

The Effects of L2 on L1

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This section of the paper presents an introduction into the topic, it is well known that languages change over time. However, the effects of L2 on L1 did not receive enough attention in the study of language influence. Each work provided in this paper focuses on an element of the language.

Multi Competence

This section reproduces the effect of the second language on the first as presented by Cook (2003). In which, the notion of this effect came from the concept of

multi competence. The author thinks, the knowledge of the monolingual speaker differs from the knowledge of the bilingual.

L1 Attrition

Cook (2003) presented a study by Porte (1999), on L1 attrition in the environment of L2.

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This section deals with a study on the EFL teacher of long term resident in Spain. This study pointed out that certain elements of the language were effected, such as, verbal and some written code-manipulation.

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It provides the methods of the study and how it was accomplished. It expresses the way in

which that data was collected and the status of the subjects.

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In this section, the findings of the study are provided which proves that there is no significant L1 attrition despite the code-manipulation.

L1 collocation knowledge

A study cited from Cook (2003), examines the lexical knowledge, from the ability to judge L1 collocation as correct.

The purpose of this study is to explore the impact of L2 on L1 collocational knowledge.

Methods of Study

This section deals with this study in details by providing information about the subject and the ways the study was conducted.

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In here, the findings of the study is explained with providing tables of the results.

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This section illustrates the experiment of two scholars on the consequence of learning a foreign language on the skills development of the mother tongue.

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In here the focus of the study is expressed, including the research questions and what it investigated.

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Each group of the study had different results, it expresses how each group differs from the other according to the classes they had.

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The summary shows that is experiment proves that intensive and successful FL learning can help in developing the skills of L1.

Conclusion

This section provides a summary of the studies provided in this paper, on the influence on the second language on the first.

1. Introduction

It is known about languages that they change over time, it is pervasive and unavoidable. There are many reasons to why languages change, social, political and economic. Languages change in form and structure, vocabulary, and pronunciation. It is argued that second language (L2) speakers

influence some changes in their first language (L1). Also, the first language effects the second language, it is a fact. However, many scholars investigated how the use and learning of the second language effects the first language as well. This paper will present different views from scholars on how L2 influences L1 in different aspects.

Much research were done on how the first language influences the second language.

This can be seen on many aspects of the language, like having an accent or misuse of words. However, the effects of L2 on L1 have been largely ignored. Some scholars investigated this effect but there have been some claims against a couple of these findings. The effects of L2 on L1 can be found if we look deep enough into bilinguals who learned the second language at adult age.

This paper presents a couple of scholars who wrote about the influence of L2 on L1. Each work discussed here focused on a special aspect of the language. Multi-competence

raised many questions in regard to this topic, which Cook discussed in his book (2003). Another problem that had different claims against it is simplification of L2 in adult users, argued by Ellis (2008). Also, the paper discusses the transfer from one language to another which Cook (2003) referred to as 'reverse' or 'backward' transfer. As Kesckes and Papp (2000) wrote in their book, they elaborated on the development of multilingualism as a process in which structural and conceptual transfer occurs from one language to another.

2. Cook (2003)

2.1 Multi-competence

Effects of the Second Language on the First by Cook, examined this reverse transfer in details and by using a variety of perspectives and methodologies. He discussed multi-competence, he thinks the notion of the effect of L2 on L1 came from this concept. Multi-competence raised many questions in regard to this topic. In which, it refers to the

knowledge in a person's mind of more than one language (Cook 1991). Multi-competence showed the knowledge of the L2 users of their first languages differs from the knowledge of monolingual native speakers.

2.2 Attrition of L1

The author of this book presents a study on L1 attrition in an L2 environment (Porte 1999). Long-term resident EFL teachers are an example of language loss in regard to their daily working life. They are likely to be exposed to L1 erosion upon the length of stay in the foreign country. Furthermore, code-mixing and code-blending are two of the principles effects of L1 erosion. Cook identified code-mixing according to Kaufman and Aronoff (1991), as when similar units from two languages are used together. While code-switching is producing morphemes from one language with those of another language within a single word. A study was done in Spain on EFL teachers

showed verbal and some written code-manipulation (code-mixing and code-blending) in the presence of family members or work colleagues (Porte 1999). However, this study pointed out that certain elements of the language were effected.

3. Porte's Study

3.1 Methods of the Study

This study was done in Spain to three EFL teachers of long-term resident (15-24 years). They speak and read Spanish fluently, and they were strongly connected with the Spanish community. The data collected in this study was from a three group conversations of 20-30 minutes over a three months period. The subject were not aware of the objectives of this study to not provoke the L1 output. The topics of the conversation were chosen to encourage use of language such as, EFL teaching, university administration, local social life and more.

Most of the evidence from the data were in the lexicon, speakers inserted L2 nouns in

the syntactic environment of the L1. In the recorded conversation, the subjects have a tendency mostly to code-mixing. They code-mix what they are certain that it is recognizable to the people they are talking to. The author thinks that this code-mixing is done consciously and under the assumption of the common knowledge shared by the participants. Subjects use code-mixing when there is no true L1 equivalent, and as a desirable strategy of communication.

However, code-blending examples were less and restricted to only two of the three subjects. The insertion of L2 verbs were blended with an L1 bound morpheme. Consider the following excerpts of code-blending as reproduced from Cook (2003:112). In all these examples, the L2 verb stem that is attached to a bound morpheme resembles an existing L1 form.

1- S2: I was really shocked when I first saw how molested (*molestar* 'to annoy')some teachers got at my criticizing the system

2- S3: The difficult thing is accustoming (*acostumbrarse* ‘to get used to’) yourself to that kind of tradition.

3- S2: You’d rarely get invited (*invitar* ‘to stand someone a drink’) to a drink by your average professor [in England].

3- S3: Most of the beaches at home are much more contaminated (cf. Spanish: *contaminado* ‘polluted’) anyway, so there’s not much difference there.

3.2 Results

According to these data, there is no significant L1 attrition despite the code-manipulation. Thus, it shows some support of language erosion since there is no direct evidence of the state of the subject’s L1, which makes it become normalized within a closed speech community. The code-manipulation produced consciously by the subjects. Gürel (2011) stated, “L1 attrition must be perceived as an unconscious rearrangement or restructuring of the L1

grammar due to contact, but not as a drastic loss/decay as in the case of pathological conditions”.

He did a study on people who learned L2 at adult age when they immigrated to another country, and started to use L2 dominantly. He believes that adult L1 attrition should be recognized as a shift toward L2, and also as a sign of L1 attrition. Gürel presented many ways in which this happens, like lexical borrowing, the use of L2-like collocations and idiom, changes in the pragmatic formulations, and changes in the phonetic and phonology systems.

4. L1 collocation knowledge

A chapter in Cook’s book (2003) deals with the influence of L2 on L1 lexical competence, collocation knowledge, and L1 lexical diversity in free written expression. The author indicate knowledge as the stored information about a word in the mental lexicon. Where lexical competence as the output of knowledge. The study provided next, ex-

amine the lexical knowledge, from the ability to judge L1 collocation as correct. The native speaker's ability may misjudge collocation because the word in the mental lexicon are related to other word..

On how L2 influences L1, the author points out two types, direct and indirect influence. An example of the direct influence is when a native speaker of English whose L2 is Hebrew say "we don't have any evidences", which is ungrammatical. The equivalent of the word 'evidence' in Hebrew has the count grammatical feature, which the speaker applied here. He proposed that direct influence appear in the case of L1 lexical knowledge. For the indirect influence, the Laufer suggested that it occurs in lexical competence. Such as, the difficulty in retrieving L1 words. The proficient L1 user will exceed the speed of retrieving of the native speaker who use a L2 prominently.

4.1 Study 1: Collocations

The purpose of this study is to explore the impact of L2 on L1 collocational knowledge. This study was done on two groups, academic educated adults. The first group were immigrants from the Soviet Union to Israel. They have been living in Israel for 2 to 40 years. They immigrated to Israel between the age 11 and 44, all of them speak Hebrew and their native language is Russian. As for the other group, they were 14 adults residence of Moscow, and native speakers of Russian who did not move to another language environment.

4.2 Research questions

Following the research questions reproduced from Cook (2003:22),

1- How well can immigrants who live and function in an L2 environment recognize and correct non-native-like L1 collocations when compared with people living in an L1 environment?

2- How is the correctness judgement of collocations affected by the following sociolinguistic variables?

- (a) length of residence in Israel;
- (b) age of arrival in Israel;
- (c) Russian language maintenance;
- (d) frequency of use of Hebrew.

4.3 Methodology

A questionnaire was given to the subject to collect demographic and sociolinguistic information about the subjects. The questionnaire included questions on which language they use in their daily life like watching Tv or reading books. These type of questions were used to figure out the language use of each subject. As for the correctness judgement, the subjects were given 18 correct sentences and 17 with wrong collocation based on Hebrew.

4.4 Results

The table above provided by Cook (2003) provides the scores of both groups (immigrants and Russian) in regard to their ability to judge correct collocations. This test answers the first research question, however, the result shows definite difference between the two groups. The immigrants were not able to figure out 40% of the wrong collocations.

What makes the results vary from a group to the other are the sociolinguistics factors. The table above show the results according to each factor. As seen in the table, the use of Hebrew did not effect on the collocational knowledge of the subjects. The age factor has a huge interaction with the test score, people who immigrated at older age were more successful. However, the effect of the length of residence was the strongest.

Table 2.1 Scores of collocation correctness judgement (maximum = 34)

	<i>n</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>Minimum</i>	<i>Maximum</i>
Immigrants in Israel	30	20.7	8.06	2	32
Russians in Moscow	14	28.5	2.24	23	31
Difference	$T (d.f. 42) = 7.6 \quad p = 0.001$				

Table 2.2 Collocation judgement correctness and sociolinguistic variables: Correlations

	<i>Collocation judgement score</i>	
	<i>R</i>	<i>p</i>
Age of arrival	0.37	0.04
Length of residence	-0.65	0.0001
Use of Russian	0.54	0.002
Use of Hebrew	-0.28	ns

Since the length of resident has the strongest influence, the experimenter decided the group of immigrants into two subgroups according to their length of residence. Subject who lived in Israel for 2-6 years were the first group, and the other 17-40 years. These three groups were compared using the method, analysis of variance on their collocational knowledge.

The table below presents the result of the three groups, based on their collocation judgments of Russian. The results express that the longer the length of residence in a non-L1 speaking environment, more attrition in collocational knowledge happens.

4.5 Summary

The length of residence in the L2 environment has the strongest impact on the collocational knowledge. However, the other factors like the age and the amount of language use play a role in the influence of L2 on L1.

5. Keckes and Papp's Experiment

The authors in their book *Foreign Language and Mother Tongue*, inspected the consequence of learning a foreign language on the skills development of the mother tongue. It was a longitudinal study that took 2 years, on students aging 14 to 16 years old in Hungary. They were native speakers of Hungarian and learning a second language, English, French or Russian. The aim of this study is to find how the foreign language

Table 2.3 Collocation judgement scores of Russians, recent immigrants and old immigrants (maximum score = 34)

	<i>n</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>Minimum</i>	<i>Maximum</i>
Russians	14	28.5	2.24	23	31
Recent immigrants	22	24.7	4.04	18	32
Old immigrants	8	9.75	6.62	2	19
Difference	$F(41,2) = 54.2 \quad p = 0.0001$				

influences the use of L1 during a period where the skills of L1 are being developed.

5.1 Focus of the Experiment

The study focused on structural wellformedness and the use of linguistics memory versus visual memory in written production. Also, to measure the metaphorical density of texts. At first the authors came up with three hypothesis,

- Intensive and successful FL learning can have a strong beneficial influence of the use of L1 skills.
- Intensive FL learning can influence the ways of thinking and can be transferred to L1 activities.

- If FL differs from L1 in configuration (i.e., grammatical word-order language and pragmatical word-order language) speeds up the development process.

5.2 Types of Classes

The students had relatively similar social background and education. They came from middle-class families. Also, the L1 skills were tested and there was no significant difference in the results. All students had the change to study Russian for almost 4 years since it was compulsory. During the study, there was three types of classes. The immersion class had 36 students, the foreign language taught to them was French. However, French is considered to be new to them.

Some of the school subject were taught in the foreign language, like biology and math. As for the specialized class, 35 students were involved, the forgiven language was either English or Russian. They had 7 or 8 FL classes per week and all school subjects were taught in Hungarian. The last type of classes is the control class which included 33 students and had 2 or 3 hours per week of English or Russian. All school subjects were taught in Hungarian as well.

5.3 Methods of Testing

The method of testing used in this experiment was written tests, the students took three different tests. The first which was the entering written test to determine that the students are on the same level in Hungarian. The second was 9 months after the first, it was a written test consisted of three parts. The student were asked to write in both language, the L1 and FL. Student do not have composition classes in high school, they write in both languages but without teaching

them or instructing them. The last test was at the end of the experiment and 1 year after the second test.

5.4 Results

As mentioned before, the first test showed that there is no huge difference among all three groups in the native language skills, however, the control class exceeded the other two classes with a slight difference. The experimenters used a modified version of the Bernstein-Lawton-Loban method of evaluation. In the third test, the control class had a lower score than the other classes, in each category. Final results showed the immersion and specialized classes developed their use of L1 creatively while the control class hardly maintained the previous level. Although, the immersion class had fewer classes in the L1 and less exposure than the other two classes.

5.5 Summary

This experiment proves that intensive and successful FL learning can help in develop-

ing the skills of L1. The only difference between these three groups was the exposure to L1 and FL, which influenced the development of L1. It also determines that FL learning has a role in affecting the state of L1 knowledge and skills. The investigation of this experiment was shortened to structural wellformedness only. Additionally, the effect relied on a couple of aspects like, language proficiency, motivation, and the way of exposure to the FL.

6. Conclusion

The idea of L2 influencing L1 is not well known, and some might be against it. This paper presented studies of different scholars on this influence. There are many arguments in this regard, since the influence is not really obvious as it is in the influence of L1 on L2, like having an accent. Some studies were longitudinal, in which the longer the period of learning a foreign language or living in a foreign language community, the influence would be stronger. Also, these ef-

fects may be shown in the academic writing as illustrated in Kecskes and Papp's experiment.

The transfer from one language to another can be direct or indirect, depending on the situation. Cook is one of the scholars who did many researches on the effects of L2 on L1. He thought the concept of this effect came from multi-competence. These ideas were illustrated in the paper, as well as, the approach of reverse transfer. Literally, the exposure to L2 for a long time has many effects on L1.

References

- Cook, V. J. 2003. *Second Language Acquisition, 3 : Effects of the Second Language on the First*. Clevedon, GBR: Multilingual Matters.
- Kecskes, I, Papp, T. 2000. *Foreign Language and Mother Tongue*. Mahwah, N.J.: Lawrence Erlbaum.



Laufer, B., Nation, P. 1995. Vocabulary size and use: Lexical richness in L2 written production.

Applied Linguistics 16, 307-332.

Porte, G. K. 1999. English as a forgotten language: The perceived effects of language attrition.

English Language Teaching Journal 53 (1), 28-35.