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**METHODOLOGY ASSIGNMENT**

**Development of a methodology to de-stabilise fossilised  
structures in one-to-one adult students.**

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# **Development of a methodology to de-stabilise fossilised structures in one-to-one adult students.**

## **Introduction**

This paper examines the phenomenon of fossilisation, that is long-term persistence of non-target-like structures (Selinker and Lakshmanan, 1992 in Han 2004), in four Italian adult one-to-one students. It distinguishes between errors and mistakes, showing that a pre-emptive and post-emptive focus on form is necessary to de-stabilise fossilised errors, whilst a consciousness-raising strategy is more important in the case of mistakes. It also looks at the area of error/mistake correction and feedback, encouraging student self-correction and arguing that in the case of fossilisation it could be beneficial to sacrifice fluency for immediate correction.

## **Background of students**

This study examines four Italian adult students of English. They are between 40 and 60 years old and are all male (thus the student is referred to in the masculine in this paper). Three are doctors, and one a lawyer. They have all been studying English since school, and need to use it for their work, and social life. They all have private individual lessons once or twice a week for one hour. Traditionally, Italian schools focussed greatly on studying grammar, using a grammar translation method (Stevick 1996:211-212), so all the students have a good background in grammar, but have varying degrees of difficulty in communicating.

AC is 45 years old and is an advanced level student. He has a lesson once a week during his lunch hour. He studies as a hobby, and to maintain his level.

PM is 50 years old, and is at intermediate level. He has lessons twice a week, and wants to work on improving grammatical accuracy, and developing listening skills.

FF is 60 years old and is at intermediate level. He is studying to prepare for an international medical conference in which he will have to make a presentation of thirty minutes, and talk formally, and socially with colleagues from several countries.

AC, PM and FF occasionally need to use English to talk to foreign colleagues and patients (NS and non-NS), read and write medical articles and reports, deliver presentations, and also for social purposes and travel.

GB is 58 years old and is also at intermediate level. He uses English for work, to talk to clients, and other lawyers, read legal documents and write emails. He does not want to speak 'perfect' English, but needs to communicate accurately in an international business environment, so he is interested in learning potential communication difficulties. He would also like to gain a greater understanding of the grammatical principles of English.

### **Fossilisation**

These students have all studied English for many years, and have used the language successfully in their business and private lives, but they continue to make a number of errors. Some of these errors have been in the student's L2 for many years, and have a clear link with L1 structures. One term used to describe this type of long-standing error is **fossilisation**. Selinker (1972) first used the word to explain why the majority of students never attain native-like skills in L2. He gave 5% as an estimate of the students who attain native-like performance, thus highlighting the importance of understanding the phenomenon, to help students continue in their language acquisition.

'Fossilisation' as a term is used in many different ways in the literature, from the general

*errors occur in areas where students should be proficient (Hamilton, 2001)*

and

*people whose communicative ability is rather high, but whose accuracy is poor and showing no signs of improving. (Johnson, 1992)*

to more in-depth treatments:

*fossilization is the process whereby the learner creates a cessation of interlanguage learning, thus stopping the interlanguage from developing, it is hypothesized, in a permanent way.*  
(Selinker, 1996 in Han 2004)

Selinker and Lakshmanan (1992 in Han 2004) talk about fossilisation in terms of long-term persistence of non-target-like structures, and Acton (1984) extends the term to include persistent pronunciation errors.

A distinction between stabilisation and fossilisation is sometimes made, the essential difference being that stabilisation is temporary, but fossilisation is permanent (Long 2003 (in Han 2003) and Han 2003), which implies that de-fossilisation is impossible. In this paper, however, I do not make this distinction, but keep to the more pedagogically useful definition of fossilisation as long-term errors which are seen to have a connection with L1. This definition is more useful, as teachers are faced with the challenge of helping their students move towards a more native-like L2, even if a total native-like mastery is very unlikely and any course would be long finished before fossilisation in the limited sense would become relevant.

Interlanguage, that is the structures used by the student in L2, but which show structural similarities to L1, is a fundamental aspect of fossilisation, and understanding the structures behind student interlanguage is vital both for the student and teacher in order to de-stabilise the fossilised interlanguage structure. This understanding is necessary because of the strong resistance to de-stabilisation found in fossilised structures, and will be examined in this paper.

## The errors

The first phase of this project was to collect student errors, and select a structure for analysis. This took place over a one month period during the lessons, by writing down a selection of errors, and looking for consistent problems for all the students. All the error-data gathered in this study was collected by writing down the error immediately during the lesson. The structure selected is the present perfect (PP). This is very likely to create erroneous interlanguage structures for native Italian speakers, as it has some similarities and some differences with Italian:

I have eaten snails (in my life) = Ho mangiato le lumache  
\*(I) have eaten the snails

Nb The subject pronoun is usually omitted in Italian, but shown in parentheses in the translation for clarity.

Here the structure is the same in English and Italian. However:

I ate snails yesterday = Ho mangiato le lumache ieri  
\*(I) have eaten the snails yesterday

Here Italian uses a structure similar to the PP when English uses the past simple. The opposite is also true – when English uses the PP, Italian sometimes uses the present simple:

I **have lived** here for two years.  
Vivo qui da due anni.  
\*(I) live here for two years.

The similarities cause errors, which tend to fossilise even if the students ‘know’ the grammar rule of when to use the present perfect, and the past simple, for example PM said when asked the difference between PP and past simple: “PP is used when the action is connected with the present. Past simple is

used just for the past.” This passive knowledge has not, however, been activated in the student’s interlanguage.

This produces errors such as the following, here given with the literal, correct Italian equivalent, and the correct English:

AC:

*I	have	done	the	soldier	there.
	Ho	fatto	il	soldato	lì.
	(I) did		my	military service	there.

*I	have	done	a	little	mistake.
	Ho	fatto	un	piccolo	errore.
	(I) made		a	little	mistake.

FF:

*I	have	been	in	Marseille	in	March.
	Sono	stato	a	Marsiglia	in	marzo.
	(I) was		in	Marseille	in	March.

*I	have	been	to	him	for	learning...
	Sono	stato	con	lui	per	imparare...
	(I) was		with	him	to	learn...

PM:

*I	have	did	the	course.
	Ho	fatto	il	corso.
	(I) have	done	the	course.

Here PM mixes the past simple and PP, as shown by his use of the past simple *did* instead of the past participle *done*. This error reveals a lack of clarity of form, although either tense would have been correct in this sentence.

AC is generally able to produce the correct form, but when he attempts to say something difficult he often falls back into the error. This is an example of backsliding, a feature of fossilisation, where an error thought to be eliminated reappears.

A distinction is sometimes made between *errors*, that is inaccurate interlanguage, and *mistakes*, when the student is working under difficult conditions, for example trying out a new structure, or lexical item, and backslides into the incorrect form, having difficulty to process the language under more challenging circumstances, as seen in AC's case above. (See Corder 1981 in Johnson, 1988) In this paper, I distinguish between the terms.

## **De-stabilisation**

### Form

A focus on form is certainly necessary to de-stabilise fossilised forms, despite Krashen's (1982) acquisition theory, as these students have been exposed to many years of comprehensible input, but the fossilised forms still exist. Schmidt (1990) highlights the importance of actively 'noticing' a form to be able to acquire it, thus requiring more than just hearing, so the question is how to make the students notice the correct form.

The field of cognitive psychology suggests that "consciousness is necessary for ...overrid[ing] habits" (Yiend and Mackintosh, 2005:481) and that "consciousness of our memory for past errors may help us adapt our behaviour by learning from our mistakes." (Andrade, 2005:565) Fossilisation is a form of habit which needs to be overridden, and as the students are very often not aware of the error, a consciousness raising strategy should be used to help the students learn from their past errors.

Johnson (1988) talks about four requisites for a mistake (as opposed to error) to be eradicated: 1. Desire to improve. 2. Internal procedural 'knowledge' of the correct form, not just declarative knowledge, that is an ability to cite the rule. 3. Realisation of the mistake, given by feedback. 4. Using the correct form in real communicative situations. We shall now discuss these points, and expand them to consider errors as well as mistakes. Here the students are all paying to have private lessons, so they have the motivation to improve. It is the job of the teacher to provide the other three points.

Looking at the second point, Ellis et al (2001) discuss the importance of a pre-emptive focus on form, that is highlighting the potential errors before they occur. They tell us that the forms are more likely to be acquired if the focus is student initiated, than if it is teacher initiated, thus a de-stabilising methodology should encourage the student to analyse the structures in question, and ask for clarification, rather than be told explicitly the rules, thus using a discovery approach to grammar teaching. This is not to be confused with explicitly teaching the grammar rules, but rather helping the students to notice the correct application of the rules. This will not, however, cure the whole problem, so a reactive, post-emptive focus on form is also necessary to correct the student's errors, which is Johnson's third point, feedback, and error correction. Murphy (1986) argues that there is no benefit in stopping communication to make a correction, especially if the error can be looked at later, as this will stop fluency. In the case of fossilisation, however, the students are fluent, but with errors, so stopping the student immediately after the error could help the de-stabilisation process. This will be tested in the present research. Care must be taken not to make the students feel guilty, or stupid when being corrected, although this is much less of a problem in a one-to-one lesson than in a group.

Johnson (1988:93) tells us that learners have a need to know why they made the error, that is they need to understand the communicative context, and grammatical rules to be able to understand how to use the form correctly. He goes on to say that explanations could be helpful in the case of errors, but not mistakes, as in the case of mistakes, the student already 'knows' the rule.

## Feedback

At this stage we can differentiate between feedback and error correction. Feedback can refer to any type of information coming back to the student about his utterance, whether a direct correction, a recast, a reply, or a nod of the head. Feedback can also come from the student himself in the form of

reformulation. Student self-correction is a very powerful form of feedback. Gainer (1989) warns of the ineffectiveness of simply saying 'again', or recasting, that is repeating in a correct form, the erroneous sentence, as the student may not realise where the problem was, or may not realise that the recast is in fact a correction. He then describes an error correction technique in which the teacher writes the correct part of the utterance on the board, but leaves gaps in the 'trouble-spots' for the student to analyse the error. This method gives the student time to analyse his utterance, and to think about the grammar rule, thus comparing his own interlanguage with the correct form, helping to destabilise the fossilised form. Panova and Lyster's (2002) study shows similarly poor results for recasts and translation, which "leav[e] little opportunity for other feedback types that encourage learner-generated repair." They examine seven feedback techniques: recast, translation, clarification request, metalinguistic feedback, elicitation, explicit correction, and repetition. They report:

*The highest rates of learner uptake (100%) occurred with clarification requests, elicitation, and repetition. Metalinguistic feedback was the next prominent indicator of learner uptake; 71% of the feedback moves with metalinguistic feedback resulted in learner uptake.*

Learner uptake, that is the learner repeating the correction after the teacher is no guarantee that the form will be acquired, but it does show that it has been noticed, which is a vital step in acquisition. Han, (2002) however finds recasts to be effective in raising awareness, and in improving oral and written performance. This contradiction could be explained by recasts being effective for certain forms, but not others, or by the application in the classroom, that is if the students are aware that this is a correction technique, not just part of the teacher's conversation it is more likely to be effective.

Johnson, K. (1988)'s fourth point about giving opportunity to integrate the form into real communication is easy to apply to a one-to-one lesson, with any question about the past serving to elicit the past simple / PP, also providing room for further feedback if and when necessary.

Johnson, H. (1992) proposes a four point strategy for de-fossilisation,

- 1 *Communicative goal* is set;
- 2 Students *plan* what they will want to say, including things they need to learn;
- 3 Students *learn* (through communicating individually with the teacher);

#### 4 Students *communicate*

This strategy is designed to increase motivation to learn for students who can communicate effectively but inaccurately, by timing the teacher intervention at the point when the students need the new language not before as in PPP, giving them time to give it attention, thus facilitating acquisition, and then allowing them to use it. This is designed for groups, but could be adapted for one-to-one lessons.

Han and Selinker (1999) in a fascinating study of Thai-Norwegian interlanguage and fossilisation develop a four point de-fossilisation strategy, which is very situation-specific, although the ideas can be applied to other situations. The points are:

1. Contradicting the erroneous interlanguage rule.
2. “[C]ounteracting native language transfer by contrasting the related L1 construction with the related L2 construction.”
3. Checking restructuring of knowledge by giving tasks and confronting the student with their own errors.
4. Helping to integrate new knowledge into interlanguage by exercising in a genuine context.

These were all carried out in a single one-to-one lesson, and the effects were monitored over three months, during which time a significant improvement was observed. Han and Selinker talk about the Multiple Effects Principle (MEP, Selinker and Lakshmanan, 1992 in Han and Selinker, 1999),

*which predicts that when language transfer works in tandem with one or more second language acquisition processes, there is a greater tendency for interlanguage structures to stabilize, leading to possible fossilization.*

This implies that in order to de-stabilise any fossilised form it is necessary to identify all the processes, and counteract them. This would apply to errors, not mistakes, as students who make mistakes, but not errors have already acquired the structures.

Thus the literature shows the importance of distinguishing between an error and a mistake, showing that with mistakes consciousness-raising of the problem, followed by opportunity to practice is important. With errors, however, there is a need for both a pre-emptive and post-emptive focus on form, with an understanding of all of the processes behind the error, not just looking at the correct form, or simply saying ‘try again’. This again needs to be followed by practice.

The literature also gives many suggestions for feedback, and error correction, which can be applied both in the form-focus stage, and the practice stage of the lesson.

## **Strategy**

As we have seen, there is a difference between errors and mistakes, so as one of the students in this study makes mistakes and the others errors, two different strategies are necessary.

## **Errors**

MEP tells us that two or more processes are involved in fossilisation. The first is L1 interference, as examined above. The second is harder to identify, but possibly comes from an incomplete understanding of the grammatical rules in English, an assumption that English is more or less the same as Italian, that the differences are small, they can be understood even if the grammar is not perfect, or an idea that the grammar rules are too complicated to learn.

Thus the de-stabilisation strategy should work on two levels: 1. A clear focus on grammatical rules, in this case of when to use the PP and past simple. 2. A comparison of L1 and L2, showing the similarities and differences, including an examination of the student's errors. There should then be opportunity to practise the structures.

Feedback should be given in a way to clarify to the student what the error was, and to enable him to compare his own interlanguage with the correct form, thus writing down the erroneous sentence and asking the student to find the error is a way of adapting Gainer's technique (1989, see above), but by presenting the whole sentence, the student also has to find the error, thus raising consciousness of the problem more than in Gainer's cloze technique. The timing of the feedback is also important, being given immediately after the error, although stopping fluency, is expected to help de-stabilisation of the fossilised form.

To test these hypotheses, different strategies were used with different students, all being taught the basic rules, one being stopped immediately after an error, whilst the other two being shown the error at the end of the lesson, and two being shown a comparison between L1 and L2, testing the MEP:

	Error correction	L1/L2 comparison	Taught rules
PM	<b>Immediate</b>	<b>Yes</b>	<b>Yes</b>
GB	<i>Delayed</i>	<b>Yes</b>	<b>Yes</b>
FF	<i>Delayed</i>	<i>No</i>	<b>Yes</b>

## Mistakes

With mistakes there is no need to teach the rules, as the student is generally competent at applying them. A consciousness-raising strategy should be used to help the student understand the mistake-making process, to be aware that when he is trying new or difficult language (structures, or lexical items) backsliding is likely to occur. He will thus be equipped to try out new language and still think about the correct tense to use. This may impede fluency, but will help to prevent further backsliding, and fossilisation.

Feedback, then, should be given immediately, in a way to raise consciousness of the error, and to encourage self-correction, with minimal focus on form from the teacher. One way to do this is with the finger raising technique, that is the teacher raises a finger to signal to the student that a mistake has been made, and the student stops immediately and tries to self correct, acting as a type of metalinguistic feedback (Panova and Lyster 2002). It is therefore necessary to train the student to look for the signal, and self correct.

## The Research

Participatory action research (Taylor, 1994) was chosen as the research method, as the students are all from academic backgrounds, so would find a research project interesting and motivating. Being active participants in the research would also give them more of an understanding of their own interlanguage, thus helping them to improve. It was explained to the students that the teacher is researching the learning of the PP, and the difficulties for Italian learners of English in the acquisition of the structure.

## Error research

A lesson was designed using Unit 19 from *Essential Grammar in Use, Italian Edition* (Murphy, 1991:38, see appendix 1), to illustrate and practise the difference between PP and past simple, and clarify any misunderstanding of the rules, followed by a comparison between L1 and L2 for PM and GB, based on the examples above. The Italian edition of the grammar book was chosen as it gives comparisons and contrasts with the L1 and L2 forms. FF was taught the rules in a traditional PPP way,

to act as a control. All the students were then engaged in conversation, and any further errors of this structure were pointed out immediately in the case of PM, by raising a finger, and then allowing the student to self correct, and at the end of the lesson for GB and FF. To provide a post-emptive focus on form, during the feedback sessions reference was made to the grammatical rules when discussing the errors.

This led to some doubt as to the correct form, with, for example, PM asking “we spoke or we have spoken?” after the clarification and comparison. This doubt could be interpreted as the fossilised pattern starting to break, as previously there was fluent error.

The performance of the students was then monitored over the next month for any backsliding.

#### Findings:

In the month following the intervention it was observed that FF, being shown the grammatical rules, but with no L1/L2 comparison and given delayed correction, made very little progress – he was able to take up the correct form in the error correction session at the end of the lesson, but rarely produced it correctly in conversation.

On the other hand, PM and GB both consistently produced the correct form of PP or past simple, in the majority of their utterances. Both of these students were shown the L1/L2 comparison.

#### Mistake research

The nature of fossilisation, backsliding, and mistakes were explained to the student, and strategies for thinking about the correct form when trying difficult language were discussed together, to raise consciousness of the problem. This included discussing some points from the first draft of this paper together, in line with the principles of *participatory* action research, where the subject works with the researcher, thus blurring the distinction between subject and researcher, becoming two participants with different skills, points of view, and objectives to bring to the study. It was highlighted to the student

that he had a particular problem with the PP in these situations. His performance was then monitored over the next month, and his opinions to the strategy sought.

During the session, he asked for some clarification on the use of the PP, and it was found that he had a good procedural knowledge, but poor declarative knowledge, that is he could understand easily if a sentence was correct or not, but could not put the rules into words. This contrasts with the other students in this study, who had at least a partial declarative knowledge, but a poor procedural knowledge of the PP.

The following week the student was asked “What did you do last week?” to elicit the past simple. His responses were all correct, for example:

I worked all week.

I came back late.

I returned to my office.

Then the student was asked “What countries have you visited?” in order to elicit the PP. Some sentences produced were correct, but others incorrect:

I have been to a lot of countries.

but

\*I have been in the same shop that was bombed when I was in Egypt.

Immediately after this mistake, the teacher raised his finger to signal a problem, and the student self-corrected:

I was in the same shop...

He commented “of course – it’s finished, in the past” thereby showing some declarative knowledge, providing evidence that his consciousness of the form had been raised. After the finger raising the student produced the form correctly, for example:

I went to Sicily last year.

I went there by boat.

I have been to Mexico.

In the following lessons, he was seen to have improved, rarely making mistakes with the form, and being able to self correct easily when a mistake was signalled by the teacher.

## **Discussion**

We have seen that the teacher needs to understand the problem to be able to design an effective methodology to help de-stabilisation of fossilised forms. The first point is to distinguish between student errors and mistakes, focusing on form with students who make errors, but not with those who make mistakes. This focus was both pre- and post-emptive, which helped to clarify doubts in the student's minds as to how to use the past simple, and PP. It has been seen that the most effective results were obtained from the students who were given a comparison between the form in L1 and L2. It should be noted that GB, who was given delayed feedback generally noticed when the teacher noted an error in his note-book, and sometimes self-corrected immediately, thus making it difficult to distinguish between the immediate and delayed correction results in this study. To remove this problem, the lesson could be recorded, and feedback be given the following lesson, or the student could be trained not to take notice of what the teacher writes to be able to give delayed error feedback in the same lesson. Poor results were observed for the student who received an explanation of the grammar, but with no L1/L2 comparison, and delayed feedback. This corroborates Han and Selinker's (1999) observation of the role of the MEP, and the need for a finely-tuned pedagogical intervention, taking account of the interlanguage produced by the students, thus requiring an at least partial knowledge of L1 on the part of the teacher, to understand the origin of the errors to be able to design a multiple method strategy to counteract the multiple effects in the MEP. This study also contradicts Murphy (1986), in that good results were obtained when the correction was immediate, rather than delayed *for fossilised errors and mistakes* when students have no problems with fluency. In the case of mistakes, it was found that good results were obtained by using a consciousness-raising strategy, and immediate feedback, with no explicit focus on form. With both errors and mistakes, it is necessary to continue to monitor the students for backsliding over a longer period, to determine whether this

intervention has permanently changed the student's interlanguage, and helped them to acquire the form correctly.

It is important to note that this is a very small scale piece of research, and that more research is needed with a wider range of students, also from non-academic backgrounds to test this de-stabilisation methodological strategy. Long term longitudinal research would also provide more information into the nature of backsliding, to develop a long term strategy to counter fossilisation. There is also a need for more research into the most effective feedback methods in the case of fossilised learners, particularly on the issue of immediate / delayed feedback.

In order for this research to be of benefit to other teachers, the author has discussed his findings with colleagues, and is preparing a short article based on these findings for publication in an English teaching magazine.

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