Multilingualism of Croatian Elementary School Children on Facebook

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Abstract

The Internet, as the largest worldwide network of interconnected computers, assumes multilingualism and thus deserves to be the focus of the latest research on communication. On the one hand, multilingualism can be interpreted as the use of multiple languages or varieties in a particular situation. Therefore, the authors here speak of multilingualism among Croatian elementary school children on the Internet, especially on Facebook. The first step was to conduct research on multilingualism (including both vertical and horizontal multilingualism) of seventh graders in three counties in the northern and north-western regions of Croatia. The next step was to examine whether elementary school children express their multilingualism (both horizontal and vertical) on Facebook as well. The authors wanted to explore whether code-switching and code-mixing occurred in their communication on Facebook, and if they did, to what extent and for what reasons. The conclusion was that Croatian elementary school students are highly multilingual both with respect to vertical and horizontal multilingualism, which is expressed in their communication on Facebook as well, where they frequently use code-switching and code-mixing.

Key words: *code-mixing; code-switching; Facebook; horizontal multilingualism; seventh graders; vertical multilingualism.*

Introduction

Multilingualism, either vertical or horizontal by nature, has become a characteristic of almost every individual. Vertical multilingualism is described as multilingualism that "more or less expresses interrelation of the mother tongue (acquired at birth,

organic, environmental, homeland) (L1) and standard language (L2)" (Pavličević-Franić, 2005, p. 62).[1] Horizontal multilingualism assumes an interrelation between the mother tongue and a foreign language. Current global reality reveals all the luxury of multilingualism today. Oksaar (2002, p. 11) says that multilingualism prevails in our era, since 70% of the people use two or more languages in a daily context, while more than 50% of children worldwide learn at school a language that is not their mother tongue. Research studies conducted by Pavličević-Franić (2006) and Filipan-Žignić (2006) also point out the fact that most children in Croatia are multilingual, both vertically and horizontally, at the time of their early education. Prior to describing the current Croatian circumstances, we would like to present some data on the concept of multilingualism in the European Union, as stated by the Eurobarometer statistics.[2] German is the most widely used language in the EU, spoken by 16% of the Europeans as the first language, while 13% of people consider English to be their first language; for 12% it is French, and for 8% of people it is Spanish or Polish. Most Europeans (54%) state they can lead a conversation in a second foreign language, while as many as 10% can do it in three foreign languages. The most frequently used and the most widespread foreign languages in the EU are the following five: English (38%), French (12%), German (11%), Spanish (7%) and Russian (5%). The most popular second foreign languages are German and French (10%), as well as Spanish (5%). About 67% of Europeans consider English as the most useful language, followed by German (17%), French (16%), Spanish (14%), etc.

Foreign languages have been taught in Croatia for decades. The second foreign language was introduced as an elective subject in the 4th grade of primary school in the academic year 2003/2004. Some experts pointed out serious inconsistencies in the language policy, such as Vrhovac (2006), Filipan-Žignić (2006) and Velički (2007), reproaching the lack of clearly stated stages of learning. The English language is the most frequently taught foreign language (65%), followed by German (25%), French, Italian and Spanish, while in the early stage of learning English is learned by 85% of students, German by 14% and all the other languages by 1% (VL, September 8th 2004). The data revealed by the Croatian Bureau of Statistics say that in the academic year 2010/2011, English was being learned by 69.6% of all the students, German by 36.4%, Italian by 5.7% and French by 0.8%.

It should be noted that both horizontal and vertical multilingualism have deep historical roots in Croatia. Early in their history, Croats had had comprehensive contacts with other languages, which they later used in communication or took over some of their linguistic elements. Numerous foreign languages have influenced the development of the Croatian language, from Latin and classical Greek, as a common basis of all the European languages, to modern languages: German, Italian, French,

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[1] This and all other Croatian quotations in the text have been translated into English by the authors of this paper.

[2] See http://ec.europa.eu/public_opinion/archives/ebs/ebs_386_en.pdf

Hungarian, Turkish, and English as the most influential one recently (Filipan-Žignić, 2011).[3] Thus, for example, Croatian and Latin were two standard languages in Croatia until the mid-1800s. This is why Samardžija (2000, p. 103), when writing on the influence of Latin on Croatian, noted: "The Croatian standard language would be, for example, invalid without its Latin heritage".

The history of multilingualism can be most thoroughly and most intensively monitored in its truest sense from the beginnings in the north-western Croatia, throughout the Habsburg Monarchy, when "this part of Croatia represented a true example of multilingualism and languages in contact. Three languages were used in the area in the second half of the 18th century – Croatian (Kajkavian dialect), Latin and German. The Kajkavian dialect was not only the language of everyday communication, but also the language of civil law, of royal regulations and other official documents. By the end of the 18th century German took the role of Latin in the Habsburg Monarchy as the language of communication, education and science. One of the results of the Austrian – Croatian language contact at the end of the 18th and the beginning of the 19th century was the so-called social bilingualism" (Jernej, Glovacki-Bernardi, & Sujoldžić, 2012, p. 347).

The impact of the English language on the Croatian lexicon is closely related to the position of English as a global language of our time. Loanwords from English are a recent addition to Croatian. They have entered the Croatian language mostly after the World War II, and particularly recently, as is the case with other European languages, most often as American variants. The key reason of this transfer is without doubt the political, economic and as a result cultural predominance of the United States in the world today, which results in a growing role of the English language globally. Other obvious reasons are the need to fill in the lexical voids, and enthusiasm, especially of the young people, for everything associated with the American way of life. The impact of the English language has been growing unstoppably, particularly in the language of the media and personal communication, especially on the Internet. Thus the expression *The Multilingual Internet*, introduced by Danet and Herring in 2003, was reasonably expected. It should be noted that the rich history of languages in contact and borrowing in Croatia obviously account for the fact that both the wish to learn foreign languages and the actual learning are at a noteworthy level in the European context.[4]

Explaining the concept of vertical multilingualism within the borders of Croatia, Pavličević-Franić (2011, p. 17) said that speakers of Croatian had for a long time been considered monoglots and unilingual speakers, so the research methodology was adapted to this premise. Actual research studies refuted this view and revealed that most speakers of Croatian were multilingual. Thus Pavličević-Franić, based on the

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[3] More detailed description of the impact of all these languages is given by Filipan-Žignić, 2011, pp. 32-39.

[4] Compare the data in the EC report for 2013/14 at http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/IT_Comparative_analysis_2013_14.pdf.

research on multilingualism of pre-school children and children in the lower grades of elementary school in the Zagreb region, revealed that more than 90% of these children were multilingual (2006, p. 21). Filipan-Žignić conducted research on the sample of 4th grade students in Varaždin and found bilingual behaviour in 7.7% of students, while 92.2% of them have mastered a number of a foreign language idioms (2006, p. 201). Pavličević-Franić (2011, p. 18) wrote about a number of language codes which are interwoven in the process of mastering the Croatian language. Most often there are three different idioms of their mother tongue in a vertical paradigm and at least one new non-mother tongue (most often of foreign origin) in a horizontal paradigm. The author made a distinction among four levels of mastering a language in vertical and horizontal multilingualism, as follows:

– "the level of individual language idiom – the first language mastered within the family or living surroundings (L1) […]
– the level of Croatian standard idiom – […] (L2)
– the level of substandard idioms of Croatian – dialects, sociolects, jargonism […] (L3) and
– the level of the norm of a non-mother tongue, foreign idiom […] (L4, L5…)" (Pavličević-Franić, 2011, pp. 18-19).

The work described here is aimed at investigating the percentage of multilingual seventh grade elementary school students, with the purpose of comparing these results with the results obtained for early age speakers and speakers of older age, in order to create a more comprehensive picture. Students today spend quite a lot of time on the Internet, Facebook particularly, thus it could be rightfully expected that their multilingualism would be clearly seen in this type of communication. It is well known that the Internet, as the widest network of mutually connected computers, assumes multilingualism, and this is why we organised our research to cover primarily the communication on Facebook. The students are supposed to switch language codes on the one hand and to mix them on the other when communicating on the Internet. Code-switching in this paper encompasses the so-called intra-sentential and inter-sentential code-switching. Gumperz (1982, p. 59) explained code-switching as a language or language variety exchange within a particular language discourse, which together constituted a unique interaction whole, in other words a "juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or sub-systems". Code-mixing (of a language) is considered to be inter-sentential switching, i.e. the changes on the level of words or syntagms. Muysken (2000) distinguished three types of language mixing, or code-mixing – insertion, alternation and congruent lexicalization. We shall not discuss them in more detail in this paper, as our aim is to clarify and establish code-switching and code-mixing. Code-switching and code-mixing on the Internet were also investigated by Androutsopoulos (2006), who conducted research on the forums of German migrants, as well as by Cardenas-Claros and Isharyanti (2009), who studied the chatrooms of

advanced foreign speakers of English at American universities. Androutsopoulos (2006) concluded that code-switching was predominant in forums, where code-mixing was seldom encountered. Cardenas-Claros and Isharyanti (2009) offered results for code-switching and code-mixing on the basis of the speakers' origin and on the topic concerned, as well as on the basis of code-mixing types. Both papers investigated code-switching and code-mixing on the level of horizontal multilingualism, while we have been trying to investigate code-switching and code-mixing on both levels.

Aims, Hypotheses and Methodology
Aims

The aim of the work described here was primarily to investigate multilingualism of seventh graders of both sexes in the counties of northern and north-western Croatia (Karlovac County, Varaždin County and Međimurje County), including both vertical and horizontal multilingualism, as well as to study whether the students express their multilingualism (both horizontal and vertical) on Facebook as well. The aim relating to Facebook was to investigate whether their Facebook communication includes code-shifting and code-mixing, what the frequency of code-mixing and code-switching is, and what the reasons for code-switching and code-mixing are. The focus was also on establishing which language codes were involved in the students' communication on Facebook.

Hypotheses

H1 7th grade students are multilingual, both vertically and horizontally, having control of at last two language codes, again both in the case or vertical and horizontal multilingualism;

H2 Vertical multilingualism in the case of 7th graders is related to horizontal multilingualism;

H3 7th graders express their multilingualism on Facebook, both vertical and horizontal;

H4 7th graders often switch and mix language codes on Facebook;

H5 The most often employed language codes appearing on Facebook include the first idiom mastered or a regional variant of a particular area, as well as the English language;

H6 The reasons for code-switching and code-mixing are *in-group* signals, together with the awareness of the actual trends.[5]

Methodology

The research described was organised in two phases. The sample for the first phase of the research included 338 participants (N=338) from 7th grades in the counties

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[5] *In-group* signals include the wish to be a part of a particular group, while trend awareness refers to students' effort to show the others that they are familiar with the current trends.

of northern and north-western Croatia, in the administrative centers of the Karlovac County, Varaždin County and Međimurje County: Karlovac (two elementary schools), Varaždin (three elementary schools) and Čakovec (two elementary schools). Field research was conducted in spring 2014, as a part of a broader research aimed at investigating multilingualism of 7th graders, 12th graders (final year of secondary grammar school) and adult speakers. The study was conducted according to the ethic codes for research which involve children. A questionnaire was used as a tool, consisting of three parts (sociodemographic data, data on multilingualism and data on interculturality). The results presented here involve only the second part of the questionnaire, where questions of open and closed type were present, concerning vertical and horizontal multilingualism. Ten questions were asked and the answers were supposed to encompass the following: what their mother tongue was; which language/s they spoke at home; which foreign languages they spoke; which foreign languages they were taught at school; how long they had been learning a particular foreign language; how their knowledge of the foreign language was graded at school; which languages they would like to study additionally; whether they liked to learn a particular foreign language; whether they wished to meet people who spoke a particular foreign language, and whether they considered it important to learn particular foreign languages. The methods used in the research were the arithmetic mean method and correlation, while SPSS was, among others, used in data processing.

The second phase of the research included collecting of corpus status or timelines, as well as texts from Facebook chatrooms, for fifty 7th grade students (N=50) from the above towns included in the multilingualism research (20 from Karlovac, 15 from Varaždin and 15 from Čakovec). The corpus included an equal number of statements for all the participants (100), involving the total of 5,000 statements. Facebook statements were then recorded in a *Word* document and stored for further analysis. Linguistic analysis of the corpus obtained from Facebook was conducted, regarding the use of a particular language code, code-switching and code-mixing, frequency of code-switching and code-mixing, as well as the reasons for code-switching and code-mixing. The method of content analysis was used for the purpose.

Results and Discussion
Research of Vertical and Horizontal Multilingualism
Vertical Multilingualism

As can be seen in Figure 1, the results obtained show that the participants were vertically at least bilingual, and actually mostly multilingual. Their multilingualism differs according to their residence. Thus the participants from Varaždin and Čakovec were multilingual to a higher extent than those from Karlovac, of whom a much higher percentage stated they used standard Croatian only. It is interesting to note that some of the respondents claimed they were fluent in the Kajkavian dialect only. However, these statements should be taken with caution, since the participants were
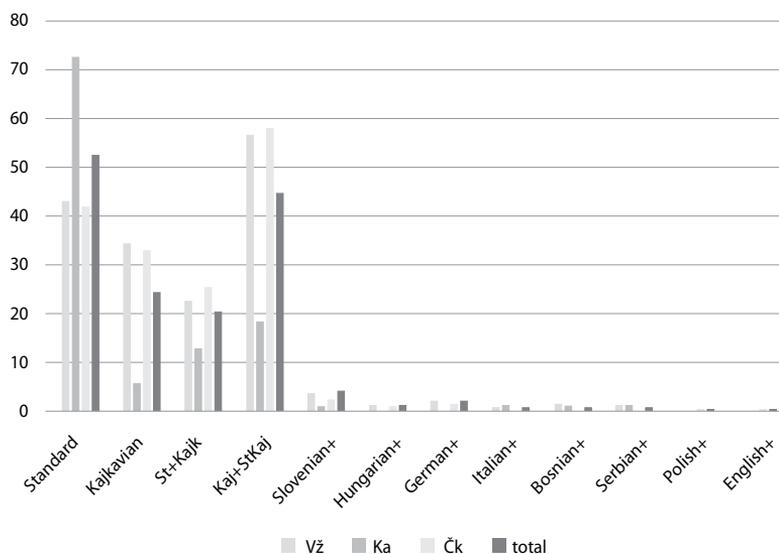
Figure 1. Vertical multilingualism of 7th graders

exposed to the standard language to such an extent that they were surely fluent in it. This is why the fourth column of the figure has those that stated to be only Kajkavian speakers added to it and this column in fact gives a precise estimation of vertical multilingualism (Kaj+StKaj), which was 44.5% of the overall number of participants, being even much more predominant for those from Čakovec (58.2%) and Varaždin (56.9%). This is, for that matter, multilingualism with a combination of the Croatian standard, substandard (mostly the Kajkavian dialect) and most probably an organic language. However, due to the age of the students, it was practically impossible to obtain precise information from them in the course of the survey. On the other hand, the analysis of the texts from Facebook confirmed this thesis. Obviously the percentage of vertical multilingualism was much higher than the respondents revealed in their answers. This percentage should also be further supplemented by other foreign languages (Slovenian, Hungarian, German, Italian, Bosnian, Polish and English) for which the students stated to be able to use them, because their parents used them as they were of foreign origin.

Horizontal Multilingualism

It is much easier and simpler to acquire the data on horizontal bilingualism, or multilingualism, as making distinction among the idioms is much simpler for the participants here. Of all the students involved in the research who had the command of at least one foreign language, apart from their mother tongue, 28.1% had the command of English and 5.4% of German (see Figure 2). Again, 58.6% of the students mastered two foreign languages, first of all the above mentioned combination, i.e. English and German. However, the students participating in the research also mentioned
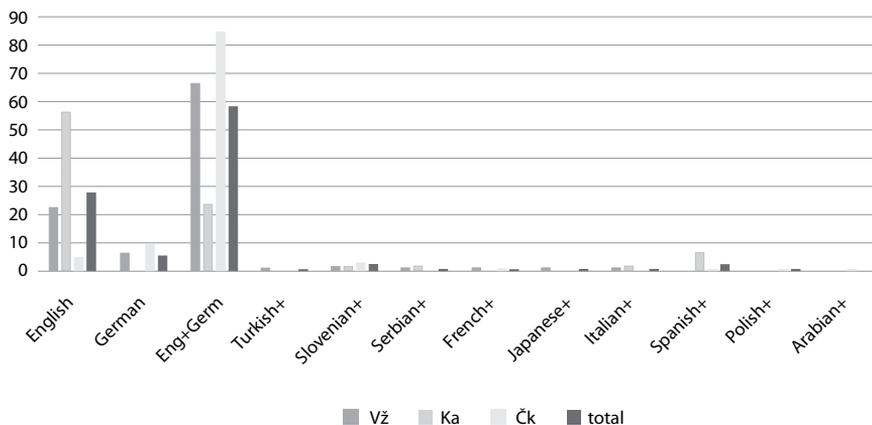
Figure 2. Horizontal multilingualism of 7th graders, with the languages the students stated they spoke

some other languages they had mastered –firstly Spanish, then Slovenian, Italian, etc. It should again be noted that the participants from Čakovec and Varaždin are multilingual in much higher percentage (85.2% and 66.6% respectively) than the respondents from Karlovac (24%).
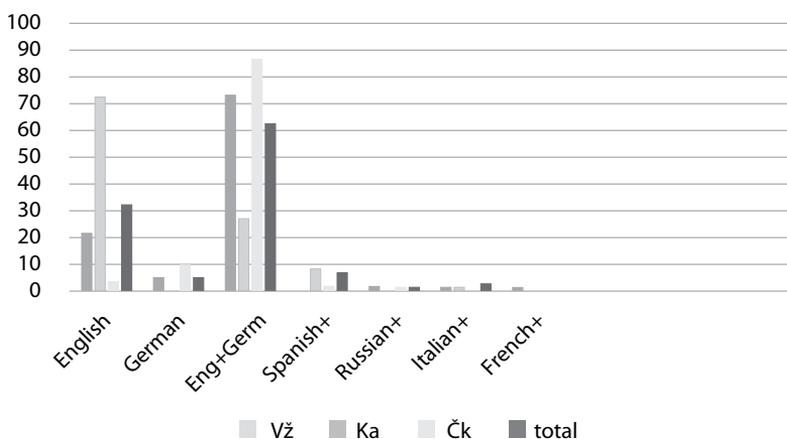

Figure 3. Horizontal multilingualism of 7th graders, with the foreign languages taught at school

The data in Figure 2 do not differ significantly from those in Figure 3, where the information is given on the foreign languages the students are taught at school. The data presented (all the participants included) show that 62.4% of the students tested learn German and English at school. This also points out the fact that some of the students consider they have not mastered the foreign language they are taught at school at an adequate level. This accounts for the difference in the above figure in the number of students who are proficient in English and German (58.6%) and the figure showing how many of them learn English and German at school (62.4%). Apart from these languages, the students sometimes mentioned some other foreign languages

(most often together with the two mentioned) that are taught at school, probably as a part of their extracurricular activities, such as Spanish, Italian, French or Russian. Learning Spanish seemed to be on the rise and was more frequent than French as a third foreign language. This tendency was probably the result of the influence of TV series and soap operas in which Spanish is spoken, and which have been frequently broadcast on Croatian TV channels recently.
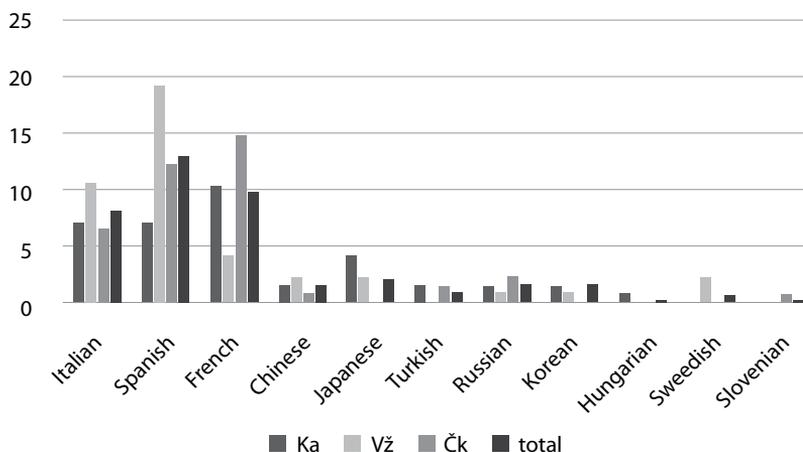

Figure 4. Potential horizontal multilingualism of 7ᵗʰ graders, with the languages they would prefer to learn

Figure 4 shows the preferences exhibited by the students for learning additional foreign languages, whether at school or outside school. Spanish is again more preferred than French, followed by Italian, and then Chinese, Japanese, Russian, Korean, Turkish, etc. These trends are obviously in accordance with the global economic trends, especially when speaking of Chinese, Japanese, Korean and Russian. These are obviously completely different trends, as compared to those of twenty or more years ago, when Russian was definitely an option preferred by the students.

Correlation of Vertical and Horizontal Multilingualism

Besides the above mentioned aims, the authors intended to investigate the correlation of vertical and horizontal multilingualism, in other words, to determine whether mastering a number of idioms at the vertical level is correlated with learning more foreign languages at school. The results obtained indicate that the correlation is statistically significant ($p<0.01$). However, it should be noted that the coefficient is rather low.

Apart from this correlation we also wished to investigate the statistical significance of the correlation between mastering a higher number of idioms at the vertical level and the wish to learn additional foreign languages outside of the school at the horizontal level. Results obtained show there is no such correlation ($p>0.05$).

We also tried to investigate whether there was a correlation between mastering more idioms at the vertical level and learning more foreign languages at and outside school

(see Table1). This research was performed only with the participants from Varaždin (N=93), and the results showed that 49.2% of multilingual students learn at least two foreign languages at school and wish to learn additional foreign languages outside school, as can be seen in Table 2. Additionally, 32.2% of multilingual students at the vertical level wish to learn more foreign languages at school and do not prefer to learn, besides these foreign languages at school, additional foreign languages outside school. Furthermore, 13.5% of students who are multilingual at the vertical level do not wish to learn additional foreign languages at school, but prefer learning them outside school. Only 5.1% of students multilingual at the vertical level do not wish to learn additional foreign languages at school (except for the obligatory one) or outside school.

Table 1

*Correlation of vertical multilingualism and learning more foreign languages at school, as well as the wish to learn additional foreign languages outside school (only participants from Varaždin) ***

Multilingual at home	Learn more foreign languages at school (most often 2)	Wish to learn additional foreign languages outside school
YES = 49.2%	YES = 49.2%	YES = 49.2%
YES = 32.2%	YES = 32.2%	NO = 32.2%
YES = 13.5%	NO = 13.5%	YES = 13.5%
YES = 5.1%	NO = 5.1%	NO = 5.1%

*applies to the whole sample

Among the students bilingual at the vertical level, some 29.4% wished to learn more foreign languages at school and some additional foreign language outside school. About 11.7% of bilingual students wished to learn more foreign languages at school, but not additional foreign languages outside school, while 29.4% of them wished to learn additional foreign languages outside school and not at school. The same percentage of bilingual students (29.4%) did not wish to learn additional foreign languages, neither at school nor outside it (see Table 2).

Table 2

*Correlation of vertical bilingualism and learning more foreign languages at school, as well as the wish to learn additional foreign languages outside school (the sample including only participants from Varaždin)***

Bilingual at home	Learn more foreign languages at school (most often 2)	Wish to learn additional foreign languages outside school
YES= 29.4%	YES= 29.4%	YES= 29.4%
YES= 11.7%	YES= 11.7%	NO= 11.7%
YES= 29.4%	NO= 29.4%	YES= 29.4%
YES= 29.4%	NO= 29.4%	NO= 29.4%

*applies to the whole sample

Research of Language Corpus from Facebook

Communication on Facebook

Facebook became a great success soon after Zuckerberg founded it in 2004. This service was perfected in the years to follow and became a favourite to millions of people. This success was primarily due to simple registration and creation of profile.

As Facebook enables an amalgam of the text, picture, animation, sound and graphics, it became a favourite of the young, who can now take care of their virtual pets, chat, send virtual greeting cards, gifts, hugs, exchange messages, photos, play video games, listen to their favourite music, give and receive instructions or solve tests (Filipan-Žignić, 2012). Facebook thus represents for the young an inexhaustible source of communication with their friends and a possibility to make new ones.

Communication on Facebook can be *one-to-one* or *one-to-many*. One-to-one is more of a private character, while the other form moves in the sphere of public language. However, Facebook groups of the young often break this rule and the language is in both cases of a private character. It is obviously the result of the fact that the groups formed in this way are of a closed nature.

It is interesting to note that Internet communication was the first instance in history that a written word was used in direct communication. It happened on Facebook and in chatrooms, which is of importance for the work described here. Obviously, certain modification of the written language was necessary so as to make it fully adequate for the written, simultaneous (or quasi-simultaneous) communication that occurs on these two services. Facebook involves written conversational language that is realised in a written form because of the medium used (Filipan-Žignić, 2015). This is what makes Facebook crucially different from the traditional forms of communication.

Using Language Codes on Facebook

We have proved, based on the language corpus on Facebook used by 50 students from 7th grade in three towns and counties, that the students use three language codes (see Figure 5), most frequently in the following order:
  a) the first language acquired in the family or environment (L1), which can sometimes be hard to distinguish from substandard idiom of the Croatian language, or a dialect characteristic of the area where they live (L3),
  b) Croatian standard idiom (L2) and
  c) non-mother tongue (foreign) idiom (L4, L5…).

Here are some examples which illustrate the above theses:

A) The first language acquired in the family or environment or substandard idiom, i.e. the Kajkavian dialect:
  – *kaj ne? i ja velim*
  – *Kaj delas?*
  – *Ne, pa rekla si da trebas uciti, pa sam tak i mislila. A sad nebrem dojti*
  – *Jejjjjjjj Kaj znas?*
  – *H A H A H A H A H H H A H H H A H A   I Z A B E L A   J E   M O G U C E HAHAHAHAHHAHHAHGAHAHAHA ESOSEEEEEEE FTRGLO MEEEE HAHAHAHAH TO IZABELA*
  – *ali nejdu svi tko zna*

– *Jbt bolje da smo na švedsku išli a neve pitanje dal bumo opče išli na olimpijske drugo leto*
– *Donesem i ja tebi ako oces*
– *I DAJ MI DOJDI NA TJELESNI VEC TE TOLKO PUT ZOVEM A TI NIS*
– *Hahah, joooj e neznam dal budem mogla dns k tebi al msm da budem mogla, nisam sigurna*
– *ko bude nas pelal?*
– *Haha deca moja nejte se svaditi. Dam ti ja deca! Haha dete moje najlepse!!!*
– *hahahahaa kaj si morem tak je ispalo*

B) Standard idiom:

– *Koja je najbolja?*
– *ja sutra imam biologiju prvi saat*
– *Kad ćemo se naći pred crkvom?*
– *Za kraj godine… - zadnja ove godine s najdrazima*
– *Ne volim kad se razmještamo. Ni ja, pogotovo s slučajnim odabirom*
– *Čezneš za harmonijom i mirom u svijetu i najradije bi ugodila svakome. Uvijek si tu za svoje prijatelje i u svako im doba rado pomažeš svojim savjetima. Teško ti pada reći Ne i moraš paziti da te ne iskoriste ;)*
– *Najviše mrzim kad se moje predrasude dokažu tocnima..*
– *tako je...najvažnije je nikad ne odustati jer trud se uvijek na kraju isplati*
– *Ljudi se smiju tvojim snovima, a onda kad ih ostvariš, mrze te.*

C) Foreign idiom:

– *hay how are you? remember me? to you in England? Hevy Maja*
– *se si senjorita*
– *Danke mein Schatz*
– *acta la vista*
– *Aah same thing<3<3<3<3<3<3<3<3<3<3<3<3<3<3*
– *Goodbye*
  Aufwidersehn
  Adios
  Bye bye 2014
– *It's been a great year! Thanks for being a part of it.*
– *Something must be wrong with this guy…*
– *Majne kapa:**Btw. Najs* ❤ *Hehe tnx*
– *Break a leg…*
– *nice guys   Yeahhhhh!!! no homo i see same legends Ice from hungary „hey männer" reeeeeessspeeeeckt"!"*
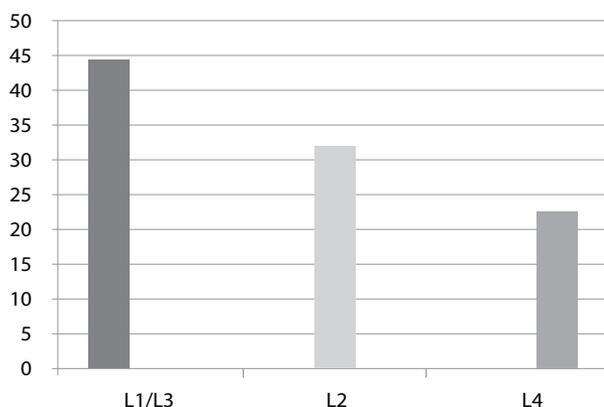
Figure 5. Frequency of idiom usage in the Facebook corpus

Considering the overall corpus of the contributions from Facebook, it can be seen that among the three idioms analysed the first acquired idiom (L1) is the most frequent one, together with the substandard idiom of the area (L3), followed by the standard idiom and only then by non-mother tongue idiom (see Figure 5). Idioms (L1) and (L3) are more often used in the northern and north-western counties (Varaždin and Međimurje counties), while the standard idiom is more frequent in Karlovac County. Non-mother tongue idiom is in both cases last (L4, L5). As far as foreign (non-mother tongue) idiom is concerned, most frequently it is the English language (see research study by Pavličević-Franić, Gazdić-Alerić, & Aladrović-Slovaček 2010, which indicated that senior graders frequently use English lexis and abbreviations on Facebook), more seldom German language, followed by Spanish. It should be noted that this paper does not include a deeper language or semantic analysis of the corpus.

Code-Switching and Code-Mixing on Facebook

The analysis of the overall language corpus used on Facebook by seventh graders from three counties confirms that code-switching from one language code to another occurs often in their language, as well as mixing various language codes. It should be noted that both phenomena are quite often present. However, code-mixing within a sentence is more frequent as far as horizontal level is concerned. When switching from mother tongue code to a foreign one, these switches often refer to the quotes which frequently contain intertextual elements from literature, songs, or some proverbs or a joke of a kind. Intra-sentential switching or switching within a sentence is more frequent with vertical paradigm than with the horizontal one (see Figure 6). Here are some examples of code-switching and code-mixing:

– *Znači, u sedam i 35 krećemo...Voze nas učitelj, domar i knjižničarka...Cek malo, podijeljeni smo? Ko bude nas pelal?... Ja hocu da nas vozi ucitelj*

– *Pisali ste povijest? Koliko si dobila?... Jesmo, pet. Ti?...e toooo, tak treba, ja cetriJ... ma i to je super, kaj delas?... A nikaj.. došel sam upravo doma i tak, ti?... A pišem zadaću...*

- *Prije bus ti njega zmazala...idem citati knjigu... Ja se idem uciti caoss...Idem citati hari potera... Patricija, nemoj fotic zabiti...bum bum*
- *daj posalji jos onima koji ideju z tvojeg razreda, ako ti nije problem*
- *Svaki put kad sam s tobom se ludo zabavim jer ti uvijek imas neke fore ili najnovije smesne price...*
- *Ova je lijepa za deti na jastuk.. Je*
- *Perinka…ajd vise nemoj razmisljat… odi za fizioterapeuta… najbolje… ajd javi jos kaj budes.. odi za stolara*
- *Mislio sam na Piu kaj jos ceka kaj se ne vraca hahahaha*
- *Ja ocu ici s uciteljem i pem*
- *s kaksim si mobom to snjimala odlicno je ispalo*
- *Al neznam baš da voliš gredu. Zakaj ne? Ok. Ne ljuti se.*
- *Puno zdravlja, srece i svega kaj ti treba;)*
- *No, pa rekla si da trebas uciti, pa sam tak i mislila. A sad nebrem dojti*
- *Hvala svima sto puta! and I am the ring! Haha XD*
- *Hahah, i like it very much...hvala, hvala thank you very much...hahahhaha Marta is okej??:**
- *di si bila? u sopingu*
- *Lepa si tnx* ❤
- *wahahhaha koja stupid zenska isuse-.-*
- *sori kj tek sad odgovaram al isla sam u dgra:D*
- *predivna…od licna…se si senjorita…lepaa*
- *Najljepsa moja<3…Danke mein Schatz…Najljepsa moja seka*
- *Aah same thing<3<3<3<3<3<3<3<3<3<3<3<3<3<3…well, gdje su slike? No it isn't!!!!!* ❤ ❤ ❤ ❤ ❤
- *recem ti v inbox-u* ☹
- *Sutra natjecanje iz geografije!!! Osjećam se scared* ☹
- *Koja mi je najbolja? Nista! Najbolja je treca.* ❤ ⋯ ⋯. *thank you33<3<3<3 No problem* ❤ ❤ ❤
- *kaj delas?<3<3<3<3<3<3*
- *Lajk i dobiši me*
- *Like i tagiram vas!*
- *Nemas beda*
- *ok na mesenger ti poslem*
- *Let it snow, let it snow, let it snow.... Počelo i v Čakovcu!!!!*
- *daj performance da ti predlozim neke ubi igrice (ubi)=ubisoft*
- *PRAVILA:*
  1. Lajk na moju stranicu - Dash of blue Makeup
  2. Shareajte ovaj post (mora biti public! ☺ *)*
  3. U komentar napisite...

– I must share   braaavo stari!!! nice Hvala svima

– Mnogo najs

– hay how are you? remember me? to you in England? Hevy Maja Kaj ima? nis zima je tu kod nas, jel ima tam kod vas snjega u Eng? kj si vidla 1D Ne, nisam Jo›s, al sam isla u muzej vostanih figura i tamo je bio 1D ok uzivo si ih vidla ili Ma ne samo lutke koje slice njima a ok
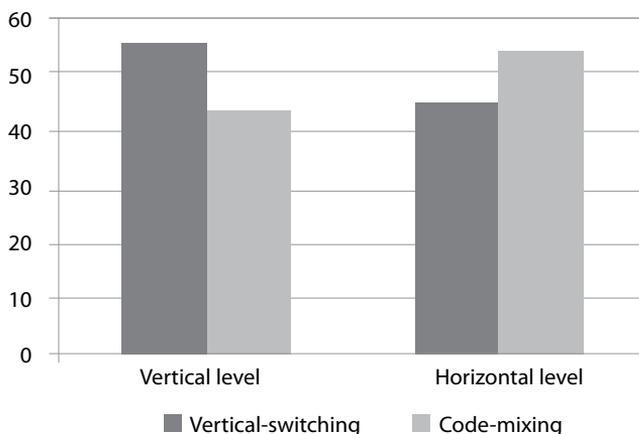

Figure 6. Frequency of code-switching and code-mixing

The Reasons for Code-Switching and Code-Mixing on Facebook

Code-switching on the vertical and horizontal levels should be clearly distinguished. When code-switching occurs within mother tongue, it should be noted that it mostly concerns code-switches at the sentence border or over it, and most often the code-switching occurs between standard and substandard, i.e. the Kajkavian dialect. Possible reasons for using a dialect could be expressing closeness, speeding up communication, expressing solidarity and belonging to a common group, or simply imitation of spoken language (Filipan-Žignić, 2014a). Communication on the Internet, and especially within a more intimate service, such as Facebook, really affects written communication with some elements of spoken language, i.e. a written speech. This is why the language (dialect) of the Internet, mainly on Facebook and in chatrooms, is unavoidable.

A possible reason for code-mixing, more frequent at the horizontal level, as well as for the widespread usage of the English language, is the leading role of the United States today, which results in the growing importance of the English language. When the Internet and computer technologies are concerned, the reason is that new notions developed in the Anglo-American world were at first loaned as a logical step, while their equivalents were created in other languages only later. However, apart from all this, the already mentioned enthusiasm of the young for the so-called American way of life and everything that is associated with it should also be taken into account (Filipan-Žignić ,2012, 2013). The corpus analysed confirms the reasons, such as recognising soul

mates and like-minded people who belong to the same or similar society, awareness of the trends or an attempt to be *in*, sometimes also the usage of the language abounding in Anglicisms, characterised by high language creativity. Quite often the reason is the attempt to be international, obviously frequently mixed with social prestige and in some cases with hints of faddism sometimes as well. Without exception, code-mixing, when the usage of English, German and even Spanish language is involved, is always stylish.

Conclusion

The research study conducted and the results obtained lead to the conclusion that there is a high percentage of Croatian elementary school students, seventh graders in this research, who are multilingual, both at the vertical and horizontal level. This multilingualism is to a high extent expressed in their communication on Facebook in which they frequently use code-switching and code-mixing. Code-switching is more present at the vertical level, while code-mixing is predominant at the horizontal level. The research has also confirmed that vertical multilingualism is in some of its aspects statistically significantly correlated to horizontal multilingualism.

As can be seen, all the starting hypotheses have been confirmed by the research conducted and described here, some of them being supplemented (H4 and H6), while one hypothesis (H2) has not been confirmed in neither of the segments investigated.

H1) Students of the 7th grade are multilingual, both vertically and horizontally. They most frequently have the command of at least two language codes, again both when analysing vertical and horizontal multilingualism. As far as vertical multilingualism is concerned, the code is most often the first acquired language (L1) and substandard/ Kajkavian dialect (L3), as well as standard language (L2), while horizontal multilingualism involves standard (L2) or substandard (L3) and English language (L4). As many as 62.4% of the participants learn two foreign languages at school, mostly English and German, while some of them mentioned Spanish, French, Italian and Russian.

H2) Vertical multilingualism of seventh graders correlated to horizontal multilingualism. Statistically significant correlation was identified between mastering a greater number of idioms at the vertical level and learning more foreign languages at school at the horizontal level. However, no statistically significant correlation has been established between mastering a greater number of idioms at the vertical level and the wish to learn additional foreign languages outside school at the horizontal level.

H3) The tested 7th graders express their multilingualism, both vertical and horizontal, on Facebook. The research confirmed that students frequently expressed their multilingualism on Facebook. We can conclude that Facebook is primarily characterised by multilingual communication.

H4) Additionally, 7th graders frequently switch and mix language codes on Facebook. It was confirmed that both phenomena are quite frequent. Code-switching is more frequent at the vertical level, while code-mixing is predominant at the horizontal level.

H5) The most frequently encountered language codes on Facebook are those of the first acquired idiom, or a regional variant (the Kajkavian dialect) at the vertical level, together with the English language at the horizontal level.

H6) *In-group* signals are also an important reason for code-switching and code-mixing together with the awareness of the trends. The wish to be a part of a particular group is certainly one of the most important reasons for code-switching and code-mixing, with the awareness of the trends and language creativity contributing, as well as social prestige and faddism.

This research included 7th graders, but we can rightfully suppose that multilingualism would be even more pronounced with 8th graders, due to their higher level of communicative competence. This trend was confirmed by the research study performed by Pavličević-Franić et al. in 2010, which showed that students in higher grades used more lexemes of the English origin than those in lower grades.

A completely comprehensive picture of vertical and horizontal multilingualism of Croatian language speakers will be obtained when the results of the already conducted studies of multilingualism in pre-school, elementary and secondary school children (see Pavličević-Franić 2006, 2010; Filipan-Žignić 2006, 2014b) are supplemented by the research studies of adult Croatian speakers.

Likewise, a more comprehensive picture of code-mixing on Facebook will be obtained when future research on the multilingualism of communication on Facebook precisely defines what kind of code-mixing is involved, namely what the level of presence of particular elements of code-mixing is (i.e. insertion, alternation and congruent lexicalisation) and when it defines the reasons for this particular type of code-mixing.

References

Androutsopoulos, J. (2006). Mehrsprachigkeit im deutschen Internet: Sprachwahl und Sprachwechsel in Ethnoportalen. In P. Schlobinski (Ed.), *Von *hdl* bis *cul8r*. Sprache und Kommunikation in den Neuen Medien* (pp. 172-196). Mannheim: Dudenverlag.

Cardenas-Claros, M. S., & Isharyanti, N. (2009). Code switching and code mixing in Internet chatting: between 'yes', 'ya' and 'si' a case study. *JALT CALL Journal*, 5(3), 67-78.

Danet, B., & Herring, S. (2003). The Multilingual Internet. *Journal of Computer Mediated Communication*. 9.1., online Edition, Retrieved from http://jcmc.indiana.edu/vol9/issue1/.

European Commission. (2012). *Europeans and their languages*. *Special Eurobarometer 386*. Report. Retrieved from http://ec.europa.eu/public_opinion/archives/ebs/ebs_386_en.pdf.

European Commission. (2014). *Comparative Overview on Instruction Time in Full-time Compulsory Education in Europe 2013/14*. *Education and Training.* Eurydice Report.

Retrieved from http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/IT_Comparative_analysis_2013_14.pdf.

Filipan-Žignić, B. (2006). Rana višejezičnost (ni)je utopija. In I. Vodopija (Ed.), *Dijete i jezik danas. Dijete i višejezičnost* (pp. 199-209). Osijek: Sveučilište Josipa Jurja Strossmayera u Osijeku i Učiteljski fakultet u Osijeku.

Filipan-Žignić, B. (2011). Wie Deutsch und Kroatisch durch Fremdelemente überflutet und gefährdet waren (sind) und trotzdem nicht untergehen. In P. Katelhön, & J. Settinieri (Eds.), *Wortschatz, Wörterbücher und L2-Erwerb* (pp. 27-48). Wien: Praesens.

Filipan-Žignić, B. (2012). *O jeziku novih medija. Kvare li novi mediji suvremeni jezik*. Split: Matica hrvatska.

Filipan-Žignić, B. (2013). *Jezik moje bake i Internet. Posuđenice u međimurskom kajkavskom dijalektu – jučer, danas, sutra.* Čakovec: Matica hrvatska.

Filipan-Žignić, B. (2014a). Dialekte im Online-Diskurs. In I. De la Cruz Cabanilla, & C. Tejedor Martinez (Eds.), *Linguistic Insights: Studies on Languages* (pp. 389-402). Alcala de Henares: Universidad de Alcala.

Filipan-Žignić, B. (2014b). *Višejezičnost na Facebooku kajkavskoga govornoga područja*. Unpublished manuscript.

Filipan-Žignić, B., & Mošmondor, L. (2015). Jezična promjena putem novog medija interneta. Primjer Facebooka na hrvatskom i njemačkom jeziku. In S. A. Toth (Ed.), *A Magyar Tudomany Napjan Elhangzott Horvat (es Angol) Nyelvü Elöadasok Gyujtemenye*. 2013-IG. Baja: Jozsef Eötvös Foiskolai.

Gumperz, J. J. (1982). Social network and language shift. In J. J. Gumperz (Ed.), *Discourse Strategies* (pp. 38-58). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511611834.005

Jernej, M., Glovacki-Bernardi, Z., & Sujoldžić, A. (2012). Multilingualism in Northwestern part of Croatia during Habsburg rule. *Jezikoslovlje*, 13.2, 327-350.

Muysken, P. (2000). *Bilingual speech: A typology of code mixing*. Cambridge: Cambridge University Press.

Oksaar, E. (2002). Mehrsprachigkeit und Kulturkontakt im europäischen Integrationsprozess. In Lj. Biškupić et al. (Eds.), *KDVinfo Europa-Mitteleuropa-Mittelmeerraum. Mehrsprachikgeit als Voraussetzung kultureller Vielfalt und Integration in Europa* (pp. 11-17). Zagreb: KDV.

Pavličević-Franić, D. (2005). *Komunikacijom do gramatike*. Alfa: Zagreb.

Pavličević-Franić, D., Gazdić-Alerić, T., & Aladrović-Slovaček, K. (2010). Utjecaj engleskoga jezika na funkcionalnu komunikaciju u hrvatskom jeziku. In A. Bežen, & D. Pavličević-Franić (Eds.), *Društvo i jezik – višejezičnost i višekulturalnost Society and Language – multilingualism and multiculturalism* (pp. 234-248). Zagreb: Učiteljski fakultet Sveučilišta u Zagrebu i Europski centar za sustavna i napredna istraživanja.

Pavličević-Franić, D. (2011). *Jezikopisnice*. Zagreb: Alfa.

Samardžija, M. (2000). *Jezikoslovni razgovori. Desetljeće ugodnih i uglavnom uzaludnih prigovaranja o hrvatskome jeziku i u vezi s njim*. Vinkovci: Riječ.

Večernji list. *Strani jezici u osnovnoj školi*. 8th September 2004, 58.

Veliči, D. (2007). Nova višejezičnost i učenje stranih jezika kao dio jezične politike. *Metodički ogledi*, *14*(1), 93-103.

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Višejezičnost hrvatskih osnovnoškolaca na *Facebooku*

Sažetak

Internet kao najveća svjetska mreža međusobno povezanih računala podrazumijeva višejezičnost pa ona u najnovijim istraživanjima komunikacije na internetu zaslužuje biti u fokusu tih istraživanja. Višejezičnost se, naime, u određenom smislu može tumačiti kao uporabu više jezika ili varijeteta u nekoj situaciji. Autorice stoga u ovome radu progovaraju o višejezičnosti hrvatskih osnovnoškolaca na internetu, i to poglavito na Facebooku. One isprva provode istraživanje o višejezičnosti učenika 7. razreda u trima hrvatskim županijama sjeverne i sjeverozapadne Hrvatske s obzirom na vertikalnu i horizontalnu višejezičnost. Sljedeći je cilj bio proučiti izražavaju li osnovnoškolci svoju višejezičnost (i to kako horizontalnu, tako i vertikalnu) i na Facebooku. Željelo se istražiti dolazi li u njihovoj komunikaciji na Facebooku do prebacivanja i miješanja kodova, u kojoj su mjeri prebacivanje i miješanje kodova zastupljeni te koji su razlozi prebacivanja i miješanja kodova. Zaključak je da su hrvatski osnovnoškolci u visokom postotku višejezični, i to kako s obzirom na vertikalnu tako i s obzirom na horizontalnu višejezičnost, te da je ona izražena i u njihovoj komunikaciji na Facebooku, pri čemu oni u svojoj komunikaciji učestalo rabe prebacivanje i miješanje kodova.

Ključne riječi: *Facebook; horizontalna višejezičnost; miješanje kodova; prebacivanje kodova; učenici 7. razreda; vertikalna višejezičnost.*