Sveučilište u Zagrebu
Filozofski fakultet
Odsjek za anglistiku
Katedra za metodiku

LEARNING AND USING SPANISH AS L7: AN AUTOBIOGRAPHICAL SKETCH

Diplomski rad

Student: Ana Marija Žagar
Mentor: dr. sc. Marta Medved-Krajnović

University of Zagreb
Faculty of Humanities and Social Sciences
Department of English
TEFL Section

LEARNING AND USING SPANISH AS L7: AN AUTOBIOGRAPHICAL SKETCH

Graduation Thesis

Student: Ana Marija Žagar
Supervisor: Assoc. Prof. Marta Medved-Krajnović

## Examining Committee:

Asst. Prof. Renata Geld
Dr. Anđel Starčević, senior teaching assistant
Assoc. Prof. Marta Medved-Krajnović
Abstract ..... 5

1. Introduction ..... 6
2. Background ..... 8
2.1 Multilingualism ..... 8
2.2 Crosslinguistic influence ..... 9
2.3 The organization of lexicon and lexical transfer ..... 12
3. The aim of the study ..... 16
4. Methods ..... 17
4.1 Participants ..... 17
4.1.1 Linguistic background ..... 17
4.2 Intrasubjective methods ..... 20
5. Results and discussion ..... 22
5.1 Classroom context ..... 22
5.2 Conversations ..... 27
6. Conclusion ..... 31
References ..... 34
Sažetak (abstract in Croatian) ..... 35


#### Abstract

Crosslinguistic influence or crosslinguistic transfer has been known as the influence of a person's knowledge of one language on that person's knowledge or use of another language. Assuming that word production is governed by activation and inhibition of lemmas and lexemes, to choose the appropriate lexeme, the word with the highest activation level is selected, whereas other words are inhibited. However, assuming a multilingual person knows more than two languages, it is predicted that in certain cases the lexeme for a concept pertaining to the language a speaker does not want to use may be chosen instead of the lexeme for the same concept pertaining to the language the speaker intended to use. It is predicted that this may occur if the lexeme of the unintended language has a higher resting level of activation (e.g. due to its frequent use) than the lexeme of the intended language. It is also predicted that language production of a multilingual person might result in lexical blends; that factors such as high frequency and recency of use and high proficiency etc. could possibly increase crosslinguistic influence; and that speaker's subjective perceived similarity of languages may or may not lead to positive or negative transfer. A case study designed as an autobiographical sketch was carried out using stimulated recall to test these predictions in a multilingual learning Spanish as L7. The findings of the study indicate that the languages, which the speaker is highly proficient in and which she uses often, seem to influence lexical transfer more and also seem to be used more as source languages. Secondly, perceived subjective but not objective lexical or phonological similarity seems to lead to negative transfer, whereas perceived subjective as well as objective similarity seems to lead to positive transfer. Finally, it appears that a large difference between the resting levels of activation of lexemes for the same concept can sometimes lead to production of unintended lexemes.


Keywords: multilingualism, crosslinguistic influence, stimulated recall, autobiographical, Spanish

## 1. Introduction

In the face of globalization and increasing migration, multilingualism can hardly be seen as news anymore and thanks to its intriguing nature it has become the subject to much research (Beebe and Zuengler, 1983; Poulisse, N. \& Bongaerts, T., 1994; Poulisse, 1999). However, being quite a complex phenomenon, there are still questions that need to be answered and areas to be explored.

One of the answers to the question of what multilingualism entails, is the ability to use three or more languages either separately or in various degrees of code-mixing. It has also become known that multilinguals' linguistic system is a fluid construction consisting of various subsystems, such as phonology, lexis and pragmatics, which characterize the languages a multilingual knows. However, the subsystems do not necessarily need to be in sync, nor are they automatically in the same stage of acquisition or on the same level of development.

Since being multilingual means knowing more than two languages, it is not unexpected that a person's knowledge of one language can influence that person's knowledge or use of another language, a phenomenon otherwise known as crosslinguistic influence (CLI) or language transfer. CLI is not the same across multilinguals, but rather depends on various factors, such as whether the speakers perceive two languages they know as similar and whether that is actually the case; how frequently they use a language or a particular language construction; how proficient they are in a particular language; or how long they have been exposed to a language.

There are more types of transfer and lexical transfer is one of them. More precisely, lexical transfer entails how word knowledge in one language influences a person's knowledge or use of words in another language. There are different ways of acquiring new words, but eventually our lexical knowledge is consolidated at three levels: the level of concepts, where we store the mental images of our experience of the world, the level of lemmas, at which we can find all the information about a particular word, just like in a dictionary, and the level of lexemes, where all the different word forms of a particular word can be found, such as speak, speaks, and spoken. In the process of learning new words, we can make connections between concepts, lemmas and lexemes connected to one language and those connected to other languages we know. Because of the connections we create, sometimes by using one word, the words that are connected with it also get activated and compete for our "attention". However,
since we want to encode a particular concept in a particular language, other interfering words need to be suppressed, so that the right word or structure can be chosen and used.

Given that while learning and using words in different languages, we make connections between concepts, lemmas and lexemes, and given that it is hypothesized that the activation and inhibition of lemmas and lexemes governs our language production, while at the same time there are multiple factors that can influence the activation and inhibition, I expect that lexical transfer would increase if two or more lemmas are highly activated at the same time. I also expect that if there is a relatively large difference between the levels of activation of lexemes that pertain to different languages, but represent the same concept, provided that it is activated more (e.g. due to its frequent use), although the speaker wants to use the less activated lexeme of the language $\mathrm{s} / \mathrm{he}$ intends to use, the lexeme pertaining to the unintended language may accidentally be chosen.

This paper aims to add additional insight into these hypotheses by presenting an intrasubjective study in the form of an autobiographical sketch. Even though quite a few studies have been carried out on CLI, most of them are either intersubjective in nature, focusing on patterns of language use observed in relatively large groups of language users, or intrasubjective (case) studies, which focus on patterns of CLI found in the language use of individuals (Jarvis \& Pavlenko, 2008, p. 30). However, there have not been that many intrasubjective studies, where the researcher himself is also the subject of the research. With such study, done as an autobiographical sketch, a more immediate description of the processes within a multilingual's linguistic system could be obtained, possibly giving a different perspective on multilingualism and/or revealing various methods a multilingual might draw on while learning and/or using a particular language. Yet, due to the autobiographical nature of such study, the results should be regarded as very subjective and generalizing them would therefore not be possible

In section 2.1, more information is given about multilingualism, while in section 2.2 crosslinguistic influence is explained and some previous studies are mentioned. Section 2.3 gives more information on the organization of lexicon and lexical transfer. The aim of the study is presented in section 3 and section 4 explains the methodology that was used to obtain the data, which are presented and discussed in section 5. Finally, section 6 summarizes and concludes the paper.

## 2. Background

### 2.1 Multilingualism

Since multilingualism is not a simple phenomenon, it is no surprise that the issue of how to define it has not been settled yet. For the purposes of this study I will define a multilingual as "a person who has the ability to use three or more languages either separately or in various degrees of code-mixing" (Kemp, 2009, p. 15). The term language here denotes language as a variety "which a group allocates to itself for use as a habitual and time-stable code of communication" (Franceschini, 2009, p. 34).

Multilinguals may not be equally proficient or have equal control over their languages. Moreover, their proficiency can also differ when it comes to their skills in speaking, writing, listening and reading. The proficiency in each of their languages can also fluctuate over time. What is particularly interesting is that languages of a multilingual are not completely separated and stored in "locked drawers" in their minds, but rather make up quite an interactive system. That way, languages that a multilingual uses can work together to help him/her understand a completely new language. The acquisition of a new language may also affect other languages, and a particular language that a multilingual knows and uses may help him/her in the process of acquiring a new language. These are only some of the characteristics of a multilingual person, but it can be easily seen that multilinguals are quite different from monolinguals in the way their mind works when it comes to languages. As Kemp (2009) explains, "each language in the multilingual integrated system is a part of the complete system and is not equivalent in representation or processing to the language of a monolingual speaker", which accordingly leads to the conclusion that being multilingual does not necessarily mean being proficient to native speaker level (p.19).

All in all, as various studies continuously prove it, multilingualism is an interesting, incredibly intricate and multifaceted phenomenon, one whose shape and development is influenced not only by a speaker's surroundings and external influences, but also by the individual characteristics of the speaker himself. This dynamic nature of multilingualism is also the reason why multilingualism is not that simple to examine and pin down.

### 2.2 Crosslinguistic influence

One of the major reasons for such a dynamic linguistic system of multilinguals is a phenomenon known as crosslinguistic influence or crosslinguistic transfer - "the influence of a person's knowledge of one language on that person's knowledge or use of another language" (Jarvis \& Pavlenko, 2008, p. 1). For example, CLI often occurs as a learning strategy, by which learners use their knowledge of one or more languages for making assumptions about the forms, structures, rules etc. of a different language. The result of this process are frequently hybrid structures, which are produced when a speaker combines the elements of the languages that $\mathrm{s} / \mathrm{he}$ knows. For instance, combining the Swedish word lycklig and English word lucky, a Swedish speaker can create the word luckly, to mean happy (Jarvis \& Pavlenko, 2008, p. 9). CLI can also be noticed in word choice preferences, which often transfer from one language to another and affect the types of words language users choose and their choice of specific words used in specific contexts (e.g. be angry versus be mad) (Jarvis \& Pavlenko, 2008, p. 91).

CLI can occur either as forward, lateral or as reverse transfer. CLI from an L1 to an L2 or L2 to L3 etc. is called forward transfer. Conversely, CLI from L2 to L1 or L3 to L2 etc. is known as reverse transfer. Finally, lateral transfer is used to describe CLI from one post-L1 language to another post-L1 language, because it is not the order in which a language was acquired that plays a role in its ability to function as a source language, but other factors, such as the language user's level of proficiency and similarity to the recipient language (Jarvis \& Pavlenko, 2008, p. 22).

There are many factors that affect and govern transfer, some of them being crosslinguistic similarity or psychotypology, frequency, recency and salience, markedness and prototypicality, metalinguistic awareness, length, frequency and intensity of language exposure, length of residence, general level of proficiency, number and order of acquired languages and language use.

When it comes to crosslinguistic similarity or psychotypology, it seems that transfer occurs most when the source and the recipient languages are perceived to be similar by the L2 user. If the source language is indeed objectively similar to the recipient language, forms and structures of the recipient language will be learnt easier as they will be directly associated with the familiar L1 forms and structures. However, if aspects of certain languages are just subjectively similar and in reality are quite different, this can lead to negative rather than
positive transfer, as the assumed similarities are not compatible with objective similarities. As a consequence, the L2 user may encounter false friends and make errors. For example, the word ali in Slovenian means or, whereas in Croatian it means but, so if an L2 user transferred it from Croatian to Slovenian, s/he would be making a negative transfer by using it erroneously (Jarvis \& Pavlenko, 2008, p. 176).

Apart from the perceived similarity of two languages, studies have also shown that structures that occur very frequently in a learner's L1 and/or L2 are more likely to be transferred and show up in the learner's interlanguage. For instance, Poulisse (1999) found that the majority of slips of the tongue of Dutch speakers while speaking English were influenced by very frequent function words in their L1, such as ook (too) and nog (another) (as cited in Jarvis \& Pavlenko, 2008, p. 184). This is explained by the fact that those words are highly automatized and are therefore more difficult to suppress while a person is trying to select the right word in their L2. Something similar happens if a person has used a particular language prior to using another one. In that case the forms and structures of the language used recently are likely to be highly activated in the person's mind and are more difficult to suppress. Therefore, CLI is more likely to take place when a language has been used or learnt just prior to the target language (Jarvis \& Pavlenko, 2008, p. 184). The same effect of CLI occurs when a structure is perceptually more salient or noticeable in the source language, which makes it more likely to be transferred to the target language.

Markedness and prototypicality can affect transfer as well. For instance, since learners usually associate prepositions in accordance with their central, prototypical meanings, they often make errors while using them in their L2, L3 etc. More specifically, when choosing a preposition in English, their L2, instead of saying I'm worried about him, a Croatian speaker might say I'm worried for him (Cro. zabrinuta sam za njega). In this case the speaker is relying on preposition's prototypical, literal meaning from their L1, Croatian, and is transferring the Croatian preposition into English, rather than using the appropriate English preposition (Jarvis \& Pavlenko, 2008, p. 188).

Another factor that can have an effect on transfer is metalinguistic awareness. When it comes to intentionality and conscious control or monitoring of a language, it seems that while unintentional switches to another language in a multilingual are usually switches to his/her L2, the intentional switches tend to be the ones to his/her L1. Therefore, it seems that our choice of the source language can also be affected (Jarvis \& Pavlenko, 2008, p. 195).

Besides metalinguistic awareness, the length, frequency and intensity of language exposure along with the length of residence influence transfer as well. Studies have shown that as the intensity of exposure, usually measured in the number of hours of L2 instruction per week, increases, the transfer increases too. However, it seems that the longer one studies the language or lives in the L2 (or L3 etc.) environment, the transfer tends to decrease. These results imply that transfer may be curvilinear, at first increasing to a certain point and then decreasing (Jarvis \& Pavlenko, 2008, p. 200).

It is no surprise that a person's level of proficiency in both the source and recipient languages also plays a role in the amount of transfer. From the various studies it seems that whereas negative transfer decreases with proficiency, positive transfer can increase as the learner's proficiency in L2 (or L3 etc.) improves and becomes more aware of the similarities between the languages. The learner's proficiency in the source language appears to be particularly important, because the transfer depends on the degree to which the source language is activated during recipient-language performance. In other words, the higher the level of activation of the source language, the higher the amount of source-language intrusions or interference in recipient-language processing (Jarvis \& Pavlenko, 2008, p. 203).

Finally, some studies have demonstrated that in multilinguals, the language learned just prior to the recipient language is favored as the source language. Additionally, when it comes to the number of languages a person knows, "it is clear that people who know more than two languages often exhibit transfer from multiple languages, even simultaneously" (Jarvis \& Pavlenko, 2008, p. 205). Importantly, external factors, such as multilingual's interlocutor may also have an effect on his/her transfer in that it can depend on our knowledge of the person and the languages they know. For example, in a study by Beebe and Zuengler (1983), Chinese-Thai bilinguals used variations of Thai vowels making them sound either more Thailike or more Chinese-like, depending on whether they were talking to Thai with an ethic Thai or an ethic Chinese (as cited in Jarvis \& Pavlenko, 2008, p. 208).

To sum up, crosslinguistic influence, whether it is forward, lateral or reverse, plays an important part in multilingulas' linguistic system. Although it may not be equally evident in all of them, CLI reaches different linguistic subsystems and in that way governs our language learning process and language use in great measure. Therefore, when it comes to research, factors, such as psychotypology, frequency, general level of proficiency etc., which are known to affect transfer, are not to be left out of the picture.

### 2.3 The organization of lexicon and lexical transfer

As it can be deduced from the examples of CLI mentioned in the previous section, lexical transfer is only one among different types of transfer, such as phonological and orthographic transfer, morphological and syntactic transfer, pragmatic transfer, lexical and semantic transfer, conceptual transfer etc.

As defined by Jarvis \& Pavlenko (2008), "lexical transfer is the influence of word knowledge in one language on a person's knowledge or use of words in another language" (p. 72). However, knowing a word in a language entails several stages. A person needs to be able to access a word in his/her mental lexicon; $s / h e$ needs to know how the word is pronounced and spelled in various forms; $s /$ he has to be aware of the word's grammatical class and syntactic constraints and needs to know what the word means; and also, s/he has to know the collocations in which the word occurs and the word's associations with other words and notions. Additionally, when acquiring or learning a new word, a person gains conceptual knowledge connected to the word as well. Conceptual knowledge involves "mental concepts with which a word is associated", i.e. mental representations whereby a person visualizes "situations and contexts in which the word has been or could be used", is able to recognize a word's denotations and interpret its connotations (Jarvis \& Pavlenko, 2008, p. 73).


Figure 1: Three levels of lexical representation (Jarvis and Pavlenko, 2008, p. 83)

Word-related knowledge is finally represented at three different levels, as shown in figure 1. As Jarvis and Pavlenko (2008) explain, "the first level is the level of lexemes, or the forms of the word", which includes knowledge about the pronunciation and spelling of the inflectional forms of a word (p. 82). For example, our knowledge of the word sell would comprise phonological and/or orthographic representations for the lexemes sell, sells, selling and sold.

The second level is the level of the lexical lemma, at which we recognize sell, sells, selling and sold as different forms of the same word, or more precisely, of the same lemma. This is also the level of the information about the word's grammatical class, subcategorization frame, collocational and syntactic constraints and semantic specifications or how the word's forms map onto conceptual meaning. Finally, the third level is the level of concepts, where "visual, aural, olfactory, tactile, kinesthetic and other types of impressions, images, properties, schemas and scripts are stored and organized into conceptual categories" (Jarvis \& Pavlenko, 2008, p. 82). At this level, we form our knowledge of the world.

When we acquire a word in a new language there are more ways in which we can connect it with the words in a language that we already know. For instance, we can link the lexemes of the new language to the lexemes of the already-known language directly (e.g. the English lexeme sell with the Dutch lexeme verkopen and the lexeme sells with the lexeme verkoopt). Other ways of acquiring a new word are linking the L2 lexeme to the L1 lemma; creating a new lemma in the L2; linking the lemma in L1 to the one in L2; associating the L2 lemma (e.g. verkopen) to the concept that underlies the L1 lemma (e.g. sell); or combining these ways of interconnection simultaneously (Jarvis \& Pavlenko, 2008, p. 83).

Such interlingual associations formed between structures (e.g. words, as seen in the previous paragraph) in two or more languages usually give rise to linguistic transfer. Since the structures of the two or more languages are connected, the use of a structure in one language can as a result activate the corresponding structures in other languages (Jarvis \& Pavlenko, 2008, p. 82). Therefore, for example, if a multilingual wanted to use a word in his/her L4, s/he would have to suppress the words in his/her other languages that get activated in the process, so that $\mathrm{s} / \mathrm{he}$ could eventually use the word that $\mathrm{s} / \mathrm{he}$ intended to use in the language $\mathrm{s} /$ he wanted.

Generally, researchers agree that the language one wants to use is selected in the conceptualization phase, or at the level of concepts. However, "when we want to encode a concept, such as TABLE, not only the concept of TABLE but related concepts such as CHAIR, DESK, and so on are also activated to some degree" (Kormos, 2011, p. 56). Since we wanted to express the concept of TABLE, this concept will be activated the most. The activation from the concept will spread to the level of lemma for TABLE and eventually, to the level of lexemes, where the right lexeme will be selected, as the lexemes for other
concepts, like CHAIR or DESK, will be less activated than the lexeme for TABLE (Kormos, 2011, p. 56).

Nevertheless, if a person is multilingual, the conceptual system sends activation not only to L1, but also to L2, L3 etc. lexical items. With the aim to explain how it is exactly that bilinguals select the right words or why they sometimes suffer from the effects of transfer, several models have been proposed on bilingual speech production (Green 1993; Poulisse and Bongaerts 1994).


Figure 2: The selection of an L2 lemma through spreading activation (Poulisse, 1999, p. 62)

In their 1994 study of unintentional language switches in L2, Poulisse and Bongaerts present their own model, as presented in figure 2. Firstly, they "assume that language choice is determined during conceptualization and is included as a language component in the preverbal message" (as cited in Poulisse, 1999, p. 62). As seen from figure 2, the conceptualization level in Poulisse and Bongaerts' model consists of different meaning elements, such as [+ human] and [- adult], which pertain to and can be shared by various concepts and therefore lemmas as well. Along with the meaning elements at the conceptual level, there is also a language component or language cue, like the [+ English] illustrated in figure 2. As we imagine or think of what we want to say and decide on the language in which we want to express it, that conceptual information and the language cue work together in activating lemmas of the right meaning and language. Like shown in figure 2 , the lemma that receives most activation will be selected for further processing. It can also be seen that the L2 (English) lemmas receive more activation because the preverbal message contains the feature [+ English] (Poulisse, 1999, p. 62).

Secondly, when it comes to the level of lexemes, according to Poulisse and Bongaerts, it is the matrix language that governs the morphological encoding of inflections. More precisely,
as Poulisse (1999) explains, "when one is speaking the L2, all inflections come from the L2 while when one is speaking L1, all inflections come from the L1" (p. 63). Nevertheless, according to Poulisse and Bongaerts (1994), if there is a relatively large difference in the resting levels of activation for the L1 and L2 words, which is often the case with less proficient speakers, lexical transfer can occur, because "the L1 word will have a much higher resting level of activation than the corresponding L2 word" as it is generally used more frequently (as cited in Poulisse, 1999, p. 63). Therefore, a word from L1 may be selected by accident as it shares all features except from the language feature of the target word. Additionally, what makes lexical transfer even more likely to occur is that beginning learners' speech production is not very automatized, which is why the speakers need to focus their attention more on the processing (Poulisse, 1999, p. 63).

Finally, the model also accounts for the occurrence of blends, such as "springling" from the English "spring" and German "Frühling". According to Poulisse (1999), the blends occur if two or more lemmas are highly activated and therefore compete for further phonological processing, whereby two lemmas are selected and "the phonemes of both words are combined into a single new word" (as cited in Kormos, 2011, p. 61).

Because of the way the model is structured, it could be considered true for multilingual production as well. Surely, as in multilingual production more than two languages are involved, there would be more lexemes that would be activated and considered for selection, making the process slightly more intense and therefore also creating more chances for CLI.

The mind of a multilingual is indeed quite impressive in the amount of work it has to carry out continuously and more or less successfully throughout the act of conversing, be it in a multilingual's mother tongue or his/her other languages. Considering everything lexical knowledge entails, the organization of lexicon and different methods of acquiring new words, it is however no wonder that the mind sometimes slips. This is even more so if various factors, such as psychotypology or prototypicality mentioned in section 2.2 , are taken into account.

## 3. The aim of the study

Various theories have been proposed and many studies have been carried out on the organization of lexicon, acquisition of new words and lexical transfer, some of which I have mentioned above. Formulated in (1-5), some of the existing hypotheses and findings are presented.
(1) Word production is based on the activation and inhibition of lemmas and lexemes for the concepts a speaker wants to encode. To choose the appropriate lexeme, the word with the highest activation level is selected, whereas other words are inhibited.
(2) There can be a relatively large difference between the resting levels of activation of lexemes for the same concept, which differ only in the language cue, i.e. the language component on the conceptualization level, which denotes the language in which the speaker wants to express a particular lexeme. If it is activated more, the lexeme pertaining to the unintended language can be chosen by mistake.
(3) Two or more lemmas can be highly activated and compete for selection at the same time, which can result in speakers' production of lexical blends.
(4) Factors such as high frequency and recency of use, high frequency and intensity of language exposure, high proficiency and extensive length of residence increase the activation of lemmas and lexemes pertaining to the languages for which these factors are true. Because of that, the possibility of crosslinguistic influence can also increase.
(5) Languages can be objectively similar to each other or subjectively perceived as such. If the speaker subjectively finds that aspects of particular languages are similar to each other but objectively they are not, negative transfer may occur, whereas if $s /$ he subjectively finds that aspects of particular languages are similar to each other and objectively they indeed are, positive transfer might take place.

To add additional insight into the hypotheses and findings mentioned in (1-5), a case study was carried out in the form of an autobiographical sketch about a multilingual using and learning Spanish as L7. The aim of the study was to investigate whether its results corroborate, or not, the existing hypotheses and findings about how multilingual speakers process and use their languages.

## 4. Methods

### 4.1 Participants

To add additional insight into the hypotheses a case study was carried out in the form of an autobiographical sketch. I, the participant, am a female 25 -year-old multilingual Croatian speaker. I have lived in Zagreb, Croatia, for almost my whole life, which is also where the data for this research were collected. I am currently a double major MA student at the University of Zagreb. My first major is Teaching English as a Foreign Language (TEFL) and my second major is Dutch studies. However, in the past year, I lived in Amsterdam, the Netherlands, where I graduated from the University of Amsterdam. In Amsterdam, I studied Dutch as well, with emphasis on linguistics and language acquisition, which together with the study programs from the University of Zagreb, not only helped further shape my metaliguistic awareness, but also provided me with tools to carry out this research.

### 4.1.1 Linguistic background

So far, I have learned seven languages. Namely, Croatian, Slovenian, English, German, Dutch, French and Spanish. Since I live in Croatia and since it is my mother tongue, I speak Croatian the most and I am most fluent in it as well.

Slovenian could almost fit the category of being my second mother tongue, since I am half Slovenian. Half of my family lives in Slovenia, near a city called Novo mesto and since I was a baby, I have been visiting them once a month, which has sometimes been just a one-day visit and other times a one- or a two-week holiday. When I was a child, I would stay there even for a month or two, during which my family would talk in Slovenian with me. The input that I received was enough for me to pick up the language. However, the input that I got originated mostly from the family members who, when at home, speak a variety pertaining to the region of Dolenjska. On the other hand, Slovenian TV programs, cartoons and books functioned as the main source of the standard Slovenian that has been shaping my knowledge of the language. Since I had never received a formal education in Slovenian, in my first study year in Zagreb, I followed a one-year course of Slovenian. The lessons, where I explicitly found out more about Slovenian grammar, were held once a week and lasted for one hour and a half. Nevertheless, since, when everything is taken into account, my experience in spoken Slovenian exceeds my reading or writing skills in Slovenian, I consider myself to be at the
native speaker level when it comes to speaking, but when it comes to reading and writing, I do not find myself as skillful.

The third language I find myself most proficient in is English. I have been learning English since I was 4 . During the first years of my primary school I used to go to various language schools and from my fourth grade until my last year in high school, it was a part of my formal education. The classes were usually held twice or three times a week and each lasted 45 minutes. Additionally, throughout the high school I was enrolled in a language school where I had four classes of English per week. My English input was not limited only to formal education. In day-to-day life, I have always been in contact with English via media, and in my third and fourth year of high school I also started reading English literature, which reached its peak during my studies at the university of Zagreb and Amsterdam, where I practiced my writing skills as well. In Amsterdam, not only did I live with an American student, with whom I communicated in English every day, but I also lived in an international student complex, where English served as a lingua franca.

In the fourth year of primary school, I chose to study German, which I continued studying in my high school as well. I was learning it for eight years, during which I had two 45-minute classes per week. The classes in my primary school consisted mostly of direct instruction with a formal authority teacher, which I did not particularly like. Apart from the last year of high school when we got a new teacher who used a more student-centered, communicative approach, I was quite unmotivated to learn German, which, combined with little input outside of classroom, led me to stop learning it all together after I had graduated.

In 2008, along with English, I started studying Dutch at the University of Zagreb. We had two 45 -minute lessons three times per week during the first three years and two 45-minute lessons two times a week during our Master's degree. Combined with other courses, such as Dutch culture and literature, the acquisition process was rather intense. Since Dutch is a Germanic language and since German and Dutch are indeed quite similar in some aspects, my knowledge of German helped me a lot in the beginning. However, as I became more proficient in Dutch, I had to suppress German, as I found it to be too interfering. Because of psychotypology, I found that the occurrences of negative transfer from German to Dutch were making the acquisition more difficult, especially when it came to Dutch pronunciation and cases of subjective (but not objective) similarity. After my first and second year, I attended a three-week course of Dutch language and culture in the Netherlands, where all the
lessons were in Dutch. Additionally, while socializing, the students communicated mostly in Dutch as well. This enabled me to use Dutch on everyday basis, which helped me become more fluent. My fluency in Dutch increased even more during the year that I spent in Amsterdam. Even though, very often English was used for communication and even most of my classes were in English, Dutch was still part of everyday life, which not only enabled automatization, but also helped me overcome my foreign language anxiety.

In my second year at the Univeristy of Zagreb, after I had finished the course in Slovenian, I started learning French, which I had always wanted to do. I was very motivated, but since I had only two 45 -minute lessons once a week and apart from the Spanish input that I received from watching Spanish soap operas, this was the first Romance language I attempted to acquire, I found it quite challenging. My knowledge of Spanish helped me in understanding and learning some words and structures, but this applied mostly when they were in written form. With time, I became more proficient in my writing and reading skills. However, with so little input and output, it was hard to reach automatization and fluency. Therefore, my speaking and listening skills continued to lag behind.

Since at the University, I was able to study French only for two years, in my fourth year of studies, I began learning Spanish. The 90 -minute lessons have been held once a week, just like French lessons before. Nevertheless, I found Spanish much easier at first, since by watching soap operas during my childhood, through unfocussed language acquisition, I picked it up, but have not actively used it. So, since I started learning it with the help of guided instruction, and using it more, I have been acquiring it with more ease than French. However, since while living in Amsterdam, I was not learning it or using it at all, now that I have continued, I have to make a bit more effort to activate the old knowledge again. I find that my reading skills, and especially my listening skills, are quite good, whereas my production skills are slightly weaker.

The languages described above are also systematically presented in table 1 , where I evaluated my proficiency in all the languages. As a standard for the evaluation I took The Common European Framework of Reference for Languages (CEFR), which entails six levels, describing speaker's abilities in reading, listening, speaking and writing. The levels range from A1 and A2 levels, generally suggesting that the user is a beginner or a basic user, B1 and B 2 , describing an independent user, to C 1 and C 2 levels, which illustrate a proficient
user. However, since Croatian is my mother tongue (MT), the scale used to describe other languages would not be applicable, as my proficiency in Croatian surpasses the C 2 level.

Additionally, as it can be seen in table 1, my proficiency in German is estimated as being on the A1 level. However, it might be so that it is slightly lower than that as I have not used German since I was 18 . On the other hand it could also be the case that if I started using it again, I could become more proficient in quite a short period of time, as the language would be activated again.

| Languages | Understanding |  |  | Speaking | Writing |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Listenng | Reading | Spoken <br> interaction | Spoken <br> production |  |
| Croatian | MT | MT | MT | MT | MT |
| Slovenian | C2 | C2 | C2 | C2 | C1 |
| English | C2 | C2 | C2 | C2 | C2 |
| German | A1 | A1 | A1 | A1 | A1 |
| Dutch | C1 | C2 | C1 | C1 | C1 |
| French | A1 | A1 | A1 | A1 | A1 |
| Spanish | B1 | A2 | A2 | A2 | B1 |

Table 1: Subjective grading of the languages I know

### 4.2 Intrasubjective methods

In this study, learning Spanish, or more precisely lexical transfer in the process of learning Spanish, was examined at the level of the individual. To do that, I probed into my own internal language system by means of stimulated recall.

As Mackey and Gass (2005) explain, "stimulated recalls are conducted with some degree of support" (p. 78). In this study the support was a voice recording mobile phone application that enabled me to record 90 -minute Spanish lessons that I attended once a week from 24 October 2014 to 16 January 2015. In the same period, I recorded conversations that I had with a Spanish native speaker, Byktor. The conversations usually lasted from 15 to 30 minutes. They included a variety of topics, such as languages, hobbies, culture etc. All together, that amounted to 3 conversations and 9 Spanish lessons. After I had recorded the lessons and conversations, I listened to them once again and tried to remember my way of
thinking and the processes that had been going on in my mind during that moment. I tried to think of the way I was able to learn or remember a particular word, how I was able to understand it or why I was not able to understand it, and how and/or why I ended up using a particular word. In cases of evident lexical transfer, I tried to recall why it had happened. For every new or problematic word, or lexemes for which more processing was needed, I noted down what I believe was my thought process. Naturally, this makes the study qualitative and very detailed rather than quantitative. It also makes it extremely subjective, which is why generalizing the results is not possible. However, case study results are looked at as a contribution that corroborates, or not, already existing findings and hypotheses about how multilingual speakers process and use their languages.

The results were grouped according to the type and characteristics of lexical transfer. More precisely, they were divided into five categories: positive transfer, negative transfer, learning a new expression or a new word, understanding an expression or a word from context and translating it into another language. Positive and negative transfer were examined in both production, as presented in (1a-b), and reception, as help in understanding a particular expression or a word, as in (2a-b).
(1) a) Span. estrésate - Eng. stress out
b) Span. *fecho - Ger. fach (Eng. subject)
(2) a) Span. común - Eng. common
b) Span. piscina (Eng. pool) - Slo. pisarna (Eng. office)

When a new word was presented, a language that was used as help when learning it or which the new word was associated with was determined, as presented in (3).
(3) Span. forjado - Eng. forged

Also, words that were understood mostly only because of the context they were in, were observed as a separate phenomenon, as the one in (4).
(4) Span. Hay dos adivinos. Uno, todo bien. Todo te ira bárbaro! - Eng. 'There are two fortunetellers. One says everything will be fine. Everything is going to be great!'

Finally, words whose meanings were understood by translating its parts into another language made up a separate category as well, as presented in (5).

## (5) Span. balonmano - Cro. rukomet (Eng. handball)

The results are presented as graphs, which are later discussed. The lessons and conversations that were analyzed were not fully transcribed, but sometimes context was given for easier explanation and analysis.

## 5. Results and discussion

### 5.1 Classroom context

To examine lexical transfer in the process of learning and using Spanish I probed into my own internal language system by means of stimulated recall. The results of the data collected in the classroom context are shown in figures 3 and 4.


Figure 3: CLI in the classroom
As seen from figure 3, all languages were involved in CLI to a greater or lesser extent in the classroom context. However, precisely because of the classroom context, the majority of CLI and other processes that took place during the lessons were connected with the receptive, rather than productive skills. The classes usually began with presentations held by students, after which the presenters would prepare an exercise, they and other students would ask some questions or there would be a small discussion. Afterwards, the professor would turn our attention to grammar, reading or listening exercises, depending on the topic of the lesson. Since 20 odd students participated in the classes, even though the students were given enough opportunities for expressing themselves, most of the time it was more proficient students who used those opportunities. Because of that, more than my production skills, my receptive skills
were activated during the classes, which nonetheless triggered CLI and other processes that arose in the face of my being exposed to Spanish.

High frequency and recency of language use, intensity of language exposure, high proficiency and extensive length of residence predict the possibility of the increase in crosslinguistic influence. Moreover, my subjective perception of how similar aspects of particular languages are predicts the occurrence of negative transfer if they are objectively not similar, and positive transfer if objectively they really are similar to each other. The results seem to support those predictions, since most of the CLI is associated with English and Croatian, the percentages of which are presented in figure 4.


Figure 4: The percentages of CLI in the classroom
As seen from figure 4, when encountering, or, less often, producing, Spanish lexemes, English influenced lexical transfer more than Croatian. Because I subjectively perceived Spanish lexemes similar to English lexemes and since Spanish and English are to some extent lexically similar due to their common linguistic influences, such as Latin, French and Arabic, in $75 \%$ of the time, positive transfer took place, as in examples (6-8).
(6) Span. lectura - Eng. lecture
(7) Span. de segunda mano - Eng. second hand
(8) Span. chimenea - Eng. chimney

Nevertheless, in $14 \%$ of the cases, I erroneously assumed that the languages were lexically similar, which led to negative transfer, as in (9-11).
(9) Span. exigente (Eng. demanding) - Eng. *exhilarating
(10) Span. reinar (Eng. reign) - Eng. *ride
(11) Span. consiguieron (Eng. obtain) - Eng. *concede

Also, in $9 \%$ of the cases, English served as a means to acquiring new words or expressions. So, when I heard a new Spanish word or expression, I would try to remember it by associating it with an appropriate lexeme in English, either because the lexeme was phonologically similar to the English lexeme or because the expression was similar to the one in English, as in (12-14).
(12) Span. forjado - Eng. forged
(13) Span. casa de acaramelas - Eng. box of chocolates
(14) Span. descenso - Eng. descend

Finally, according to the results, it seems that English was also only sometimes used for literal translation of English expressions to Spanish, in which case I tried translating the parts of the expression first and then join them together in Spanish to express myself, as in (15).
(15) (productive) Span. *y mas (Eng. moreover) - Span. pero mas

As noticeable from figure 4, Croatian influenced lexical transfer as well. Although Croatian induced positive transfer $20 \%$ of the time, mostly as a result of perceived (phonological) similarity, for the same reason, it also caused negative transfer, which was $14 \%$, just as with English. The reason why the knowledge of English led to more positive transfer than the knowledge of Croatian, could be because English is, not only subjectively, but also objectively, lexically more similar to Spanish than Croatian.

From figure 4, it can also be seen how Croatian and English play different parts in using and learning Spanish. Specifically, in $18 \%$ of the cases, when trying to learn a new word or expression, new Spanish lexemes were linked to the existing Croatian lexemes. Mostly, this was possibly because the new lexemes were not similar to any of the existing lexemes in other languages and since Croatian is my mother tongue and is used most frequently, it is easier to establish a link between the two. Furthermore, possibly because of the already existing links between Croatian concepts and lexemes and Spanish ones, when encountering
new compound words or expressions, if I already knew some or all parts of the compounds and expressions, I would try translating them into Croatian and then combining their separate meanings to understand the real meaning of that word or expression, as presented in (16-18).
(16) Span. mano de obra - Cro. ruka od rada = fizički rad (Eng. manual labour)
(17) Span. lugares del descanso - Cro. mjesta za odmor (Eng. places for resting)
(18) (productive) Span. *en el tiempo - Cro. na vrijeme (Eng. on time)

Additionally, upon hearing an unfamiliar word or expression in Spanish, 24\% of the time, it was Croatian concepts that were activated when I was trying to figure out the meaning of the key unfamiliar words, as in (19) and (20).
(19) (Talking about a town) Span. ...es muy bonito, es pequeño pero es llevo de (Cro. pun) los gringos. - Eng. ...it's very nice, it's small, but it's full of gringos.
(20) Span. Servia entendió eso como oportunidad para crear Gran Servia, para ensanchar (Cro. *osvojiti)... - Eng. Serbia understood it as an opportunity to create Great Serbia, to expand...

Apart from English and Croatian, which played a greater role in understanding and learning new Spanish words and expressions, table 3 shows that Slovenian, Dutch, French and German, although not as prominently, also had an influence on lexical transfer in the classroom. Interestingly enough, although I believe I am highly proficient in it, upon hearing a Spanish lexeme, because of lexical and phonological similarity, I wrongfully associated it with a Slovenian lexeme only once, as presented in (21). That Slovenian is not as influential as Croatian in my learning and using Spanish might be because I was learning Spanish in Croatian and not Slovenian context, so I had very few or I did not have any reasons to associate Spanish with Slovenian. However, it is curious that on another occasion, upon encountering the same Spanish word, but in a different context, I associated it, once again not correctly, with a Croatian lexeme, as noticeable in (22). Therefore, it seems that context might be of significance as well when it comes to lexical transfer, as it appears to influence the activation of particular lexemes, possibly affecting the conceptual level first.
(21) Span. piscina - Slo. *pisarna (Eng. office)
(22) Span. piscina - Cro. *pista (Eng. airstrip)

As visible from figure 3, at five occasions, such as the ones in (23-25), my knowledge of Dutch also caused negative CLI in my producing and understanding of Spanish. When it comes to production, as in (23) and (24), I usually tried to make a Dutch word Spanish or use it as a Spanish word, as I believed the two words were so similar. On the other hand, when it comes to reception, because of phonological similarity, I associated Spanish words with Dutch words, by mistake, as in (25).
(23) Span. *nederlandes - Dutch Nederlands
(24) Span. *kartas (Eng. tickets) - Dutch kaartjes
(25) Span. camareras (= Eng. *maids) - Dutch kamer (Eng. room)

As opposed to Dutch, which I am more proficient in, but which is objectively not as similar to Spanish as I presupposed, even though French is lexically quite similar to Spanish, I am not that proficient in French as I am in Dutch. However, possibly because of lexical similarity between the languages, in two occasions in the classroom context, positive transfer helped me understand Spanish words, as presented in (26) and (27).
(26) Span. pan - Fr. pain (Eng. bread)
(27) Span. mierdecita - Fr. merde (Eng. poop)

Quite surprisingly, apart form English, Croatian, Slovenian, Dutch and French influence, the results showed that German, which is probably my most suppressed language and the language that I use the least, also influenced my understanding of Spanish on two occasions. As seen in (28) and (29), it seems that the words that caused the misinterpreted meanings were at some point highly frequent words of my vocabulary. Although it took me a few minutes to trace where the association for the Spanish words I had heard was coming from, I believe that it is because of their past prominence that I can still associate new words with those German lexemes, whether the association is correct or not.
(28) Span. fechas (= Eng. *things) - Germ. Sachen (Eng. things)
(29) Span. redacción (= Eng. *dictation) - Germ. rede (Eng. speech)

Based on the results, it could be concluded that languages which I am highly proficient in, which are used frequently and which I use when learning and using Spanish and/or which I find phonetically and which actually are lexically similar to Spanish, serve as source languages for lexical transfer more than the languages which I am not as proficient in and/or which I do not use that often.

### 5.2 Conversations

The method of stimulated recall was also used to examine lexical transfer during conversations that I had with a native speaker of Spanish, the results of which are presented in figures 5 and 6 .


Figure 5: CLI during conversations


Figure 6: The percentages of CLI during conversations

As seen from figure 5, similar to the results of the CLI in the classroom context, two main source languages for lexical transfer were English, with 29 cases of transfer, and Croatian, with seven. However, whether that is during production or during reception, from figure 5, as well as from figure 6 , it is also visible that, as opposed to the results from the classroom context where there was $14 \%$ negative transfer with English as a source language, even though there was still more positive transfer when it comes to English, as in (30-32), negative transfer, such as in examples (33-35), amounted to $28 \%$. These results seem to support the results from the classroom context as English influenced positive lexical transfer the most, which can again be explained by my subjective perception of similarity of Spanish and English lexemes and the degree of their objective lexically similarity. Also, the higher amount of negative lexical transfer during conversations can be attributed to the fact that all of it occurred during production, which I find more difficult than comprehension.
(30) Span. campeón - Eng. champion
(31) Span. almendra - Eng. almonds
(32) Span. pelamos - Eng. (we) peel
(33) (productive) Span. *recordar - Eng. record
(34) (productive) Span. *oposito - Eng. opposite
(35) (productive) Span. *sportivo - Eng. sport (adj.)

On the other hand, with $24 \%$, i.e. in 6 cases, Croatian served for negative transfer more, as in (36-38), than it did for positive transfer, as presented in (39). Sometimes, as in (37) and (38), negative transfer occurred because of the perceived phonological similarity or literal translation of expressions from Croatian to Spanish. However, recall that if there is a relatively large difference between the resting levels of activation of lexemes for the same concept, which differ only in the language cue, if activated more, the lexeme pertaining to the unintended language is predicted to be possibly chosen by mistake. As seen in (36), at two occasions, that was the case with Croatian, as the negations ne and nije are very frequently used and are therefore very activated, which seems to support the results of Poulisse's 1999 study with Dutch speakers of English.
(36) (productive) *He visto las películas, nije, ne, telenovelas... - Eng. I watched movies, not, no, soap operas...
(37) Span. *peliculas (Eng. films) - Cro. sapunice
(38) Span. * viene y pasa (Eng. it comes and goes) - Cro. dođe i prođe

Furthermore, it can be observed that whereas this is also true for English to a certain extent ( $13 \%$ ), as in (39-41), on 12 occasions, or $48 \%$ of the time, as seen in (42-44), it is Croatian that was used for learning new Spanish words and expressions, which could also be considered as a support to the results from the classroom context. I noticed that often, the reason why I resorted to Croatian was me failing to find a way to (phonologically) associate the Spanish lexeme with a lexeme from other languages I know. It could be that since Croatian is my mother tongue, I am most comfortable using it for making new connections with a language I am not highly proficient in. Then it is also not that surprising that English was also used for that purpose to some degree seeing that my proficiency in English is also quite high. Moreover, both languages are also frequently used.
(39) Span. pista de hielo - Cro. klizalište (Eng. ice rink)
(40) Span. patinar - Cro. klizati (Eng. to skate)
(41) Span. esgrima - Cro. mačevanje (Eng. fencing)
(42) Span. limpiar - Eng. clean
(43) Span. repartir - Eng. deliver
(44) Span. placer prohibido - Eng. guilty pleasure

My proficiency and frequency of use of the two languages might also account for the fact that when trying to figure out a word from context, I only connected the possible meaning to English or Croatian, as presented in figure 5 and shown in (45) and (46), which again supports the results from the classroom context, where only Croatian was used for that purpose.
(45) (Talking about acrobatics) Span. ...tenemos como una superficie que es un poco mas banda y rebota, rebotar? - Eng. ...we have like a surface that is slightly more bendy and bouncy, to bounce?
(46) Span. La persona que esta arriba esta ágil... Ágil (Cro. spretan) esta una persona que es rápida haciendo movimientos... - Eng. The person who is up is nimble... When a person is nimble, s/he is moving quickly...

However, when I translated the meaning of particular words from Spanish, it was only once that I translated it to English, once to Slovenian, but four times to Croatian, as in (47-49). The reason why Slovenian was not used as a source language may be that even though fluent in Slovenian, I do not use it as often as Croatian and English, so it is not as activated as those languages.
(47) Span. balonmano - Cro. rukomet
(48) (productive) Eng. moreover - Span. *y mas
(49) (productive) Span. *Mi telefono va a morir - Slo. Telefon mi bo umrl. (Eng. 'My phone is about to die')

Interestingly enough, while French caused positive lexical transfer on three occasions, Dutch induced negative transfer four times and German just once. Again, although Dutch, French and German are not used as source languages often, since they are not used frequently and since I am not as proficient in them as I am in Croatian and English, their influence still does surface from time to time. When it comes to French and German, as in (50) and (51), it was usually lexical or phonological similarity that caused the transfer, whereas when it comes to Dutch, as in (52), negative transfer sometimes occurred because of the relatively large difference between the resting levels of activation of lexemes for the same concept that differ only in the language cue, such as the lexeme $j a$ ('yes'), which is, similarly to the Croatian lexeme ne ('no'), used quite frequently and is activated more, which is why it was sometimes chosen over the intended Spanish lexeme si.
(50) Span. de color oro - Fr. or (Eng. gold)
(51) Span. fecho - Germ. fach (Eng. subject)
(52) (Talking about pop music) Span. -...siempre un chico llora porque su novia ya no vuelve. - Si, si, si, ja, si... - Eng. - ...a boy is always crying because his girlfriend is not coming back. - Yes, yes, yes, ja, yes...

Finally, from figures $3,4,5$ and 6 , it is noticeable that my language production did not result in lexical blends, which might mean that there were not any lemmas in my linguistic system, which were equally highly activated and which competed for selection at the same time.

Similar to the results from the classroom context, the data obtained during the conversations with a native speaker of Spanish seem to suggest that my learning and using Spanish words is affected more by the languages I am highly proficient in and that I use often, whereas the influence of other languages seems to be much lower or it could possibly be more 'subconscious' and therefore not as traceable and noticeable.

## 6. Conclusion

This case study was done as an autobiographical sketch and it aimed to add additional insight into whether (a) word production is based on the activation and inhibition of lemmas and lexemes, (b) a large difference between the resting levels of activation of lexemes for the same concept leads to production of unintended lexemes, (c) lexical blends occur because of the equally high activation of two lemmas, (d) factors such as high frequency and recency of use, intensity of language exposure, high proficiency and extensive length of residence increase the activation of lemmas and lexemes pertaining to the languages for which these factors are true and therefore also increase the possibility for lexical transfer and (e) perceived subjective but not objective similarity leads to negative transfer, whereas perceived subjective as well as objective similarity leads to positive transfer.

The data obtained by stimulated recall indicate, firstly, that word production could be based on the activation and inhibition of lemmas and lexemes, as the languages, which I am highly proficient in and which I use often, i.e. English and Croatian, seem to influence lexical transfer more and also seem to be used more as source languages. Secondly, as predicted, perceived subjective but not objective lexical or phonological similarity seems to lead to negative transfer, whereas perceived subjective as well as objective similarity seems to lead to positive transfer. Finally, it appears that a large difference between the resting levels of activation of lexemes for the same concept can sometimes lead to production of unintended lexemes.

Deeper analysis of the results further revealed that the environment in which the language is used does not have a significant influence on which languages are most involved in lexical transfer, as both in classroom context and during the conversations, English and Croatian
proved to be the most influential. However, even though this also depends on the topic and words used and on the amount of words that are being understood or are being produced, it seems that when it comes to Croatian and English, there might be more negative transfer during production than during reception, which could be attributed to the fact that I find speaking Spanish more difficult than listening.

Another interesting finding is that when learning new words or when trying to figure out the meaning of word or expressions from context, I tend to link the new lexemes to the already existing lexemes, mostly in languages I am highly proficient in, such as Croatian and English. Which language will be chosen as a source language in those situations sometimes depends on whether I find the corresponding lexeme in the source language lexically and/or phonologically similar to the new lexeme, whereas in cases where this is not found, it is usually Croatian that I link the new lexeme to, as it is my mother tongue. Moreover, when trying to get to the meaning of an expression or a (compound) word by translating its parts, I usually translate it to Croatian, rather than to other languages.

Furthermore, other languages, which are either not used frequently, such as Slovenian and Dutch, or which I am also not as proficient in, such as French and German, still influenced lexical transfer, even though to a much lesser extent. This is not that surprising as it could be true that except from some quite frequently used and therefore more activated words, those languages are more 'dormant'.

Finally, the study showed no occurrence of lexical blends, which may suggest that there were no equally activated lemmas in my linguistic system, which competed for selection at the same time. However, it is also possible that the sample of my speaking Spanish was not extensive enough for the lexical blends to take place.

Taken together the data suggest that lexical transfer is more likely to occur if my proficiency in a source-language is higher, if I use the language frequently and if I find it phonologically and/or lexically similar to Spanish. Conversely, languages that I am not highly proficient in, which I do not use that often or at all and which I do not perceive as lexically or phonologically similar to Spanish, seem to rarely influence lexical transfer. Moreover, the results suggest that the length of residence may not be of such importance as other, previously mentioned factors, as Dutch was hardly ever present both when it came to CLI and when learning new Spanish words and expressions. Finally, it seems that the best source
languages, Croatian and English, also served as the best languages when learning new vocabulary and in attempting to understand unfamiliar words from context.

Since this study was done in the form of an autobiographical sketch, the data are very subjective, constricted by the environments where they were collected and could therefore hardly be generalized. Yet, they do show some aspects of CLI in a multilingual speaker from the speaker's perspective, even though this might be just the tip of an iceberg. Therefore, it would be interesting to see if more such studies would generate similar results and help us reach and properly understand various aspects of multilingualism and CLI.

## References

Bebee, I., Zuengler, J. (1983). Accommodation theory: An explanation for style shifting in second language dialects. In N. Wolfson \& E. Judd (Eds.), Sociolinguistics and second language acquisition (pp. 195-213). Rowley, MA: Newbury House.

Franceschini, R. (2009). The genesis and development of research in multilingualism: Perspectives for future research. In L. Aronin \& B. Hufeisen (Eds.), The exploration of multilingualism (pp. 27-61). Amsterdam: John Benjamins Pub. Co.

Green, D. W. (1993). Towards a model of L2 comprehension and production. In R. Schreuder \& B. Weltens (Eds.), The bilingual lexicon (pp. 249-277). Amsterdam: John Benjamins Pub. Co.

Jarvis, S., \& Pavlenko, A. (2008). Crosslinguistic influence in language and cognition. New York: Routledge.

Kemp, C. (2009). Defining multilingualism. In L. Aronin \& B. Hufeisen (Eds.), The exploration of multilingualism (pp. 11-26). Amsterdam: John Benjamins Pub. Co.

Kormos, J. (2011). Speech production and second language acquisition. New York: Routledge.

Mackey, A., \& Gass, S. (2005). Second language research. Mahwah, N.J.: Lawrence Erlbaum.

Poulisse, N. \& Bongaerts, T. (1994). First language use in second language production. Applied Linguistics, 15, 36-57.

Poulisse, N. (1999). Slips of the tongue: Speech errors in first and second language production. Amsterdam: John Benjamins Pub. Co.

## Sažetak

Kroslingvistički utjecaj ili kroslingvistički transfer utjecaj je poznavanja jednog jezika na poznavanje ili korištenje drugog jezika nekog govornika. Pod pretpostavkom da se riječi proizvode aktivacijom i inhibicijom lema i leksema, kako bi se odabrao točan leksem, riječ s najvišom razinom aktivacije bit će izabrana, dok će ostale riječi biti inhibirane. Međutim, budući da višejezična osoba zna više od dva jezika, predviđa se da u nekim slučajevima leksem za određeni koncept, koji pripada jeziku koji govornik nije namjeravao koristiti, može biti odabran umjesto leksema za isti koncept, koji pripada jeziku koji je govornik namjeravao koristiti. Takva se omaška može dogoditi ako je leksem jezika koji govornik nije namjeravao koristiti, primjerice, zbog učestalog korištenja, na višoj razini aktivacije od leksema jezika koji je govornik namjeravao koristiti. Također se predviđa da bi pri korištenju jezika kod višejezične osobe moglo doći do leksičkih složenica sastavljenih od osnova ili leksema iz više različitih jezika; da bi čimbenici poput učestalosti korištenja i razine znanja jezika mogli povećati kroslingvistički utjecaj; te da subjektivno percipirana sličnost jezika može i ne mora dovesti do pozitivnog ili negativnog transfera. Kako bi se provjerile navedene pretpostavke istraživanje postavljeno u obliku autobiografske skice provedeno je pomoću tehnike stimuliranog prisjećanja kod višejezične osobe koja uči španjolski kao sedmi jezik. Rezultati istraživanja ukazuju na to da jezici koje osoba bolje poznaje i koje često koristi više utječu na leksički transfer i također češće služe kao jezici koji su izvorište transfera. Nadalje, čini se da subjektivno percipirana, ali ne i objektivna, leksička i fonološka sličnost uzrokuje negativan transfer, dok subjektivno percipirana sličnost koja je ujedno i objektivna dovodi do pozitivnog transfera. Konačno, čini se da velika razlika u razinama aktivacije leksema za isti koncept ponekad može dovesti do korištenja leksema koji govornik nije namjeravao koristiti.

Ključne riječi: višejezičnost, kroslingvistički utjecaj, stimulirano prisjećanje, autobiografska skica, Španjolski

