative importance and yet constitute target language norms. In other words, formal instruction serves to prevent fossilization. [2] ... naturalistic acquisition is often a very slow process; instruction may not alter the way in which learning takes place, but it may help to speed it up. (1989:4)

While it is easy to adopt Ellis’s second claim about the difference between naturalistic acquisition and formal instructed learning, it needs pointing out that there are very few empirical or theoretical researches into the first claim — “instruction serves to prevent fossilization”. Therefore, it is only as a subjective assumption rather than an observed fact. Nevertheless, that assumption has been so widely spread during the last several decades that not only in the mind of some second language researchers, but also in second language teaching there exists a kind of causal relation concept: without grammar instruction and error correction, fossilization will occur. Furthermore, this conception has also been a major driving force behind the revival of the general interest in instruction – aided second language grammar teaching in many countries since the early 1980s (VanPatten, 1988).

1.2 Hypotheses of the Research

---

1 see, e.g. Ellis, 1994; Long, 2003; White, 2000; Han, 2000.
2 For summaries and recent perspectives, see, e.g. Ellis, 1989; Larsen-Freeman & Long, 1991; Odlin, 1993; Schmidt, 1993.
3 see, e.g. Higgs& Clifford, 1982.
Since little is yet known as to whether instruction can really help prevent fossilization, this paper aims at touching down upon the effects of second language instruction on SLA and fossilization. The following are our research questions:

Can instruction serve to prevent fossilization? If it were so, to what extent can it do that? Moreover, can instruction promote fossilization? If so, how? And to what degree?

Hence, the author has three hypotheses:

First and foremost, the assertion that formal instruction serves to prevent fossilization may not be correct. Secondly, formal instruction may facilitate as well as debilitate second language development. Further, in addition to the hypotheses concerning formal instruction and L2 development, the author suggests instruction may also be an important causal factor of fossilization.

In order to testify these hypotheses and answer the questions, several research approaches are adopted. In the ensuing parts, the author will examine in-depth some case studies on instructional effects, review relevant SLA research literature, and analyze the observations of and the interview with L2 learners.

2. THE EXTENT OF INSTRUCTION’S ASSISTANCE TO ACQUISITION

Skehan (1994) refers to Long (1983, 1988) to make a case for the effectiveness of instruction. He asserts that:

... an influence to combat unbalanced memory-driven development. Learners are not easily allowed, that is, to forget about structure, when their tendency might be concentrate on communication and meaning. In this way, instruction pre-emptively reduces the likelihood of inflexibility and fossilization in language development (Long, 1988).

However, obvious and strongly supported as the positive effects of instruction on L2 acquisition, the SLA literature is not deprived of the awareness that instruction is not always successful. Indeed, close inspection of the works dealing with the role of instruction in SLA reveals its limitation. The researchers are generally rather prudent in pronouncing positive effects of instruction.

To what extent, then, does instruction facilitate acquisition? Long (1983:359), after reviewing 13 early studies of instructional effects in terms of (a) the relative utility of instruction as well as (b) the absolute effects of instruction, concludes that “there is considerable (albeit not overwhelming) evidence that instruction is beneficial (1) for children as well as adults, (2) for beginning, intermediate, and advanced students, (3) on integrative as well as discrete-point tests, and (4) in acquisition-rich as well as acquisition-poor environments”. Moreover, the benefits of instruction appear to be the strongest at beginning levels and in acquisition-poor environments. However, Long’s review provides little insight into how instruction has aided acquisition for it
gives no description of the types of instruction (e.g., explicit or implicit) for each of the studies reviewed.

The following several years witnessed the publication of a few review of studies, including Ellis (1989, 1994), Spada (1997) and Lightbown (2000). Due to space constraint, here let us take a look at Norris and Ortega’s findings (2000), which notably filled the gap in Long’s study. Their study is a much larger-scale synthesis and meta-analysis – this time of 49 experimental and quasi-experimental studies of the effectiveness of L2 type-of-instruction. It not only confirmed Long’s (1983) finding, i.e., instruction does make a positive difference for classroom L2 acquisition- but also made significant headway in terms of identifying differential effectiveness of different types of instruction. The main findings are summarized below:

a) focused L2 instruction results in large target-oriented gains;

b) explicit types of instruction are more effective than implicit types;

c) focus on Form and Focus on Forms interventions result in equivalent and large effects; and

d) the effectiveness of L2 instruction is durable. (2000: 417)

In the meantime, it was pointed out that ‘generalizability of findings is limited because the L2 type-of-instruction domain has yet to engage in rigorous and empirical operationalization and replication of its central research constructs’ (2000:418), thus hinting that the experimental procedures, statistical measures included, are in themselves a potential variable that can affect the magnitude and strength of the effectiveness so far reported.

Therefore, a tentative conclusion can be drawn from the above discussion that instruction can undoubtedly make a difference to adult L2 development. As for the question we posed at the beginning of this part, i.e. to what extent can formal instruction facilitate second language development? The answer appears to be: “to some extent.” That is, instruction “is useful to some extent, for some forms, for some students, at some point in the learning process” (Larsen-Freeman, 1995). On the other hand, learning with exposure to naturalistic input is still essential to the development of L2 competence. Its role in the process seems to be supplemental rather than fundamental.

---

4 For more critique, see Pienemann, 1998; VanPatten, 1988. Pienemann points out three major problems with the studies reviewed by Long, one of which is that all informants in these studies had some degree of exposure to the natural acquisition context, thereby rendering the results ambiguous. To attribute the differences in results exclusively to differences in learning contexts would, therefore, seem presumptuous.

5 Long (1991) makes a distinction between Focus on Form and Focus on Forms: ‘where as the content of lessons with a focus on forms is the forms themselves, a syllabus with a focus on form teaches something else- biology, mathematics, foreign language is spleen, the cultures of its speakers, and so on – and overtly draws students’ attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning, or communication.’ On this conception, the metalinguistic focus under the Structural Approach is classified as focus on forms, while that under the Communicative Approach, which is primarily meaning-based, as focus on form, the latter being incidental in nature as opposed to being dominant and overriding.
Furthermore, in the view of many researchers⁶, the supplemental role is compensatory in nature. Due to the fact that adult learners have a weakened capacity for implicit learning, comprehensible input is necessary for their second language acquisition, but it is far from enough. Specifically, adult learners are found to be particularly inapt at learning. From comprehensible input alone, linguistic items that “are rare, and/or cause little or no communicative distress” (Long & Robinson, 1998:23). Thus, in order to master these language items, and at the same time, to destabilize the ‘hard-to-control fossilizable use of structures’ (Mellow et al., 1996), instruction has been assumed to be necessary. However, as Allwright (1984:4) points out, “learners do not learn everything they are taught”. Figure 4 and 5 can show this explicitly. Hence, even on the acquisition of the linguistic features, it is recognized that instruction may be constrained by a series of linguistic and psychological variables, such as linguistic domain, complexity, semantic and functional saliency, learner readiness, and perhaps, learners’ personal agenda.

From the L2 research thus far, we can gain an insight that not all of the language features are equally successfully taught; some feature can be taught, while others may never be. Therefore, only from the fact that a vast number of students all over the world are learning a L2 through instruction, it does not follow that instruction itself can produce competent L2 language users. In this sense, we can tentatively form a hypothesis that if L2 learners are subject to formal instruction alone, their learning can be inhibited.

6 See, e.g. R. Ellis, 1994a; Long & Robinson, 1998.
3. INSTRUCTION’S PROMOTION OF FOSSILIZATION

Among second language teachers, there appears to be a rather widespread fear of fossilization, which VanPatten (1988) has called fossilophobia and a parallel conviction that corrective feedback which plays an important role in explicit instruction prevents fossilization. During the last several years, I have noticed numerous messages about this sentiment on those TES, and ESL website forum. Here is just one of the examples which will demonstrate this sentiment:

Hello Maurice:
I agree with Roger that it is important to help students become aware of their mistakes and the places where their language may have fossilized. They will never be able to change set learned patterns until they know what it is that they must change.

The problem here is that any awareness of the mistake always comes after the fact -sometimes well after- if at all. In my experience students with fossilized grammar or pronunciation will readily notice and correct their own mistakes if you record them as they speak and then write them on the board to show them. This is a step toward awareness.

Higgs & Clifford (1982:78) expressed that “when students are regularly rewarded for linguistically inaccurate but otherwise successful communication of meaning or intent that the threat of proactive interference in the form of fossilization looms large.” Therefore, some researchers are in the view that without correct feedback fossilization will appear. Quite clearly,

---

7 For more information, refer to website http://www.eslcafe.com/forums/teacher/viewtopic.php?t=147
this either/or kind of conception confers upon corrective feedback an absolute capability to eradicate errors and thereby to prevent fossilization. However, this does not seem to fit reality; “there has been and continues to be empirical evidence that a mastery-orientated emphasis on identifying and correcting learner errors may not be as effective as teacher would like to be” (Cohen, 1997: 133).

Then, does teachers’ fear of fossilization have any validity? The answer seems to be in the affirmative. As mentioned earlier in part 3.2, L2 research has proved that classroom learning provides learners with a unique experience that, on the one hand, has notable advantages, e.g., resulting in faster learning rate, but on the other hand, there are also some noticeable limitations. Part of the limitations result from the learning setting, for instance, the impoverished input, the restrictive opportunities for use of language; but others are contrived, such as the way instruction is practiced in the classroom. In turn, all these constraints promote fossilization, which will be argued and shown in the following part.

3.1 Classroom Input

According to the causal factors of fossilization discussed earlier, we know that either inadequate quantity or quality of target language input will surely result in the fossilization of both the dominant and recessive errors in learners’ interlanguage. In L2 classroom, sometimes the incorrect language output – both in language features and meaning – will be taken as or function as language input, which will lead to deposition of the learners’ incorrect interlanguage forms and eventually cause fossilization.

In foreign/second language instruction, very often the only language that learners are exposed to is the one in the classroom. And classroom input primarily comes from three sources: (a) teachers, (b) teaching materials, and (c) other learners. It is easy to notice that teacher talk can be misleading; learners talk to other learners in a limited manner and their discourse are often filled with errors; teachers’ dissatisfactions with the textbooks are not uncommon. And the fact that the textbooks are constraining teaching/learning activities in many aspects has been recognized by L2 researchers. Gass and Selinker (2001: 326), for instance, claim that “instructed learning may …result in inappropriate conclusions drawn by the learners precisely because the input is often impoverished and because emphasis on certain forms is selective”. Similarly, Ellis (1994a: 84) points out that “the input that learners derive in the classroom, whether from the teacher or other learners, may not always be the best kind for acquisition”. These claims seem well justified by empirical evidence.

3.1.1 Teacher Talk

Swain (1991: 99), for example, has provided the following picture of teachers’ use of language in the early immersion classes:

Teachers created few opportunities for systematically using contrasting forms and functions in their content teaching, rather, teacher talk was spontaneously used in service of the content
being taught. Consequently, for example, the use of different verb forms was extraordinarily skewed. Over 75% of the verbs used were in the present or imperative. Only about 15% of verbs used by the teachers were in the past tense, 6% in the future tense and 3% in the conditional. Of the 15% used in the past tense, about two-thirds were in the past indefinite and one-third in the imperfect. The use of the imperfect was almost completely limited to the verbs avoir, être, faire, and vouloir. Its use with action verbs was virtually nonexistent (Swain, 1989). Sorting out form and function on this basis would be difficult, and indeed, it is an enduring problem of the immersion students.

Apart from that, another crucial factor ought also to be pointed out. In non-English speaking countries, their native people serve as English teachers. From a theoretical point of view, these English teachers are also second language learners, and their talk in classroom is also a form of interlanguage. If measures are not taken to regulate them to speak in a way that is more close to target language, great negative affect will be exerted on more and more learners. For instance, when a teacher pronounces a word inaccurately concerning the stress, some of the students she or he teaches will be most likely to have the same pronunciation problem, which will cause great effort on the part of their later teachers to correct them, and probably only to achieve little.

In China, as one of the countries with largest number of English learners, it is not uncommon to hear students’ greeting the teachers using “Good morning, Teacher Wang” — English with Chinese flavor. However, this kind of typical pragmatic error is passed down from generation to generation of some learners. Therefore, teacher’s fossilized language use has much to blame for the interlanguage fossilization phenomenon in learners, especially in pragmatic aspect, and any discussion of fossilization shouldn’t ignore the fossilized interlanguage of L2 teachers.

In L2 classroom, the provision of teacher’s feedback comprises a large part of teacher talk, yet regarding the errors made by learners, teachers share two contrasting views: some take the errors as a hideous monster, every single one of which must be corrected; others are in the view that teaching should be students centered, and errors should not cause panic. Plenty of researches have been carried out in this area to date, and various ways are put forward. Current foreign language teaching theories, based on structuralism, functionalism, constructionalism est., have experienced a series of processes, such as grammar-translation approach, audio-lingual approach, situational and audio-visual language teaching, communicative approach, task-based language teaching. In recent years, since much analysis is put on the communicative function of language, concerning the question of what to do with students’ incorrect uses of language, many researchers favour that they should be left to students themselves to discover and correct in the process of their acquisition so as not to set back their interest in language learning. After all, what kind of cognitive and emotional feedbacks should teachers provide for the wrong interlanguage forms of students?

In light of the previous discussion in 2.3 on the causes of fossilization, feedback could cause positive, neutral and negative psychological effect on the learners, and the effect can be in
different degrees with different feedbacks. As Corder pointed out, since the learners find their expressions and understandings can satisfy the need of communication, they are not motivated to rectify the errors (Corder, 1981). Thus, they would stop learning at least about one aspect of the language. It must be pointed out that: positive cognitive feedback, such as “I understand”, is easy to cause fossilization; negative feedback like “I don’t understand” could in a way prevent fossilization (Ellis, 1999: 354). Just as correct language features can be learned through the strengthening effect of positive feedback, those flawed output can also be intensified if the learners receive either positive emotional feedback, like I love it, or positive cognitive feedback, like I understand.

Consequently, we can conclude that wrong or ambiguous feedbacks, or rather misused positive feedbacks, may mislead learners. Teachers’ corrective feedbacks, when delivered on the basis of hunch as apposed to a sound understanding of the causal factors, can prolong the existence of interlanguage deviance, thereby promoting fossilization.

3.1. 2 Teaching Materials

The impoverished input does not come from teachers alone, however. Teaching materials also share part of the responsibility. Limited in scope and complexity, textbooks usually take on a rather artificial format with input organized and sequenced according largely to the textbook writers’ own interpretation of how languages should be learned. Typically, target language forms are presented in discrete units, and accompanied by exercises created to practice them almost exclusively. Moreover, due to some constraints, only a subset of forms may be represented there. As a consequence, learners are provided with a rather skewed picture of the target language, and are led into overgeneralization or inappropriate use of the linguistic forms. Overuse or inappropriate use, as Lightbown (1983:240) points out, indicates that “the learner has an incorrect or incomplete understanding of the functions of the form and the limits of its use.”

Concerning textbooks, the distorted version of the target language may arise from the unnatural sequence of input, but it may also be induced by the way in which a textbook presents grammatical rules. Han and Selinker (1999), through a longitudinal study, documented how a textbook explanation of a rule governing an inverted structure in the target language, Norwegian, has misled a learner to formulate incorrect knowledge about the word order. Such incorrect understanding combined with the influence of the learner’s native language, results in an interlanguage construction that is both persistent and resistant to the teacher feedback.

As in China, Niu Qiang points out in his research (Niu Qiang, 2000: 28) that the teaching materials used have flaws in three aspects: (a) The outdatedness of language features and content materials in some textbooks: As a carrier and mirror of social culture, language is in constant change and development, but with the outmoded materials, it is hard to imagine students can learn the target language in the real-functional sense. (b) the confusion of written language and oral language: in an interview, one of the American teacher in my university
expressed that some Chinese English learners sound as if they were reciting from books when they speak to others, and sound like talking or chatting when they write articles. A great number of oral English textbooks put too much emphasis on the completeness of sentences, and in no way can them reflect the characteristics of spoken language. This problem does not only exist in the textbooks written by Chinese, but may appear in those imported from English-speaking countries as well. The following dialogue from the original textbook “Flying Colors” is a case in point.(Vivian Cook, 1991:93)

Nicola: Do you like this music?

Roger: Not very much. I don’t like jazz.

Nicola: What kind of music do you like?

Roger: I like classical music.

In real life communications, conversation makers rarely use this kind of complete sentences to answer others’ questions clearly, nor do they follow such strict interaction order. This dialogue is written with the attempt to make students master the two sentence patterns: “Do you like …” and “What kind of …do you like?” If students are native speakers, they will gradually adapt to the informal ways, but as L2 learners, they can hardly have the opportunities. Finally (c) the mixture of British English and American English: in a famous English-learning website company in China where I used to work as a part-time editor, I noticed that American teachers were often invited to read aloud for the tape recording or to host English talk shows, but the materials were mostly written by British writers. As a matter of fact, differences between these two varieties of English still exist and cannot be overlooked. Therefore, listening to this kind of twisted “original language” or “native talk” would also lead even advanced learners to make interlanguage construction resistant to the teacher feedback. We probably could classify this kind of fossilization as caused by transfer of training.

3. 1. 3 Peer Talk

Another factor contributing to the distorted classroom input is the communication among students. And a representative case is just the L2 classroom with communicative approach as the main teaching means. As K. Johnson (1996: 129) notes:

Many communicative techniques placed the emphasis on ‘getting the message across’, and sometimes this inevitably occurs at the expense of grammatical correctness. Often the result is that learners develop sophisticated strategies across in almost any situation, but in so doing they develop a form of pidgin.

This type of language classroom are highly motivating, but at the same time can provide students a large number of understandable but flawed input as they are talking to one another. The large amount of peer talk, usually with the interference of teachers concerning language forms, surely produce great quantities of output, which in turn becomes the input of the students themselves. This input is simple, and may be the interlanguage of other learners rather than genuine language materials of target language. And more often than not, the input
language is no better than the learner’s own interlanguage. These flawed and inaccurate language features can reinforce their wrong analysis of the target language, and thus creating an evil cycle. Lightbown and Spada (1990) note that the students trained in an exclusively meaning-focused L2 classroom setting are able to speak fluently and confidently, but that their oral production is marked by numerous errors, errors common to virtually all students. Apart from hearing each other’s faulty speech, another contribution to the common errors is likely to be the fact that the students share the same native language. Usually, communications conducted by L2 learners sharing the same L1 background is less likely to break down, and therefore, negotiation of forms between learners rarely occurs. This is partly due to the fact that because the learners may possess the same conceptual framework as they share the same L1; they have the tendency to use similar ways to express their thoughts. Even if one student gets stuck in conveying a particular message because of lack of linguistic resource, his peers are able to figure out what he or she is trying to say. Furthermore, it is shown by research that when communication difficulties arise during student-to-student interaction, they do not always have proper resources to overcome the problems. Therefore, we can hereby predict that students are very likely pushed so far that they produce additional interlanguage forms.

3.2 Teaching Strategies

3.2.1 Teaching Objective

Coulter and Selinker, through research, show that L2 learners, after reaching degree of language learning, tend to use such communicative strategies as avoidance and simplification to overcome communication difficulties in fulfilling communicative aim. Once having achieved the purpose, they will either cease learning to reach higher level or pay less attention to improving L2 proficiency, both of which are likely to lead to fossilization. It is especially the case when L2 teachers emphasize greatly on the communicative purpose of L2 learning, for if L2 learners are constantly under communicative pressure and are not competent enough to cope with it, fossilization will often occur (Higgs & Clifford, 1982).

Two Chinese scholars Su Dingfang and Zhuang Zhixiang have a detailed summary of the research on learners’ communicative strategies. And Selinker first used the “communicative strategy” in his 1972 article entitled “Interlanguage”, and points out its effect in forming of interlanguage. Ellis defines it as the strategies adopted by L2 learners when lacking proper knowledge to cope with communicative tasks (e.g. Lacking certain target language vocabulary, he has to show to the other the actual object.) Another scholar Tarone classified communicative strategies into five categories: (1) paraphrase, including a. approximation; b. word coinage; c. circumlocution; (2) borrowing, including a. literal translation; b. language switch; (3) asking for assistance, that is L2 learners will ask the other party directly to supply the correct expression; (4) gestures; (5) avoidance, including a. topic avoidance; b. message abandonment.

Although communicative strategies can provide alternative ways in continuing discourse, overemphasis on successful use of these strategies will inhibit L2 acquisition. Further, relying
heavily on communicative strategies will probably affect the normal communicative process. For instance, too much use of paraphrase will not sound pleasant; the expressions such as “This place is very men (闷 in Chinese ).”; “the room was full of bomb instead of happiness. (房间里充满了火药味而不是欢乐。)” will lead to nowhere in conversations.

Oral language teaching in China is just a case in point. Traditionally, teachers regard the objective of oral English teaching as teaching students the ability to use the learned language to meet the need of communication, as shown in figure 6. However, from analyzing the causes of interlanguage fossilization, we can find out that the methods of oral language teaching can actually result in fossilization, because they overlook not only the difference between L1 acquisition and L2 acquisition, but also the fact that in language teaching, language serves both as means and end. This ignorance will ultimately lead to the overlook of the students’ development in language competence.

In order to eradicate this deficiency of oral language teaching, L2 teachers should make their teaching based on students’ specific language competence, and in the mean time it through proper activities, as shown in figure 7.

3.2.2 Teaching procedures

Krashen (1982) considers that the main function of language teachers lies in explaining grammar and vocabulary knowledge, and in providing adequate amount of optimal input for the students concerning the first role, most teachers can do a satisfactory job. However, a great number of teachers are not aware of the latter role, nor do they know what kind of input can facilitate language development, much less would they stress on the approaches adopted to introduce to the students the language materials in order to achieve better results.

As early as 1975, Stenson pointed out that teaching strategies could in all possibilities be a source of students’ errors. Most of us may have experienced or actually known the kind of L2 teaching strategy, which means when the teacher is explaining vocabulary, he or she would ask students to make sentences with the words they have just learned without providing correct
context, and in this way the students are “forced” to produce interlanguage form utterance. Among the many examples Stenson cited is the following:

[The students] were given the definition of point out through example sentences with appropriate gestures, and then asked to use it in sentences. Those students who did not merely paraphrase the teacher’s examples were all clearly treating the construction as two separate lexical items, point, which they already knew, and the preposition out. Thus, the new lexical item came out sounding to them like just another way to say point to or point at. One student with a little more imagination offered ‘When I see a ship in the sea, I point out’, which the teacher corrected to ‘…I point it out to my friends’. This is probably not what the student meant at all… immediately after point out, and without fully understanding it, the students were given notice and asked to use it in sentences. This led to the sentence ‘The barometer noticed that it wouldn’t be fine’. This student appears to have confused the two new vocabulary items and, since one word bears a causative relation to the other, this reinforces the confusion. The student might not make a mistake like this in a normal conversation – he would be more inclined to use a word he’s sure of, like show, if the ever needed to talk about barometer reading...

Thus it could be argued that it is the teacher’s decontextualized explanation, together with her request for immediate decontextualized production — the “wait time” is very short, which had ‘forced’ the students into producing the interlanguage utterances.

There is little doubt that teachers’ use of pedagogic strategies is very often driven by their assumptions about how languages should be taught. In one of my interviews with my students who are freshmen studying the undergraduate self-taught courses in our university, a girl reports her learning experience in attending an intensified training program on English reading and writing in one of the universities in Shanghai. Her teacher, a female Chinese English teacher, had the following part of the rationale for their pedagogic procedures in the classroom: (a) Having cues for instruction entirely in English would be too difficult for the students and would be a waste of time; (b) Having learners provide native language responses to reading passages helps to determine if the learners accurately understood the sentence structure, and such understanding is essential in successful learning; and (c) Since in this way the learners can not simply express themselves without the help of the text, translation is used to see if they really understand the meaning of the material.

Therefore, teachers regard translation as an important medium of second language learning. Taught through an instructional approach like that, the student gives her comment: when listening to the teacher’s saying English, she needs to translate the utterance into Chinese before she could understand anything; when she speaks, she has to first think about it in Chinese, and then translate it into English. The same thing happens in her reading and writing, where she comes to rely on translation almost exclusively. Such a translation schemata may
become automatic and may result in fossilization of L1 features in the learner’s second language.

Evidence of transfer of training seems pervasive. Take the teaching methodology in English writing class in China for example. The traditional writing class has always been adopting the product-focused approach, whose classroom activities are: imitating the way in which sentences are made from the given words; following the examples to develop sentences and paragraphs. Under the influence of that pedagogic strategy, traditional English writing course stresses on exercise, repetition, and intensification; the instruction tends to be program-like-designed and teacher-centered. Surely, that type of teaching approach may provide learners with correct language input, but it is not exempt from some fatal flaws: first, since the learners are constantly in a passive state with their prescribed content, method, and ranges of classroom activities, their knowledge–gaining process is fossilized; second, in the mode of product-focused approach, the information flow between teacher and student is solely in the one-way direction, i.e. the information only flows from teacher to student, but given that not all the target language sample provided by teachers can be adequate in amount, authenticity and optimum, learners may even have learned the fossilized interlanguage pattern from the teacher.

3. 2. 3 Practice Opportunity

As the lack of L2 output is another causal variable of interlanguage fossilization, being short of the practice opportunities for learners to use L2 also leads to fossilization. While it is obvious that teacher talk is an important source of target language input for learners, communicative interaction and negotiation of meaning are also crucial. Teacher talk should not deprive learners of crucial opportunities to use the language themselves. In many cases, what is most important in the language classroom is not so much the performance of the teacher, but the opportunities to perform offered to the learners. When teachers hear recordings of their lessons, they “are generally surprised by just how much talking they do.” (Nunan, 1995: 90).

In those classrooms where teachers did manage to extend their wait time from three to five seconds after asking a question, there was more participation by more students. In particular, the following effects were observed:

- There was an increase in the average length of student responses.
- Unsolicited, but appropriate, student responses increased.
- Failures to respond decreased.
- There was an increase in speculative responses.
- There was an increase in student-to-student comparisons of data.
- Inferential statements increased.
- Student-initiated questions increased.
Students generally made a greater variety of verbal contributions to the lesson. (Nunan, 1995, p. 193)

There was an increase in student-to-student comparisons of data.

Inferential statements increased.

Student-initiated questions increased.

Students generally made a greater variety of verbal contributions to the lesson. (Nunan, 1995, p. 193)

In many foreign language classrooms, students’ L1 is used more than the target language. In some cases, the use of L1 can clarify a difficult concept or grammar point that cannot be explained or demonstrated clearly in the target language. In other cases, it is clearly beneficial to use the target language whenever possible in the classroom.

The classroom setting affords limited opportunities for learners to use language for real-life purposes (Lightbown, 2000). Unfortunately, in too many classrooms, discussions are parrot-like sessions, with teachers asking a question, receiving a student response, asking a new student a question and so forth. Factual questions to determine whether or not students know basic information are far more frequent than higher-level questions which encourage students to reflect on their knowledge, attitudes and beliefs, or which require them to follow and justify a particular line of reasoning. In classrooms of all kinds, display questions are far more common than referential questions. Outside the classroom, however, they are virtually never used—to begin asking display questions in social situations outside the classroom could lead to highly undesirable consequences.

Evidently these deficiencies restricts, rather than promotes, learning, especially the learning of appropriate pragmatic and sociolinguistic features of the target language (Ellis, 1992; Lyster, 1998). Ellis found that the classroom environment not only made it impossible for the two learners he was observing to produce a wide range of requests in accordance with situational factors, but also promoted their production of linguistically incomplete requests. Ellis notes that “the classroom environment is insufficient to guarantee the development of full target like norms possibly because the kind of ‘communicative need’ that the learners experienced was insufficient to ensure development of full range of request types and strategies”(1992: 20). This explanation is plausible, and may, at least in part, prove Seliger’ suggestion (1977) that learners who are able to derive the maximum benefit from classroom learning are those who are able to extend practice opportunities beyond the classroom, and not those who are dependent on what is available in the classroom. And my personal experience as an English major college student and the experience of many others also verify this view.

3. 3 Summary
Fossilization is an inevitable process in adult second language acquisition, and it deserves due attention from both researchers and educators. The discussion of the relationship between instruction and fossilization in this chapter closely examines the effects of formal instruction on learners’ L2 development.

The question has sometimes been asked, “Can second language be taught?” or, as Michael Long (1983) puts it, “Does second language instruction make a difference?” Tough this question has been widely discussed; it is in a sense like asking a doctor if medical treatment does the patient good. But it is a different question to ask whether the doctor’s treatment was successful – to consider whether the students would have done better if they had been taught differently – but this involves the comparison of different teaching methods, not a dismissal of teaching. This chapter dispels the myth that ‘formal instruction serves to prevent fossilization’ (R. Ellis, 1988:4), and “Instruction pre-emptively reduces the likelihood of inflexibility and fossilization in language development” (Long, 1988); it, at the same time, reveals that instruction can facilitate as well as debilitate learning. That is, instruction, occurring at the right time, may prevent fossilization. Yet due largely to the existence of some constraints- classroom input, pedagogical strategies, and opportunity for practice- instruction may also restrict and mislead learning. In this sense, classroom instruction is also a source of fossilization.

4. CONCLUSION

Although many treatises exist on this topic, we consider it from the slightly different perspective of instruction’s effects on L2 development and fossilization. In an article entitled “Great Expectations”, Lightbown made the important point that one way second language research can contribute to successful classroom practice is through the expectations that teachers have the knowledge about what learners can and cannot achieve as a result of instruction.

The analysis of fossilization in this paper has shown that fossilization is an inevitable process in adult second language acquisition, and as such, it deserves due attention from both researchers and educators. The discussion of the relationship between instruction and fossilization reveals that the context of learning is also a factor that influences the acquisition of target language. When the teaching materials are not authentic enough or language teachers themselves explain certain language phenomena wrongly and ask language learners to over-drill these language patterns, learners are more likely to fossilize these patterns. Meanwhile, if the teaching materials stress some parts and ignore other parts, others will be likely to fossilize. Long (1983) noted that instruction ought to show greater influence on beginners than on advanced learners, which bears out the fact that backsliding and stopping of learning exist. The “interaction” put forward by Ellis (1994) suggested that the uncorrected language input of teachers to students may have an effect on language input, which leads to some permanent errors. In the inter-personal communication, while a message is communicated, feedback may cause positive,
neutral or negative psychological influence on the L2 learner. Different reactions may produce different uses of target language, which may cause fossilization.

Adjusting instructional strategies based on learner-readiness

<table>
<thead>
<tr>
<th>Explicit</th>
<th>implicit</th>
</tr>
</thead>
<tbody>
<tr>
<td>(+elaborate)</td>
<td>(- elaborate)</td>
</tr>
<tr>
<td>(rule explanation)</td>
<td>(repetition)</td>
</tr>
</tbody>
</table>

Figure 8

Therefore, the quantity and quality of language input are very important. In language teaching, we have to guarantee the amount of target language input to make sure that learners can attain a proficiency of target language, as figure 8 shows. At the same time, we have to lay emphasis on the quantity of language input as well.

REFERENCES


[41] 午强，2000，过渡语的石化现象及其教学启示，《外语教学与研究》，第 5 期：28-31。