

INTER GENERATIONAL SECOND LANGUAGE ATTRITION WITHIN UNIVERSITY STUDENTS - CASE STUDY

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Abstract: The purpose of this article is to present the results of an experiment investigating a decline in second-language skills of University students. The paper consists of five parts. The first section defines a definition and different types of language attrition. The following part presents a model of the education in the Jan Długosz University in Częstochowa. The third part focuses on the essential research categories used in the experiment, various solutions in teaching English for academic purposes. The last but not least part presents the hypotheses and the applied methodology as well as detailed description of the investigation. The author reveals here the results of the research. Conclusions from the experiment and suggestions for possible follow-up investigations of this issue is found in the final part of this paper.

Keywords: second language attrition, motivation, memory

1 Introduction

Each student is eagerly waiting for a holiday break and a rest from university classes, including a foreign language course. Such a gap in the second language learning during a holiday period is not a favourable solution since acquiring any language requires regularity. Considering ideal situation students should not only continue to learn a foreign language in the summer but also try to make up for knowledge deficiencies and in consequence feel confident in the new academic year. The holiday break in learning a foreign language will not cause a sudden oblivion but it may be a source of lack of our language skills development. Many researchers maintain that any unused language is rusty and eventually dies. The fact that within a year we gathered some knowledge does not mean that one can effectively use it. The vocabulary is one thing and the practical ability to use it is another. Over three-month summer break from language practice for university students is questionable. Different ways of overcoming this problem will be presented furthermore in this article. At this point it is worth explaining how and why the foreign language is forgotten. Therefore, it is essential to have a closer look at the definition of second language attrition. The next section determines a clarification of that issue.

1.1 Definition of second-language attrition

Second language attrition is in general perceived by many scientists as a decrease of foreign language abilities. This may be a result either of insufficient use of L2 or due to a domination of another language because of changes of learner's surrounding.

There are several definitions of e-learning (see Schöpfer-Grabe for a theoretical description of the e-learning terminology). Schöpfer-Grabe, a German scientist draws attention to the fact that "almost everybody who has learned a foreign language shares the experience of forgetting the acquired language skills once the period of formal instruction is over" (1998, p.231).

According to Köpke & Schmid second-language attrition can be described as the "non-pathological decrease in a language that had previously been acquired by an individual" (2004, p.5) and defined as deficiency of learner's abilities in the individual phase (de Bot & Weltens, 1995).

Second language attrition is a quite new area of research since it has been developing since the beginning of 1970s and is still among interest of many scientists. Hansen (1999) explains that not only linguists are involved in exploring that field since they want to measure what is lost but also psycholinguists and neurolinguists who are concerned with the way L2 is forgotten and sociolinguists, sociologists and anthropologists (examining why second language is lost).

Although, scientists are extensively involved in examining the attrition of L2 for over 40 years still a lot of is unknown in

comparison to the field of second language acquisition. The next section will exemplify different types of attrition.

1.2 Types of attrition

The theoretical foundation of the language attrition studies derives principally from cognitive and psychological theories. Scientists primarily inspect the field of second language attrition for the loss of the L1 and L2.

The first diversification that can be made is between pathological and natural language attrition. Pathological attrition is most frequent in acquired occlusal defects after loss of abutement zones, and in certain congenital malocclusions. In other words the loss is caused by a damage of the brain, an injury, age or an illness. Nevertheless, this issue is not going to be explored any further since the language attrition in these cases is not brought about by natural circumstances.

Another potential division is suggested by Weltens. He distinguishes inter and intra generational language attrition. „Inter-generational language attrition is concerned with attrition within individuals, whereas intra generational language attrition concentrates on the attrition across different generations” (Weltens, 1987, p.24). Van Els (1986) classifies four types of attrition in terms of which language is forgotten and in which environment is being changed. Thus, he distinguishes:

1. loss of L1 in L1 environment, e.g. dialect loss
2. loss of L1 in L2 environment, e.g. immigrants losing their mother tongue
3. loss of L2/FL in L1 environment, e.g. loss of foreign languages learned at school
4. loss of L2/FL in L2 environment, e.g. aging migrants losing their L2.

1.3 Processes of language attrition

In order to comprehend the process of language attrition better it is necessary to get to know different stages of language attrition. There are different theories about the occurrences of L2 attrition phases.

Gardner (1982, p.519-520) conceives that the process of second language attrition is classified into three stages, namely:

1. Stage 1: The beginning of second language learning
2. Stage 2: Completion of language instruction
3. Stage 3: Assessment of language competence

The period from first stage to second is defined as the acquisition time. Between stage 2 and 3 occurs incubation period (1982, p.520). Furthermore, Gardner expresses that it is not enough to take into account only the time between second and third stage to declare the existence of attrition. It is also necessary to consider „the duration, relative success, nature of the acquisition period and the duration and content of the incubation phase” (Gardner 1982, p.520). The acquisition period is the time where “language learning or language experience takes place, mainly from the first to the last lesson. During the incubation period, no language training or language usage takes place and the forgetting may begin” (Gardner 1982, p.520). He states that when that language learning is no longer operating, a study about language attrition can be carried out. In order to provide an explanation of how second L2 attrition appears it is essential to have an eye at the dates of the examination of memory. Therefore, the next chapter deals with this issue.

2 Theories of memory loss

First theories of forgetting date back to late 19th century when Ebbinghaus, German psychologist pioneered the experimental study of memory. The empirical research about learning still

plays an important role in the contemporary research of remembrance.

2.1 Decay-Theory

Ebbinghaus was extensively involved in the exploration of the memory and the brain. One of his first studies dealt with the role of memory as to storage and forget the information. His considerable result of his investigation was the correlation between the amount of learned knowledge and the amount of time invested. Moreover, he stated that the longer the time of the break is the more repetitions are needed. Ebbinghaus' outcomes of his research contributed to the first theory of forgetting which was the decay theory. It says that "if something new is learned, a memory trace is formed. This trace is going to be decayed, if it is not used in the course of time, and by decaying of this trace forgetting takes place" (Weltens, 1987, p.25).

2.2 Interference theory

The Interference theory is considered as one of the most important theories of forgetting. "It indicates that prior, posterior or new learning information compete with already existing ones and therefore forgetting occurs. This inhibition can be divided into two types: the retroactive inhibition, where information acquired at a later point in time blocks the information that was acquired earlier. Proactive inhibition means that information acquired in the past can infer with new information" (Ecke, 2004, p.325). Thus, a blocking may appear that restrains the acquiring of the new objective item.

2.3 Retrieval-failure hypothesis

Nowadays, apart from decay and interference theory the retrieval-failure assumption has become more and more popular and extensively accepted. According to Schöpper-Grabe (1998, p.237) it says that "the storage of information happens on different levels. Therefore, information or memory is not deleted, but rather, the access to the current level is blocked". Hence, the information is not available. Hansen refers to Loftus & Loftus (1976) characterize the process of forgetting which is compared to the situation when someone is : "[...] much like being unable to find something that we have misplaced somewhere" (1999, p.10).

Cohen (1989) claims that an evidence of progressive retrieval is the learner's sense of not being able to find anything. Therefore, the student is not able to utter anything that he or she used to bear in mind and as a result an incorrect form is used. De Bot & Waltens (1995) treat this period of time as the decisive element to measure how far the attrition has already proceeded. In order to understand the author's investigation better it is essential to have a closer look at the model of education at the University where the research was carried out.

3. The model of education at Jan Dlugosz University

At the beginning it is important to point out that the Jan Dlugosz University is a public institution, with history that traces back to 1971. Currently the University community is created by nearly 8,200 students and over 700 academic staff members. The students can choose among over 50 specialties at five faculties. They can also take to study three foreign languages: English, German and Russian. All of them are conducted in the Department of Foreign Languages.

In the first cycle the foreign language course lasts 120 hours and is carried out within four semesters. Most of the students start learning a foreign language either at the beginning of first semester of their studies or second. Therefore, some of them finish at the end of the second year or winter term of third year. The course ends with a final examination that proves the upper-intermediate level (B2) in accordance with the Common European Framework of Reference for Languages. The Department of Foreign Languages uses a lot modern solutions

that contribute substantially to the increase of the level of education.

4. The research methodology in EFL context

4.1. Initiation

A didactic process has got two aspects. One aspect concerns the forms of teaching and is the subject of the methodology description, the second one deals with the essence of learning. Indeed methodology focuses on teachers' working process rather than the learners wherein the problematic issues are recognized fairly one-sided i.e. not having a reference for the reported facts and phenomena. Concurrently, the learner's role in the teaching process is absolutely crucial for the effectiveness of this process and in consequence could not be omitted in the description of methodology, as well as too complex to content itself without an indication. Learners in the process of learning a foreign language are the object of the teaching process as well as the subject of learning proceedings.

The student who is taking part in the teaching instruction undergoes compound systems and different conditions during the lesson. The learner as a taught subject goes through a teacher's control process and is set to receive information. On the other hand as a subject of learning proceedings is organizing work on its own. The student is not only focused on teaching since it is an object of teacher's control, monitoring and evaluation but also converge with learning as an organizer and a self-study conductor.

As an English teacher who is mainly responsible for running a language classes I am also oblige to keep checking and testing a group of students over a period of time to see if their made a progress in learning a foreign language. In our Foreign Languages Department students are entitled to enrol in one of the available courses. The size of the group is limited. It consists minimum of 15 students and maximum 28. It is important to mention that the group is mix age, sex and ability. Due to this fact I decided to investigate the learners' skills development over a whole language course since I observed a decline of students' second language skills especially after summer break which takes 3 months.

The experiment started in March 2014 and it finished in October 2014. I had chosen two groups of Safety Engineering faculty. Both of them consisted of 15 students. Before the experiment started they wrote a pre-test. It is also worth to mention that they were supposed to be at the same level, namely B2 in accordance with the Common European Framework of Reference for Language. After summer term they were asked to take a post test. The last stage of this research was conducted after student's holidays in October 2014. In order to understand a language attrition process it was essential to examine various hypothesis that attempt to explain how language memory changes over time.

4.2. Hypothesis

After the investigation and collecting the data, it could conceivably be hypothesised that the forgetting process will set immediately after summer break for students. This might be determined by the fact that two languages within the same mind are able to have an impact and interference in one another. Moreover, partial overlapping among two languages in the mind may appear. As it has been mentioned in the previous section each group is mixed sex, age and ability. Because of this, the null hypothesis (H0) assumes that these students with higher level of language competence will forget less after a break from a foreign language instruction. The alternative hypothesis (H1) supposes that the occurrence of second language attrition will not ensue from learners' language level of proficiency. According to the above assumptions it has been presumed that contact and the intensity with the target language cannot be the only variable causing language attrition. Different factors such as psychological (cognitive and biological), sociological (attitude towards language and culture) and socioaffective factors (orientation and

motivation) are essential for attrition and determine an independent variable. In order to test these two hypothesis the author of this article has implemented certain investigation procedures. They will be described in details in the next section.

4.3 Investigation

As it was mentioned in section 4.1. the investigation started in March 2014 and it finished in October 2014. The experiment was designed in such a way that it was possible for the teacher to obtain information on the learners' progress both in terms of receptive (listening and reading) and productive (speaking and writing) skills.

The study involved two groups. The choice of these two groups was random. The experimental groups were studying English in the traditional context. They were working mainly in the classroom context but they were also asked to do some extra activities at home in order to revise a new material. Each group had 30 hours of English (1 academic hour is 45 minutes) in the classroom conditions. English instruction was taking place once a week through 15 weeks and it finished in the mid of June.

At the beginning of the experiment, that was third semester of foreign language course, students were asked to do a pre-test. It consisted of vocabulary, grammar, listening and reading section. A course curriculum was designed in such a way that the following topics were discussed: attitude to money, mobile phone mania, music and advertisement and life in travel. Both groups were graded in the classroom context during the whole research. The students took two test in English. One and the other aimed at checking their receptive skills namely reading and listening as well as linguistic competence that is grammar and vocabulary. Moreover, during the classroom practice productive skills were practised.

At the end of summer term which fell on 19th of June 2014 students did a post-test. After that all the pupils had a holiday break that lasted 3 months. They continued their foreign courses at the beginning of October.

The object of the last stage of the investigation was to test students' knowledge after the holiday rest and to check what is the loss of foreign language. Supplementary, it should be stated that it was the last semester of English instruction. It ended in the final examination. The next part will presents all the outcomes of the research.

4.4 Results

After seven months of investigation the following result may be presented. Since the limited scope of this publication the results of only one group will be presented. Nevertheless, it is crucial to indicate that both groups had similar outcomes. As it has been mentioned the students took a pre- and post-tests. Chart 1 presents the results of these two.

According to the results presented in the chart the average grade of the pre-test is 40% . However, a significant increase can be notified in the post-test as the final grade was 67%. The highest score of the pre-test was 63% whereas the worst was 21%. See chart 1 for detailed findings of the investigation.

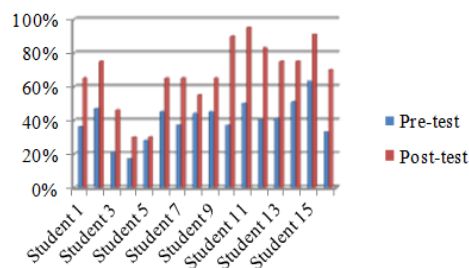


Chart 1. Results of the pre-test and post-test.

Both groups were graded in the classroom context during the whole research. The students took two test in English. The results of them are presented in the table below.

Students	test 1	test 2
Student 1	79%	67%
Student 2	76%	74%
Student 3	69%	39%
Student 4	66%	43%
Student 5	69%	36%
Student 6	49%	51%
Student 7	46%	79%
Student 8	79%	59%
Student 9	63%	58%
Student 10	92%	55%
Student 11	46%	19%
Average	67%	53%

Table 1 Results of the test written in the classroom context.

Comparing the results of these two tests it may be stated that the second test was slightly more difficult for them since the outcomes were a bit worse. Also one students did not pass it. It may be may assumed that this happened because of the end of semester and the fact that students might have been weighed down on the numerous test they had to pass from other subjects. The last diagram (see chart 2) compares the results of the post-test written in June with the one that students took after holidays.

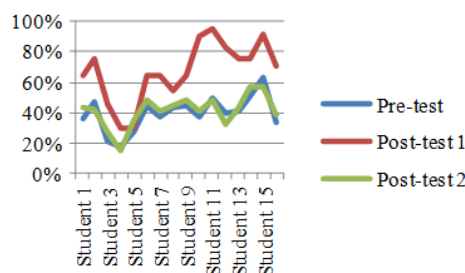


Chart 2 Comparison of pre-test and post-tests.

The average results of all of the tests briefly provide a glimpse into the problem of second language attrition. Therefore, the next diagram presents the results in a condensed way.

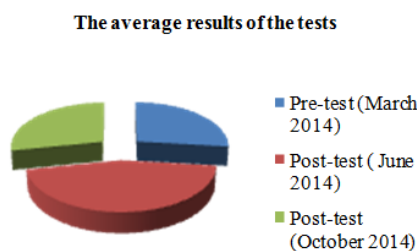


Chart 3 Consolidation of the average results of all of the tests.

The findings presented above support one out of four types proposed by Els (see Van Els, 1986 in part 1.1. of this article) namely, loss of L2 in L1 environment has occurred. Chart 3 shows that the results of pre-test and post test conducted in October are fairly the same. The average result of pre-test in March was 40% whereas post-test in October was 42%. As „Roman Jakobson embedded language regression into linguistic framework and claimed that language attrition is the mirror image of language acquisition” (Waltens & Cohen, 1989, p.130). Schmid (2014) suggests that expertise in a foreign language occur in different layers. Hence, as a mirror of image of acquisition, attrition happens from the top layer to the bottom

5 Conclusions

The results presented in that experiment confirm the assumptions established at the beginning of that investigation. They prove that even after such amount of time like 3 months a forgetting process begins immediately. However, it occurred that the level of competence of the learner is not as important as it was assumed. Therefore, the null hypothesis (H0) conjecturing that these students with higher level of language proficiency will forget less after a break from a foreign language instruction has to be rejected.

Comparing the results from Chart 2 from the previous section it is clear that those students who had high results in the post test written in June, namely 90%, after incubation period their second-language skills decline considerably to 41%. Thus, their scores were almost the same as the pre-test ones. It can be assumed that students with lower proficiency level do not follow a typical forgetting curve proposed by Ebbinghaus (see Kurch, 1999, p. 102). According to the results they forget less than those with better grades. These findings may be explained in the following way, either students with lower proficiency level have more positive attitude towards the target language or they seek more possibilities and opportunities during the incubation period to retain their language competence.

Therefore, the findings of the investigation support the alternative hypothesis (H1) assuming that the occurrence of second language attrition will not ensue from learners' language level of proficiency. However, after conducted studies it can be seen that all four language skills are affected. Though, some of them are more likely to be influenced than the others. The investigation proof that grammar and lexical competence are more likely to suffer a high attrition process.

Moreover, grammatical loss concerning tenses and conjunctions of verbs appear quite frequently. Correspondingly to Olshtain (1986) the author of this article noticed „reduced accessibility in vocabulary retrieval in all situations of attrition where there is a reduction of language loss over long periods of time” (Olshtain, 1986, p.163).

Finally, results of the investigations presented in this article proof the second-language attrition ensues from a certain order which defines productive skills as the one that are more influenced than receptive ones. Problems in lexical retrieval, followed by attrition in morphology and syntax seem to be the first symptom of language forgetting. However, in order to fully comprehend how

the human mind deals with language it is advisable to conduct further research in this area.

Summing up, activities carried out before and after the learning process are both significant in the process of storing and consolidating the information. The memory is prone to the impact of new stimulus and is subject to previously assimilated memory material influence. This means that an event which was remembered might be forgotten a week later not because the time went by but the other things that record distorted or removed a memory trace. The more we are active after learning something the greater possibility of forgetting the acquired knowledge is. If we learn things thoroughly it is less likely that they will be dismissed from mind, despite the impact of subsequent experience and information.

Therefore, both of linguistic and psychological point of view, the foreign language requires not only specific teaching methods but also a specific organization of learning process if it is going to be assimilated by learners and become an instrument of cognition and communication that operates parallel to the native language.

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