

Doctoral (PhD) Dissertation



**FIRST LANGUAGE ATTRITION AMONG RUSSIANS LIVING
IN HUNGARY**

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STATEMENT

This dissertation, written under the direction of the candidate's dissertation committee and approved by the members of the committee, has been presented to and accepted by the Faculty of Modern Philology and Social Sciences in partial fulfilment of the requirements for the degree of Doctor of Philosophy. The content and research methodologies presented in this work represent the work of the candidate alone.

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FIRST LANGUAGE ATTRITION AMONG RUSSIANS LIVING IN HUNGARY

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ABSTRACT

The phenomenon of language attrition is an essential topic in applied linguistics, developing from the 1980s. Bilingual individuals may experience language attrition after being immersed in a new language environment. The native language goes through severe changes due to migrating to a foreign language environment (Kuhberg, 1992). However, migration is not the only factor causing attrition: age, motivation and attitude, and literacy can play a crucial role in language development. The present study focuses on the first language attrition of Russians living in Hungary, focusing on changes in lexical access, speech fluency and grammar. All participants (N = 50) have spent more than seven years in Hungary, and their age ranges from 22 to 72 years old. The study aims to investigate the effect of extralinguistic variables on the extent of language attrition, such as age, language choice, contact and attitude, frequency of use and length of residence.

The data was collected using the Social Personal Background Questionnaire (SPBQ) (Schmid, 2004b) on the factors mentioned above, focusing on four domains: personal background, language choice, language contact, and language attitude. Besides questionnaires, semantic and letter fluency tasks are used to explore lexical access and a story-telling task to measure lexical diversity and speech fluency. The future tense formation task was developed to elicit the data on morphological attrition. Together, these results provide a vital understanding of how attriters' language production differs from monolinguals' and of the main factors contributing to language attrition.

The findings on grammatical judgment match with previous studies, namely, the immigrant group did significantly worse than the control group. However, the study fails to explain which variables influence the poorer performance. Additional results show that the control group has outperformed attriters regarding lexical access and lexical diversity while speech fluency seems to be intact. None of the extralinguistic variables explains the extent of attrition; however, frequency of use and attitudes toward the L1 are related to the letter fluency task, which requires inhibition. Some participants believe that they have fully integrated into the new society. Others could not adapt to a foreign culture, although they consider themselves bilingual. The rest of them try to integrate into Hungarian society, maintaining their Russian identity. The results clearly show that the participants use their two languages for different purposes and contexts, which confirms Grosjean's Complementarity Principle. The findings show a diversity in the extent to which language affects the participants' identities, which is in line with previous findings (Grosjean, 2010; Pavlenko, 2006). The present study's findings correspond to the previous studies on verbal fluency in that the immigrant group did significantly worse than the control group. However, the study fails to explain which variables influence poorer performance.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
ATH	Activation threshold hypothesis
CDM	Cognitive disfluency markers
CDST	Complex and Dynamic Systems Theory
CLI	Cross-linguistic influence
CLIN	Cross-linguistic interaction
CPH	Critical Period Hypothesis
CS	Code-switching
DMM	Dynamic Model of Multilingualism
FOU	Frequency of use
HL	Heritage language
HSD	Honestly Significant Difference
L1	First language
L2	Second language
L3	Third language
LA	Language attrition
LM	Language mode
LOR	Length of residence
LTH	Linguistic threshold hypothesis
SD	Standard deviation
SMD	Semantic disfluency markers
SPBQ	Social Personal Background Questionnaire
STTR	Sophisticated type-token ratio
TTR	Type-token ratio
VFT	Verbal fluency task

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CHAPTER 1.

INTRODUCTION

This dissertation aims to explore first language attrition among Russians living in Hungary. Linguistic and extralinguistic data were collected from 100 participants: 50 bilinguals who currently live in Hungary, and 50 monolingual Russians living in Russia who serve as the control group in this study. It is assumed that due to the new language environment, the first language goes through a number of changes, generally labeled as *language attrition*. The main goal of this study is to investigate to what extent the language of the bilingual group is different from the monolinguals' (i.e. the extent of language attrition) and what extralinguistic factors explain the variability in the first language (L1) performance of bilinguals.

The language use of Russian-paired bilinguals living in different countries is increasingly attracting the attention of linguists (Gürel, 2004, 2008; Pavlenko, 2010). The intensive growth of Russian diasporas in other parts of the world has made them an object of study in the era of globalisation and large-scale interethnic migrations. People who have left their homeland generally try to maintain kinship, cultural, and friendship ties. Maintaining L1 skills requires effort (Herdina & Jessner, 2002), especially if the environment does not support that effort. However, language attrition happens if effort is not exerted to maintain the L1. The effect of the second language (L2) on the L1 is studied in several areas of linguistics, such as psycholinguistics, neurolinguistics, and sociolinguistics. Therefore, several terms are used to describe the weakening of language skills either at the individual or the societal level: language regression, language attrition, language loss, language shift, code-mixing, code-switching, and language death (Gürel, 2008). Language attrition studies focus on the individual level and connect psycholinguistic and sociolinguistic processes by looking at the weakening of L1 skills at every level and take extralinguistic factors (such as attitudes, education level, frequency of language use in different domains, length of residence) into account.

After an individual move to an L2 environment, the L1 may become unstable, “wobbly”, and recalling particular structures and vocabulary may become difficult, which is manifested in the loss of fluency and/or decrease in lexical diversity (de Bot & Weltens, 1995; de Bot, 1996; de Leeuw et al., 2018; Jarvis, 2019; Kroll et al., 2006; MacWhinney, 2019a, 2019b;

Opitz, 2013; Köpke & Schmid, 2004; Schmid & Köpke, 2017). So far, there has been a tiny number of studies on the effects of attrition, not only among the Russian community in Hungary but also in general, which is surprising, especially in the light of theories about cross-linguistic influence, which implies changes in the L1, too. Systematic research on language attrition started only in the first years of the 21st century (e.g. Schmid, 2002). Most of it has been in small-scale studies with small statistical power and finding no discernible effect of extralinguistic variables (Schmid, 2020). Overview and handbook articles urge attrition studies that include at least 50 participants and use the methodological framework developed for L1 attrition studies for comparability. The present study addresses this gap in the literature and aims to contribute to empirical findings by studying the L1 of Russians living in Hungary.

The presence of Russian communities in various countries started to be noticeable after the collapse of the Soviet Union when moving abroad to the west and east became an option for the larger population. The migration of Russians in the post-Soviet period targeted the post-Soviet countries, the United States, Europe and Israel, in particular. Nowadays, a new kind of migration, educational migration, is starting to play an increasingly important role (such as with the help of the *Stipendium Hungaricum* scholarship). The history of Russians in Hungary began in the Soviet period when the Soviet Army's Southern Group of Forces, numbering about 60 thousand people, was stationed in Hungary. Soviet specialists were involved in large Hungarian enterprises, for example, Ikarus or the nuclear power plant in Paks. After the collapse of the Soviet Union, an overwhelming number of specialists returned to their homeland, but a small number remained in Hungary and many married Hungarians (Ryazantsev et al., 2020). Furthermore, due to the previous, the number of Russians increased in the last three decades (see Section 2.1.3.)¹. The fact that the Russian community in Hungary has not been studied from a linguistic point of view is one of the aspects of the significance of this study.

Another critical point is that L1 attrition occurs in emigration, which often entails re-assessment of identity, group membership, etc. (Schmid, 2004a, 2011a). Language use and proficiency are markers of identity which the individual can control. As the social status of the immigrant becomes lower than their status in the country of origin (Yagmur, 1997), assimilation can be a desired state for which the native language has to be rejected, and a high proficiency in the L2 acquired. However, if the individual wishes to be perceived as a

¹ The dissertation discusses the situation prior to 24 February 2022.

immigrant community member, they will maintain the L1. In both cases, attitudes seem to play an important role and should be investigated in the framework of language attrition.

This study is focused on attrition at the lexical and grammatical levels. It investigates the relation of extralinguistic variables and language attrition using the following instruments: a social, personal background questionnaire, personal interviews, verbal fluency (semantic and letter fluency) tests, story-telling, and a future tense formation task. For the importance mentioned above of attitudes, special attention is paid to the relationship between language, identity, culture and attitudes.

The goals of the study are as follows:

- To find out the effect of extralinguistic factors on the extent of language attrition;
- to explore the level of L1 maintenance by Russians living in Hungary (based on the frequency of use and attitudes towards the L1) according to the questionnaire data and account it for language attrition;
- to find differences between attrited and non-attrited (monolingual) groups in lexical access and lexical diversity;
- to find differences in the temporal and performance-related measures of speech fluency between the attrited and the non-attrited (monolingual) groups;
- to see differences in performance and use of simplified forms between the attrited and the non-attrited (monolingual) groups;
- to see the extent to which the Russian and Hungarian languages and cultures contribute to the identity formation of Russians in Hungary.

The dissertation has six chapters. Section 2.1 describes the history of emigration of Russians in the post-Soviet period and gives an overview of the largest Russian diasporas in the world, as well as the numbers and distribution of Russians in Hungary. Section 2.2 defines language attrition throughout the period of the phenomenon's existence as the working definition in the area of multilingualism, theories and previous studies related to the field of attrition. These sections 2.3 and 2.4 take a thorough look at the concepts related to language attrition and the theories and models which have been proposed to account for language attrition. Section 2.5 describes and summarizes previous findings on language attrition research at the different linguistic levels: phonological, lexical, morphological, and pragmatic levels. Section 2.6, it presents the extralinguistic variables (frequency of use, attitude, age, length of residence, literacy and L2 proficiency) which are believed to influence and contribute to language attrition or, on the other hand, prevent it from happening. Chapter

3 lists the research questions and hypotheses of the study. Chapter 4 discusses the instruments of the study and sets out the methodological part and includes the description of the participants and research tools, such as the questionnaire, personal interviews (accounted for identity formation), the verbal fluency tasks (semantic and letter fluency), the story-telling task and the grammar future tense formation task. Chapter 5 presents the findings of the study. It follows the order of the research questions and hypotheses. Chapter 6 gives the outline of the study's results in comparison with previous research. Finally, Chapter 7 provides the conclusions of the study, looking for parallels with the work of other scholars in the same field; pointing out the limitations of the study and future directions of research.

CHAPTER 2. LITERATURE REVIEW

2.1. The Russian diaspora

2.1.1 Russian migration waves

Russian emigration in different periods of history was caused by various factors that affected emigrants' attitudes to the homeland, language, and culture. Emigrants had different attitudes to the maintenance of the Russian language, which depended on the reasons for migration, the life, attitudes and priorities of the emigrants themselves. Four waves of Russian emigration can be distinguished (Andrews, 1999): the first, during the revolution of 1917; the second, during and after World War II; the third, in the 1970s, the bulk of the emigrants were Jews who were allowed to emigrate to Israel and the USA, and dissidents expelled from the country; and the fourth, beginning with the late 1980s in perestroika period, and after the fall of the "iron curtain" – the period after 1991.

To date, there are no longer any Russians alive who left Russia during the revolution of 1917. However, their descendants remained abroad and continue to live there. The emigrants of the *first wave* were well-educated people; these were mostly Russian aristocrats loyal to Russia, with a common characteristic feature of multilingualism, the ability to use more than one language. This is explained by their origin and upbringing. After leaving Russia, they had long hoped to return, so they maintained the Russian language through the 4th generation (Andrews, 1999). Their speech retained the features of the archaic language. However, at the same time, it is characterized by changes notable of a language that can function and survive in a foreign environment for a long time. One of the features of their speech was the presence of archaic expressions and the rejection of words inherent to the Soviet era.

The *second wave* of emigrants from Russia found themselves in exile due to various wartime circumstances. Most representatives of this wave were educated in the USSR. Those who had higher education tried to retain the Russian language. Nevertheless, the majority understood the impossibility of their return due to political, ideological, moral, and ethical reasons. They were consciously involved in assimilation in the country of residence, and their language changed.

The majority of emigrants of the *third wave* received higher education in the USSR. Therefore, they knew the Russian language, which had a cultural value for them, aided by professional activity in the Russian language (Andrews, 1999). Many emigrants, before leaving Russia, also spoke English or the language of the country to which they moved.

The *fourth wave* of emigration began during the *perestroika* period and is often referred to as the "economic wave". People who left Russia at this time did not want to return. The language of the country they were travelling to was often unknown to them. To achieve their primary goal, which was to find work and housing, they had to learn the language of the country, gradually losing communication skills in their native language. Twenty-one percent of the emigrants of the fourth wave were highly educated, which can be explained that those who tended to migrate were young and a better-educated age group of the post-Soviet society (Heleniak, 2001). However, they were forced to engage in low-skilled labour. It was reported in the literature that the maintenance of the native language deteriorated due to the quick influence of the foreign language as the integration processes became visible within their language of use (Heleniak, 2001). Many of these people took the opportunity and advantage of the situation to move to other foreign countries outside the circle of the former Soviet republics.

The emigration of the 20th century or the so-called *fifth wave*, middle of 1990s, which is often called the "intellectual" wave (Zelenin, 2007). People did not plan to leave Russia forever, most of them retained their Russian citizenship. Often these were educated people fluent in their native and foreign languages, who tried to adapt to the culture of the new country and its language, but they did not strive for complete assimilation since they had strong ties, often via relatives and businesses, with their homeland (Heleniak, 2001).

2.1.2 Russian diasporas in the world

Russian diaspora is a collective name for the Russian community living abroad. In the second decade of the 21st century, around 20-30 million ethnic Russians migrated to and now live in the post-Soviet countries, Germany, the USA, France, Portugal, and many other states.

In the period after the dissolution of the Soviet Union (in 1991), many of the inhabitants of the Russian Federation used the advantage to move abroad. The main reason for migration was the dissolving economy of post-Soviet countries, which could not promise a stable perspective in life. Three countries account for the majority of individuals migrating from Russia to locations other than the former Soviet Union (Heleniak, 2001):

- Germany (57%),
- Israel (26%)
- the United States (11%)

According to Rosstat (Росстат)², in 2014, around 308,475 Russians left the country and settled in the following countries:

- Post-Soviet countries: 257,324;
- China: 8,606;
- North Korea: 4,789;
- Germany: 4,780;
- Vietnam: 3,282;
- Turkey: 2,327;
- USA: 1,937.

The study of Russian communities worldwide has attracted scientific attention, including linguistic inquiries (Jarvis & Pavlenko, 2008). The degree of maintenance of the native language among Russian emigrants living in various countries is both different and heterogeneous (Andrews, 1999; Heleniak, 2001). The number of sociolinguistics and language policy works about the Russian diaspora is relatively tiny. The studies conducted in eight former Soviet republics from 2000 to 2009 (Russia, Belarus, Ukraine, Moldova, Kyrgyzstan, Azerbaijan, Uzbekistan, and Estonia) were summarised and discussed by Jarvis and Pavlenko (2008). Specifically, the commodification of Russian has been studied in some areas: healthcare, tourism and linguistic landscape (Bátyi, 2014; Muth & Ryazanova-Clarke, 2017; Pavlenko, 2009, 2012). Commodification in this context is considered to be converting a language into an economic good and functioning in the global market.

The main goals (Pavlenko, 2017) of these studies are as follows:

- Documenting the historical moment of the Russian language entering the range of the most popular languages in the international service sector;
- understanding the influence of geopolitical, economic, social and demographic factors in the processes of commodification;

Some economic data, for example, on tourism costs, enrolment in language classes, or even an analysis of capital flows from Russia, may explain the location of the use of Russian and its reasons, as well as the consequence of changes in the use of the Russian language abroad or its decommodification (Muth & Ryazanova-Clarke, 2017).

The findings of linguistic landscape studies show that the number of inscriptions, announcements, and advertisements in Russian in many foreign cities is increasing, as is the

² Federal State Statistics Service (www.rosstat.gov.ru)

number of Russian-speaking personnel (Pavlenko, 2017; Ryazantsev et al., 2020). As Muth and Ryazanova-Clarke (2017: 381) note: “Suddenly the Russian language emerged as a global phenomenon. [...] Following the flow of Russian capital, the Russian language arrived in many European countries and further afield affecting linguistic landscapes, the service sector and the language teaching industry in the new locations.”.

Immigration of Russians takes place even nowadays. Primarily it was boosted in 2014 due to the political situation between Ukraine and Russia, shaking the economy’s stability in its regions.

2.1.3 Russians in Hungary

Globalisation largely contributed to the change of the linguistic composition of many countries as it accelerated the movement of groups and individuals from one country to the other. Most European countries now have large voluntary migrant groups, and Hungary is not an exception. According to the latest 2011 census provided by the Hungarian Central Statistical Office (Központi Statisztikai Hivatal, KSH), the Hungarian population consists of Hungarians (78.2%), Gypsies (3.6%), Germans (1.6%), Slovaks (0.3%), Romanians (0.3%), Croats (0.3%), and Serbs (0.1%). Thus, minorities include 644,524 people (6.5%), which was 9,937,628 in total. Every cultural nation has and tends to use its language, which necessarily affects the linguistic situation in the country. Nevertheless, Hungary is a country where monolingualism is dominant, but minorities (13) are recognised by law according to Act LXXVII of 1993 on the Rights of National and Ethnic Minorities.

The migration of Russians to Hungary started after WWI and accelerated after the Russian civil war (1917–1922). According to the census in 1920, 3777 Russian-born males and 1085 females lived in Hungary; by 1930 it changed to 2435 males and 1798 females (Tarján, 2016). The next period, as was mentioned in Chapter 1, was after WWII, when some members of the Russian troops and later specialists involved in building the Paks power plant decided to stay in Hungary. However, the vast majority of Russians in Hungary moved to the country due to the migration processes taking place in the 20th century and even today (Papp, 2018).

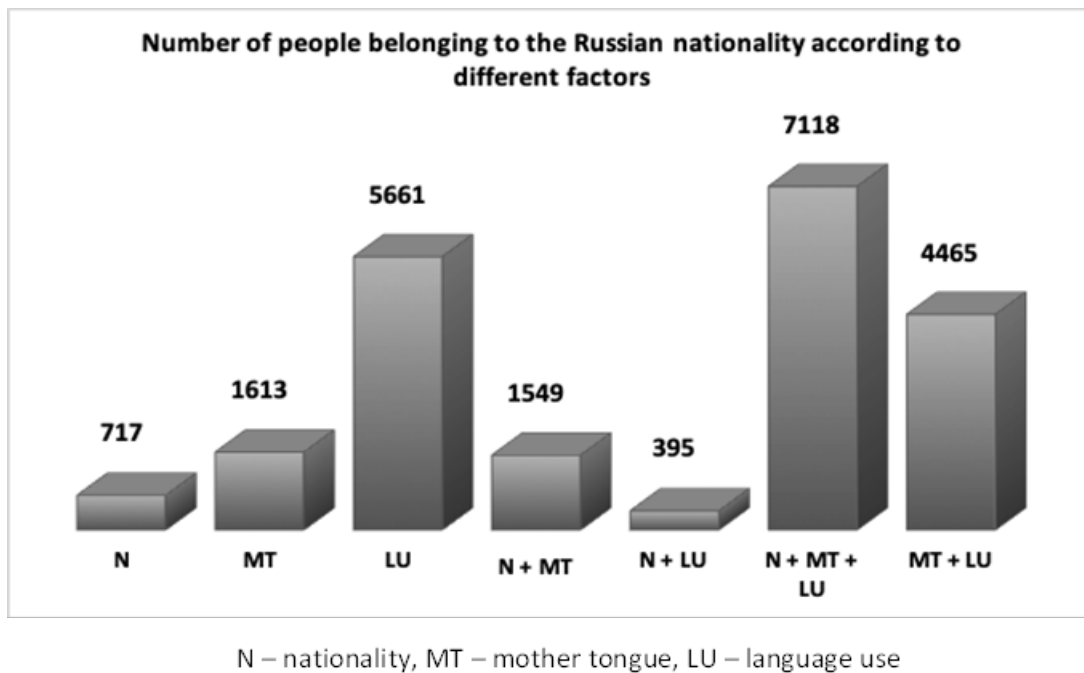
According to the official data from the Hungarian Central Statistical Office (KSH), the number of Russians in Hungary increased between 1990 and 2011 (see Table 1.)

Table 1. Russians in Hungary according to mother tongue and nationality, 1990–2011 (Központi Sztatisztikai Hivatal, 2011)

Mother tongue			Language used in the family, with friends		Cultural affiliation	Nationality		Belong to nationality	
1990	2001	2011	2001	2011	2001	2001	2011	2001	2011
3092	3257	7382	3942	10231	2893	2341	6170	5512	13337

The first thorough micro-census in 2016 (Központi Sztatisztikai Hivatal, 2016) focused on non-official minorities – such as the Korean, Vietnamese, Chinese, Arabic, and Russian minorities. The survey included questions about social satisfaction, occupational prestige, and international migration. The Dwelling Questionnaire and the Personal Questionnaire included questions about age, marital status, educational attainment, citizenship, and economic activity. According to the census results, 21,518 people considered themselves Russian based on three factors: nationality, mother tongue and language use (Figure 2). It is 0.2% of the whole population of Hungary, and 1.6% of these people speak Russian. One-third (7,118) of the Russian population considered themselves Russian based on three factors altogether, and 5,661 people identified themselves as Russian based solely on language use. A large part of the Russian-speaking population is not ethnically Russian, according to their responses, even though the numbers are very diverse regarding the length of residence, citizenship, the use of the Russian language in the family, etc.

Figure 1. Number of people belonging to the Russian nationality according to different factors (micro-census 2016, based on www.ksh.hu)



On February 1, 2018, István Döbrei presented the initiative to the National Election Committee to declare Russians as the official minority (Döbrei, 2018). The attempt was surprisingly successful: within 120 days, 1,000 signatures of support were collected from Hungarian citizens identifying themselves with the Russian minority. Interestingly, there are no rules regarding who can be a member of a given group. For example, self-proclamation does not require knowledge of the language, since it is not necessary to speak the Russian language to be considered Russian by origin. However, in the opinion of the Hungarian Academy of Sciences (Lovász, 2018), the Russian community does not meet the requirements of the law, since the objective condition is that a certain group should be constantly present in the country for 100 years, which in the case of Russians was difficult to prove.³

Russians are settled in different parts of Hungary, and the main cities are Budapest, Paks, Pécs, Kaposvár, Eger, Debrecen and Hévíz. They have other cultural communities and associations in Hungarian cities and towns. They also publish a magazine 'Rosiyskiy Kurier' (<https://www.kurier.hu>), operate a secondary school (<http://www.orosziskola.ru>) and a studio

³ "The Russian community living in Hungary does not fully comply with the legal conditions on the recognition of nationalities: Russians living in Hungary do have institutions for the maintenance of language and culture, the continuous presence of a native ethnic group for at least a century is difficult to prove, and in the course of the 20th century, rather, various their presence is due to migration waves. The 100-year continuous presence of the Russian ethnic group in Hungary cannot be established, therefore the Academy does not recommend declaring the Russian community in Hungary a native ethnic group." (László Lovász, 23 May 2018).

theatre (<http://rusteatr.blogspot.com>). The Russian Cultural Center in Budapest organises several events, and the Russian Orthodox Church also has a few communities in different cities.

2.2. Language attrition: definitions, terminology, historical overview

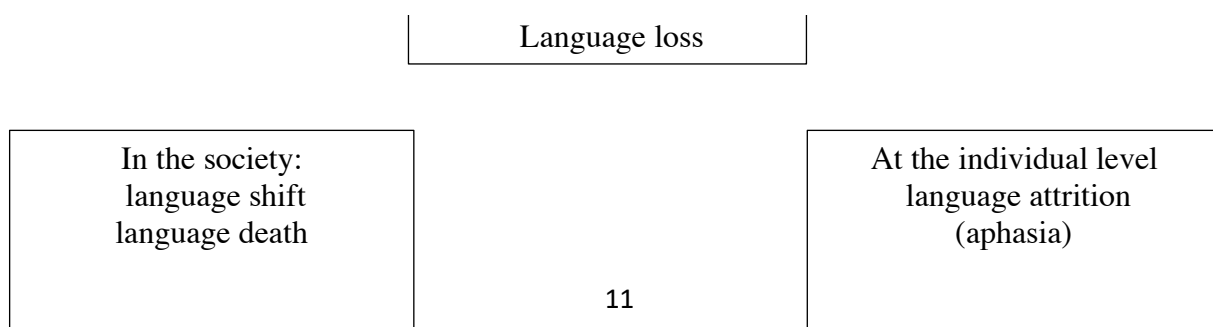
2.2.1 Definitions and terminology

First language attrition within the study of bi- and multilingualism is relatively new research, and systematic study has not started until 2002, thanks to the pioneering work of Monika Schmid and her research team. The first milestone in language attrition studies was a conference followed by an edited volume, *The Loss of Language Skills* (Lambert & Freed, 1982), in which the topics of language shift, language attrition, and language maintenance were discussed. Soon after, several attempts were made to differentiate between terms such as language shift, attrition, loss, etc., which were often used interchangeably before (Cohen, 1986; Weltens & Cohen, 1989; de Bot & Weltens, 1995; de Bot, 1996) and caused confusion. De Bot and Weltens (1995) highlighted the importance to differentiate between the definitions of "language shift" and "language attrition", the former referring to an intergenerational and societal phenomenon while the latter is an intragenerational and individual phenomenon (de Bot & Weltens, 1995). The causal factors of language shift are as follows:

- language functionality and its prestige;
- the language policy of the government;
- several native speakers in the environment (de Bot & Weltens, 1995).

Language loss is an umbrella term to refer to both shift and attrition (see Figure 3). Aphasia is caused by brain injury or some pathological conditions and affects speech production perception or both, and it is different from attrition occurring among healthy individuals. Several studies report that L1 maintenance is beneficial for immigrants, while lack of it leads to L1 attrition (de Bot et al., 1991; de Leeuw, 2009; Isurin, 2000; Jarvis, 2003; Laufer, 2003; Nicoladis & Grabois, 2002; Olshtain & Barzelay, 1991; Ventureyra & Pallier, 2004).

Figure 2. Language loss (adapted from Schmid, 2011B)



The term *language attrition* was first used by Haugen (1938) to refer to language forgetting among Norwegian immigrants in the USA. As the following quote demonstrates, he considered language as the most reliable and sensitive indicator of the process of immigration.

It is by slow, incessant attrition that each foreigner has been turned into an American, idea by idea, and word by word. Every language spoken by the American immigrant bears the marks of this conflict, and only by recording and analyzing this evidence can we fully understand the processes of immigration. Only through this highly sensitive index can we reach some of the subtlest and most significant aspects of the immigrant's psychological and cultural development. The immigrant straddles two cultures, and if he is homeless in both, it is due in no small measure to his linguistic difficulties. (Haugen, 1938: 1)

Over time, an extensive number of literature and studies have developed on the language attrition phenomenon, allowing it to grow into a separate field (Köpke & Schmid, 2004; Schmid & Köpke, 2017; Jarvis, 2019; MacWhinney, 2019a; Opitz et al., 2005; Kroll et al., 2006; de Leeuw et al., 2018, etc.). The definition of first language attrition has been refined and become more detailed as more empirical research became available. The definition of language attrition, before its current form, had changed over time and later was elaborated by Yukawa (1998):

A permanent or temporary regression from a participant's previous linguistic performance or competence at any linguistic level (phonology, morphology, syntax, and pragmatics) in exerting any linguistic skill (speaking, listening, reading, writing and metalinguistic judgment). (Yukawa, 1998: 2)

One of the earliest and still widespread definitions was given by Köpke and Schmid (2004: 3), who define language attrition as "the non-pathological decrease in proficiency in a language that an individual had previously acquired." The first language becomes less accessible or modified due to prolonged exposure to a new language and a new language environment (Köpke & Schmid 2004). Interestingly, Yukawa's definition is more precise (and older), referring to specific linguistic levels and skills, yet most of the studies adopted Köpke and Schmid's definition. Pavlenko and Jarvis (2001) view the phenomenon from a cross-linguistic

interference (CLI) point of view and determine language attrition as the influence of L2 on L1, which fails accessing, comprehending or producing meaningful L1 patterns and structures.

As the theoretical and methodological understanding of the phenomenon grew, the definitions became more successful in specifying the affected population (sequential bilinguals) and the changes in the L1. One of the latest definitions was proposed by Schmid and Köpke (2017), and it is adopted as the working definition in this study:

We refer to any of the phenomena that arise in the native language of a sequential bilingual as the consequence of the co-activation of languages, cross-linguistic transfer or disuse, at any stage of the second language (L2) development and use, as language attrition. First language (L1) attrition is therefore considered to be the process by which a) pre-existing linguistic knowledge becomes less accessible or is modified to some extent as a result of the acquisition of a new language, and b) L1 production, processing, or comprehension are affected by the presence of this other language. (Schmid & Köpke, 2017: 637-638).

Language attrition can affect the L1, the L2, foreign languages and the heritage language of an individual, so three types of attrition have been distinguished (Schmid & Mehotcheva, 2012) as follows:

- the loss of L1 in the L2 environment – First Language Attrition
- the loss of a heritage language – Heritage Language Attrition
- The loss of L2 in the L1 environment – appears among adults whose foreign language was acquired at school/university and now is attrited due to lack of usage and other factors – Foreign Language Attrition.

Heritage language and foreign language attrition will be briefly discussed here to differentiate them from first language attrition.

Heritage speakers are bilinguals, having grammatical and communicative competencies in the first and second languages. Still, the socio-linguistic environment for developing these skills is different, considering one language being the primary language in society and the second being a minor one, thus qualifying an individual as a heritage speaker (Bayram et al., 2019). The heritage language is usually the first acquired language (in some cases “one of” the first languages, especially if the child is exposed to the heritage language and the majority language simultaneously before the age of 3 or 4), and in many cases, it is an insufficiently acquired based on interaction with naturalistic input (Pires & Rothman, 2009). The heritage language is

suppressed by the dominant one in most domains of society, and it is the language primarily used at home.

Benmamoun et al. (2013: 133) defined the heritage speakers as follows:

An early bilingual who grew up hearing (and speaking) the heritage language (L1) and the majority language (L2) either simultaneously or sequentially in early childhood (that is roughly up to age 5 [...]), but for whom L2 became the primary language at some point during childhood (at, around, or after the onset of schooling). As a result of language shift, by early adulthood, a heritage speaker can be strongly dominant in the majority language, while the heritage language will now be the weaker language.

In a heritage language community, the L1 input comes from speakers (1st generation immigrants) who have been in contact with the L2 for a prolonged period and are usually attriters. As a consequence, the output and input of heritage language speakers may differ from what children in the monolingual environment receive as exposure. The main difference between heritage language and L1 attrition is that L1 attriters fully acquire their L1 before moving to another country, while heritage speakers acquire an already attrited version of the language.

Language attrition may occur not only at the level of the L1 but the L2 and/or the foreign language can also be affected. It is perceived as a general decrease in foreign language abilities, often caused by the lack of L2 usage (de Bot & Weltens, 1995) and a change in the language environment (Olshtain, 1989). Prior research suggested that L1 development is consistent and positive, whereas L2 development has degrees of failure and regression from time to time (Bardovi-Harling & Stringer, 2010). It was found that the frequency of language use is a crucial factor in maintaining L2 or foreign language knowledge (Bahrlick, 1984), which is supported by the Activation Threshold Hypothesis — structures used frequently are more likely to be recalled and retained in the memory. Furthermore, Bardovi-Harling and Stringer (2010) proposed that L2 attrition is selective: productive skills (speaking and writing) are more vulnerable than receptive skills (reading and listening). This is also supported by the activation threshold assumption which claims that a low level of activation requires only recognition of the word and a high level is vital for recalling. Not all linguistic features are subjected to loss. Some authors suggested that phonology is the most secure (Tomiyama, 1999), while lexicon is the most vulnerable (Pavlenko, 2003; Kroll et al., 2012). Schmid and Mehotcheva (2012) noted that higher literacy skills in the target language contribute to its retention.

The main difference between L1 and L2/FL attrition is that in L1 attrition studies attriting participants are compared to a similar population in the country of origin, whereas L2/FL attrition studies people with varying levels of proficiency making the detection of attrition (as opposed to lack of acquisition) extremely challenging. L1 attrition studies have an extensive number of theoretical linguistic frameworks and theories, however, studies on L2/FL attrition are most often guided by practical focus and lack solid theoretical underpinnings (Mehotcheva & Köpke, 2019). Furthermore, the extralinguistic factors influencing L1 and L2/FL attrition are also different.

2.2.2 Historical overview

In the early phases of language attrition research, empirical findings were slow to emerge, and the work already done on language attrition was classified into one of three categories (Köpke & Schmid, 2004):

- a) theoretical/hypothetical work;
- b) qualitative work or small-scale pilot studies;
- c) initial outlines of larger projects.

The interest in the topic of language attrition started in the 1980s when Lambert and Freed (1982) challenged the widely held view that with time the proficiency in a speaker's previously acquired languages weakened while achieving a great deal of proficiency in the newly learned languages. In addition, the problem of language loss in different parts of the world was documented: Africa, Eastern Europe, the Far East, the Middle East, South Asia, and Southeast Asia. This observation motivated the publication of a book title *The Loss of Language Skills* (Lambert & Freed, 1982), which discussed language loss from every possible perspective at that time, including language shift, death, pathological language loss, and social and political factors affecting the language. Furthermore, the study of language loss became widely researched in different countries and other disciplines.

In the same decade, a great number of projects were set up, and researchers began to interpret the language not only as a linguistic issue, but as a cognitive one as well, involving language acquisition processes. In 1986, with the collaboration of several researchers, the Language Loss Symposium was held in Kerkrade, Holland. The published volume included mainly the methodological parts related to language attrition and was trying to differentiate language shift, dialect death and L2 attrition whereas L1 attrition was still neglected. However, in 1989, two journals, *Studies in Second Language Acquisition* and *Review of Applied Linguistics* made an

attempt to balance theoretical and applied parts in relation to L1 attrition in L2 environment. The next milestone is Seliger and Vago's (1991) edited book which was exclusively devoted to L1 attrition. It was at that time when L1 attrition started to become a well-recognized research area. The volume included a number of theoretical papers, with an addition of five case studies. In 1995, de Bot and Weltens pointed out the distinction in the terminology between *shift* (intergenerational) and *attrition* (intragenerational) as hyponyms of the general term *loss*.

Nowadays, an increase in the interest in language attrition can be observed among bilingualism researchers. However, data collection and analysis are often challenging. Although conducting research in the field of attrition is complicated, language attrition gained recognition, and in 2000 a workshop on L1 attrition was organised at an international conference in Madison, Wisconsin, by Dorit Kaufman and at the 3rd *International Symposium on Bilingualism* in Bristol, 2001, organised by Agnes Bolonyai. In 2002, the change in the methodology representation related to language attrition studies happened during the First International Conference on First Language Attrition. There a network of scholars was formed who were already involved at some point in time in individual projects investigating the different aspects of language attrition. They met annually to develop the standard research methodology, which was the necessary step toward researching the phenomenon of language attrition. Köpke and Schmid (2004) and Schmid (2004b) contributed to language attrition studies by offering research instruments for further research. The most crucial investment to the language attrition research was the Language Attrition Test Battery, which included the collection of tools (questionnaires, linguistic tasks, coding and analysing systems) to support researchers. Their purpose was to render the finding from attrition studies to external and personal background factors, combining sociolinguistic factors with linguistic and psycholinguistic ones.

In summary, the language attrition field has undergone many changes and developments in the last 3-4 decades. It gained recognition as an independent field in the early 90s. Before that, it was an integral part of second language acquisition, and overall L1 attrition was hardly ever discussed. Nowadays, language attrition is not only well recognised in linguistics and the media (<https://languageattrition.org/media-coverage/>), but with the growing research interest and with the help of the well-developed instruments and theories (see Schmid, 2004a; Herdina & Jessner, 2002) it is becoming more apparent how attrition can be distinguished from other related phenomena (e.g. effects of the second language on the first (EotSLotF, CLI, bilingualism) (Cook, 2003; Schmid & Köpke, 2017; Bátyi, 2022). However, studying language attrition is still one of the most challenging enterprises in the area of bi- and multilingualism due to the

many limitations and difficulties a researcher may face (e.g. finding participants is challenging, participant attrition is high, there is enormous variability in participants background, no point of reference to compare participants performance with, etc. (Schmid, 2011B)).

2.3. Theories and models of language attrition

Language attrition is a complex concept, and several hypotheses and models have been proposed to account for the phenomenon. Many are adapted from psychology as most researchers tried to link it with memory and forgetting. This section will briefly describe and link these theories and models with language attrition.

Language decay is considered the oldest approach, dated to 1914 (Thorndike, 1914). The idea behind language decay is that the frequency and the recency of the use of the structure are essential for maintenance and access in the memory. The lack of frequency and recency results in “the dissipation of the “trace” (Ecke, 2004: 325).

In language attritions, research tip-of-the-tongue states (Brown & Nyx, 1996; Burke, 1999) and spelling errors (MacKay & Abrams, 1998) are typical evidence associated with the language decay approach. There is some additional evidence of older immigrants, who have no frequent use of their L1 and manifest lexical deficits, such as issues in comprehension (Ammerlaan, 1996; Kenny, 1996; Schmid, 2002) and in the morphological system (Anderson, 2001; Kaufman & Aronoff, 1989; Kaufman and Aronoff, 1991; Levine, 1996).

Repression and suppression theories originate from the psychology and works of Sigmund Freud. He claimed that unpleasant and traumatic experiences could be deliberately suppressed (see Freud, 1961). The observations suggest that repression is a “mechanism that operates unconsciously and defensively to block out traumatic experiences” (Schacter, 1996: 255). The difference between suppression and repression lies within the possibility of unconscious retrieval of the information, which is possible in the former and impossible in the latter (Golding & Long, 1998).

In language attrition research we find some research results that suggest the deliberate suppression of a language. A study conducted with German-Jewish emigrants to the USA (Schmid, 2002) suggested that suppression is rather uncommon within that group, and language retrieval and maintenance are determined by the degree of persecution and suffering of emigrants. Most of the participants had not used their L1 for more than 60 years, and they managed to preserve the full repertoire of linguistic knowledge. In a conclusion, Schmid (2002) suggested that the suppression of L1 does not affect language competence. It is important to

note that these speakers were post-puberty migrants, forced to leave their country after the age of 12 and 14. There are some other studies with adopted children where the complete loss of the L1 from the memory was documented (Isurin, 2000; Nicoladis & Grabois, 2002) which can be explained by the traumatic experience associated with the L1 and was suppressed when moving to a new and safe environment.

Complexity and Dynamic Systems Theory / Dynamic Model of Multilingualism (Herdina & Jessner, 2002; Jessner, 2003; de Bot et al., 2007) consider the language system as complex, nonlinear, unpredictable, and adaptive. The reason for language changes sets within the communicative needs to which speakers adjust. Opitz et al. (2005) proposed that the CDST model shows language attrition as the outcome of the interaction between the L1 and the L2 systems. According to Jessner, the dynamics system is “a set of variables that mutually affect each other’s changes over time” (Jessner, 2003: 235). An important concept is the so-called “attractor” state, which means that the system sticks at a certain state or level and moves in a positive or negative direction due to various external influences, so both development and decline can be possible outcomes. According to Jessner (2003) language attrition becomes more noticeable when the factors that supported the maintenance and development disappear, leading to “negative or inverse language growth” (Jessner, 2003: 240). The components of L1 and L2 language systems are interrelated, any change affecting them, would it be internal or external as environmental adaptation, will affect the rest of the system, causing, e.g., access and retrieval problems due to inhibitory mechanisms.

Most researchers acknowledge the necessity and relevance of the dynamic approach. However, only a few researchers employ it as a methodological framework. This is well exemplified by the following quote:

...the bulk of L1 attrition research to date, except Opitz (2011, 2016), Cherciov (2011), and Yilmaz (2013, 2019), has studied changes in the attriting language only, without much recourse to the other languages, which may be an additional source of the divergent findings (Opitz 2019: 51).

As for the current research, there are several reasons why this study did not follow a dynamic approach. A dynamic methodology requires the design to be longitudinal and look at changes over time. This would require research which looks at a specific set of linguistic elements and skills and compare them to measurements at a later stage. Since attrition is a slow process (de Bot, 2019), it is difficult to complete the such study within the period given for the PhD

research. A longitudinal study from a dynamic perspective should look at the subsystems of a multilingual language system which interact between themselves and with the surrounding environment.

The interference hypothesis (Sorace & Filiaci, 2006), also called "the interlanguage hypothesis," proposes that the cause of language attrition is the increasing influence of the newly dominant competing language. Evidence for the interference hypothesis was presented in several studies (see Köpcke & Nespoulous, 2001; Yagmur et al., 1999; Yagmur, 1997; Boyd, 1993; de Bot & Clyne, 1994; Pavlenko, 2003; Schmid, 2002) which examined the interference of L2 structures, loans, meaning-related substitutions in L1. Besides, the morphological structures of L1 can also be affected by interference, being abandoned or replaced (Andersen, 1982), or simplified (Pfaff, 1991; Slobin, 1977).

The activation Threshold Hypothesis (ATH) proposed by Paradis (1995) connects the loss of vocabulary with an imbalance between L1 and L2. The Activation Threshold Hypothesis proposes the following:

An item is activated when a sufficient amount of positive impulses have reached it. The amount necessary to activate the item constitutes its activation threshold. Every time the item is activated, its threshold is lowered and fewer impulses are required to reactivate it. (Paradis, 2001: 11)

Paradis (2004: 28) noted that "[a]ttrition results from long-term lack of stimulation." The Activation Threshold Hypothesis (Paradis, 2004) is related to the activation process of an item based on its frequency of use and recency. The higher the exposure to the target language, the lower the threshold. In addition, Paradis (2007) predicts the fact that the disuse of the language will lead to gradual loss.

Overall, the most applicable theory concerning language attrition is "the Activation Threshold Hypothesis" by Paradis (2007). However, in the reference to morphological attrition, Schmitt (2019) considered that "there is no single theory that accounts for the complexity and variety of morphological operations and morphemes that undergo restructuring, modification, and ultimately language attrition". Even though the studies on the ATH provide insight on into the connection between frequency of use and inhibition of morphemes in the attriting language. The results seem to suggest that the cognitive process underlines the morphological decline, though not enough evidence was presented.

2.4. Language attrition: a processing or representation issue?

In the bilingual mind, all languages are in constant interaction with each other, which leads to various language changes, being observed when bilinguals and monolinguals are compared (e.g., Van Hell & Dijkstra, 2002; Shook & Marian, 2013). Language processing is considered a less demanding task for monolinguals than for bilinguals since the latter has to deal with a more significant number of additional tasks related to the use of the different languages (see Abutalebi et al., 2011; Green, 1986, 2011). Perhaps, the problem with this approach is that bilinguals have to maintain the processing routine of the languages, and as a result of less input, this often leads to the weaker representation of linguistic features and lexical items (Gollan et al., 2005).

First, attention was drawn to the question of *representation* or *processing* by Sharwood Smith in 1983. The author suggested three stages of the competence/performance distinction. The first stage was categorised by systematic deviation in performance while competence was intact. The second stage is described as a transactional stage between possessing a new language and preserving the chance to change to the old one. Finally, the third stage involves the development of new competence, with a linguistic repertoire being changed in line with universal grammar.

Since then, the topic of representation versus processing was developed by Seliger (1989) and Grosjean and Py (1991), who concluded that attrition at the expression level lies within language knowledge. It has been reported that at the processing level, difficulties in controlling that particular language knowledge are observed (Ammerlaan, 1996).

The results of studies by Ammerlaan (1996) and Hulsen (2000) showed that *word-finding difficulties* were related to reducing the accessibility of the lexicon, whereas receptive skills were less deteriorated.

Recent research suggested that crosslinguistic competition affects not only L2 but L1. They propose to conduct further studies to better understand how L2 acquisition may affect the already established linguistic knowledge (L1), on the short and long-term (Schmid & Köpke, 2017). Comparison of bilingual acquisition and attrition can help to answer the question of the interaction of language representation and crosslinguistic transfer (Schmid, 2009, Schmid et al., 2014). Besides, Schmid & Köpke (2019) mention that the instances when language representation deteriorated can rarely be found among late bilinguals. Development is not a one-way process; thus, what has been learned can be forgotten, and attrition has been described as a “special case of variation in the acquisition and use of a language” (Andersen, 1982: 86),

following the “extreme situations” (Costa & Sebastian-Galles, 2014: 399) which involve minimal L1 exposure (Dussias & Sagarra, 2007) as well as a high level of L2 proficiency (Kroll & Bialystok, 2013). In their epistemological article, Schmid and Köpke (2017) suggest that the separation of online (performance) and representational (competence) effects should be considered as developmental stages of the same continuum. This result would seem to suggest that the onset of language attrition is when we begin to learn the L2 and is rooted in the coactivation of languages. One major drawback is that the representation is only affected when migration happens before puberty and L1 maintenance is impossible. L1 language attrition in adult bilinguals is mainly a processing issue.

2.5. Linguistic manifestations of language attrition

In this section, the symptoms of language attrition will be discussed at each language level with a particular emphasis on the lexical and grammatical levels, the main focus of the dissertation. The first part of the subsection briefly describes the bidirectional nature of language interaction between the bilingual’s two languages as the influence of the L2 on the L1 has long been neglected.

2.5.1 Crosslinguistic influence

Bilingualism differs from monolingualism as two languages interact with each other in the speaker's mind. There are many pieces of evidence showing that bilinguals cannot switch off one language and use another one (for an overview see Kroll et al., 2012), leading to cross-linguistic influence (henceforth CLI). Experimental research has repeatedly found that the bilingual’s two languages are always active and interact.

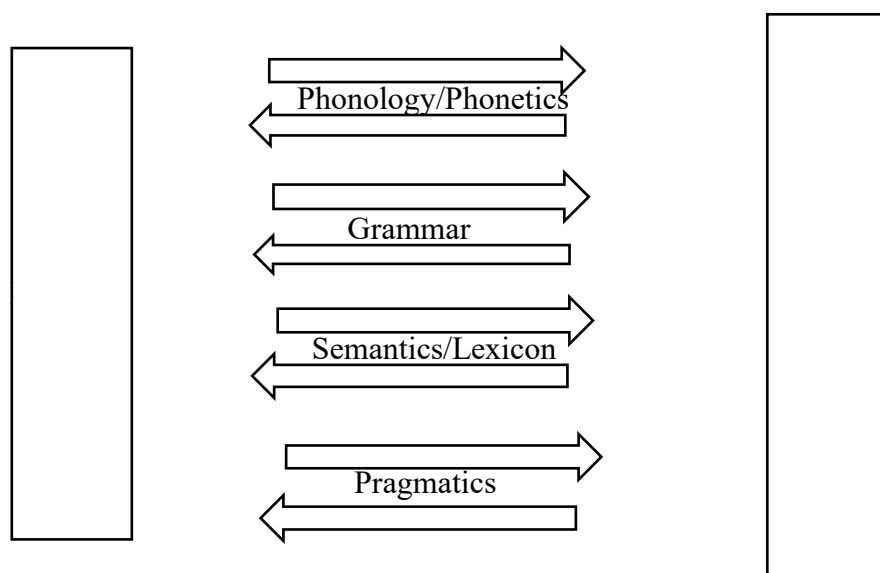
The dynamic nature of bilingual language processing is supported by what we take to be the central observation in the recent research: bilinguals cannot switch off one of the two languages at will. When they listen to speech, read, or prepare to speak in only one of their two languages, information about the language not in use is also active and influences performance (e.g., Dijkstra, 2005; Kroll et al., 2006; Marian & Spivey, 2003). Most critically, these cross-language interactions can be observed at virtually every level of language processing, including those grammatical structures that are shared across languages (e.g., Hartsuiker, Pickering, & Veltkamp, 2004). (Kroll et al., 2012: 231).

CLI is not unidirectional and has consequences both for the second language (L2) and the first language (L1). For a long time in bilingualism research only the effects of the L1 on the L2 were considered and thus studied within the framework of CLI. The term cross-linguistic influence was first proposed by Sharwood Smith (1983; 1989) to describe the process of borrowings, word and pattern "transfers", influence of L1 on L2 and vice versa. The study of CLI has a long history, starting from the 1940s. Researchers, at that time, were concerned with finding the point of similarities and differences between native and target languages, hoping to create more effective pedagogy by taking these two into account.

Consequently, they concluded that the interference of the native language causes the main difficulties in learning a new language. The Contrastive Analysis Hypothesis (Wardhaugh, 1970) was proposed to account for the similarities and differences, leading to *positive transfer* or *facilitation* and *negative transfer* or *interference*. Therefore, the inhibition of the L1 in the acquisition process of a new language was proposed to be the key to successfully becoming native-like in L2.

The bi-directionality of CLI has only been highlighted in the last two decades when studies focused on what happens to the L1 in different L2 acquisition contexts (classroom, immersion, immigration). Figure 1, proposed by Schmid and Köpke (2007), highlights the two-way connection and influence of L1 and L2 at each language level.

Figure 3. Cross-linguistic influence in bilingualism (Schmid & Köpke, 2007)



CLI is an integral part of different models, such as Grosjean's Language Mode model (1985) and the Dynamic Model of Multilingualism (Herdina & Jessner, 2002), and it is also an essential

feature of Cook's multicompetence (Cook, 2003). The Language Mode model (LMM) describes how the languages of a bilingual are activated based on internal and external contextual factors (such as topic, interlocutor, proficiency) and to what extent the guest language is used in the matrix or base language of the communication in the form of code-switching/mixing. The model fails to conclude in terms of language development or attrition of the L1 and L2. However, code-switching has been identified as an essential indicator of changes in the L1 that have consequences to the ATH.

Habitual language use in dual language contexts (where code-switching is appropriate and frequent) impacts overall cognitive control as well as language control skills differently from use in single language contexts, where one language is strongly inhibited (cf. Green's model of the behavioural ecology of bilingualism; Green, 2011). (Schmid, 2019: 290)

Therefore, in a single language context, when the L1 is used, switching to the L2 is not allowed, leading to a higher level of maintenance compared to a switching context, where particular words and expressions are always used in the L2 even if the base language of the communication is the L1.

Cook (1992) described the "knowledge of two or more languages in one mind" as multicompetence, where the L2 affects the L1. The languages of bilingual speakers form a super-system in mind, rather than isolated from each other language systems. Besides, Cook et al. (2003) concluded the following:

The belief in the native-speaker standard is one reason why the effects of the L2 on the L1 were so little studied. If the L1 of the L2 user were different from that of monolingual native speakers, SLA research that used the native speaker as the target would be based on shifting sand. (Cook, 2003: 5).

Cook (2003) also described three directions of L2-L1 effects: positive, negative and neutral (which reflect on the differences between the languages, neither good nor bad). Such directions were confirmed after analysis by several researchers, who demonstrated the usage of complex sentences in children's L1 (Kecskés & Papp, 2000), better metalinguistic skills (Bialystok, 2001) and better reading skills in L1 (Yelland et al., 1993). The negative effect can be considered as language attrition, which usually occurs as the outcome of prolonged exposure to L2 (for instance, in immigrants).

2.5.2 Language attrition at different language levels

Language attrition may affect all language levels: lexicon, grammar, phonology and pragmatics. This section discusses each of them.

At the *grammatical level*, the research of L1 attrition is more straightforward than the other language areas and has an effect when the L1 and L2 systems have competing equivalent forms (Köpke, 2002). The influence of L2 English on L1 Russian, based on elicited oral data collected from 30 late Russian–English bilinguals was examined by Pavlenko (2003). The results concluded that Russian L2 users of English tend to use the English based case system, which requires to use 3 cases instead of the Russian six-case system. Moreover, after the analysis of future tense formation tasks of 60 Russian speakers living in Israel, Baladzhaeva (2013) found age-related attrition rather than an L2 effect. At the level of syntax, influence of L2 English on L1 Finnish grammar of an adult immigrant in the USA was observed (Jarvis, 2003). Based on spontaneous speech collected from the participant, the conclusion was drawn that the L2 word order had affected the word order pattern in their L1 Finnish. The post-verbal placement and realization in Spanish among Cubans in Miami and Spaniards in the UK were discussed by Domínguez (2013), who showed the decrease of post-verbal subject use. However, such explanation tends to overlook the L2-L1 crosslinguistic interaction, but rather considers the adaptation of Cubans to non-Caribbean varieties in Miami (Domínguez, 2013). The same conclusion was drawn by Chamorro et al. (2016), who studied attriters after they were being re-exposed to their L1, and stated that no change in language competence occurred in the use of L1 overt/null subjects. French L1 speakers living in an L2 English environment were studied with a grammatical judgement task on the formation of middle-verb constructions, which is different in the two languages, since English has more restrictions than French (Balcom, 2003). The findings show that in comparison to monolingual French speakers, bilinguals judged grammatical sentences to be ungrammatical significantly more frequently. It is almost certain that L1 grammar tends to be influenced by L2, thus confirming the assumption that when the L2 offers a more restrictive grammar than the L1, no attrition effects are expected (Gürel, 2002). The effect of L2 exposure on L1 grammar was also documented by Pavlenko (2003) who studied Russian-English bilinguals and showed that the four categories were affected by the changes: tense and aspect, subcategorization case making and prepositional choice. The inconsistency arising from the previously described aspects of morphology were attributed to the influence of the morpho-syntactic form of L2 (English) on L1 (Russian). The idea supports

the findings by Schmitt (2000), who studied Russian immigrant children in the UK, with the conclusion of demonstrating subcategorization violations and case marking mistakes. Besides, Cook et al. (2003) predicted the override of the word order based on the case, animacy and agreement cues in other languages. The findings of the study on L2 English effects suggest the syntactic processing of Japanese, Spanish and Greek. Bilinguals in all three L1 groups differ from monolinguals, plus the Japanese bilingual group demonstrates more over-reliance on animacy and plurality cues in comparison with Japanese monolinguals. However, these data must be interpreted with caution, because it does not indicate L2 influence but suggests a changed L1 grammar in the L2 user, as predicted by the multi-competence model. In addition, the effects of non-pro-drop characteristics of L2 English on the pro-drop setting of L1 Spanish within the Minimalist framework (Chomsky, 1995) using Lipski's preliminary data (1996) were discussed (see Satterfield & Saleemi, 2003). The authors conclude that transitional Spanish–English bilinguals tend to lose the contrastive function of overt pronouns in Spanish. The group involved in Lipski's preliminary study were late bilinguals. However, it is highly bias whether the analysis, conducted by Satterfield and Saleemi (2003), can be applied to attrition in mature L1 Spanish grammar (Gürel, 2002). Studies on grammar were also conducted by Yağmur (1997), and the results of the tests revealed the that the among the Turkish attrited group the grammatical constructions, such as polarization after a quantifier, were affected by the changes in the linguistic repertoire and lead to its attrition. According to Ben-Rafael (2004) who studied the effects of L2 Hebrew on L1 French, the grammatical changes observed were frequently similar to the French register. The reduction and simplification likely had its tendencies in the French language. Gross (2004), with the help of production model of Myers-Scotton and Jake (2000), showed the considerable number of morphemes being influenced in the German L1 of adult bilinguals. Therefore, it was concluded that early system morphemes are more vulnerable than late system morphemes. As a conclusion, the present study expects to find changes on the grammatical level of the participants after long time of exposure to the L2 in the L2 environment.

The study conducted by Hirvonen (1998) observing the influence of the English *lexicon and semantics* on Finnish concluded that the effect is stronger on the second generation than on the first. In addition, the strong influence on the phonology and morphology was noticed. As for the third generation of Finnish Americans, they had such a limited knowledge of Finnish, which made them being categorized more of English speakers. It was suggested that self-corrections, hesitations, pauses and metalinguistic comments are signs of – at least temporary – language attrition (Pavlenko, 2003).

Both monolinguals and bilinguals experience disfluencies and word-finding difficulties, however, processing two languages with the same production system is more complex and is affected by multiple factors. According to recent reports, one of the explanations for this is that the bilingual vocabulary is more extensive, which results in more competition between words when selecting the target word, and the frequency of each word will be lower than for monolinguals (Kroll et al. 2012; Sandoval et al. 2010). It has been reported that word-retrieval difficulty is the most salient and earliest feature of language attrition, which can be manifested in the increase of disfluency markers (e.g. hesitations, filled pauses, or repetitions) (Schmid & Beers Fägersten, 2010), an increased number of tip-of-the-tongue states (Ecke & Hall, 2013), slower lexical retrieval and retrieval failures (Gollan et al., 2008). Lexical diversity is usually analysed as an indicator of changes in the expressive vocabulary of an individual. Therefore, non-attriters usually outperform attriters in this measure even if the latter maintain high-proficiency in their L1 (Schmid, 2007).

Previous studies of lexical diversity have not dealt with it in depth and proposed to treat rarity as a separate concept (see Laufer & Nation, 1995). On the contrast, most recent arguments on the lexical rarity as a component of lexical diversity were summarized by Jarvis (2013). Lexical diversity has been receiving a considerable amount of attention from researchers (see Schmid & Jarvis, 2014). The diversity itself, as it was shown by the findings of Schmid & Jarvis (2014) is related to language attrition. Besides, several cases of lexical diversity being affected by language attrition have been recorded (see Yilmaz & Schmid, 2018; Schmid & Jarvis, 2014, Opitz, 2011, Schmid & Dusseldorp, 2010). These results were elicited with the use of verbal fluency tasks, to be precise, tasks involving semantic categories. Research on lexical density are associated with diversity (the type-token ratio) (see Negrisanu, 2008; Taura & Nakanan, 2013).

Previous research had shown the possibility of bilinguals maintaining separate *phonetic* systems for their two languages (e.g., Schmid et al. 2014; MacLeod & Stoel-Gammon, 2005). However, due to cross-linguistic influence, the L1 phonetic system gets impacted by the level of language production and perception of speech sounds (Jarvis & Pavlenko, 2008). In addition, several other studies concluded the dependence of phonetic transfer on cross-linguistic phenomena. For example, the influence has been found across a variety of paradigms, including naturalistic (e.g., Balukas & Koops, 2015) and read speech (e.g., Antoniou et al. 2011), and in different types of code-switches (e.g., for single-word insertions, see Olson, 2016; for alternational code-switching, see Bullock & Toribio, 2009).

2.6. Speech production and fluency

Speaking is one of the favourite activities of humans (Levelt, 1995), however, non-linguists rarely reflect upon the complex process of speech production. In healthy individuals, speech is highly automatic and fluent and is subserved by a complex system. One of the most widely accepted models of speech production was developed by Levelt (1989), based on the empirical work available at that time. Since then the temporal parameters of the process have been detailed, and the model has been supported behavioural and neurolinguistic data. The Speaking Model consists of three main components: the conceptualizer, the formulator and the articulator. The geniality of the system positions the cooperation between these components (de Bot & Bányi, 2022). The effectiveness and processing speed of the system are due to its highly automatic nature. When an individual is asked to name a picture (e.g., *ball*), the activation of concepts, lemmas (spreading activation), morphology, phonology and of the full articulatory system happens in less than a second (0.5–0.6 s). These automatic processes are completed by controlled processes which are activated when the system faces a problem (e.g., a tip of the tongue phenomenon). Because planning and speaking happen simultaneously, the fluency of speech can be disrupted as the control processes are activated, and this monitoring detects a problem at any level of the system. Fluency is referred to as the ability to produce meaningful patterns of linguistic codes in a largely continual manner (Crystal 1997; Götz 2013). It is considered an automatic procedural skill, implying that proficient speakers need little attention and effort to produce fluent speech (Schmidt, 1991). Speech fluency is often characterized by time-related and performance-related concepts (Bergmann et al. 2015). Temporal aspects of speech are usually measured in the speech-pause relationship, such as speech rate, articulation rate, etc., while performance-related measures are disfluency markers. According to Goldman-Eisler (1968: 31) “*spontaneous production in any speaker is a highly fragmented and discontinuous activity in which hesitations act as necessary and natural speech management strategies*”.

Hesitation markers may be developed with a naturalistic input, e.g., classroom learners benefit less from exposure than immersion learners (Freed et al. 2004; Segalowitz & Freed 2004). The speaker is likely to transfer both formal and functional features of native hesitation forms, which is recognized as a non-native pattern (Clark & Fox Tree, 2002: 93). The L2 level of proficiency has a direct impact on the occurrence of disfluencies in that language; however, these findings were verified by the study of de Leeuw (2004) and Riazantseva (2001), who

stated that the difference in hesitation markers in L1 has no significant difference between the hesitation markers of L2 speakers with various proficiency level.

2.6.1 Language attrition and fluency

Cross-linguistic influence is a bidirectional process which affects the L2 and the L1 as well. As the area has been neglected for a long time, only a few studies are addressing the question of fluency in bilinguals' L1. Most studies in the area of bilingualism have focused on the L2

thors generally define two types of disfluency markers. Markers related to *cognitive disfluency markers* are indicators of a problem with lexical retrieval (henceforth CDMs) (Levelt, 1989; Fox Tree & Clark, 1997). They are manifested in hesitation markers such as silent pauses, repetitions, or retractions (e.g., Levelt, 1989). These occur more frequently in bilinguals' speech as the bilingual speaker's task is to manage and access two linguistic systems simultaneously, which increases the number of hesitation markers. The second type is related to *semantic disfluency markers* (SDMs) and is manifested in filled pauses (de Leeuw, 2007). Additionally, it was proposed that it is necessary to differentiate filled pauses from other disfluency markers, specifically, as they can be linguistic words, thus implying the relation to *semantic disfluency markers*. It is important to note that with increased proficiency in L2, the number of disfluency markers decreases. It has been found that CDMs are overrepresented in the speech of beginning or low-proficiency learners but decrease as proficiency becomes more advanced (de Leeuw, 2004; Hilton, 2007; Riazantseva, 2001). For instance, L1 Russian speakers produce longer pauses in their L2 English than do L1 speakers (Riazantseva, 2001). But what happens to the L1 in the process of L2 acquisition?

From the perspective of language attrition, hesitation markers are more noticeable in lexical access (Köpke & Schmid, 2004), while grammatical and phonological areas are more intact and stable for those speakers whose emigration happened after puberty (Schmid & Dusseldorp, 2010). It has been proposed that "bilinguals may not have one 'normal' language (in which they are indistinguishable from monolinguals [. . .]) and one 'deviant' one (in which knowledge is less extensive than that of monolinguals, and also tainted by interference from L1 in SLA and L2 in attrition)" (Schmid & Köpke, 2007: 3).

As a significant sign of language attrition, the extra retrieval time for lexical items was proposed by Hansen (2001). In spontaneous speech, longer retrieval times are linked with disfluencies. L1 attriters should be less disfluent than late L2 learners.

There is a difference between the three different types of hesitation phenomena. These are:

- 1) pauses (filled and empty);
- 2) repetitions;
- 3) self-corrections.

The study conducted by Schmid and Beers Fägersten (2010), analysed disfluency markers in the speech of 245 speakers, divided into five groups (German emigrants in Canada, German emigrants in the Netherlands, Dutch emigrants in Canada, monolingual Germans in Germany, and monolingual Dutch in the Netherlands). Their research contained a film retelling task to elicit the speech samples. The findings showed that the attrited group used more CDMs, due to the cognitive demands, suggesting increased demands of bilingual processing and L1 attrition affecting the micro-planning. Similarly, Bergmann et al. (2015) collected data from 20 speakers, who belonged to three different groups: learners, attriters and monolinguals. As for the method, the story-retelling task was used to collect the speech data. The results show that learners and attriters are equally (dis)fluent and significantly more dysfluent than monolingual speakers. One of the drawbacks of speech production fluency is the limited number of studies. Therefore, one of the goals of the present study is to explore the extent to which Russian migrants living in Hungary are different from monolinguals in L1 speech fluency.

2.7. Extralinguistic factors in language attrition

The pace, depth, and type of language attrition are affected by various extralinguistic factors. Several studies (Köpke & Schmid, 2004; Bylund, 2009; Paradis, 2007) tested how language attrition is influenced by age, frequency of use, length of residence, education and attitudes.

It has been found that the likelihood of language attrition reduces with higher *education*, due to metalinguistic consciousness (Paradis, 2007), i.e., highly educated individuals tend to learn the L2 at an advanced level but at the same time maintain their L1.

Language use habits can also facilitate or inhibit language attrition. Bilinguals use a cognitive switch mechanism, which helps them to alternate between the languages. If the switch fails, the speaker has difficulties accessing the intended words, resulting in a pause or code-switching. Language attrition is more likely to occur in a linguistic environment where the community accepts code-switching. This phenomenon can also be explained by the Activation Threshold Hypothesis (Paradis, 2007, Paradis & Jia, 2016), which claims that if the speaker uses the L2 alternative of an L1 word, the activation threshold of the L1 word rises, making its retrieval more difficult. In addition, the lexical domain is affected by code-switching and more

frequent use of the L2, as is the grammatical level: the closer the linguistic structure of the two languages, the more increased the interference (Gürel, 2004).

In a major study conducted by Köpke and Schmid (2004), several extralinguistic variables are proposed, which have an impact on language maintenance/attrition:

- age;
- attitude and motivation;
- level of education and literacy;
- length of residence;
- frequency and recency of language use;
- aptitude and personality;
- L2 proficiency.

All of these variables will be discussed separately below to distinguish the degree of their contribution to the language attrition of individuals.

2.7.1 Age

Numerous authors have reported that *age* appears to be the most influential factor in L1 attrition (Kaufman, 1991; Kuhberg, 1992; Seliger & Vago, 1991; Tomiyama, 2000). One of the most uncontradictory factors is the age of onset (of attrition) - as puberty (the age of 12) seems to “protect” the L1 from attrition. Participants who migrated to an L2 environment after puberty do not show dramatic a decrease in their L1 skills (even after 50 years of non-use, see Schmid 2012), while children adopted at a young age lose the ability to use and even to recognize their native language (Bylund, 2019; Isurin & Seidel, 2015; Pallier et al., 2003; Pierce et al., 2014). The latter point has been critiqued by Polinsky (2007), who mentioned that the changes may occur due to an insufficient amount of exposure on an everyday basis. There is a change in language attrition vulnerability at around the age of twelve years. Based on several studies with adopted children (Isurin, 2000; Glenne & Masters, 2002), Bylund (2009) proposed that the language is more vulnerable if migration to another country happens during the pre-puberty period and less likely to be affected in the post-puberty period (Schmid, 2012). This was explained partly by the critical period hypothesis (CPH, Lennenberg, 1967), that is, brain flexibility at a young *age* allows for language acquisition and at the same time for attrition too (MacWhinney, 2019a) and partly by a social effect, that is, the new social environment of the child supports L2 acquisition but not L1 maintenance (e.g., Au et al., 2002).

2.7.2 Length of residence

Time spent in the L2 environment has been suggested as a factor associated with language attrition, however, the relationship between the length of residence (LOR) and the extent of language attrition is not straightforward. De Bot and Weltens (1995) claimed that the length of residence (LOR) might affect only those speakers who have limited L1 contact and it matters during the first five to ten years of living in the new language environment. After that, no significant changes can be expected. Some studies tried to find out the relationship between LOR and language attrition (see Olshtain & Barzilaz, 1991; Major, 1992; Vilar Sánchez, 1995) but the findings were inconclusive. Porte (2003) proposed to look at LOR as a continuum, along which several stages of language maintenance and loss can be identified. Besides, the study on hesitation markers conducted by de Leeuw (2007) reported several different language groups (English, German and Dutch groups) having an impact of LOR on language attrition. Thus, one group performed closer to the native norms, while in the other three groups there was an absence of any main effect of LOR. In addition, a significant negative correlation was found between LOR and VFT, with an increase in the former and a decrease in the fluency task performance (Schoofs, 2013). Overall, according to earlier studies, the effect of LOR is not reported to be significant with LOR of less than ten years (Yilmaz & Schmid, 2018; Waas, 1996; Varga, 2012; Schmid & Dusseldorp, 2010).

2.7.3 Frequency of use

Frequency of language use (FOU) is considered to be an important feature if the speaker wants to decrease the extent of language attrition. This view is supported by the Activation Threshold Hypothesis, which states that the availability of a mental representation is based on the frequency and recency of its activation (Paradis, 2004). Therefore, the less often the speaker uses one of their languages, the more likely they will face difficulties with lexical or grammatical retrieval during a normal conversation (Schmid, 2009; 2013). Paradis (2007) suggested that the *frequency of use* leads to language attrition if insufficient.

In addition, Schmid (2019) overviewed 49 studies and summarized the results concerning the frequency of use and number of participants (Table 1), describing the importance of the higher number of participants in language attrition experiments. She concludes that the impression of not significant data might be deceptive, as it is shown in Table 1, where the significance is reached in one-third of the tasks. Whenever the number of participants is less than 50, FOU shows no impact on language attrition.

Table 2. The impact of L1 use on individual L1 attrition (Schmid, 2019: 294)

	No impact of L1 use		Impact of L1 use	
	N	%	N	%
Accuracy & fluency	4	50	4	50
Lexicon	12	70.6	5	29.4
Morphosyntax	3	60	2	40
Phonetics	4	66.7	2	33.3
General proficiency	8	80	2	20

2.7.4 Attitude

Numerous studies have identified the importance of psychological constructs such as attitude and motivation in L2 development. Previous research has indicated that attitude may impact language learning positively or negatively (Dewaele, 2013; Horwitz et al., 1986). Similarly, the data from several sources showed that language anxiety drains motivation for language learning and usage, leading to disruption in the learning process (Gardner et al, 1985; Horwitz et al., 1986).

Schmid and Mehotcheva (2012) highlighted the complications in studying motivation and attitude in language attrition due to the dynamic change of these variables. One would expect that *attitude* towards L1 directly influences language maintenance or attrition, as a positive attitude towards L1 can facilitate positive development (Schmid & Mehotcheva, 2012), however, only a few studies could find a direct link. The main weakness of the study is the lack of a clear-cut definition (attitude towards the L1 or attitudes towards maintenance?) and attitude as a variable is difficult to separate from other factors (Opitz, 2011). Besides, Paradis (2007) discussed the Threshold hypothesis and the dependence of motivation, as the latter can lower or raise the activation threshold.

2.7.5 Literacy

In recent years, there has been an increasing amount of attention devoted to describing the connection between literacy and language attrition. Developed literacy skills are likely to resist language attrition. Olshtain (1989) demonstrated that the older speakers who maintain their L2 literacy skills are also highly literate in the attriting language. However, there is an inconsistency with this argument. In the analysis of the importance of education to maintain L1

lexical skills, Schmid and Köpke (2017) and Bardovi-Harlig and Stringer (2010) found that education does not lessen either L2 or L1 attrition.

2.7.6 L2 proficiency

The main limitation of this part is a small number of empirical studies which have proven the correlation between proficiency levels in L1 and L2. In addition, rather a small number discussed the interconnection of L2 proficiency and L1 attrition. Thus, L2 proficiency as a variable that may predict language attrition is considered to be an ambiguous one. Jaspaert and Kroon (1989) mentioned the relevance of proficiency in L2 maintenance. The possible connection between "knowing" the language and exposure to it matters for L1 maintenance. Okimura-Bichard (1985) refers to a pattern where increased proficiency in L2 concurrently reduced L1 proficiency. Besides, the study by Pan and Berko Gleason (1986) discussed the way of the children's development of L1 and L2, concluding that they either become proficient in L2 and attrite or do not develop in their L1. Likewise, Yeni-Komshian et al. (2000) suggested an "inverse relationship" between L1 and L2 pronunciation proficiency and mentioned the pronunciation equation: as L2 pronunciation proficiency increases, proficiency of L1 may decrease, and vice versa.

2.8. Language, identity and migration

The concept of "language" includes symbolic, semantic, verbal components, and philosophical meanings. "Man is human because he can say so" was stated by Lieberman and Crelin (1971: 222). Through language, a person learns the world around them, the culture that they create, preserve, and pass on to descendants. Besides, languages can form and shape a person and determine their behaviour, lifestyle, worldview, mentality, character, ideas, perceptions, cultural perception models, and personality. Several studies have explored the relationship between language and identity (e.g. Norton, 2000; Meaders, 1997; Dewaele & McCloskey, 2015; Smari & Navracsecs, 2019; Navracsecs, 2016), providing a deeper insight into the complex relationship between the two concepts. Misztal (2003: 132) argues that "[p]eople use it [language] to make sense of themselves, of their activities, of what they share with others and how they differ from them." Consequently, language is an integral part of the complex concept of identity (De Fina, 2016), which comprises multiple elements, such as gender, culture, religion, social network, etc.

The concept of identity is described as a "result of (inter)subjective memories, present events, and emotional resonance that change over time and constantly provide new configurations as well as periodic repetitions" (Haviland-Jones & Kalbaugh, 2000: 301). Identity is generally not an essential factor in the individual's life until the point of migration when belonging is disrupted. As a result of migrating to a second language (L2) environment, the use of the first language (L1) is often restricted to a limited number of domains (e.g., family, friends, relatives in the homeland, social media, etc.). More often than not, these linguistic and cultural changes result in the re-definition of the identity (Bátyi, 2020; 2021). Bi- and multilingualism, culture, identity and migration are all flexible and dynamic constructs which interact with each other in the new environment. How are these concepts shaped in the new environment? *Bi- and multilingualism* is affected by a multitude of extralinguistic factors often leading to a change in language dominance and resulting in language attrition (Köpke & Schmid, 2004). *Culture* is the beliefs, values, and norms of a specific sociocultural group (Brumbaugh, 2002). Bicultural individuals are bilinguals who have internalised two cultures, and these cultures affect their feelings, thoughts, ideas, etc. (Ramirez-Esparza et al., 2006). It is important to note that not all bilinguals are bicultural (Grosjean, 2015), however, individuals living in an L2 environment are affected by the host culture to some extent. *Migration* has been considerably altered by economic and technological advancements in the last century, which created transnational communities. It is not a one-way process anymore because ties can be maintained with the country of origin more than before, which brings about new forms of identities and practices (De Fina, 2016).

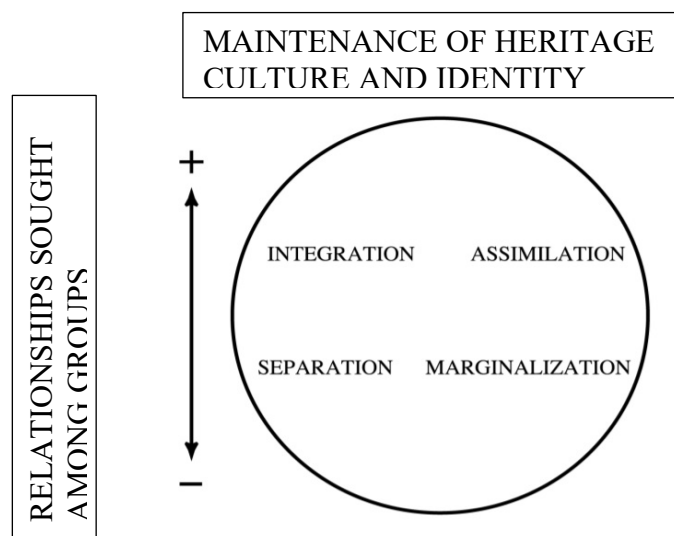
The (re)definition of identity in the new L2 environment goes through several stages and is influenced by the relationship of the individual with the home and the host environment. Schumann (1986) proposed the link between successful integration and a higher level of target language proficiency, explaining that the host society and the environment will replace the original culture and language. From a psychological point of view, Meaders (1997) proposed three stages in the process of transcultural *identity building*:

1. Immersion stage: a dynamic stage of second language development, and losses are extremely noticeable.
2. Recognition stage: reflecting on the aspects of the old and the new culture;
3. Transcultural stage: the development of flexible multiculturalism.

The strategies of a migrant group in the host environment are described by Berry (2007) as depicted in Figure 5. However, these strategies are also applicable to individual migrants. These are:

- Assimilation – developing interest in the culture of the new country while neglecting the heritage culture and identity;
- Separation – maintaining heritage culture and avoiding interaction with members of the new society;
- Integration – maintaining heritage culture and developing interest in the new culture simultaneously;
- Marginalisation – reduced cultural interest in their own and other cultures as well.

Figure 4. Intercultural strategies (adapted from Berry, 2007)



2.8.1 Bilingualism and identity

The study of identity change, formation and (re)definition of bi- and multilinguals is a crucial topic as identity change is a widespread phenomenon. No official figure is available about the number of bi- or multilinguals in the world, however, one of the most convincing data is the difference between the number of languages (7,139, according to www.ethnologue.com) and the number of states (206). Individuals who speak two or more languages on an everyday basis are considered to be bilingual speaker-hearers (Grosjean, 1989). Grosjean (1985) in his wholistic view proposes that bilingual speakers use both of their languages separately or together, creating code-switching, based on the communicative needs. Bilingual language use

is domain-specific, that is, the bilingual individual can use his/her different languages in different areas of life (work, home), with different people, in different situations, etc. (Grosjean, 2015). This poses the question of whether language can cause a change in identity or not. Grosjean (2015) mentions that there is no direct cross-effect between language and identity. Based on the domain-specificity, he claims that it is the culture, the interlocutors and the environment that cause a change in the individual's identity and/or personality. Even there are examples of individuals experiencing differences while using their mother tongue and the foreign language, for instance: *"I find when I am speaking Russian I feel like a much more gentle, 'softer' person. In English, I feel more 'harsh,' 'businesslike'"* (Grosjean, 2015). The importance of the context of language use has been emphasised by Fogle (2012), who argues that the individual will adapt to the comfortable situation, including the changes in their identity, way of thinking, and behaviour.

Identity shapes the individual over the lifespan and is affected by political opinions, morality and beliefs, and language itself. For instance, the migration process may substantially impact the individual's life, ensuing changes in the identity. Studies conducted by Pavlenko (2006) and Grosjean (2010) with bilinguals found that their participants perceived themselves depending on the language of the environment and linguistic situation. Both studies concluded that bilinguals change their "identity" according to the new environment, adapting to the situation. However, such an explanation tends to overlook the fact that the change in identity was described by respondents giving their unique explanations, linking feelings of difference to conscious or unconscious behaviours (Dewaele & McCloskey, 2015).

The present study investigates identity patterns and changes due to increased use of L2 and the presence of L1 attrition, affecting not only their language proficiency in the mother tongue but the shift in identity perception of the participants (Russian or Hungarian identity).

CHAPTER 3.

RESEARCH QUESTIONS AND HYPOTHESES

This dissertation seeks to explain the changing nature of language attrition of L1. The main research question is as follows:

1. To what extent do extralinguistic variables (age, education, frequency of use, and length of residence) associate with the level of L1 attrition of Russians living in Hungary?

Besides, several sub-questions are added to the research:

- 1a. To what extent is the L1 maintained by Russians living in Hungary based on the frequency of use and attitudes towards the L1?
- 1b. Is there any difference between the attrited and the non-attrited (monolingual) groups in lexical access and lexical diversity?
- 1c. Is there any difference in the temporal and performance-related measures of speech fluency between the attrited and the non-attrited (monolingual) groups?
- 1d. Is there any difference in solving the future tense formation task between the attrited and the non-attrited (monolingual) groups?
- 1e. To what extent do the Russian and Hungarian languages and cultures contribute to the identity formation of Russians in Hungary?

The hypotheses that will be tested are as follows:

1. Russians living in Hungary have a generally positive attitude towards their L1 and use the L1 frequently with family members, relatives and friends.
2. The attrited group will show the signs of L1 attrition in verbal fluency tasks in comparison to the control group and will show poorer lexical diversity.
3. The monolingual control group performs at a faster speech rate and articulation rate and has fewer disfluencies.
4. The attrited group will show poorer performance in the future tense formation task in comparison to the control group.
5. Age and length of residence will be negatively related, while the frequency of use and attitudes will be positively related to lexical access, lexical diversity and speech rate/articulation rate.
6. The length of residence and the language environment will affect the identity of the attrited group, and L1 and L2 languages and cultures are integral components of the identity.

CHAPTER 4.

METHODS

4.1. Participants

To answer the research questions, two groups were included in this study: a *control group* (N=50) of monolingual Russian residents in Russia from the central and southern parts of the country and a *target group* (N=50) of Russian emigrants living in Hungary (they migrated mostly in the 1980s and 1990s). All of the participants were brought up in the Russian language environment.

The main selection criteria for participants in the two groups were the following:

- The control group – to be monolingual residents in the L1 environment with low or no exposure to any L2 in any circumstances.
- For the target group a minimum of seven years of residence in Hungary.

For all participants, Russian is the L1, which is standardized across their homeland, Russia. Dialectal phonetic and vocabulary differences were not tested in this study. However, note that the majority of the regions, the participants originally are coming from, include the dialect *Surzhyk*, due to close interaction with the Ukrainian language and relatively close borders. The impact of the dialect was not reported by the participant in their questionnaire, making it clear that the main language of use with family, at work and in other domains **is** strictly Russian for the control group, and **was** for the target group.

After settling in Hungary, most participants have never returned or rarely visited their home country. It is important to note that all data was collected before the events of 24th February 2022.

As was described in section 1.8.3, most studies focusing on less than 50 participants could not find a significant effect of the frequency of use (FOU) on language attrition, so in this research, both the target and the control group consisting of 50 subjects (see Table 3).

Table 3. Descriptive data of the target (N=50) and the control group (N=50)

	Target group		Control group	
	Mean	SD	Mean	SD
Age	45.14	11.32	41.1	10.92
Length of residence	18.64	9.97	N/A	N/A
Age at emigration	26.5	8.71	N/A	N/A

The **target group** includes 50 participants (38 females and 12 males) who moved to Hungary a minimum of 7 years prior to data collection. The two groups were matched based on age (see Table 2) and level of education, however, the gender distribution is different. The mean length of residence in the target group is 18.64 years, with the minimum age of 25 and maximum of 71 years. The age of emigration is quite diverse for all participants, with a mean of 26.5 years of age at emigration. Most of the participants had no knowledge of the Hungarian language, either grammatical constructions or vocabulary, before moving to Hungary. However, it changed with time (more details in the chapter 5.1). They come from different socioeconomic backgrounds and have different levels of education: 33 participants have higher education and 17 professional technical school as their highest level of education. The language they use to speak with their Hungarian spouses is predominantly Hungarian, as the majority met during the 1980s and 1990s in the Soviet Union. According to the questionnaire, 34 participants have Hungarian spouses, 10 Russian spouses, and 6 have no partners.

The **control group** consists of 50 participants to match the target group, with 46 female and 4 male participants, between the ages of 25 and 65. Thirty participants have high level of education and 20 professional technical school education (also known as TVET, for *technical and vocational training and education*). The participants in the group are from the Voronezh region, Saint-Petersburg and Moscow, and did not speak a foreign language or had classes during their time in school. None had any knowledge of the Hungarian language. The Russian language is relatively standardized across the country and a standard variety of the language is used in schools and universities, on TV, and is generally spoken among the country's inhabitants in Russian Federation. Therefore, dialectal phonetic and vocabulary differences are not included in this study; thus, the dialectal differences should not affect the results due to the aforementioned reasons.

Participants were contacted with the help of social network sites such as Facebook. The Russian public pages were the primary target for participant recruitment, for example, *Az Oroszok*, *Camovap*, etc. The blog www.LiveJournal.com was used to create an ad to find more volunteers to participate in the study. Participants in general were found by the snowball approach, and interviews were conducted either online (Facebook Messenger, WhatsApp, Viber) or in a personal meeting at home or other social places, with relatively lower noise levels, in order to have a good-quality audio recording. Most of the participants come from Hévíz, Budapest, Pécs, and Keszthely.

4.2. Instruments

In order to answer the research questions, the following instruments were used for data collection.

4.2.1 Social Personal Background Questionnaire

Information on the personal background, frequency of language use, and language attitudes was collected via the use of a **Social Personal Background Questionnaire (SPBQ)** (retrieved from www.languageattrition.org). The original questionnaire was compiled by Schmid (2004b) to study the language attrition of bilingual immigrants and is part of the Language Attrition Test Battery (Schmid, 2011b). The original questionnaire was targeted at the groups of Dutch speakers living in Canada (Keijzer, 2007). The questionnaire was adapted and translated into Russian (see Appendix A). The pilot study was conducted only with 25 participants to pilot the questionnaire and its reliability. In attrition studies finding participants is challenging, which is the reason why most attrition studies include no pilot testing of the questionnaires.

The aim of the questionnaire was as follows:

- a) to obtain data ensuring interparticipant comparability for social background and education level;
- b) to elicit information about participants' language learning history and use: length of residence in the host country, amount of contact with either language since emigration, age of L2 acquisition, etc.;
- c) to elicit self-report data on participants' language proficiency;
- d) to elicit information about participants' attitudes towards language in general and towards integration with the host community.

The questionnaire includes 79 questions of three types: yes/no questions, Likert scale questions and open-ended question. The questions can be divided into four sub-categories (following Cherciov, 2011):

1. demographic information;
2. contact with L1 (e.g. example [2]);
3. frequency of choosing L1 (e.g. example [1]);
4. attitudes towards L1 (e.g. example [3]).

Examples of the given questions in the SPBQ:

[1] Какой язык или языки Вы чаще всего используете, когда говорите со своими детьми? [What language or languages do you use more often, when talking with your children?]

- a. Только венгерский [Only Hungarian]
- b. Как русский, так и венгерский, но в основном венгерский [Both Russian and Hungarian, but usually Hungarian]
- c. Как русский, так и венгерский, без предпочтений [Both Russian and Hungarian, no preference]
- d. Как русский, так и венгерский, но в основном русский [Both Russian and Hungarian, but usually Russian]
- e. Только русский [Only Russian]
- f. Другое [Other] _____

[2] Как часто Вы говорите по-русски? [How often do you speak Russian?]

- g. Редко [Rarely]
- h. Несколько раз в год [A few times a year]
- i. Ежемесячно [Every month]
- j. Еженедельно [Every week]
- k. Ежедневно [Every day]

[3] Считаете ли Вы важным использовать русский язык? [Do you consider it important to use the Russian language?]

- l. Неважно [Unimportant]
- m. Относительно неважно [Relatively not important]
- n. Не очень важно [Not very important]
- o. Важно [Important]
- p. Очень важно [Essential]

The participants of the Russian control group received a background questionnaire (see Appendix B), which contained questions about participants' personal information:

- Name;
- Gender;
- Education;
- Place of residence;
- Language use.

Both questionnaires were administrated in the participants' mother tongue.

It is suggested by Schmid (2011b) that variables should be reduced to a smaller set of factors by calculating average values over a set of variables for each individual, so the questionnaire results were decoded with the help of the "coding" book developed by Schmid in addition to SPBQ. The coding book was used in order to build up statistical data to analyse the progression of language attrition and find correlations and significance between the tests results and extralinguistic variables. The coding book included the Variable label (e.g., UseL1, Maint, childimp), plus the number of the question and its definition from the questionnaire. This way nominal or textual information could be quantified and summarized. For example, when asked about language use, the following coding was used: 0=*only L2*; 0.25=*frequently/mainly L1* 0.5=*sometimes/both L1 and L2*; 0.75=*frequently/mainly L1*, and 1=*very often/always L1*. The answers elicited via the SPBQ were converted into the numbers, which made it possible to perform statistical operations on them, e.g., calculating averages, differences, etc. All data were organized in Excel tables, and the scores on the rating scales were coded from 0 to 1. In the end, this makes the procedure easier for interpretation, control and assessing the impact between the attriters and controls due to several independent variables which have been taken together.

The questionnaire data was analysed for reliability separately for the aforementioned language choice, contact and attitude factors, and it was found that some items did not show any variability, so they were excluded from the analysis. The items are the following:

- | | | |
|---------------|---|--|
| ○ Churchvisit | - | How often do the participants attend church? |
| ○ clubmemb | - | Are they members of a Russian club? |
| ○ music | - | Do they listen to the music in L1 |
| ○ TV | - | Do they watch TV in L1? |
| ○ radio | - | Do they listen to the radio in L1? |
| ○ read | - | Do they read books/newspaper in L1? |
| ○ homesick | - | Do they ever feel homesick? |
| ○ accent | - | Does a heavy L1 accent bother them? |
| ○ go back | - | Do they want to go back to their motherland? |

As one of the main extralinguistic factors that is assumed to influence the level of attrition is frequency of use (see section 1.8.3 above), language contact and choice were merged into one variable, labeled as frequency of use (merging was possible as the correlation between the two variables was high, $r=0.7$).

The reliability and internal consistency of the two factors are good and moderate, respectively: FOU (13 items), Cronbach $\alpha=.86$; language attitude (10 items) Cronbach $\alpha=.6$.

FOU proved to be reliable, so the internal consistency of the scale is good, while the reliability of attitude is quite low, which could be explained by the fact that it is not a stable

factor but rather dynamic, and, as such, it is difficult to capture and measure it in different contexts.

4.2.2 Interview

Interviews were conducted with the subjects to find out about their attitudes towards the Russian language and culture, their identity and its relation to language, their language use, etc. The interview was conducted using social platforms or in a personal meeting, for example, in a café, and was based solely on the SPB questionnaire. The purpose was for the interviewee to elaborate and expand on the questionnaire elements. It was done to receive broader answers for the further analysis of the role of the L2 in attrition and identity formation. The length of the interview ranged between 15 and 30 minutes. The recordings were transcribed and analysed in order to find out the extent to which language is used not only for communication but to construct identity among Russians living in Hungary (see Gnitiev, 2021).

4.2.3 Story-telling task

A **story-telling task** was administered to measure the lexical diversity and language fluency of the participants (see Bátyi 2020; Bátyi & Kemppainen, 2022). The “frog story” was used as a stimulus in which a boy and his puppy are searching for an escaped frog, whom they had befriended the night before and who ran away from them. The original idea for the cartoon is created by Mercer Mayer (1969) "Frog, where are you?" (see Appendix C). The Frog story has been widely used in various studies (Berman & Slobin, 1994; Hanks, 1996) which are targeted to administrate how language-specific means, such as lexical diversity and speech fluency, hinder the flow of speech to solve the given task, to check the sequence of preverbal and cognitive decisions, grammatical choices. The advantage of using a story-telling task sets out within the fact that the same stimulus is used, which can be applied for any age group and language (as it is culture independent) to elicit spontaneous speech for further research. Such a task allows the participants to construct narratives, for instance, as discursive actions. This task was chosen to elicit fairly free-spoken data with controlled content. The choice of vocabulary and the style is expected not to be homogeneous across the illustration of the cartoon, thus lexical diversity can be measured.

4.2.4 Verbal fluency task

A verbal fluency task (VFT) was used to measure the time of lexical access under a restricted time frame and how the mental lexicon has been affected by language attrition. For this study a VFT itself was divided into two tasks, letter and semantic; it was used to investigate the mental lexicon and differences between the attriter and the control groups. Both groups were instructed about the tasks and were presented with the stimuli to each category, and the VFT had to be performed in the participants' L1. The participants were given the choice which task to start with, as the particular order was not relevant for the research. The time for each of the tasks was 60 seconds. All of the repeated words were excluded from the final count.

As has been mentioned above, the VF test included two measures: semantic and letter fluency. Note that in this particular research letter <c> was referred to as a consonant and on both phonemic and letter level remained the same. For the semantic testing the category 'animals' was chosen, proposed by Schmid (2004b) as the most commonly used in most languages, providing a wide variety of answers. The second testing included a specific letter in the language. Previous studies on VF used letters FAS in English alphabet (Lacy et al. 1996; Spreen & Strauss, 1998; Delis et al., 2001) as the typical initial letters for their cues and resourcefulness. The present study required subjects to determine the letters in Russian alphabet equal to the letters <f>, <a>, and <s> in the Latin alphabet, and the study by Snodgrass and Tsivkin (1995) was very helpful. The authors made the comparison between the 6,318 most frequent words from the British National Corpus (2017) and the list of the 5,000 most frequent Russian words from Sharoff (2001). For each letter of the two alphabets, they calculated the percentage of words starting with a particular letter that were some of the most frequently occurring words. In the end, the following Russian letters were selected: <д>, <о>, and <с> (the equivalents of <d>, <o>, and <s>, respectively). They were the best match for English words with the initial letters <f>, <a>, and <s> in their usage frequencies: words starting with <д>, <о>, and <с> represent 4.46%, 7.20%, and 11.48%, respectively, of the most frequent Russian words, and words starting in <f>, <a>, and <s> represent 4.83%, 6.77%, and 11.48%, respectively, of the most frequent English words in the frequency lists mentioned above. In the present research, the choice was the most frequent letter from the 3 above mentioned letters: <с>. The participants had to list as many words, in relation to the given stimuli, as possible, which allows us to conduct a further investigation of VF, comparing the two groups using the elicited data.

4.2.5 Future tense formation task

The **future tense formation task** included 10 sentences with a blank space to fill in with a verb conjugated in the future form. The participants were expected to fill the spaces with one word in the perfective aspect, as it was required by the given sentences.

The base idea of the future tense formation in both Russian and Hungarian expresses the moment of action, determined by the verb phrase, and the moment of speaking. Both languages have an identical number of tenses: past, present and future, which also can and is expressed by the present tense. As for the experiment I conducted, the future tense formation was the most preferable to observe.

The difference in future tense formation lays within the verbal form. Three tenses (past, present and future) are formed with the use of Imperfective verbal aspect forms, when the future and the present tenses can be produced by the use of Perfective aspect form of the verb. In Russian language two types of the future tense exist: Future Perfect (the Perfective aspect – meaning the result of a process) and Future Simple (the Imperfective aspect – meaning a process, without a result yet). Future Perfect reflect on the intention to accomplish the task in the future, e.g., *выходить* “to go out” – *выйду* “I will go out”. The perfective aspect of the verb is synthetic and is formed with the use of various prefixes and plays an essential role in Future Perfect tense formation, e.g., *на-* added to the present tense form *писать* “to write” – *напишет* “s/he will write / s/he will have written”.

On the other hand, Future Simple tense represents an action which will be accomplished in the future, with uncertain results, e.g., *ходить* “to go” – *буду ходить* “I will go”. Thus, the aspect of the verb in this conjugation form is based on the appropriate person and future form of the auxiliary verb *быть* “be” plus the imperfective infinitive of the main verb. However, if the main verb is *быть* “be”, it remains the same (Rozental et al., 2010).

Thus, *Она сегодня получила письмо от подруги, завтра напишет ей ответ* “Today she received a letter from a friend, tomorrow she **will write** a response to her” is an expected correct version of future tense formation of the verb, whereas *Она сегодня получила письмо от подруги, завтра будет писать ей ответ* “Today she received a letter from a friend, tomorrow she **will be writing** a response to her” is a less preferred form of verb usage.

The forms of Hungarian future tense are translated into Russian as the forms of Imperfective verb aspect, as well as Perfective verb aspect. The perfectivity of the verb in Hungarian involves the prefix right before the verb in a neutral sentence, and right after the verb in the sentences containing a focused constituent or a negative particle (Kenesei et al., 1998). Besides, the

perfectivity can be expressed in most of the cases with the prefix *meg-* (having no direct adverbial meaning) and *el-* “away”.

The imperfectivity in Hungarian as the phenomenon present in Russian language, cannot be expressed, only through various categories – habitual, progressive, iterative aspects – can be (Kenesei et al., 1998).

The Hungarian future form consists of the conceptual verb plus finite form of the present tense aspect of the verb *fog* (3rd Singular) + verb infinitive (-ni) based on the conjugation: *Fogok csinálni* “(Я) буду делать” “I will do”.

However, the Hungarian future tense formation is more sophisticated. The future can be described with the use of the Present tense, which will create absolute tense, meaning that the grammatical expression of time reference (usually past, present or future) relative to “now” as the moment of speaking. In this case, the verb remains in the **present** tense form: *Hamarosan Oroszországba megyek* “Soon I am going to Russia”. Therefore, creating the form of the near future, with some plan or kind of surety in this kind of Future expression.

The next variation is based on the verbs in the complex sentence,. Such as *Megmosom a kezem, mevacsorázom* “I will wash my hands and will have a dinner”. A sentence is “linear”, so the events follow each other that way:

1. *Megmosom a kezem* “I wash my hands”
2. *Megvacsorázom* “I will have my dinner”

Feltételes mód “Conditional for future” is used to express the future in Hungarian language. For instance, *holnap én is elutaznék Olaszországba* “tomorrow I will travel to Italy” – I may or may not travel, but I have the willingness to do so.

However, the grammatical category of verb aspect has not been studied to its fullest and was not been comprehensively dealt with, neither descriptively nor theoretically (Kenesei, et al., 1998).

For making a connection between Russian and Hungarian future tenses it is rather helpful to create a system of verb aspects, visually guiding the speaker/learner. Even though, it will be still problematic to compare forms of the Hungarian and Russian languages due to a particular quality of the latter: the result of the action is visible in the structure.

In the modern Russian language, five forms of verbal tenses are recognized:

- One present tense – *он рисует* “He draws”
- Two past tenses – imperfective *красил* “I-MASC/you-MASC/he painted” and perfective *покрасил* “I-MASC/you-MASC/he had painted”

- Two future tenses – imperfective *буду петь* “I will be singing” and perfective *спойю* “I will sing”

It is crucial to mention, that it is rather impossible to make direct translation parallels between two aspects of the future in Hungarian and Russian. In addition, in the Hungarian language it is possible to use the present tense to express the nearest future or particular events in the future, which is the opposite in Russian. Russian verbs of perfective aspect have no present tense form, which explains the disproportion. Thus, for describing the context, the situation and the tense marking, such as *majd* “later”, *akkor* “then”, *hamarosan* “soon” etc. play an essential role in use and translation of the tense forms.

According to the previous studies, conducted with the use of the future tense formation task, the usage of Future Simple aspect was considered the main feature of language attrition (Altenberg, 1991; Gürel, 2008; Raidt, 1997; Pavlenko, 2003; Pavlenko, 2010; Pavlenko & Jarvis, 2002; Waas, 1996). Thus, it is expected that the bilinguals experiencing the language attrition will simplify the tense formation. Future tense is considered to be the weakest link in the grammar aspect of the language, being acquired the last after the present and past tenses (Silva-Corvalán, 1991). Reconstruction of the L1 grammar is possible due to extensive L2 exposure, with the lack of L1 input (Schmitt, 2004).

A score system was introduced, which included the following:

- an error recognized and corrected counted as 1 point;
- an error recognized but not corrected, or corrected wrongly counted as 0.5 point.

Consequently, for each group of sentences the score could range from 0 (no errors recognized) to 10 (all errors recognized and corrected).

In this research I will look at the part related to the grammatical judgment task. The participants were under the time pressure, which allows to test the productive, explicit language knowledge and ensure the atmosphere of the testing as close as possible resembling the real time conversation (Schmid, 2011b). The task itself included the piece of paper with 10 sentences, in which were blank spaces to fit the verb in the form of the future tense in (see Appendix D). The participants were notified about a time limit and they had a freedom to use as many words as possible to complete the sentences.

4.3. Procedures

For most tasks, due to the pandemic situation, the participants were contacted via email or social media and were asked to fill in the online questionnaire. The SPBQ was not only handed to the

participants in a paper-based format, but created online with the help of Google Forms, which eases the process and improves the quality of data collection.

Personal interview were conducted with a participants to obtain more details in relation to their language use history, personal data and to elaborate on the answers received from the SPBQ. The received recordings were transcribed and analysed in order to find out the extent of the identity change.

In a separate session the participants were met in person and asked to complete the semantic and letter verbal fluency task (60 seconds each) and the picture-book retelling task. In the retelling task they were asked to get familiar with the story first by going through the pictures and then tell the story. There was no time restriction, so the length of the recordings varies, ranging from 1 minute to 9 minutes. The recordings were transcribed and prepared for analyses. The temporal aspects of speech were analyzed with PRAAT and Table 3 includes the measures and their definitions following Kormos (2006).

As for the story-telling task, both groups told the story in their L1. The pictures did not include any words, thus giving the freedom for description to the participants. They got a chance to familiarize themselves with a cartoon-story and the retelling took place right after viewing the pictures. The data was collected in the audio formats of M4A/MP3 and further converted to WAV file format to analyze it, using PRAAT software. Recordings were transcribed and analysed thoroughly noting repetitions, pauses, filler words, self-corrections, etc.

To successfully transcribe the data, the symbols from a software CHAT were adapted for our research (Cherciov, 2011):

um@fp – filled pause
/ – retracing without correction word
(x N) – word repetition
// – retracing with correction

As the example demonstrates the completed sentences with filled pauses “@fp” and retracing. With correction word “//”.

Мальчик залазит на дерево вот@fp в отверстие в дереве, но там // оттуда вылетела сова, мальчик падает на землю “The boy climbs on the tree well@fp in the hole on the tree, but there // from there flew the owl, the boy falls down on the ground”

As a measure of lexical diversity, the traditional measure is the type-token ratio (TTR) which is the number of different words (types) divided by the total number of words uttered (tokens). The weakness of this measure that it is sensitive to text length, that is, in longer samples type repetition inevitably occurs and it decreases TTR. In this analysis, I used the “sophisticated

type-token ratio [STTR]—word types per square root of two times the words $\frac{\textit{type}}{\sqrt{2 * \textit{tokens}}}$ that takes the length of the sample into account” (Larsen-Freeman & Cameron, 2008: 143–144).

Table 4. An overview of measures

<i>Measure</i>	<i>Definition</i>
Letter fluency	The items starting with a specific letter
Semantic fluency	The items belonging to a specific category, e.g., food, animals, etc.
Speech rate	The total number of syllables produced in a given speech sample divided by the amount of total time required to produce the sample (including pause time), expressed in seconds. This figure is then multiplied by sixty to give a figure expressed in syllables per minute.
Articulation rate	The total number of syllables produced in a given speech sample divided by the amount of time taken to produce them in seconds, which is then multiplied by sixty. Unlike in the calculation of speech rate, pause time is excluded. Articulation rate is expressed as the mean number of syllables produced per minute over the total amount of time spent speaking when producing the speech sample.
Phonation-time ratio	The percentage of time spent speaking as a percentage proportion of the time taken to produce the speech sample (Towell et al., 1996).
The number of silent pauses per minute	The total number of pauses over 0.2 sec divided by the total amount of time spent speaking expressed in seconds and is multiplied by 60.
The mean length of pauses	The total length of pauses above 0.2 seconds divided by the total number of pauses above 0.2 seconds.
Filled pauses	The speaker involves “strategy” to fill the empty pause, usually caused by tip-of-the-tongue phenomenon.
Retracing with correction	The speaker begins to say something, stops and then repeats the phrase with some content or form correction.
Retracing without correction	The speaker begins to say something, stops and then repeats exactly the same phrase or content without correction.
Word repetition	Speech material that is repeated in exactly the same way.
Grammar	The correct conjugation of the verb in the future tense

For the grammar task a printed version of the task was delivered to each participant to test their future tense verb production skills. The participants were not given the correct answers even after the data collection. However, if the participants provided a semantic or an auxiliary

verb in future tense with the verb's infinitive, the answer was counted as incorrect, for instance *будет писать* [s/he will be writing], instead of *напишет* [s/he will write]. Maximum points were related to the number of sentences provided, totaling ten points for each correct answer, except the self-correction, which gives the participants 0.5 points for the sentence, instead of a full 1 point. The participants were notified about the time limit (max 5 mins), and they had the freedom to use as many words as possible to complete the sentence.

In addition, the data elicited from the SPBQ was analyzed to see the pattern emerging between the extralinguistic variables and correct grammar answers.

CHAPTER 5.

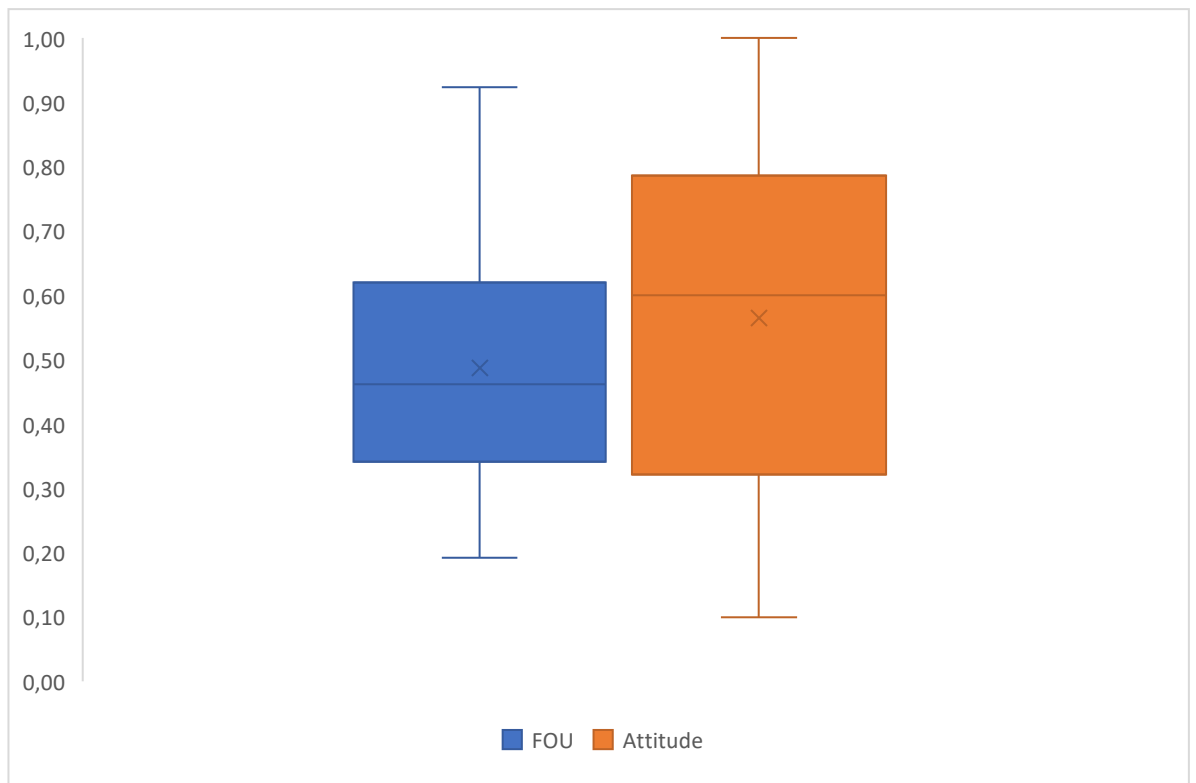
RESULTS

5.1. Social Personal Background Questionnaire results

The Social Personal Background Questionnaire contains closed and open questions which were coded according to the instructions of the developers of the instruments. Three categories of questions have been created: questions about contact with the L1 (e.g. the native language of friends; amount of contact with friends/family in country of origin), about the frequency of choosing the L1 (e.g. use of L1 with partner, children; preferred language), and about attitudes towards the L1 (e.g. opinions on importance of maintaining L1; language preference; cultural preference). As was mentioned in section 2.2.1, contact with the L1 and choice of L1 were merged into one factor labeled as frequency of use.

Figure 6 presents two boxplots, depicting the average of the participants' answers in terms of attitude towards Russian ($M=0.56$, $SD=0.25$), and FOU ($M=0.49$, $SD=0.18$) factors. Median values are also higher in the attitude box than in the FOU. As for the length of the boxplot, the attitude box is slightly longer, which means the answers are more spread out among the participants. Neither of the boxplots has outliers (i.e. going beyond the top or the bottom whiskers), which means that neither dataset had any extreme values. In general, participants' attitude is positive to the L1 at the group level, however, the answers are more heterogeneous (ranging from 0.1 to 1) than in the FOU factor (from 0.18 to 0.89). The majority of the answers in the attitude fall between 0.32 and 0.79 (see the box), while for the FOU between 0.34 and 0.62.

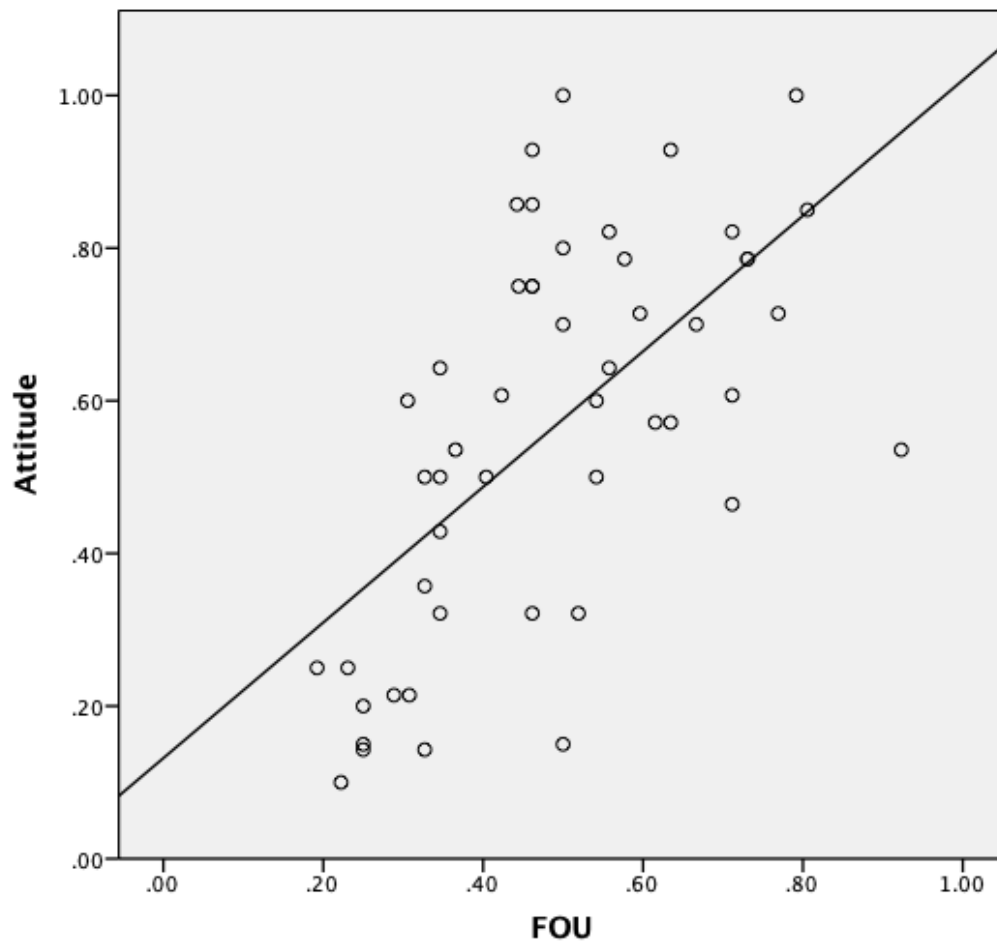
Figure 5. The distribution of results in the attitude and FOU factors



Some variables were excluded from the final count, as the participants did not express variation in questions such as “homesickness” (none of them feel homesick), “desire to go back” (they do not desire to go back to Russia), “accent” (whether heavy L1 accent bothers them or not), the use of “radio, TV, books/newspapers” in L1 (they do not use any of these) and “members of Russian club” (none of them are members of Russian clubs). The overall response to this question was negative. Most of the participants suggested that there is no particular need and point to move back to Russia, as they have settled in Hungary and after spending prolonged time, they are accustomed to the life in Hungary. A minority of respondents indicated that they have never thought about this idea.

It was also found that FOU is positively and significantly related to attitudes ($r=0.62$, $p<.000$) suggesting that more positive attitudes are associated with more frequent use of the L1 (Figure 7). No such relationship was found with the other extralinguistic variables.

Figure 6. The relationship between attitude and FOU



For the participants most components of the FOU are below the average (see Table 4). Overall, the participants have quite low use of language in general ($M=0.24$) and native language with partner is rather Hungarian than Russian ($M=0.26$), which, possibly, can be explained with rather neutral or negative attachment to L1 and a preference to use it as less frequently as possible and only in the important cases. According to the self-report of the participants they use Russian often (1) and mostly with relatives in Russia (2), however, they rarely visit their country of origin (12). The frequency of use of the L1 has significantly decreased since they moved to Hungary (4) as the majority of their friends are Hungarians (5) and the language used in the family (with partners 7, 8; and children 9, 10) is predominantly Hungarian (see Table 5). However, the idea of language transmission is vague, as the participants tend to use L1 with their children, whereas the child is more likely to use L2 with a parent. The relatively similar range of values across the factors, indicating that for the most of the bilingual participants the values are comparably equal with a respect of FOU factors. These scores indicate that the FOU of the participants are generally on a medium range, even

though the *native language of the friends* and *the use of L1* lower than the average, which implies that the participants have to maintain frequent contact and choice of L1.

Table 5. Average results to the items in the FOU factor

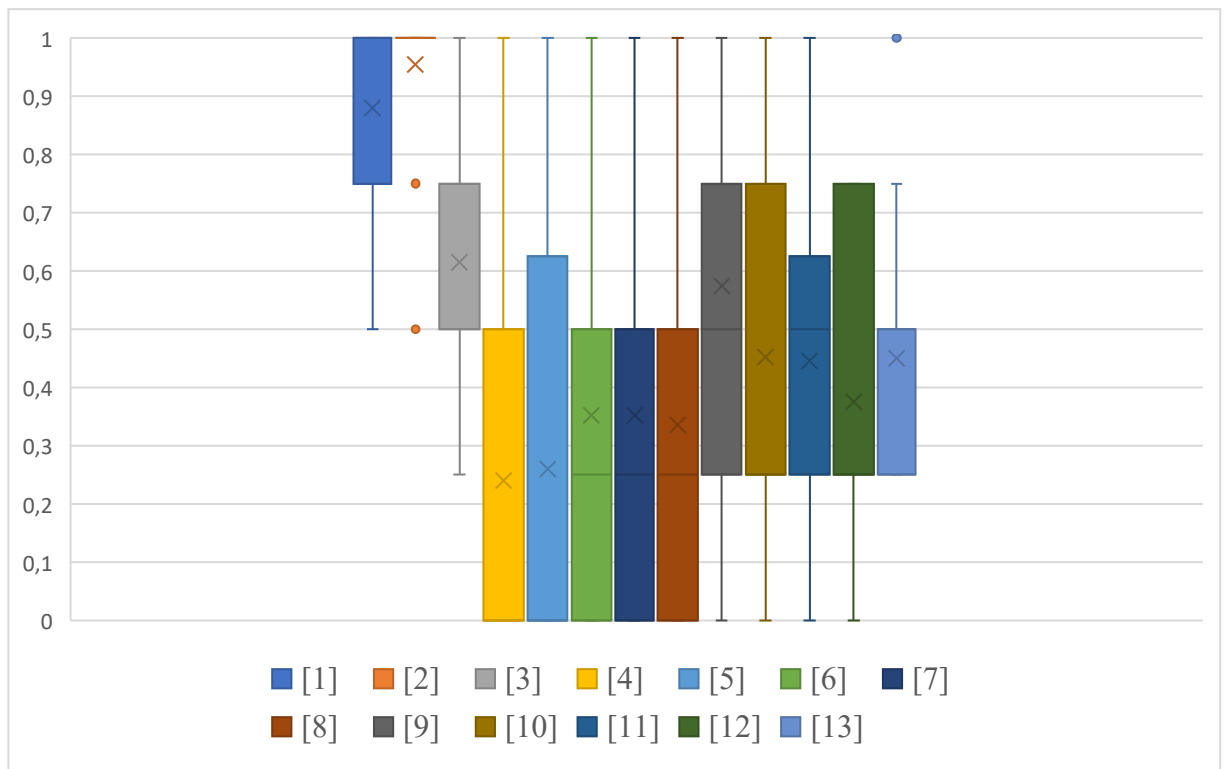
	Question	Mean
1	How often do you speak Russian?	0.88
2	What language or languages do you mostly use to keep in touch with relatives and friends in Russia?	0.96
3	Are you in frequent contact with relatives and friends in the Russia?	0.61
4	Do you think you use more or less Russian since you moved to Hungary?	0.24
5	What is the mother tongue of the majority of your new friends?	0.26
6	Native language of current or last partner?	0.35
7	What language or languages do you mostly use when talking to your (ex)partner?	0.34
8	What language or languages does your partner mostly use when talking to you?	0.57
9	What language or languages do you mostly use when talking to your children?	0.45
10	What language or languages do your children mostly use when talking to you?	0.45
11	Did /do you ever correct your children's Russian?	0.35
12	Have you ever been back to Russia since leaving for Hungary?	0.38
13	In general, do you have more Russian- or Hungarian-speaking friends in Hungary?	0.45

Note: the highlighted answers are above the factor mean (0.52)

FOU=frequency of use

The range of scores is depicted by the boxplots on Figure 8. The most homogenous answers were given to Question 2 as almost all participants (except 2) keep in touch with their Russian relatives and friends using Russian language. Answers are also positive and homogenous to Question 1, that is, they use Russian often and to Question 3, i.e. they are in frequent contact with their relatives in Russia. The answers to Question 13 are also similar, the majority falls between 0.25 and 0.5, showing that they have more Hungarian speaking friends.

Figure 7. The range of scores in FOU questions



Note: The number in the legend correspond with the questions in Table 5

As it is apparent from Table 6, the range of the language attitude is drastic, from the point of 0.94 to the lowest of 0.17. Only two measures were above the average, which implies the positive L1 maintenance and the importance of the use of L1 by participants' children, and marginally positive admonishment for children to keep their L1. On average participants feel more at home in the Russian culture (3) but speaking Hungarian is more comfortable (4). Russian maintenance (1) and transmitting the language to children (2, 5) is moderately important for them, and those who have children regret if they [children] do not speak and understand the language (6).

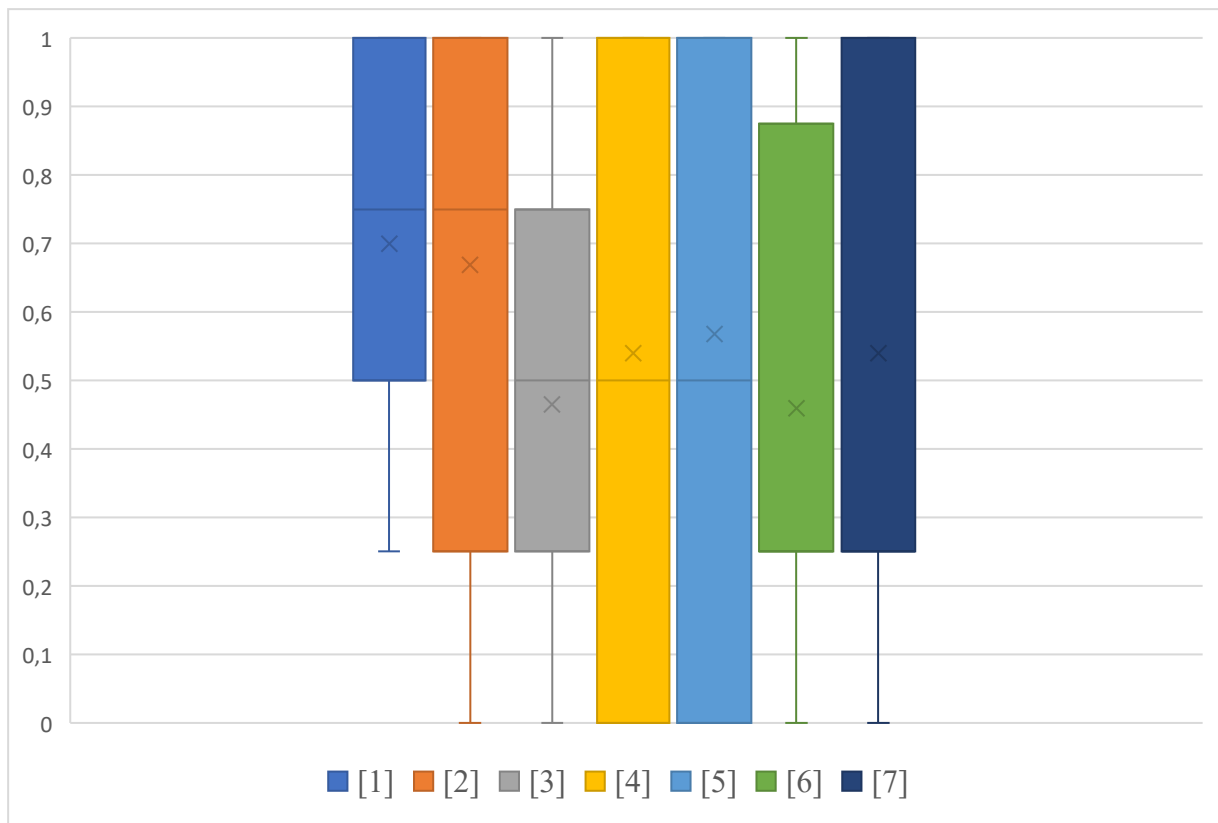
Table 6. Average results on the items in the attitude factor

	Question	Mean
1	Do you consider it important to maintain your Russian?	0.47
2	Do you consider it important that your children can speak and understand Russian?	0.54
3	Do you feel more at home in Russian or in Hungarian culture?	0.57
4	Do you feel more comfortable speaking Russian or Hungarian?	0.46
5	Do you encourage your children to speak Russian?	0.54
6	If your children do not speak or understand Russian, do you regret that?	0.7
7	Do you think Russian plays an important role in the relationship between your close family members?	0.67

Note: the highlighted answers are above the factor mean (0.56)

The boxplot provides more visual comparison of the attitude factors, and spots either the homogeneity or the opposite. Most of the data is homogeneous, for instance the “preferable culture” and “encouraging children to speak L1” are equal with a slight difference in value, 0.54 and 0.56, respectively. The rest of the data looks rather heterogeneous, with a various range of bottom-up whiskers and average line.

Figure 8. The range of items of attitude

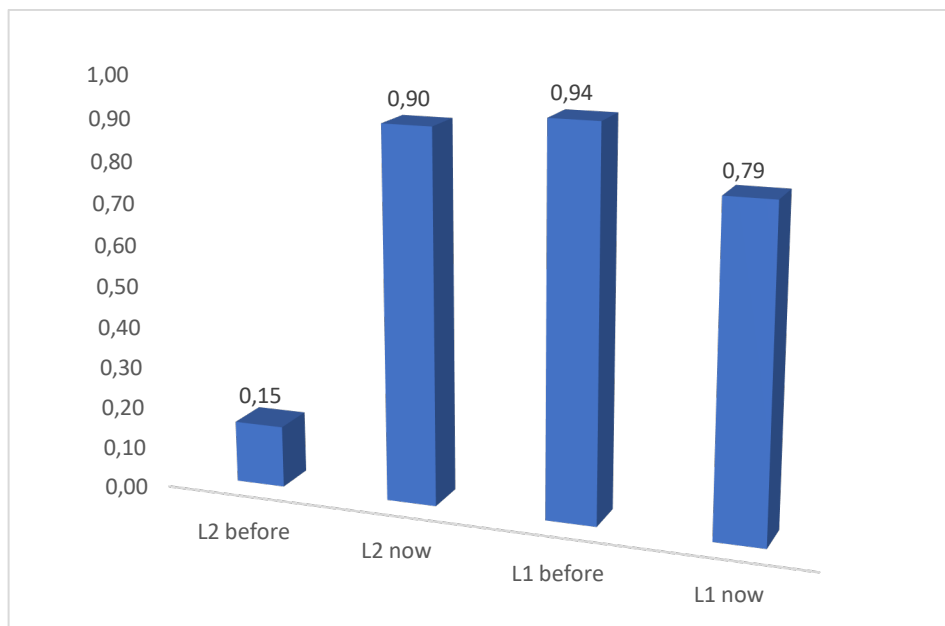


Note: The number in the legend correspond with the questions in Table 6

The data elicited from the questionnaires help conclude that the Hungarian language is the dominant language at home, with spouses and/or children. Out of fifty participants, thirty-four are married to Hungarians, and according to their report, they use mostly Hungarian with children/spouse, which explains the poor FOU (language choice and contact). Ten participants have Russian spouses, and predominantly use Russian within the family. The exception is one participant, who tries to use Hungarian as well. Six participants have neither Hungarian, nor Russian partners.

In addition, Figure 10 presents data on the self-reported language proficiency. Based on the self-evaluations, their L2 improved while their L1 knowledge remained intact.

Figure 9. Participants self-report on their L2 and L1 proficiency before emigration and now



When the participants were asked about the platform or "instruments" they use to keep in touch with their friends and relatives, the overall response was with use of social platforms like Viber, Facebook Messenger, and WhatsApp as the most popular applications in Russia.

5.2. Verbal fluency results

5.2.1 Comparison of the target and control group

Another question of the study is to find out how the target group performs on the different verbal fluency tasks compared to the control group. In both tasks monolingual controls outperformed the bilingual group (see Table 7). The differences between the control and the attrited group as shown by the results of the independent t-test was significant in the semantic fluency task ($t(98) = -5.030, p < .001$) and in the letter fluency task as well ($t(98) = -4.043, p < .001$). If we look at the within-group comparisons, both groups performed slightly better on the letter fluency task but the difference is not significant according to the paired samples t-test (control ($t(49) = .134, p = .894$), target ($t(49) = 1.231, p = .224$)).

Table 7. Descriptive data of the verbal fluency tasks

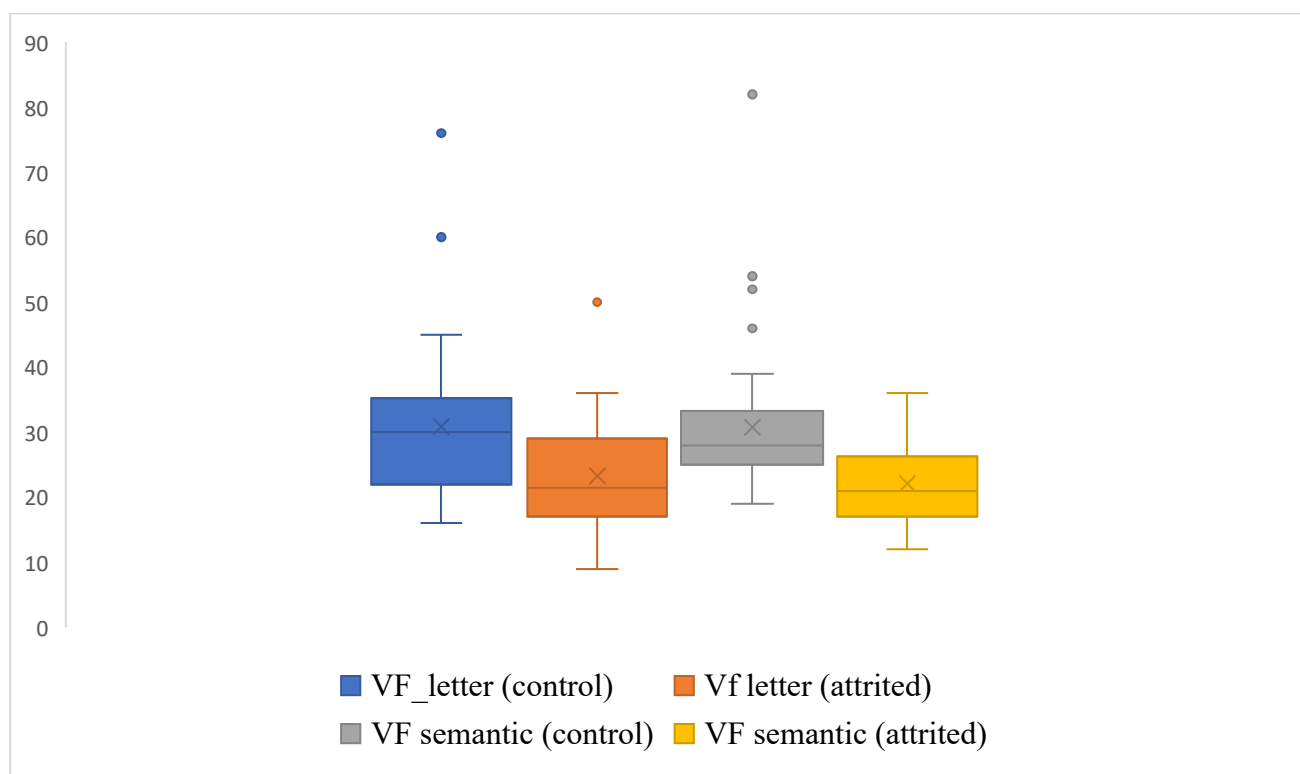
Semantic fluency		Letter fluency	
Mean	SD	Mean	SD

target	22.08	6.09	23.24	7.94
group				
control	30.72	10.5	30.84	10.65
group				

The correlation between the letter fluency and semantic fluency results were positive, strong and significant in both the control group [$r=.822$, $p<0.01$], and the target group [$r=.577$, $p<0.01$]. The box-and-whisker plot (Figure 11) is an exploratory graphic to show the distribution of results. The answers were sorted into two categories – VF_letter and VF_semantic. Figure 11 shows the findings of the semantic and letter fluency tasks in a boxplot. In both figures the two boxplots are considerably similar, the dispersion is comparably equal between the two groups in both tests, however, some outliers were found. In the semantic fluency task four participants from the control group outperformed all of the partakers and produced a high number of words per one minute in both tests semantic and letter categories testing. Besides, the control group had outperformed with a beyond maximum whisker score both in letter and semantic category verbal fluency test, with two and four participants, respectively. This can be explained by their occupation and level of education, all of them are working in the field of engineering, which might explain the excessive vocabulary for letter fluency, but the performance in the semantic category is unexplained. As for the rest of the participants with an equal level of education, they avoided job-related vocabulary. Besides, in the target group only one participant went above the maximum value.

The attrited group performed worse in both the letter and semantic tasks, which is confirmed by the boxplot below. The data are scattered and beside the significant difference in the performance of the two groups, the within-group variation is more apparent in the attrited group (i.e., a bigger space between the upper and lower whiskers) in the semantic and letter fluency than in the control group. Dots represent those participants who performed much higher or lower than the majority of the participants in letter or semantic test.

Figure 10. The distribution of the semantic and letter fluency task results in the attrited and the control group



5.2.2 The role of extralinguistic variables

This section discusses to what extent extralinguistic variables such as age, length of residence, frequency of use and attitude are associated with L1 attrition.

According to Pearson's correlation (Table 8) within the attrited group, a significant but weak correlation was found between FOU and letter fluency ($r=.329$, $p<.01$) and between letter fluency and attitude ($r=.282$, $p<.01$). As it can be seen in Table 8, age and length of residence show no significant correlation with either fluency or lexical diversity measures.

Table 8. The correlation between predictors (age, length of residence, FOU, attitude) and outcome variable (verbal fluency)

	Letter fluency	Semantic fluency
age	.063	-.027
LOR	.078	-.055
FOU	.329*	.080
Attitude	.366*	.035

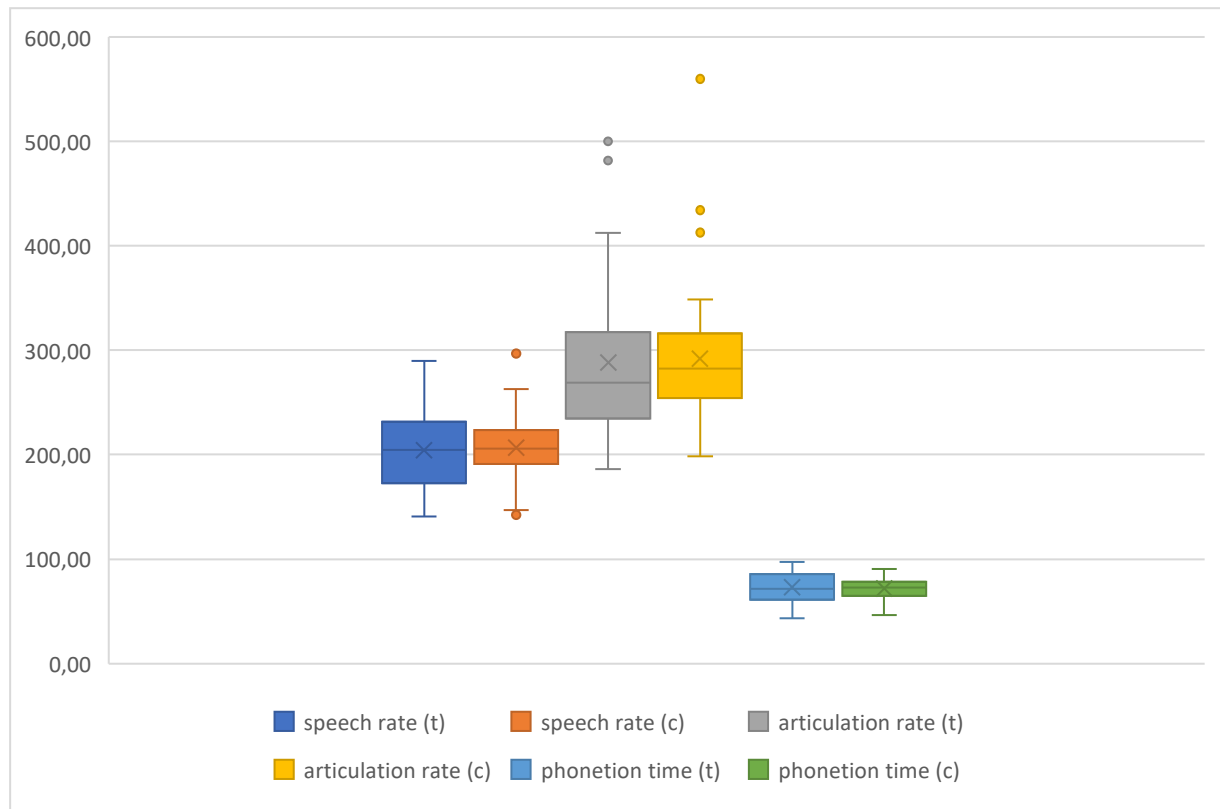
*. Correlation is significant at the 0.05 level (2-tailed)

5.3. Speech production and fluency results

5.3.1 Speech production in the target and control groups

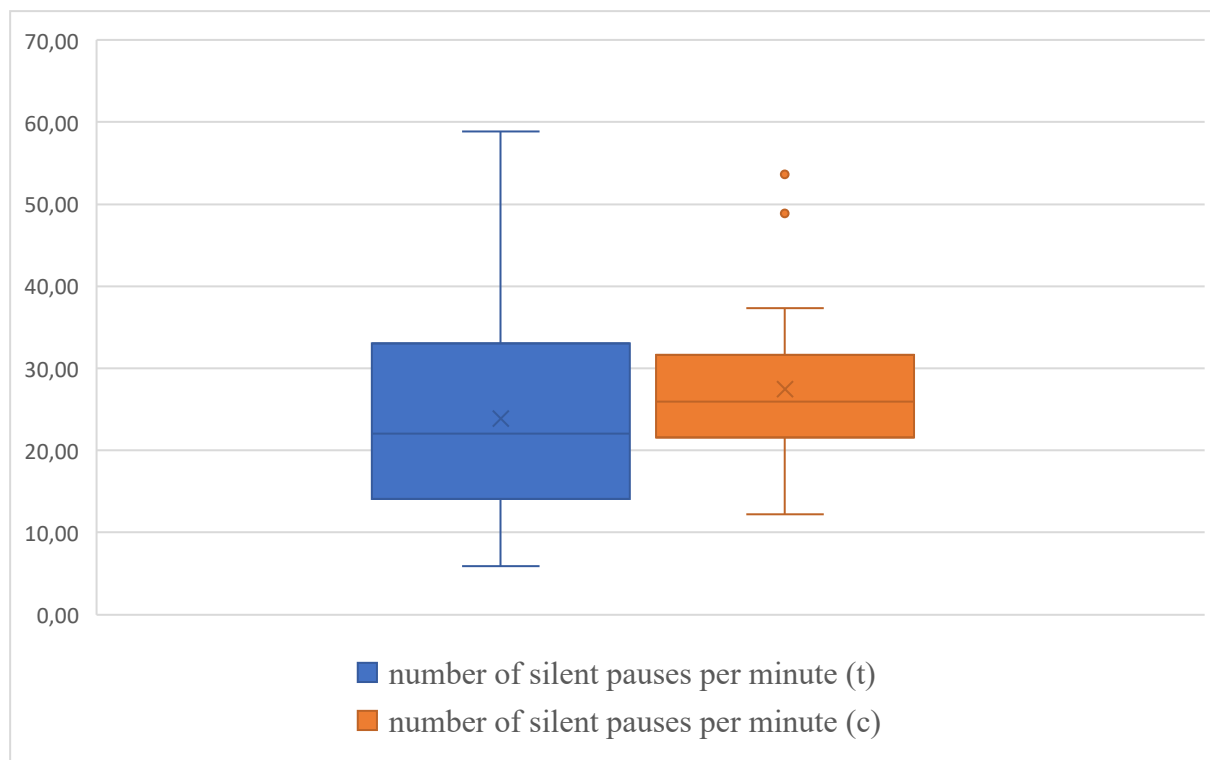
The distribution of the temporal measures of speech in both groups is captured on Figure 12. The control group performed slightly better on all measures, however the figure clearly shows that participants in the target group performed more heterogeneously than the control group's participants which is a usual characteristic feature of bilingual groups.

Figure 11. The distribution of the temporal measures of speech in the target and the control group



The number of silent pauses shows the same pattern: the bilingual target group's results are more heterogeneous compared to the control group's (Figure 13).

Figure 12. The comparison in number of silent pauses per minute between control and target groups



The results obtained from the collection and analysis of the story telling task provided with only one marginally significant difference (Table 9) between the two groups (number of silent pauses per minute). However, the rest of the measure showed non-significant differences according to the independent samples t-test. For instance, the difference between speech rate and articulation rate is not significant, even though with attrited group underperforming; whereas the phonation-time ratio is a bit longer on average than in the control group. However, the number of silent pauses per minute shows the marginal-significant difference inclined to the control group. It is important to note, that no big difference can be observed between the two group's performance by looking at the mean values.

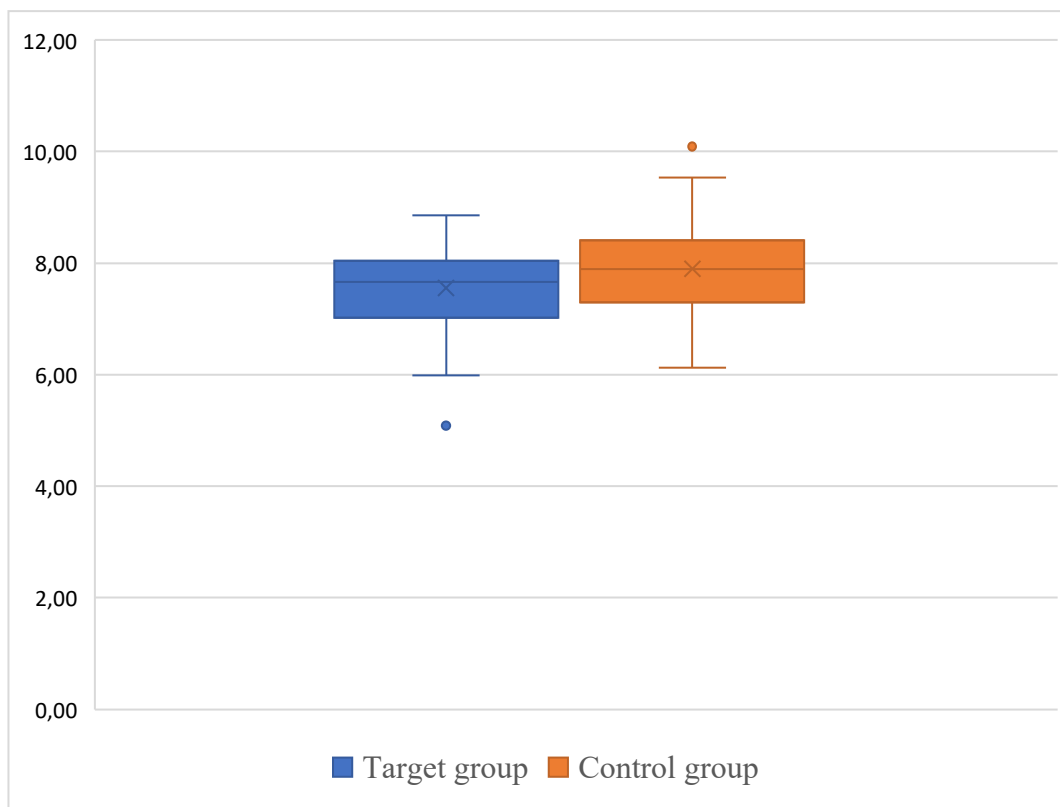
Table 9. Difference between the target and the control group in speech fluency measures

	Mean (SD)		Significance
	Attrited group	Control group	p
Speech rate	204.5 (38.9)	206.7 (31.8)	.75
Articulation rate	288.4 (68.9)	291.9 (58.1)	.78
Phonation-time ratio	72.7 (13.7)	71.8 (9.8)	.69
Number of silent pauses per minute	23.8 (11.2)	27.4 (8.8)	.08
Mean length of pauses	0.6 (0.2)	0.6 (0.1)	.11
Filled pauses	5.2 (6.4)	5.1 (5.9)	.97
Retracing with correction	2.3 (1.6)	2 (1.4)	.42
Retracing without correction	1.1 (0.3)	1 (0)	.57
Word repetition	1.4 (0.7)	1.2 (0.4)	.45

Note: attrited group N=50, control group N=50
significance $p < .05$

Figure 14 shows the distribution of the lexical diversity (STTR) results and as it can be seen, the control group outperformed the target group, however, the boxplots are similar in size suggesting that both groups performed comparably homogeneously.

Figure 13. The distribution of the lexical diversity (STTR) results in the target and the control group



As it is shown in Table 10, the control group produced longer and more varied texts on average and on the lexical diversity measure (STTR) a marginally significant difference was found by the independent samples t-test ($t(98)=-2.022, p < .05$).

Table 10. Difference between the target and the control group in lexical diversity

	Mean (SD)		Significance
	Attrited group	Control group	p
Tokens	316.26 (73.31)	336.3 (114.3)	.299
Types	190.38 (38.01)	205.36 (55.44)	.118
Lexical diversity (STTR)	7.5 (0.7)	7.8 (0.9)	.046*

Note: * $p < 0.5$

Table 11 shows that the lexical diversity measure (STTR) negatively correlates with speech fluency measures: speech rate ($r=-.213$, $p>.05$) and phonation-time ratio ($r=-.298$, $p<0.5$). One of the measures of lexical access, namely letter fluency negatively and significantly correlates with articulation rate ($r=-.288$, $p<0.5$) and with the number of silent pauses ($r=-.377$, $p<0.01$), while positively correlates with phonation-time ratio ($r=.340$, $p<0.5$). However, the strength of all correlations are very weak or weak. No correlation was found between semantic fluency and any speech fluency measures.

Table 11. Correlations between fluency and lexical measures in the target group

	speech rate	articulation rate	phonation-time ratio	number of silent pauses per minute	mean length of pauses
STTR	-.213	.063	-.298*	.188	.224
Letter fluency	-.027	-.288*	.340*	-.377**	-.058
Semantic fluency	.001	-.100	.142	-.082	-.081

** . Correlation is significant at the 0.01 level (2-tailed)

* . Correlation is significant at the 0.05 level (2-tailed)

No significant correlation was found in the control group.

5.3.2 The correlation between extralinguistic variables and speech fluency measures

As it can be seen in Table 12, which describes the correlation between the extralinguistic variables and speech fluency data, there is a weak negative significant correlation between LOR and articulation rate [$r=-.303$, $p<0.5$]. In addition, a weak negative significant correlation was found between attitude and number of silent pauses [$r=-.335$, $p<0.5$]. However, there is a weak positive significant correlation in the relation between attitude and phonation-time ratio [$r=.340$, $p<0.5$].

Table 12. Correlation between extralinguistic variables and speech fluency measures

	STTR	Speech rate	articulation rate	Phonation-time ratio	number of silent pauses per minute	mean length of pauses
Age	-.213	.079	-.062	.117	-.047	-.110
LOR	-.047	-.131	-.303*	.186	-.209	-.021
FOU	-.183	.138	-.090	.240	-.246	-.145
Attitude	-.075	.078	-.223	.340*	-.335*	-.168

** . Correlation is significant at the 0.01 level (2-tailed)

*. Correlation is significant at the 0.05 level (2-tailed)

5.4. Grammar Judgment task

The aim of this part of the research is to find the difference in the grammar task performance between control and target groups. The exact task was to produce the verbs in future tense in order to fill the gaps in the sentences. The difference between groups was slightly significant with a big gap in minimum and maximum of correct answers (see Table 13).

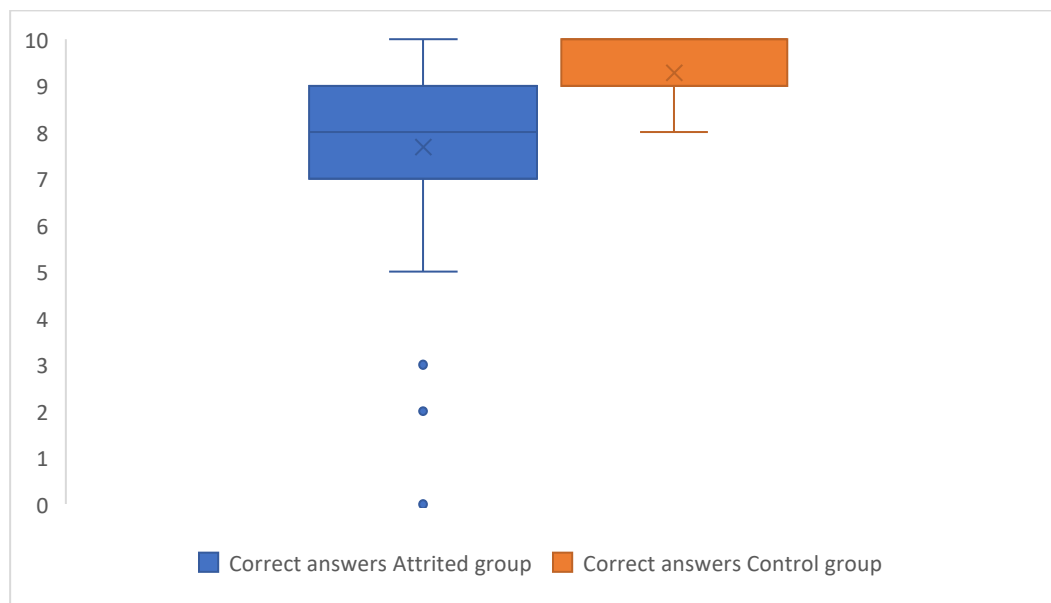
Table 13. Differences between the two groups on the future tense production tasks

	N	Mean (max. 10)	Standard deviation	Min.	Max.
Control group	50	9.28	0.66	8	10
Target group	50	7.71	1.81	2	10

The independent samples t-test was performed in order to discover the difference between two groups, control and target, including the independent and dependent variables, such as language choice, contact, attitude, length of residence and age. A significant difference ($t(98) = -5.383$, $p < .05$) was found, showing the reversal in the directionality of the study.

Figure 15 shows the findings in the future tense formation task on a boxplot, and the attrited group shows more within-group variation than the control group (i.e. minimum and maximum between upper and lower whiskers). Two of the participants went beyond the minimum range of the boxplot and became outliers in the study, with the minimum results of the correct answers for the grammatical judgment test.

Figure 14. The distribution of results in the control and the target groups on the future tense formation task



A Pearson correlation factor was calculated to determine the relationship between the correct answers in the grammatical judgment test of the attrited group and the extralinguistic variables. None of the given variables were correlated with the correct answers collected after the grammatical judgment testing.

Furthermore, an additional one-way ANOVA test was conducted between the spouse and the correct results. To conduct the test, the attriter group was classified into three different categories (see Table 15):

Table 14. Participants with/without Hungarian/Russian spouse

With Russian spouse	10 participants
With Hungarian spouse	34 participants
No partner	6 participants

According to results of the ANOVA test, the difference was no significant between groups [$F(2,47)=.886$, $p=.419$]. Tukey's HSD test for multiple comparisons also did not find the difference in mean between all groups.

5.5. Domain specificity (interview results)

None of the participants had ever learned Hungarian before moving to Hungary. The first encounter with the language is connected to meeting their new (Hungarian) partner, getting a job, etc. Most of them learned the language because they wanted to integrate into the Hungarian society. Both the questionnaire and the interview results confirmed that the majority of the participants are bi- or multilingual. Only one participant reported on the difficulties he/she faced in learning foreign languages. The participants acquired English, German, French as foreign languages in or out of school besides Russian and Hungarian.

During the interview, the participants have reported the professional necessity to maintain their Russian. They have also highlighted the frequent 'code-switching' in the professional domain (see [1, 2 and 3]). As can be seen in interview excerpt 1, the participant is in the phase of relearning English, so the frequency and salience of the language interfere with the other two languages, which is not a rare language learner experience.

[1] *Я сейчас учусь английский, моя ... мои мозги все настроены на английский в основном. Так что, может быть, поэтому я часто смешиваю. До этого, давно, когда я начала учить венгерский у меня английский как то стерся, поэтому заново надо было.... Ну конечно, базовые такие ... знания. А вот сейчас хочу уровень повыше, все таки и для работы нужно.*

“I'm learning English now, my ... my brains are all set to English mostly. So maybe that's why I mix often. Before that, long ago, when I started to learn Hungarian my English was somehow erased, so I again had to.... Well, of course, basic ... knowledge. But now I want a higher level, I still need it for work.”

In example [2], the participant is a lecturer at a university in Hungary, therefore, she is more fluent in this domain in Hungarian. This experience coincides with Grosjean's (2010) Complementarity Principle, which claims that the bilingual uses his/her languages for different reasons, with different interlocutors and in different situations. Consequently, there will be domains (e.g. work) in which the bilingual will be more fluent and proficient in one of the languages.

[2] *Если нужно переводить с одного языка на другой, то начинается смешивание языков. Это есть. Профессионально мне проще на венгерском, легче конечно. Все профессиональные выражения, термины это я уже не знаю как сказать по-русски. Если*

мне нужно будет делать лекцию или читать лекцию русскоговорящим, то мне нужно будет очень сильно подготавливаться.

“If you need to translate from one language to another, then the mixing of languages begins. It is there. Professionally, it's easier for me in Hungarian, easier of course. All professional expressions, terms I no longer know how to say in Russian. If I need to give a lecture or presentation to Russian speakers, I will need to prepare very much.”

Interview excerpt [3] below also confirms the complementarity principle where the participant's L3 (English) is also used in the work domain together with Hungarian, while the personal domain is Russian.

[3] Родной язык использую для повседневного общения. На работе –венгерский, общаюсь с коллегами, в магазине тоже венгерский, но на работе еще и английский. Документация, письма...

“I use my native language for everyday communication. At work I use Hungarian, I communicate with colleagues, in the store it is also Hungarian, but at work also English. Documentation, letters ...”

These examples show how the languages of bi- and multilinguals play different roles in different domains and interact, which is the natural outcome of multilingualism. All respondents emphasised that it is complicated to adapt to the target society without knowing the country's language. Most of them have a positive attitude towards Hungarian and try to expand their vocabulary and apply different speech styles. The respondents reported that their proficiency level in L1 and L2 depends on the frequency of use, the place of use, and the interlocutors. The languages spoken by the respondents are deliberately used for different purposes in order for communication to be successful. As an outcome of the constant interaction between these languages, their language system is dynamic and used in different social spheres.

5.5.1 Integration to the host society through L2

The interview was conducted in Russian at the participants' request, who explained this by the desire to communicate in their native language (e.g.: [4]). As shown in example 5, the participant did not manage to master Hungarian to a high degree. However, her motivation is

low, while the anxiety is relatively high. This example supports Norton's (2000, 2001) assertion that negative self-perception can lead to non-use of the language.

[4] **Question:** *Вы считаете, что для Вас важен русский язык? Как для общения так и для сохранения русской личности [...]*

“Do you think the Russian language is important for you? For communication and also for maintaining a Russian identity [...]

Answer: *Очень важен. Я работала на многих фирмах. Я работала как переводчик, так что Я работала и в Эстонии как переводчик с людьми, так что использовала русский и хочу использовать. Не всегда есть возможность использовать. Вообще-то каждый день использую, так как сейчас двадцать первом... первый веке Скайп, Вайбер. Я с родственниками часто разговариваю. [...]*

“It is very important. I have worked for many firms. I worked as an interpreter, so I also worked in Estonia as an interpreter with people, so I used Russian and I want to use it. It is not always possible to use. Actually, I use it every day, since now is the twenty-first ... first century Skype, Viber is available. I often talk with my relatives. [...]

[5] *Я до сих пор не освоила Венгерский. Но в основном я пользуюсь русским. Я ленивая к языкам, они не вызывали у меня интерес. Я не получаю от этого удовольствие. Я стесняюсь говорить на венгерском, считаю что либо говорить очень хорошо, либо никак.*

“I still haven't mastered Hungarian. I mostly use Russian. I am lazy for languages; they did not interest me. I don't enjoy it. I am embarrassed to speak Hungarian; I think that you should either speak it very well or not at all.”

The current findings go along with Schumann (1986), who noted the link between successful integration and a higher proficiency of target language knowledge.

[6] *Но вообще у меня много работы было, так как мы много переезжали. Из-за мужа у меня много работ было. И я работала и в **Minőségügyi**, ну это в качестве ... за качество ответствение было. У меня муж сейчас, он уже как **Minőségügyi vezető** работает. Ну это наша профессия, за этим ... за качеством.*

“But in general, I had a lot of work, since we moved a lot. Because of my husband, I had a lot of jobs. And I also worked in **Quality**, well, this is in quality ... for I was responsible for

quality. I have a husband now; he is already working as **Quality manager**. Well, this is our profession, for this ... for quality.”

[7] *Много раз пыталась начать изучение... Везде необходимо знание языка, пойдешь в **gyógyszertár** или даже в **busz... kórház** опять же...*

“Many times, I started learning... The language is required everywhere, if you go to the **pharmacy**, or even on the **bus... hospital** as well...”

Respondents recognise the importance of their native language as a personal identifier that confirms their belonging to the Russian community. This confirmation emphasises the importance of linguistic influence on personality. The native language as a marker of identity connects belonging to the Russian community and at the same time distinguishes the foreign society. However, when discussing work, the respondents emphasise the importance of knowing the Hungarian language as a necessary factor in finding and applying for a job. Moreover, the respondents switch to Hungarian when it comes to a job-related topic.

People who are fluent in two languages switch from one to the other in different ways when expressing their feelings, interacting with different people, or being in different places. Fogle (2012) mentions the importance of the context, for example, what language they use in various domains., e.g., at work, in school. Individuals adapt to what they find comfortable. Grosjean (2016) also discussed it in the Complementary Principle when describing the behaviour of bilinguals in everyday life. He claims that personality change is simply a shift in attitudes and behaviour that correspond to a shift in situation or context, regardless of language.

Dewaele and Pavlenko (2003) interviewed about a thousand bilingual people and asked them if they feel like someone else when they speak a foreign language. About two-thirds of all respondents answered affirmatively. Fogle (2012) mentioned that language mirrors identity, although the personality can change depending on the speaker perceiving others in the target language. Different languages shape our thinking and they contribute to changing emotions or even affect memories.

Most respondents in the present study reported that using different languages changes their thoughts, feelings, and their personality.

[8] *Я на родном языке необщительный человек, но разговорчивый на других ...*

“I am an uncommunicative person in my native language, but talkative in others...”

[9] *Я говорю на русском, английском и венгерском, заметила, что от того на каком языке я говорю, меняется мое восприятие и поведение...*

“I speak Russian, English and Hungarian, I noticed that depending on the language I speak my perception and behaviour change...”

[10] *Не знаю ... что это, но замечаю, что часто говорю на одном языке, а думаю на другом. Почему, не понимаю. Может, это вторая личность во мне?!*

“I don't know ... what it is, but I notice that I often speak one language and think in another. I don't understand why. Maybe this is the second person in me?!”

[11] *Замечала за собой не раз, но мне кажется, причина не в смене языка ... Может быть, в культуре?*

“I noticed it more than once, but it seems to me that the reason is not in the change of language ... Maybe in culture?”

[12] *Часто такое ... Думаю, когда меняю язык, наш мозг думает, что мы в другом месте и с другими людьми, другими правилами и традициями.*

“Often this ... I think when I change the language, our brain thinks that we are in a different place and with different people, different rules and traditions.”

The respondents emphasise the role of another country's culture, immersed in reaching a certain level of learning a second language, which contributes to integration into a new society. Indeed, this is confirmed by Jarvis and Pavlenko (2008) on the acquaintance of students with a new culture, which helps to acquire new ways of expressing emotions and a new perception of cultural aspects.

In the interviews the language switching often occurred when expressing emotions.

[13] *Жаль, что не получилось остаться жить там, **szép hely**, но ... не сложилось...*

“It's a pity that we didn't manage to stay and live there, **beautiful place**, but ... it didn't work out...”

In this example, the participant switches from Russian to Hungarian to positively describe where she lived and then switches back to Russian. Recalling a pleasant place in Hungary where she lived, the respondent makes a value judgment in Hungarian.

[14] *Ах, как мы провели там время ... и дети. **móka volt** и мы были **boldog***

“Oh, how we spent time there ... and the kids ... **it was fun** and we were **happy**...”

In example [14], the respondent uses two languages, Russian and Hungarian, choosing Hungarian for a specific function. The example above highlights the pattern of language choice for positive emotions.

The following example illustrates the choice of language concerning a person:

[15] *Наш **tanár** требовал много всего, но я справлялась.*

“Our **teacher** demanded a lot, but I managed.”

The respondents, communicating in Russian, suddenly switch to Hungarian as soon as it comes to status people.

It can be concluded that the respondents' languages are not used arbitrarily. It is possible to trace a pattern associated with social or cultural values powerful enough to influence identity, which confirms Grosjean's (2010) theory of context influencing identity change. This is supported by examples of interview excerpts, where participants noted changes in their behaviour and social skills, even their way of thinking.

5.5.2 Successful integration and assimilation as the factor to develop a new identity

Various indicators have been developed to assess the success of adaptation to another society. One of the many is *integration* with maintaining L1 and cultural aspects while adding another language, culture, and *assimilation*, where the shift happens from L1 to the language of a new culture in a new society through language. It should be noted that language cannot be considered only as a practical tool of communication; language plays an essential role in creating social and cultural differences. Therefore, the study and use of the host society's language is of practical importance and helps the individual's self-identification.

[16] **Question:** *Вы считаете, что для Вас важен родной язык для? сохранения русской личности.*

“Do you think Russian is important for preserving your Russian identity?”

Answer: Да. Я стараюсь поддерживать контакт с родным языком, родной культурой. Я не могу привыкнуть к Венгрии. Меня здесь все устраивает, но в душе я русская.

“Yes. I try to keep in touch with my native language, my native culture. I can't get used to Hungary. Everything suits me here, but at heart I am Russian.”

[17] *Совершенно нет, с венгерской культурой нет. Вот сейчас я с дочерью пойду на концерт венгерской группы. Но мне как то ... не цепляет это. Хотя это плохо...*

“Absolutely not, not with Hungarian culture. Right now, my daughter and I will go to the concert of a Hungarian band. But somehow... it doesn't engage me. Although this is bad...”

The participant is experiencing the separation process and identifies herself as a Russian, even with Hungarian citizenship. However, she expresses her regret for not being able to assimilate entirely. She mentions that Hungarian culture is acceptable for her, even though she cannot picture herself developing the Hungarian lifestyle.

Overall, the participants' identities have not been influenced wholly by having Hungarian citizenship. All of the participants describe themselves first of all as Russians.

5.5.3 Going back to Russia

The current study included the question of whether the participants regret their decision to leave the country. All of them expressed their opinion of making the right decision. The answers to having nostalgic feelings included 12 participants feeling nostalgic, while eight concluded the opposite. Besides, one of the participants added the answer that his country does not exist anymore because he was born in USSR.

[18] *Я родился в СССР, моей страны нет с 1991 года, никакой ностальгии по РФ или СНГ у меня нет.*

“I was born in the USSR, and my country has not existed since 1991, so I have no nostalgia for the RF or the CIS.”

[19] *Тут не скажешь однозначно. Жалеть не о чем. Могу ведь вернуться в любой момент. Но зачем? Мне вроде и здесь хорошо. Привыкла...*

“You can't say for sure. There is nothing to regret. I can go back at any moment. But what for? I feel good here too. I got used to it...”

[20] *Я привыкла. Спасибо. Но пришлось не легко.*

“I got used to it. Thanks. But it was tough.”

[21] *Жизнь может и не сложилась так как хотелось бы... Но уезжать не хочу. Чтобы привыкнуть тут нужно время и силы. Муж венгр, дети... Как я это все оставляю? Дочь считает себя венгеркой.*

“Life may not have worked out as I would have liked... But I don't want to leave. It takes time and effort to get used to it. A Hungarian husband, children... How can I leave it all? My daughter considers herself Hungarian.”

[22] *Нет смысла жалеть о чем-то или не жалеть. Все нет так плохо, нет только друзей. Они там ... их приобретают в молодости.*

“There is no point in regretting or not regretting anything. Everything is not so bad, just there are no friends. They are there... they are acquired in youth.”

[23] *Не жалею .. Я не покинула Родину, а приобрела ее.*

“I don't regret it... I didn't leave my Motherland, I found it.”

[24] *Я так скучаю ... Может .. – вернусь? Ностальгия накатывает по друзьями, родственникам, а я в душе русская.*

“I miss it so much ... Maybe I will return? Nostalgia gets me about my friends, relatives, and in my soul, I am Russian.”

[25] *Я и готова вернуться, но сомневаюсь, смогу ли начать сначала? И не жалею, но и не радуюсь ...*

“I'm ready to go back, but I doubt if I can start over? And I don't regret it, but I'm not happy either...”

Participants were asked to indicate whether they experienced homesickness and intention to return to Russia. The overall conclusion was drawn, that they have neither intention to go

back to Russia nor feel homesick. A smaller number of respondents indicated that they had never thought about this idea.

Even though the participants have identified themselves with Russian language and culture more dominantly, none of them highlighted the desire to move back to Russia. The answers were supported by the fact that they find life in Hungary more pleasant than in their country of origin. They would move only due to the economic situation or personal issues — the highlights mentioned above show the ongoing assimilation/integration of the participants into Hungarian society.

CHAPTER 6.

DISCUSSION

The focus of this study has been lexical and grammatical attrition, and it has aimed to investigate the relationship between extralinguistic variables and the extent of language attrition with a help of research instruments: social personal background questionnaire, personal interviews, verbal fluency (semantic and letter fluency), story-telling, and future tense formation task. This study has explored the degree of language attrition of people who left Russia for different reasons and at different times and identifies the characteristic signs of Russian-speaking immigrants' language living in Hungary. In the following, the main findings of this research will be discussed concerning the research questions, hypotheses and the literature.

The main question of this study has been to answer to what extent extralinguistic variables (such as age, education, frequency of use and length of residence) have an impact on the level of L1 attrition of Russians living in Hungary. Several sociolinguistic factors were inspected in their relation to language attrition: level of education, age at immigration, length of residence in Hungary, level of Hungarian proficiency, exposure and use of Russian and Hungarian, and attitudes towards Russian and Hungarian. To answer the central question of the study, several sub-questions were created, and hypotheses were generated. The result of the study will be discussed following the order of the questions and their presentation in Chapter 3.

The first question of the study addressed the extent of Russian language maintenance based on the frequency of use and attitudes towards the L1. Based on previous studies with attriters, it was hypothesized that Russians living in Hungary will maintain a generally positive attitude towards their L1, and the use of L1 will be relatively frequent with their family and relatives. The Social Personal Background Questionnaire (Schmid, 2004b) elicited the data, based on the 79 questions and personal interviews with the participants. The knowledge of English as an additional language for some participants was found out during the data collection process and it was impossible to change the design halfway which is a limitation and shortcoming of the research. The results illustrated that the main factor for migration to Hungary was mainly a Hungarian spouse, and less frequently a job opportunity. To explore the extralinguistic factors, the SPBQ was used and besides demographic data, the frequency of L1 use and attitudes towards the L1 were assessed. The group averages have been not high on any of the measures (FOU = 0.52, attitude = 0.56) and the analyses of the individual items revealed the reasons for

the low ratings. In terms of FOU, the participants have mainly used Russian to keep in touch with relatives but in Hungary the language used in the family and with friends is predominantly Hungarian. Their attitude toward Russian was generally positive but language transmission to the next generation is only moderately important to them, which is not surprising as in most voluntary migrant groups total language shift happens in three generations (Lieberson, 1980). A significant positive correlation was found between attitudes and FOU which means that more positive attitudes to Russian are related to more frequent use of the language. The study's hypothesis was only partly confirmed by the results as the attitudes are positive but the language used in the family is more often Hungarian than Russian.

The second question of this study was to find the difference between the attrited and the non-attrited groups in lexical access and lexical diversity. It was hypothesized that the attrited group will show some signs of L1 attrition in verbal fluency tasks and show poorer lexical diversity. The two verbal fluency tasks have been used for this research, letter fluency <c> (Snodgrass & Tsivkin, 1995) and semantic category "animals" (Schmid, 2004b). The participants were under a strict time-limit of 60 seconds, and they had to produce as many words as possible in the given period. As expected, the control group significantly outperformed the target group on both letter and semantic fluency measures which coincides with previous results; however, the performance of the attrited group was found to be unrelated to the frequency of use, length of residence or attitudes. It is clear to what degree the poorer performance of the target group is the outcome of the general bilingualism effect or language attrition. Most studies focusing on the relationship between extralinguistic variables and verbal fluency could not find a direct link. Only a few studies with small samples found links to attitude (Cherchiov, 2011) and length of residence (Bátyi, 2020). In the present study, the attrited group performed more heterogeneously in both tasks than the control group, usually found in bilingual groups; however, the variation could not be explained by any of the variables. Opposing the previous findings using the semantic and the letter fluency task, this research shows that both the control and the target group did not produced significantly different numbers in the latter according to the paired samples t-test ($t(49) = .134, p = .894$), target ($t(49) = 1.231, p = .224$)

The control group significantly outperformed the attrited group on both verbal fluency tasks, which coincidecoincides with previous results (e.g. Schmid & Jarvis, 2014) and proves that lexical access is affected by the change in language dominance. Hence the participants produced fewer words in their L1 than monolingual controls. The sophisticated type-token ratio has operationalized the lexical diversity of the participants and it was found that the control group performed better and the difference was marginally significant. These findings confirm the

second hypothesis and are in line with previous results showing that even L1 maintainers in an L2 environment are outperformed by non-atrainers (Schmid, 2007). However, it is worth mentioning that none of the differences between the two groups was considerable, suggesting the small extent of language attrition.

The study results show that L1 lexical retrieval is less effective among the Russian-Hungarian bilingual group than among Russian monolinguals, which is in line with previous bilingual studies. Finally, the correlations between the extralinguistic variables and outcome measures have shown that age is negatively and non-significantly related to lexical diversity (STTR), i.e. lexical diversity in the L1 decreases by age. The length of residence shows no relationship with the lexical measures. Frequency of L1 use has positively and significantly correlated with letter fluency, while attitudes towards the L1 have a significant positive relationship with letter fluency.

The third hypothesis of the study proposed that the monolingual control group have faster speech rate and articulation rate and less disfluencies. As it was shown in Table 8, the control group was slightly faster in their speech and articulation rate, while the attrited group performed more hesitation markers, however, none of these differences has been significant which does not convincingly confirm the third hypothesis. Besides, frequency of L1 use positively and non-significantly correlated with a phonation-time ratio and negatively with the number of silent pauses per minute. Attitudes positively and significantly correlated with phonation-time ratio and negatively and significantly with the number of silent pauses per minute. Finally, the length of residence negatively and significantly correlated with the articulation rate. None of the extralinguistic factors explained the variability in the outcomes. Phonation-time ratio is a good indicator of speech fluency (Kormos, 2006) and in a language attrition context it changes due to changes in attitudes and language use.

The next question was whether the participants would show any difference in future tense formation task. It has been hypothesized that the attrited group will show poorer performance in future tense formation task. The last test included the conjugation of the verb into the future tense, to test the implicit knowledge of grammar of our participants. As expected, the control group has outperformed the target group in the testing, the latter performed more heterogeneously in the given task. while the monolingual group has been more homogeneous. The attrited group achieved the mean score of 7.84 out of 10, and the participants were not able to recognize their mistakes and correct them. However, the variation of the target group was not been confirmed by Pearson correlation analysis. Consequently, the relation between

extralinguistic variables and correct results has not been found. The results coincide with Baladzhaeva (2013) who also could not find the direct influence of extralinguistic variables.

Hungarian influence was observed in the verb's grammatical choice of the future tense aspect. The simple constructions and the choice of imperfect aspect of the verb have been present in the attrited group, whereas the. In contrast, the control group used more sophisticated constructions, and perfect aspect of the verb to create a future tense. It corresponds with the findings by Gürel (2008), who claims the complex L1 forms do not correspond with L2 forms, and thus can be processed with difficulties due to L1 attrition, especially concerning the difference between Russian grammatical forms and Hungarian ones. The tendency to replace the complex form of the future tense has been explained by the desire to simplify the structure of future tense formation. On the other hand, simplification may be defined by the insufficient use of L1.

After analysing the results of the future tense formation task, attrition has been observed as a complex process. It corresponds with Pavlenko (2003) findings, who concluded the drastic decrease in the grammar aspect of the verb of motion in Russian-English bilinguals. The participants proved the apparent tendency to simplify the construction and use more imperfective constructions. However, the data is insufficient to conclude whether one area of grammar attrites faster than others or is immune to attrition. It is suggested to have more studies that would focus specifically on attrition of different areas of grammar in the Russian language, to obtain more specific data concerning this matter. In this particular research, I do not test the language aptitude. Thus I cannot conclude the correlation between language aptitude and L1 attrition as was suggested by Bylund et al. (2010). They concluded that a higher level of language aptitude could function as compensation for L1 attrition, helping to maintain higher language proficiency in the L1 with a lack of exposure (Bylund et al., 2010).

The level of education was not significant in future tense verb production. As was already mentioned, difficulties in irregular verb production was observed among some immigrants in Hungary. However, since there was not much variation in the level of education of the participants, this relationship could not be studied. Most of the participants in the study had higher education, thus they had almost no difficulty in producing irregular verbs.

Level of education was slightly, but significantly, related to the retrieval of words with a starting letter <c>. It is not surprising, since educated speakers tend to have larger vocabulary. Small or non-existent correlations of the educational level with lexical retrieval tasks might also explain why there was no strong attrition in them. Perhaps, higher educational level can give

some resistance toward language attrition in these language areas (see Bardovi-Harlig & Stringer, 2013).

Age at immigration was not correlated, even if there was a slight correlation, it was weak and non-significantly with the grammar judgment task. I concluded, according to verbal fluency tasks and lexical measures that older participants have a less diverse vocabulary. The correlation was negative, that is the older the participants were, the worse results they accomplished. Reduced lexical *production* in L1 has sometimes been associated with the effect of ageing, and not with L2-caused attrition (Goral et al., 2007), which is partially supported by the results of the current study. In addition, the weak effect of age on the grammaticality judgment of future tense formation supported the claim that in these tasks worse performance of the immigrants should be ascribed to L1 attrition. Classified age groups (above and below 18 years old) have no effect on the test results within the attrited group. Goral et al. (2008) claim that “lexical changes observed in both younger and older bilingual individuals are more likely to be the results of L1 attrition, whereas changes unique to the older individuals can be attributed to processes of ageing” (Goral et al, 2008: 510). It supports the arguments of reduction of lexical performance to the effect of older age rather than L2 interference. The significant difference in lexical diversity in the story-telling task was observed in both younger and older groups. As it was not unique to the older immigrants, it cannot be credited only to age effect.

In contrast to most studies on L1 attrition (Ammerlaan, 1996; Tsimpli et al., 2004; Brown, 2001; de Bot & Clyne, 1994; Gürel, 2002), the relationship between length of residence and the results of attrition was found, particularly in the speech fluency testing and it was associated with articulation rate. Laufer (2003) found correlation of length of residence in Israel with the results of the participants; however, in her study two different waves of immigrants were compared.

Further factors that were examined were frequency of use and attitude towards Russian and Hungarian languages in the study. Generally, all the immigrants have had more positive attitudes towards Russian than towards Hungarian. However, contrary to other studies on L1 attrition (Schmid & Dusseldorp, 2010; Waas, 1996), correlation has been found between the language attitudes and the results of the tasks, for instance, between number of silent pauses and phonation time in speech fluency testing. In addition, the language choice also correlated with the number of silent pauses. However, neither frequency of use nor attitude have correlated with the grammar results of future tense formation. The questions related to what is happening to Russians' identities living in Hungary, including the process of integration to the new community, and attempts to integrate and maintain the Russian language and culture at the same

time, were discussed. Their life experiences were expressed through their opinions and views on their new home country's life and culture. The significance of the study is that it shows how diverse bilingual identities can be in the context of another culture. The model and strategies proposed by Berry (2007) were used to identify the four strategies in identity development and social integration. According to elicited data, the participants are not fully integrated into Hungarian society. All subjects consider themselves bilingual and associate their bilingualism with the fact that they have different personalities when they speak different languages. This result is in line with Pavlenko's (2006) findings, which mentioned that bilinguals perceive the world differently, making gradual changes based on their language. Some believe that they have successfully combined two cultures and become part of a new society, fully integrating into it. Others, not wanting to move away from their Russian roots, could not accept a foreign culture, although they do consider themselves bilingual. Some subjects are trying to integrate into Hungarian society, maintaining their Russian culture and language. However, they all have expressed that another language leaves its mark on the personality, whether they like it or not. The participants reported the shift in their identity, which can be explained by a change in the environment, such as work/home. The findings are in line with Grosjean's (2010) claims that the change is not caused by the influence of language but the environment and context. The qualitative data reports low diversity in the participants' answers. They emphasize the necessity to switch the language at their workplace or other public places and as a consequence their identity changes and it is due to the environment. An interesting pattern of identity change has emerged from the interviews, that is, personality may exert an impact on one's identity (e.g. integration for a sociable person is easier). It goes along with Fogle's (2012) claim that identity changes occur based on the interlocutor's perceptions of the person in a language-use situations. These results underscore the self-reports from the interview and the questionnaire, that is L1 is maintained while the proficiency in L2 increased and it is connected to the changes in their identity. The role of the identity in language attrition is vague, as it is impossible to research the identity of the present-day attrited group linking to their past identity and require longitudinal study. However, the value of the further studies between attrition and identity are undisputed.

Based on the empirical results it is apparent that the studied Russian group in Hungary show no dramatic signs of attrition, their fluency seems to be intact. The participants of the study are post-puberty migrants and as such they seem to be protected against considerable changes in their L1 proficiency (Pallier et al., 2003; Pierce et al., 2014). Speech slows down with a

prolonged length of residence and the frequency of L1 use and positive attitudes toward the L1 contributes to lexical access.

CHAPTER 7.

CONCLUSIONS

This study has investigated first language attrition among first generation Russian immigrants in Hungary who moved to the country in the 80/90s for various reasons, the main motivation factor being married to a Hungarian. The main questions of the study were (i) to what extent the attriters differ from the monolingual Russian group in lexical access, lexical diversity, speech fluency and grammatical future-formation, and (ii) what are the main extralinguistic variables that cause more attrition in one individual than in another. In order to give a theoretical and methodological context and framework for the study, before the presentation of the results, the relevant literature was reviewed in Chapter 1, followed by the description of the research instruments and design in Chapter 2. Being a relatively new research area, it was important to discuss the main conceptual definitions of language attrition, to present the short historical overview of the developments in the field, to separate it from related concepts, such as language shift, language loss, heritage language attrition and second/foreign language attrition and to list some of the models and theories that were found to account for language attrition. In chapter 1 the main extralinguistic variables assumed to be associated with language attrition were also discussed. The main methods of the study were a questionnaire (SPBQ) which collected data about the background variables, two verbal fluency tasks which measured lexical access and a story-telling task operationalizing lexical diversity and speech fluency. An interview was also made with the participants to dig deeper into how their identity have changed and what is the role of their languages in their identity formation.

As expected, the control group has outperformed the target group in almost all measure and the bilingual group performed more heterogeneously in the given tasks which is usually the case in bilinguals (Kroll et al., 2012). Significant differences has been found between the two groups in how they access words (VFT results) and their lexical diversity which coincides with previous assumptions that the lexicon is the most vulnerable to attrition. Very few studies focused on the speech fluency in the L1 and the present study have found no significant difference either between attriters and non-attriters. This shows that even after a considerable time spent in an L2 environment, speech fluency remains unaffected. No significant difference has been found between the two groups in the future formation task either which confirms the resistance of grammar to language attrition. Some of the extralinguistic factors were found to be associated with the performance on the tasks, but none of the correlations were outstandingly

strong. Frequency of use seems to play a role in letter fluency, which confirms previous findings with bilinguals, namely that the bilingual experience enhances inhibition of non-relevant items and at the same time activation of target items.

The participants reported the shift in their identity, which has been explained by a change in the environment, such as work/home. The findings are in line with Grosjean's (2010) claims that the change is not caused by the influence of language but the environment and context. The qualitative data reports low diversity in the participants' answers. They emphasize the necessity to switch the language at their workplace or other public places and as a consequence their identity changes and it is due to the environment. A pattern of identity change has emerged from the interviews, that is, personality may exert an impact on one's identity (e.g. integration for a sociable person is easier). It goes along with Fogle (2012) who stated that identity changes appear based on the speaker's perceptions of the person in a language-use situations.

This study follows a cross-sectional design which is a limitation in most attrition studies. It is important to note that the language attrition is a process and should be investigated longitudinally and from a dynamic perspective (Herdina & Jessner, 2002) by looking at the subsystems of a multilingual language system which interact between themselves and with the surrounding environment. Hopefully, this cross-sectional study gives us a clearer picture of the language attrition of Russians living in Hungary and the role of extralinguistic variables which can serve as a starting point for designing such a longitudinal study. This leads us to another limitation of the study: the differences between monolinguals and bilinguals does not necessarily reflect the extent of attrition in the target group. Future research in language attrition should address these methodological issues.

7.1. Limitations

There are numerous limitations in this research. First of all, due to the impact of COVID-19, the data collection process was moved from face-to-face to online data gathering, using social media platforms like Viber, Facebook Messenger, WhatsApp and Google Forms.

Another limitation, which is present in almost all attrition studies (Schmid, 2011b), is the low number of participants (N=50) with heterogeneous backgrounds. Categorizing them into subgroups along the extralinguistic variables would make statistical analyses questionable considering the small number of participants in each group. This might explain why most studies find no links between the extralinguistic factors and attrition.

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APPENDICES

Appendix A. Social Personal background questionnaire

С помощью этой анкеты я хотел бы получить представление о личном опыте использования русского языка и изучения венгерского языка у русских, переехавших на жительство в Венгрию. Она состоит из 79 вопросов. Важно отметить, что не все вопросы относятся к Вам лично. Если Вы считаете, что определенный пункт не относится к Вам (например, когда вас просят рассказать об использовании языка ваших детей и у Вас нет детей), Вы можете вычеркнуть (пропустить) номер вопроса и перейти к следующему. Важно, чтобы Вы ответили на эти вопросы самостоятельно, потому что я заинтересован в *Вашем* использовании языка. Если вы не понимаете какой-то вопрос, пожалуйста, не стесняйтесь сообщить это мне. Принимаются любые ответы !

- 1) Когда Вы родились? 19
- 2) Вы: ■ мужчина ■ женщина
- 3) Где Вы родились : Деревня/Город:
Область/ Округ: Страна :
.....
- 4) Кто Вы по национальности?
- 5) На каком языке/диалекте Вы говорили, когда жили в СССР / России ?
 ■ стандартный русский
 ■ диалект, а именно:
- 6) Какое образование вы получили?
 ■ начальная школа
 ■ средняя школа:
 ■ высшее образование, а
именно:
 ■ университет
(степень):
- 7) Когда вы приехали в Венгрию (год)? 19
- 8) Какова причина Вашего переезда, и почему Вы выбрали Венгрию ?
 ■ Работа ■ работа супруга ■ супруг ■ другое, а именно:
.....

.....
.....

9) Помимо Венгрии, вы когда-нибудь жили в другой стране, кроме России, в течение более длительного периода времени (то есть более 6 месяцев)?

■ нет

■ менее 1 года в: (город) (страна)

■ 1 год или более в: (город) (страна)

.....

10) На каком языке(языках) Вы разговаривали перед поступлением в школу?

■ русский ■ русский и другие ■ другое

11) Вы посещали какие-нибудь занятия по изучению венгерского языка до приезда в Венгрию? (эти занятия должны быть в образовательной среде, например, в школе или подобном учебном заведении): ■ нет ■ да, менее 1 месяца ■ да, менее 3 месяцев ■ да, менее 6 месяцев ■ да, менее 1 года ■ да, больше 1 года

12) Получили ли вы дальнейшее образование, живя в Венгрии (это не должно быть связано с изучением языка)?

■ да, за (количество лет):

■ нет

13) Какой язык (языки) вы изучали в школе или профессионально?

...

.....
.....

14) Какой язык или языки вы изучали вне образовательной среды (например, вне школы или работы)?

.....
.....
.....
.....
.....

15) Какая у вас профессия? Если вы на пенсии, не могли бы вы указать свою последнюю профессию до выхода на пенсию?

.....
.....

16) Если бы у вас было несколько профессий, могли бы вы указать каждую из них в хронологическом порядке?

- 1СДо
- 2СДо
- 3СДо
- 4СДо

17) Вы когда-нибудь посещали классы” Российское наследие “ во время проживания в Венгрии ?

- да, в (году): 19 за период: месяц, часов в неделю
- нет

18) Вы когда-нибудь приезжали в Россию после переезда в Венгрию ?

- никогда
- редко
- регулярно, 1-2 раза в год
- регулярно, 3–5 раз в год
- регулярно, более 5 раз в

год

19) Если вы указали , что вы приезжали в Россию, не могли бы вы указать причину визита (Вы можете отметить более одного окна здесь)

- Из-за срочных семейных дел (например, свадьба или похороны)
- для посещения без особой причины
- по другой причине

20) Вы когда-нибудь ходили в церковь в Венгрии ?

- нет, никогда
- да, иногда
- да,
регулярно

21) Если вы указали, что ходите в церковь, не могли бы вы указать, на каком языке проводятся эти

службы? ■ RU ■ HU ■ RU & HU ■ другое

22) Как бы Вы оценили уровень владения венгерским языком до переезда

в Венгрию ? ■ нет ■ очень плохо ■ плохо ■ достаточно
хорошо ■ хорошо ■ очень

хорошо

23) В целом, как бы Вы оценили свое владение венгерским языком в настоящее время? ■ нет ■ очень плохо ■ плохо ■ достаточно хорошо ■ хорошо ■ очень хорошо

24) Как бы Вы оценили уровень владения русским языком до переезда в Венгрию ? ■ нет ■ очень плохо ■ плохо ■ достаточно хорошо ■ хорошо ■ очень хорошо

25) В целом, как бы Вы оценили уровень владения русским языком в настоящее время? ■ нет ■ очень плохо ■ плохо ■ достаточно хорошо ■ хорошо ■ очень хорошо

26) Как часто Вы говорите по-русски ? ■ редко ■ несколько раз в год ■ ежемесячно ■ еженедельно ■ ежедневно

27) Считаете ли Вы важным использовать русский язык ?

■ неважно

■ относительно неважно

■ не очень важно

■ важно

■ очень
важно

28) Считаете ли Вы важным, чтобы Ваши дети могли говорить и понимать по-русски ?

■ неважно

■ относительно неважно

■ не очень важно

■ важно

■ очень
важно

29) Каких друзей у Вас больше в Венгрии- русско- или венгеро- говорящих?

■ только венгеро-говорящие друзья

■ больше венгеро-говорящих друзей

■ одинаковое количество русско- и венгеро- говорящих друзей

■ больше русско-говорящих друзей

только русско-говорящие
друзья

30 Какая культура Вам больше по душе - русская или венгерская ?

- венгерская культура
- обе, но больше венгерская культура
- обе культуры одинаково
- обе, но больше русская культура
- русская культура

31) Вы чувствуете себя более комфортно, разговаривая
на русском или венгерском ? венгерский русский нет
предпочтений

32) Не могли бы вы уточнить свой ответ: почему Вы чувствуете себя более комфортно,
разговаривая на русском или венгерском, или почему у вас нет
предпочтений?

33) Каково Ваше семейное положение в данный момент? женат разведена /
разведен вдова / вдовец есть
друг холост

34) На каком языке (ах) разговаривал в детстве ваш (бывший)
супруг ? русский венгерский другое, а
именно:

35) Если ваш (бывший) супруг не родился в Венгрии , по каким причинам он или она
приехали в Венгрию ? Работа работа супруга супруг друг, а
именно:

36) Когда ваш (бывший) супруг приехал в Венгрию (год)? ... 19

37) Где вы встретились? RU HU другое, а именно :

.....
.....

38) Какой язык или языки Вы чаще всего используете при общении со своим (бывшим) супругом?

- только венгерский
- как русский так и венгерский, но в основном, венгерский
- как русский так и венгерский, без предпочтений
- как русский так и венгерский, но в основном, русский
- только русский
- другое или нет ответа

39) Какой язык или языки ваш (бывший) супруг чаще всего использует при общении с вами?

- только венгерский
- как русский так и венгерский, но в основном, венгерский
- как русский так и венгерский, без предпочтений
- как русский так и венгерский, но в основном, русский
- только русский
- другое или нет ответа

40) Какая профессия у Вашего (бывшего) супруга на сегодняшний день? Если Ваш (бывший) супруг вышел на пенсию, не могли бы Вы указать его / ее последнюю профессию до выхода на пенсию?

.....

41) У Вас есть дети? ■ нет ■ да, количество: Их имена:

.....

Возраст:.....

.....

42) Какой язык или языки вы чаще всего используете, когда говорите со своими детьми?

- только венгерский
- как русский так и венгерский, но в основном, венгерский
- как русский так и венгерский, без предпочтений
- как русский так и венгерский, но в основном, русский
- только русский

■ другое или нет
ответа

43) Какой язык или языки чаще всего используют ваши дети при разговоре с вами?

- только венгерский
- как русский так и венгерский, но в основном. венгерский
- как русский так и венгерский, без предпочтений
- как русский так и венгерский, но в основном, русский
- только русский
- другого или нет
ответа

44) У Вас есть внуки ? ■ нет ■ да, количество:

..... Их имена:

.....

Возраст

45) Какой язык или языки Вы чаще всего используете при общении с внуками?

- только венгерский
- как русский так и венгерский, но в основном, венгерский
- как русский так и венгерский, без предпочтений
- как русский так и венгерский, но в основном , русский
- только русский
- другое или нет
ответа

46) Какой язык или языки чаще всего используют Ваши знакомые, когда разговаривают с вами?

- только венгерский
- как русский так и венгерский, но в основном, венгерский
- как русский так и венгерский, без предпочтений
- как русский так и венгерский, но в основном, русский
- только русский
- другое или нет
ответа

47) Вы поощряете своих детей говорить по-русски ? ■ нет, никогда ■ да,
иногда ■ да, часто

48) Ходили ли когда-нибудь ваши дети на уроки

“Русское наследие “(например, в субботу)? да нет

49) Вы когда-нибудь исправляли ошибки в речи на русском языке у детей ? никогда очень редко иногда регулярно очень часто

50) Если Ваши дети не говорят и не понимают по-русски, Вы об этом сожалеете? не всегда не так часто не думаю об этом немного очень нет ответа

51) Вы часто общаетесь с родственниками и друзьями из России ? очень редко редко иногда часто все время

52) Как Вы поддерживаете связь с родственниками и друзьями из России ? телефон письма электронная почта другим способом, а именно:
.....
.....

53) Какой язык или языки Вы чаще всего используете , чтобы поддерживать связь с родственниками и друзьями из России ?

- только венгерский
- как русский так и венгерский, но в основном ,венгерский
- как русский так и венгерский, без предпочтений
- как русский так и венгерский, но в основном ,русский
- только русский
- другой или нет ответа

54) Как Вы думаете, русский язык играет важную роль в отношениях между вашими непосредственными членами семьи? не со всеми не очень вероятно не совсем очень важную нет ответа

55) У Вас появилось много новых друзей в Венгрии ? да нет

56) Какой родной язык у большинства этих людей? венгерский русский равно другой язык

57) Как вы познакомились с большинством этих людей?

- через Русский клуб или другую организацию
- через общего друга
- через работу или школу, где учатся дети

по-другому, а
именно:

58) Не могли бы Вы указать тех людей, с которыми вы чаще всего общаетесь, в следующей таблице? Эти люди могут жить в России или в Венгрии .С помощью этой таблицы мне хотелось бы узнать , какой язык Вы чаще всего используете в своей повседневной жизни: русский или венгерский . Вам не нужно указывать имя человека, если вы этого не хотите. Однако, я хотел бы попросить вас предоставить остальную часть запрашиваемой информации.

Имя (необязательно)	Этот человек живет в Венгрии или России?	Какой язык (языки) вы используете при общении друг с другом?	Как Вы познакомились с этим человеком?	Как давно Вы знаете этого человека?	Каковы Ваши отношения с этим человеком?

59) Не могли бы Вы в следующих таблицах указать, в какой степени вы используете венгерский (таблица 1) и русский (таблица 2) в предоставленных ситуациях? Вы можете просто поставить галочку. Если определенная ситуация не применима к вам (например, если у вас нет домашних животных), вы можете оставить поле пустым.

Я говорю по-венгерски	все время	часто	иногда	редко	очень редко
С родственниками					
С друзьями					
Домашним животным					
На работе					

В церкви
В магазинах
В клубах или
организациях

Я говорю по-русски

все время часто иногда редко очень редко

С
родственникам
и
С друзьями
Домашним
животным
На работе
В церкви
В магазинах
В клубах или
организациях

60) Вы когда-нибудь были членом русского клуба или организации в Венгрии ?

■ да, а именно (название организации и период членства):

.....
.....
.....
.....

■ нет

61) Являетесь ли Вы членом русского клуба или организации в Венгрии в данный момент?

■ да, а именно (название в организации):

.....
.....
.....
.....

■ нет

62) Испытывали ли Вы ностальгию по России ?

■ да, и больше всего мне не хватает

-
.....

■ нет

63) Вы когда-нибудь слушаете русские песни?

■ да ■ нет

64) Вы когда-нибудь смотрите российские телевизионные программы?

■ да ■ нет ■ я бы с удовольствием, но у меня нет к ним доступа

65) Вы когда-нибудь слушаете российские радиопрограммы?

- да нет я бы с удовольствием, но у меня к ним доступа

66) Вы когда-нибудь читаете русские газеты, книги или журналы?

- да нет

66b) Если Вы указали, что никогда не слушаете русские песни или радиопрограммы и не читаете русские газеты, книги или журналы, не смотрите российские телевизионные программы, не могли бы Вы объяснить, причину

?

.....

.....

67) Как вы думаете, ваш русский язык изменилось с тех пор, когда вы переехали в Венгрию?

- да, я думаю, что стал хуже
- нет
- да, я думаю, что стал лучше

68) Как вы думаете, Вы стали использовать больше или меньше русский язык после переезда в Венгрию?

- да, я думаю, что я меньше использую русский язык
- нет, я не думаю, что использую больше или меньше русский в настоящее время
- да, я думаю, что я больше использую русский

69) Вы когда-нибудь чувствовали себя некомфортно, разговаривая с русским человеком, который недолго живет в Венгрии?

- да, иногда нет, никогда

70) Если вы когда-либо чувствовали себя неловко в такой ситуации, укажите, относится ли это также к тому случаю, когда вы говорите по-русски с кем-то, кто, как и вы, долгое время жил в Венгрии?

- да нет

71) Вы считаете себя двуязычным человеком? Другими словами, Вы думаете, что владеете русским языком так же хорошо, как и венгерским?

- нет, я больше владею венгерским языком
- да
- нет, я больше владею русским языком

■ я не знаю, потому
что:.....
.....

72) Вам легче определить социальное положение/статус человека, когда он говорит по-русски или по-венгерски ?

- венгерский
- одинаково
- русский
- я не знаю, потому
что :

73) Как Вы относитесь к русским людям (например, к туристам), которые говорят на венгерском с сильным русским акцентом?

- это меня раздражает (нет)
- у меня нет проблем с этим (да)

74) Собираетесь ли Вы когда-нибудь вернуться в Россию?

- да, я бы очень хотел(а) вернуться в Россию
- нет, я не собираюсь когда-либо возвращаться в Россию
- я никогда не задумывался об этом

.....
.....
.....
.....

75) Если вы указали, что никогда не собираетесь возвращаться в Россию , можете ли вы объяснить, почему?

.....
.....
.....
.....
.....

76) Оглядываясь назад, вы думаете, что приняли правильное решение переехать в Венгрию ?

■ да

■ нет, если бы мне пришлось снова сделать выбор я бы не переехал(а), потому что:

.....
.....
.....
.....

■ Я не знаю, потому

что:
.....
.....
.....

76b) Не возражаете, если я связался бы с вашими родственниками в России (желательно братьями и сестрами), чтобы взять у них интервью о жизни с членом семьи за границей? Естественно, что вся эта информация будет рассматриваться конфиденциально. Если Вы не возражаете, не могли бы Вы указать имена ваших братьев и сестер, а также их адреса и номера телефонов?

.....
.....
.....
.....
.....
.....
.....
.....
.....

Personal background questionnaire

Name:

Date:

With this questionnaire I would like to get an impression of the personal background and language use of Russian emigrants in Hungary. It consists of 79 items. It is important to note that not all items may apply to you personally. Should you think that a certain item does not apply to you (for example when you are asked about the language use of your children and you don't have any children), you may cross out the number in front of that particular question and move on to the next. It is important that you answer these questions on your own, because I am interested in *your* language use. If you don't understand a certain question, please do not hesitate to ask me. There are no right or wrong answers!

- 1) What is your date of birth?19.....
- 2) Are you: male female
- 3) Where were you born: Village/Town:.....
County:.....Country:.....
- 4) What nationality do you have?
- 5) Would you say that you spoke a variety of Russian while you lived in the Russian or a dialect?
 standard Russian a dialect, namely:
.....
- 6) What is the highest level of education you have completed?
 primary school secondary school, level:
 higher education, namely:
 university, degree:
- 7) When did you come to Hungary (year)?19.....
- 8) Why did you emigrate and why to Hungary in particular?
 job partner's job partner other, namely:
.....
.....
.....

- 9) Apart from Hungary, have you ever lived in a country other than the Russia for a longer period of time (that is, more than 6 months)?
 no
 less than 1 year, in: (town).....(country)..... 1
 year or more, in: (town).....(country).....

- 10) What language(s) did you acquire before starting school?
 Russian Russian & other other

- 11) Did you attend any Hungarian classes before coming to Hungary? (this has to be in an educational environment, like a school or some similar institution):
 no
 yes, less than 1 month
 yes, less than 3 months
 yes, less than 6 months
 yes, less than 1 year
 yes, more than 1 year

- 12) Have you pursued further education while living in Hungary (this does not have to be language-related) ?
 yes, for (number of years):.....
 no

- 13) What language or languages did you learn professionally or at school?

- 14) What language or languages did you learn outside of an educational environment (so outside of school or work)?

- 15) What is your current profession? If you are retired, could you please indicate your last profession before retirement?

- 16) If you have had several professions, could you indicate each one of them in chronological order?
 1.....from.....until.....
 2.....from.....until.....
 3.....from.....until.....
 4.....from.....until.....

- 17) Have you ever attended Russian heritage classes while living in Hungary?
 yes, in (year): 19.....for the period of:months,.....hours a week
 no

- 18) Have you ever been back to the Russia since leaving for Hungary?

- never
- seldom
- regularly, 1-2 times a year
- regularly, 3-5 times a year
- regularly, over 5 times a year

19) If you have indicated that you have been back to the Russia, could you please indicate what the reason or reasons for such a visit were (you may tick more than one box here)?

- because of urgent family matters (such as a wedding or a funeral)
- to visit without a particular reason
- for another reason

20) Do you ever go to church in Hungary?

- no, never
- yes, sometimes
- yes, regularly

21) If you have indicated you go to church, could you please indicate in which language the services are held?

- HU RU HU & RU other

22) In general, how would you rate your Hungarian language proficiency before you moved to Hungary?

- none very bad bad sufficient good very good

23) In general, how would you rate your Hungarian language proficiency at present?

- none very bad bad sufficient good very good

24) In general, how would you rate your Russian language proficiency before you moved to Hungary?

- none very bad bad sufficient good very good

25) In general, how would you rate your Russian language proficiency at present?

- none very bad bad sufficient good very good

26) How often do you speak Russian?

- rarely few times a year monthly weekly daily

27) Do you consider it important to maintain your Russian?

- unimportant
- relatively unimportant
- not very important
- important
- very important

28) Do you consider it important that your children can speak and understand Russian?

- unimportant
- relatively unimportant

- not very important
- important
- very important

29) In general, do you have more Russian- or Hungarian-speaking friends in Hungary?

- only Hungarian-speaking friends
- both, but more Hungarian-speaking friends
 - as many Russian- as Hungarian-speaking friends
 - both, but more Russian-speaking friends
 - only Russian-speaking friends

30) Do you feel more at home with Russian or with Hungarian culture?

- with Hungarian culture
- with both, but more with Hungarian culture
- with both cultures, equally
- with both, but more with Russian culture
- with Russian culture

31) Do you feel more comfortable speaking Russian or Hungarian?

- Hungarian Russian no preference

32) Could you elaborate on your answer: why do you feel more comfortable speaking either Russian or Hungarian or why don't you have any preference?

.....

.....

.....

.....

33) What is your current marital status?

- married separated/divorced widow/widower
- with partner single

34) With what language(s) was your (ex)partner brought up?

- Russian Hungarian other, namely:

.....

35) If your (ex)partner was not born in Hungary, what were the reasons that he or she came to Hungary?

- job partner's job partner other, namely:

.....

.....

.....

36) When did your (ex)partner come to Hungary (year)?

...19.....

37) Where did you meet?

- NL CA other, namely:

.....

38) What language or languages do you mostly use when talking to your (ex)partner?

- only Hungarian
- both Russian and Hungarian, but mostly Hungarian
 - both Russian and Hungarian, without preference
 - both Russian and Hungarian, but mostly Russian
 - only Russian
 - other or no answer

39) What language or languages does your (ex)partner mostly use when talking to you?

- only Hungarian
- both Russian and Hungarian, but mostly Hungarian
 - both Russian and Hungarian, without preference
 - both Russian and Hungarian, but mostly Russian
 - only Russian
 - other or no answer

40) What is the current profession of your (ex)partner? If your (ex)partner is retired, could you please indicate what his or her last profession before retirement was?

.....

41) Do you have children?

- no yes, number:
- Their names are:.....
-and they are.....years old

42) What language or languages do you mostly use when talking to your children?

- only Hungarian
- both Russian and Hungarian, but mostly Hungarian
 - both Russian and Hungarian, without preference
 - both Russian and Hungarian, but mostly Russian
 - only Russian
 - other or no answer

43) What language or languages do your children mostly use when talking to you?

- only Hungarian
- both Russian and Hungarian, but mostly Hungarian
 - both Russian and Hungarian, without preference
 - both Russian and Hungarian, but mostly Russian
 - only Russian
 - other or no answer

44) Do you have grandchildren?

- no yes, number:
- Their names are:.....
-and they are.....years old

45) What language or languages do you mostly use when talking to your grandchildren?

- only Hungarian
- both Russian and Hungarian, but mostly Hungarian
- both Russian and Hungarian, without preference

- both Russian and Hungarian, but mostly Russian
- only Russian
- other or no answer

46) What language or languages do your grandchildren mostly use when talking to you?
 only Hungarian
 both Russian and Hungarian, but mostly Hungarian
 both Russian and Hungarian, without preference
 both Russian and Hungarian, but mostly Russian
 only Russian
 other or no answer

47) Do you encourage your children to speak Russian?
 no, never yes, occasionally yes, often

48) Did your children ever follow Russian heritage classes (Saturday classes for example)?
 yes no

49) Did /do you ever correct your children's Russian?
 never very rarely sometimes regularly very often

50) If your children do not speak or understand Russian, do you regret that?
 not at all not much no opinion a bit very much no answer

51) Are you in frequent contact with relatives and friends in the Russia?
 very rarely rarely sometimes frequently all the time

52) How do you keep in touch with those relatives and friends in the Russia?
 telephone letters e-mail another way, namely:

53) What language or languages do you mostly use to keep in touch with relatives and friends in the Russia?
 only Hungarian
 both Russian and Hungarian, but mostly Hungarian
 both Russian and Hungarian, without preference
 both Russian and Hungarian, but mostly Russian
 only Russian
 other or no answer

54) Do you think Russian plays an important role in the relationship between your direct family members?
 not at all not much probably a bit very much no answer

55) Have you made many new friends in Hungary?
 yes no

56) What is the mother tongue of the majority of these people?
 Hungarian Russian equal another language

57) How did you meet most of these people?

- through a Russian club or organisation
- through mutual friends
- through work or the children's school
- through another way, namely:

58) Could you please fill in those people that you are most frequently in touch with in the following table? These people can live in the Russia or in Hungary. I wish to see through this table which language you most frequently use in your daily life: Russian or Hungarian. You don't have to fill in the name of the person if you do not wish to. I would like to ask you, however, to provide the rest of the information asked for.

Name (optional)	Does this person live in Hungary or the Russia?	What language(s) do you use when communicating with each other?	How did you meet this person?	How long have you known this person?	What is your relationship with this person?

59) Could you, in the following tables, please indicate to what extent you use Russian (table 1) and Hungarian (table 2) in the domains provided? You may simply tick the box. If a certain domain is not applicable to you (for example, if you don't have any pets), you may leave the box empty.

I speak Russian	all the time	frequently	sometimes	rarely	very rarely
With relatives					
With friends					
To pets					
At work					
In church					
In shops					
At clubs or organisations					

I speak Hungarian	all the time	frequently	sometimes	rarely	very rarely
With relatives					
With friends					
To pets					
At work					
In church					
In shops					
At clubs or organisations					

- 60) Have you ever been a member of a Russian club or organisation in Hungary?
 yes, namely (name of the organisation and period of membership):
.....
 no
- 61) Are you now a member of a Russian club or organisation in Hungary?
 yes, namely (name of the organisation):
.....
 no
- 62) Do you ever get homesick in the sense of missing the Russia?
yes, what I then miss most is/are:
.....
 no
- 63) Do you ever listen to Russian songs?
 yes no
- 64) Do you ever watch Russian television programmes?
 yes no I would love to, but I can't get them
- 65) Do you ever listen to Russian radio programmes?
 yes no I would love to, but I can't get them
- 66) Do you ever read Russian newspapers, books or magazines?
 yes no

66b) If you have indicated that you never listen to Russian songs or radio programmes, nor read Russian newspapers, books or magazines and that you don't watch Russian television programmes, could you indicate why you think that is?

67) Do you think your Russian language proficiency has changed since you moved to Hungary? yes, I think it has become worse
 no
 yes, I think it has become better

68) Do you think you use more or less Russian since you moved to Hungary?
 yes, I think I use less Russian
 no, I don't think I use more or less Russian now
 yes, I think I use more Russian

69) Do you ever feel uncomfortable when speaking Russian with a Russian person who has never spent a considerable amount of time in an Hungarian-speaking country?
 yes, sometimes no, never

70) If you ever do feel uncomfortable in such a situation, could you indicate whether this is also the case when you speak Russian with someone who, like you, has lived in Hungary for a long time?
 yes no

71) Do you see yourself as bilingual? In other words, do you think you are as proficient in Russian as in Hungarian?
 no, I'm more proficient in Hungarian
 yes
 no, I'm more proficient in Russian
 I don't know, because:.....

72) Are you better at guessing a person's social position/status when they speak Russian or Hungarian?
 Hungarian
 equal
 Russian
 I don't know, because:
.....

73) How do you feel about Russian people (tourists for example) who speak Hungarian with a heavy Russian accent?
 that annoys me (no) I don't have any problems with that (yes)

74) Do you ever intend to move back to the Russia?
yes, I would eventually like to move back to the Russia no, I

don't intend to ever return to the Russia
really given it much thought

I have never

.....
.....
.....
.....

75) If you have indicated that you do not intend to ever move back to the Russia, can you explain why you feel that way?

.....
.....
.....
.....

76) Looking back, do you think you have made the right decision in moving to Hungary?

yes no, I wouldn't do it again if I had to make the choice again, because:

.....
.....
 I don't know, because:.....
.....

76b) Would you mind if I were to contact your relatives in the Russia (preferably siblings) to interview them about life with a family member abroad? Naturally, all of this information will be treated confidentially. If you do not mind, could you please indicate the name(s) of your siblings as well as their addresses and phone numbers?

.....
.....
.....
.....
.....

Appendix B. Russian shorter questionnaire

Ваше имя:.....

1) Когда Вы родились? 19

2) Вы: •мужчина •женщина

3) Где Вы родились : Деревня/Город:
Область/ Округ: Страна :
.....

4) Кто Вы по национальности?

5) На каком языке/диалекте Вы говорите?

• стандартный русский

•диалект, а именно:

6) Какое образование вы получили?

•начальная школа

•средняя школа:

•высшее образование, а

именно:

7)Вы когда-нибудь жили в другой стране, кроме России, в течение более длительного периода времени (то есть более 6 месяцев)?

•нет

•менее 1 года в: (город) (страна)

•1 год или более в: (город) (страна)
.....

8)На каком языке(языках) Вы разговаривали перед поступлением в школу?

•русский •русский и другие •другое

9) Какой язык(языки) вы изучали в школе или профессионально?

.....

.....

.....

10) Какой язык или языки вы изучали вне образовательной среды (например, вне школы или работы)?

.....

.....

.....

.....

.....
.....
11) Какая у вас профессия? Если вы на пенсии, не могли бы вы указать свою последнюю профессию до выхода на пенсию?

12) Если бы у вас было несколько профессий, могли бы вы указать каждую из них в хронологическом порядке?

1СДо

2СДо

3СДо

4СДо

13) В целом, как бы Вы оценили уровень владения русским языком в настоящее время? •нет •очень плохо •плохо •достаточно •хорошо •очень хорошо

14) Как часто Вы говорите по- русски ? •редко •несколько раз в год •ежемесячно •еженедельно •ежедневно

15) Считаете ли Вы важным использовать русский язык ?

•неважно

•относительно неважно

•не очень важно

•важно

•очень

важно

16) Считаете ли Вы важным, чтобы Ваши дети могли говорить и понимать по-русски ?

•неважно

•относительно неважно

•не очень важно

•важно

•очень важно

17) Каково Ваше семейное положение в данный момент? •женат •разведена /

разведен •вдова / вдовец • есть

друг •холост

18) Какой язык или языки Вы чаще всего используете при общении со своим (бывшим) супругом?

•только диалект

- как русский так и диалект, но в основном, диалект
- как русский так и диалект, без предпочтений
- как русский так и диалект, но в основном, русский
- только русский
- другое или нет
ответа

19) Какой язык или языки ваш (бывший) супруг чаще всего использует при общении с вами?

- только диалект
- как русский так и диалект, но в основном, венгерский
- как русский так и диалект, без предпочтений
- как русский так и диалект, но в основном, русский
- только русский
- другое или нет
ответа

20) Какая профессия у Вашего (бывшего) супруга на сегодняшний день? Если Ваш (бывший/бывшая) супруг(а) вышел на пенсию, не могли бы Вы указать, какой была его или ее последняя профессия до выхода на пенсию?.....

21) У Вас есть дети? нет да, количество: Их имена:

.....

.....

Возраст:.....

.....

22) Какой язык или языки вы чаще всего используете, когда говорите со своими детьми

- как русский так и диалект
- как русский так и диалект без предпочтений
- как русский так и диалект, но в основном, русский
- только русский
- другое или нет
ответа

23) Какой язык или языки чаще всего используют ваши дети при разговоре с вами?

- только диалект
- как русский так и диалект
- как русский так и диалект, без предпочтений
- как русский так и диалект, но в основном, русский
- только русский
- другого или нет
ответа

24) У Вас есть внуки ? нет да, количество:

.....Их

имена:.....

Возраст

25) Какой язык или языки Вы чаще всего используете при общении с внуками?

- только диалект
- как русский так и диалект, но в основном, русский
- как русский так и диалект, без предпочтений
- как русский так и диалект, но в основном , русский
- только русский
- другое или нет ответа

26) Какой язык или языки чаще всего используют Ваши знакомые, когда разговаривают с вами?

- только диалект
- как русский так и диалект, но в основном, диалект
- как русский так и диалект, без предпочтений
- как русский так и диалект, но в основном, русский
- только русский
- другое или нет ответа

27) Вы поощряете своих детей говорить по-русски ? нет, никогда да, иногда да, часто

28) Каким(и) иностранным(и) языком(ами) владеете Вы?

.....

.....

29) Хотели бы Вы, чтобы Ваши дети изучали иностранный язык?

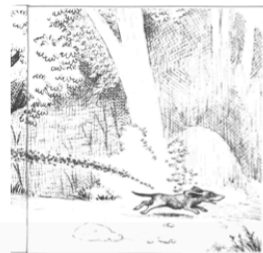
да нет

какой:.....Каким(и) иностранным(и) языком(ами) владеете Вы?

.....

.....

Appendix C. "Frog, where are you?"





Appendix D. Future tense formation task

Задание: заполнить пропуски глаголом в будущем времени.

Task: fill in the gaps with a verb in a future tense

- Сейчас черешня дорогая, но уже через две недели _____.

Now sweet cherries are expensive, but in two weeks _____.

- Кисель пока горячий, подожди немного, он скоро _____.

Kissel is still hot, wait a bit, it will be _____ soon.

- Я включила бойлер, вода скоро _____.

I turned on the boiler, the water will soon _____.

- Наш холодильник уже не новый, но он _____ еще лет десять.

Our refrigerator is no longer new, but it has been _____ for another ten years.

- Не уноси журнал, я _____ его попозже.

Don't take the magazine away, I _____ it later.

- Я пропустила сегодня новую серию сериала, завтра _____ повтор.

I missed a new episode of the series today, tomorrow _____ repeat.

- Начальник сейчас в командировке, я _____ с ним о новом проекте на следующей неделе.

The boss is on a business trip now, I _____ with him about a new project next week.

- Она сегодня получила письмо от подруги, завтра _____ ей ответ.

She received a letter from a friend today, tomorrow _____ her answer.

- Если я буду есть выпечку каждый день, я скоро _____.

If I eat pastries every day, I will _____ soon.

- Я никак не могу найти книжку, которую мне нужно вернуть в библиотеку, еще завтра _____.

I can't seem to find the book I need to return to the library tomorrow _____.