Sustainable bilingualism and language shift
Longitudinal research in Romanian–Hungarian bilingual Kétegyháza (Hungary)

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Abstract: In this paper, I introduce the longitudinal method in general, and more specifically, the method applied in a two-decade-long language shift research project conducted in a Romanian–Hungarian bilingual village, Kétegyháza (hereinafter LongBiLing: longitudinal study on bilingualism). I will primarily present the language choice changes occurring in the first decade (1990–2001) but I will also give a short review of the findings comparing the two decades. The aim of the project is to find out at what stage the Romanian–Hungarian language shift process is in the Hamers and Blanc’s (1989) unidimensional model of language shift and to what extent the process can be considered gradual (Mesthrie 2001). In a previous article I sought to find out in which bilingual national minority (out of the six) in Hungary sustainable bilingualism was the strongest (Borbély 2015). In this paper, I discuss language use domains (25 language choice situations) in a local community of Hungary’s Romanian national minority investigated with a longitudinal method. The aim was to learn about the differences among the linguistic domains in order to find out in which domain bilingualism was the most sustainable.

Keywords: sustainable bilingualism; language shift; longitudinal research; language choice; Hungary’s Romanian bilingual national minority

Language shift: the study of change in progress vs. longitudinal research

Language shift, as Coulmas (2005, 164) pointed out, “is always in the direction of the language of greater utility”. When studying language shift longitudinally, socio-economic changes must also be investigated that affect the verbal repertoires of speakers (Gumperz 1982, 44). Factors influencing language shift at the beginning of the 21st century are generally economic, political, ideological, ecological and cultural, as summed up by Wolfram:

1 Coulmas (2005, 164) makes it clear that “utility is an economic notion which has been invoked in the analysis of language shift and other macro-sociolinguistic processes”.

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“Taxonomies of the causes for language endangerment and death (e.g., Grenoble and Whaley 1998, based on a typology of minority languages by Edwards 1992) generally include both macro-variables referring to broader situations external to the community and micro-variables relating to specific factors affecting a particular speech community. On a macro-level, for example, general economic conditions and the emergence of telecommunications technology may affect different language groups in varied situations, whereas on a micro-level, the specific local economy and particular patterns of telecommunicative access impact the everyday life of the speech community in a distinctive way. Most inventories of language endangerment include economic, political, ideological, ecological, and cultural factors.” (Wolfram 2002, 767)

In her groundbreaking work on language shift, Gal (1979, 17) claims: “the process of shift, once it starts, is very much the same as other kinds of linguistic change. It consists of the socially motivated redistribution of synchronic variants to different speakers and different social environments”. Concerning the mechanism of linguistic changes, it is essential to determine the time-dimension of the current changes based on data collected in the community in order to be able to describe the processes. Labov (1994, 73) claimed that

“it is obvious that distributions across age levels might not represent change in the community at all, but instead might represent a characteristic pattern of ‘age-grading’ that is repeated in every generation (Hockett 1950). Many well-established sociolinguistic variables exhibit age-grading, where adolescents and young adults use stigmatized variants more freely than middle-aged speakers, especially when they are being observed. Given a clear age distribution in apparent time, we have the problem of interpreting this result: Does it represent change in progress or not?”

According to Labov, there are two basic approaches to the problem of accumulating real time data: first, the search of relevant literature dealing with the community in question and comparing earlier findings with current ones (see reviewing the past); second, the return to the community after a lapse of time to repeat the same study (see repeating the past) (Labov 1994, 73–74).

In her article which aims to develop the theoretical and methodological aspects that are present in studies on sociolinguistic variation discussing the notions apparent time and real time, Turell points out:

2 A similar approach is suggested by Gal: “Since historical records reveal that the present pattern used by older speakers is in fact an older pattern, it is possible to reconstruct the process of change in patterns of language choice by taking age-correlated differences in synchronic patterns as a surrogate for repeated sampling in real time” (Gal 1979, 17).
The notions of apparent time and real time are not specific to the more recent studies on sociolinguistic variation and of change in progress. In fact, they have been present in the linguistics literature since the early days of the structuralists (Bloomfield 1933, Hockett 1950) and especially since the restructuring known as the Change of Paradigm: Weinreich (1953); Herzog, Labov and Weinreich (1968). For Hockett (1950), for example, differential distribution of use of a given variable across different age groups might not represent any change in the variety of a particular speech community, and instead might represent a pattern typical of age grading, repeated generation after generation.” (Turell 2003)

Since 1970, the apparent time method has been the usually applied means of investigating ongoing linguistic changes. A study working with apparent time provides a comparison of the language use of various age groups within the same community. As the outcome of the project, the variability patterns of the differences between various age groups will come to light, which will enable us to predict changes in the future. As a result, the dimension of apparent diachrony can be established. “As real diachrony involves a link from the present to the past, apparent diachrony tries to reach from the present to the future (see, e.g., Labov, 1995: 43–72)” (Nahkola & Saanilahti 2004, 75). Language shift, as a linguistic change occurs over time, in a specific time interval (which varies from community to community), for this reason, time is an important factor in language shift research, and the differentiation between real and apparent time is very significant when investigating linguistic changes; real time refers to calendar time. The actual length of the language shift process in a community can be established by finding out when it began and when it ended. As language shift normally occurs in communities where bilingualism is not stable but temporary, the beginning of the process is often marked by the appearance of bilingualism while its end is marked by the disappearance of bilingualism in the community. The fear that bilingualism threatens the use of the first language and harms its status is rooted in this phenomenon. Language shift research projects have mostly been conducted using the apparent time method (e.g., Gal 1979; Tsitsipis 1998; Borbély 2001). Lieberson (1980, 13) claims that “the ideal solution for studying the dynamics of language behavior calls

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3 I have heard the opinion (or in a better case scenario, the question) that bilingualism has harmful effects in various bilingual communities from people with various educational backgrounds several times: it is believed by Romanian–Hungarian bilingual individuals with a Hungarian primary school qualification as well as by a Romanian–Russian bilingual professor in the Republic of Moldova, whereas in bilingual communities, monolingualism may cause for example, communication difficulties as the member of the community may be speaking the language that people around them do not understand.
for surveys conducted at two or more different times in the same setting” (cited also in Gorter 1987, 4).

The longitudinal method is a collective term: it includes numerous research techniques, which I will describe below and will summarize in Figure 1. Longitudinal studies are observational research projects performed over a period of years or even decades, and allow social scientists and economists to study long-term effects in a human population (Shuttleworth 2009). Two classification systems are given by Hua and David to demonstrate the boundaries of longitudinal studies. In the first system the main classificatory principle of studies is whether the subjects studied at different times are the same or different, and the data are collected based on three methods (see trend, panel or cohort studies). In the other system the focus is on the number of times data are collected from the participants (see repeated measures or time series). A trend study samples different groups of people from the same population at different points in time. A panel study takes the same sample of speakers at different points in time, while a cohort study examines the same groups of people over time. Studies in which data are collected twice or just a few times are repeated measures and those in which data are collected many times are time series (Hua & David 2008, 94–95). Chambers (2009, 207–211, based on Yoneda 1993) describes the real time study investigating the language changes in Japan: the National Language Institute in Tokyo conducted dialect surveys in the northern city of Tsuruoka at 20-year intervals 1950, 1971, and 1991, under the direction of Kiyoshi Egawa. The method was the same each time: the fieldworkers interviewed subjects individually for 40 minutes guided by a questionnaire that ensured comparable data from all of them. The time series method of longitudinal research is often applied when childhood bilingualism is explored, e.g., to investigate the individual (parent–child) language use. These research projects may cover months or even years. For instance, Lanza (2004) examines the simultaneous acquisition of Norwegian and English by two first-born children born to two American-Norwegian couples with the longitudinal method.

Longitudinal case studies are conducted if individuals are investigated in their natural environment over a specific period of time. In these projects, we normally rely on qualitative data, but quantitative data, which

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4 Eckert (1997, 153) argues that a trend study with an age-graded sample is the only kind that unequivocally show change in progress as it shows successive cohorts at each life stage. A panel study is the only kind that can unequivocally show change in the individual lifetime, as it sees the same people in different life stages. Trend studies, however, can yield convincing evidence of both kinds of change.
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Figure 1: Longitudinal design

can be combined and complementary, are also essential. Shuttleworth (2009) describes the difference by stating that only measurable data are collected and analyzed in quantitative research, while qualitative research focuses on gathering of mainly verbal data rather than measurements. The collected information is then analyzed in an interpretative manner, subjective, impressionistic or even diagnostic. Longitudinal linguistic research can also apply to monolingual (Nahkola & Saanilahti 2004) or bilingual
(multilingual) communities and/or individuals (Gorter 1987). They can be carried out by the same researcher, which obviously means a shorter interval than projects that are taken over and repeated by another researcher after some decades (see (i), (ii) below). Naturally, if the same researcher conducts the investigation, it will be easier to create the same conditions and circumstances (see (iii), (iv) below).

When reading literature on the effects of real-time studies, we can find linguistic studies going back even a hundred years. Labov, for example, described four real-time replication studies (1994, 85–98) from a sociolinguistic perspective:

(i) The earliest and best-known trend study – by Labov – was carried out not in a city but in the small village of Charmey in the Suisse Romande: Hermann (1929) returned to the village to repeat the work that Gauchat had carried out from 1899 to 1904 (Labov 1994, 85).


(iii) In 1967–71, Cedergren carried out a sociolinguistic study of the Spanish in Panama City (Cedergren 1973) (Labov 1994, 94).

(iv) Trudgill’s study of the English city of Norwich was carried out in 1968 (Trudgill 1974). In 1983, Trudgill (1988) returned to Norwich and conducted a restudy but with a somewhat different method from those mentioned above in (i)–(iii) (Labov 1994, 97).

Just to mention some other longitudinal research projects, Steinsholt studied the linguistic changes of 30 years in Hedrun in Norway (cited in Nordberg & Sundgren 1998). In 1995 Sundgren started working on a project (Continuity and change in present-day Swedish: Eskilstuna revisited), which investigated variation and change from a sociolinguistic viewpoint and compared the data with a similar study conducted by Nordberg a generation before (in 1967–1968), in the framework of which he recorded the speech of 83 individuals. In 1996, Sundgren prepared the recordings for the new investigations. The subjects in both corpora are natives of Eskilstuna, a medium-sized town situated 120 kilometers west of Stockholm (Nordberg & Sundgren 1998; Sundgren 2001). In the early 1970s, Paunonen (1996) conducted one of the first urban sociolinguistic study (with 96 subjects recorded) in Helsinki; the restudy was carried out in the early 1990s (29 of the original speakers were re-interviewed). Gorter (1987) and his colleagues conducted two major surveys in Friesland with a thirteen-year interval. Lane (2010) explores the Kven community with the longitudinal method: she investigates language shift comparatively by conducting in-
Sustainable bilingualism is the type of bilingualism which demonstrates that it is not simply a long-term stationary phenomenon involving two languages, but rather a diverse, continuously and dynamically changing process in which Language A or Language B prevails and which can occur only under specific circumstances before the completion of the language shift both at an individual and a community level. Thus, by sustainable bilingualism I refer to the various modes of bilingualism before the completion of the language shift process. My book (Borbély 2014) discussed the bilingualism of national minorities in Hungary – more specifically, their functional use and their speakers’ proficiency as well as the attitudes related to them – in three dimensions: (1) the communities and/or speakers’ groups (by age and gender); (2) language use domains (and language choice situations); and (3) real-time investigations (10 years).

The results of the comparative study in six bilingual national minority communities and the longitudinal study in Romanian-Hungarian bilingual settlements provide a way to model sustainable bilingualism (see Figure 2). The Sustainable Bilingualism Model (SBM) is based on relativity. In this model, conclusions can be drawn about the sustainability of bilingualism. In Hungary, real-time research was launched at the end of the 20th century. Kontra pointed out in 2003 that there was only little linguistic literature describing real-time studies, among the few existing ones are Végh 1990 and Borbély 2001 (Kontra 2003, 61). Since then, other research projects have been published: The Nyiregyháza Dialectology Research Centre has been performing longitudinal studies in the field of geolinguistics since 1987 (P. Lakatos 2002). Gal’s 1974 research investigation in Oberwart was repeated by Bodó (2012). The data collection through the questionnaire of Hungarian National Sociolinguistic Investigation (MNSZV) was repeated in Budapest 17 years later, in 2005 (see http://www.nytud.hu/oszt/elonyelv). The most significant endeavor regarding Hungarian dialectology, the fieldwork for the New Hungary Language Atlas is also now an ongoing project (Kiss 2006; http://umnya.elte.hu).
by making comparisons within the same category. Such categories are as follows:

– bilingual communities (e.g., national minorities in Hungary, such as Germans vs. the Boyash, Slovaks vs. Romanians, Roma vs. Serbs),
– settlements of a single national minority (e.g., Kétegyháza, where the number of Romanian inhabitants is under the half part of the village population vs. Méhkerék, where almost all inhabitants of the village are Romanian),
– language use domains (situations) in a language community (at home vs. at the office),
– speakers’ generations (e.g., youth, the middle-aged, and the elderly),
– speakers in the same generation.

SBM is integrated in Borbély (2014) by profoundly studied linguistic behaviors such as language choice, proficiency and attitudes but is also open for additional aspects (such as language ideologies, etc., which are, however, not studied in the book). In this model, languages of bilingual communities must be of equal status regarding language choices, proficiency and attitudes. In SBM $L_x$ and $L_y$ are applied to the following language pairs: Boyash–Hungarian, German–Hungarian, Romani–Hungarian, Romanian–Hungarian, Serbian–Hungarian, and Slovak–Hungarian. The book also discussed the varieties of $L_x$ (where relevant) in the German community in Tarján, the Romanian of the community in Kétegyháza, the Serbian of the community in Pomáz, and the Slovak in the community in Tótkomlós, and compared the regional varieties spoken in Hungarian with the standard varieties of Germany, Romania, Serbia and Slovakia. In SBM within $L_x$ the varieties are denoted as $a + b [L_{x(a+b)}]$. SBM applies only to linguistic aspects, social and community aspects are not included in it.

The linguistic constraints of SBM are as follows:

– The frequency of the use of languages (including their varieties) is sustainable among generations and in different language choice situations.
– The proficiency of languages (including their varieties) is in correlation with the sustainable and frequent use of languages (including their varieties).
– The attitudes are positive towards both languages (including their varieties).

$^5$ See also these symbols and abbreviations in the language shift model of Hamers and Blanc.
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I. Ideologies protect the use, fluency and attitudes towards both languages (including their varieties) and bilingualism.

This paper aims to identify the differences among the domains (e.g., home or work) in order to find out in which domain bilingualism is the most sustainable.

Figure 2: The Sustainable Bilingualism Model (SBM), based on longitudinal and comparative analyses carried out in Hungary’s six national minorities (Borbély 2014, 267)

The LongBiLing Research design

In Kétegyháza (Romanian written form: Chitighaz, Romanian spoken form: Tit’ihaz), the project carried out in 1990 reflects a certain stage in the language shift process of the Romanian community (cf. Borbély 2001). In the perspective of a whole historical period experienced by the
community, it only reflects half a year. Although the study concentrates on the description and analysis of the changes that occurred in the course of a decade, I do not regard the language shift phenomena observed in Kétegyháza either in 1990 or 2000/2001 as two stationary states. What can be recorded from the changes of a decade of the language shift process? Szilágyi N. (2004, 135) stated that: “For diachronic investigations, as they explore change, it is more advantageous to take the data of a longer period into account, since in these are the differences between the former and later phenomena the most striking. This, however, does not mean that no diachronic investigation can be conducted based on the data of a short period of time, as it is not defined by the investigation of longer periods but by the investigation of change”.6 Thus, the data processing contributes to clarifying whether a decade is enough to record the changes in real time (typical of the language shift process).

LongBiLing investigates the Romanian–Hungarian language shift with sociolinguistic methods working with the theory that linguistic variability and change can only be interpreted within a social context (see e.g., Chambers 2009; Fishman 1970; Kontra 2003; Labov 1994), both in majority and minority communities. It is an important task of the project to find out what circumstances facilitate the sustainability of bilingualism. I use the term **sustainable bilingualism** (Borbély 2014, 92; 2015) as a type of bilingualism in addition to **stable bilingualism**, and **unstable bilingualism**. This is a reflection to the critique of Gal who claimed that “the search for the causes of language shift has been unsuccessful first because the distinction between stable and unstable bilingual communities is less useful than some conception of the process by which stability and shift occur” (Gal 1979, 3).

The theoretical framework of my research project was provided by Hamers and Blanc’s (Hamers & Blanc 1989, 176; Borbély 1996, 27) uni-dimensional model of language shift (see Figure 3). Taking the group as a whole, with its different generations and social status categories, Hamers and Blanc can represent the process of language shift on a continuum ranging from unilingualism in the minority language at the one end to unilingualism in the majority language at the other. In between – as Hamers and Blanc (1989, 176) argued, “we have different levels of bilinguality and bilingualism, from dominant in L1 to dominant in L2, with a stage of relative balance between the languages half way along”. While processing the results of the first Kétegyháza language shift research project carried out in 1990 (see T1 below) with the apparent time method, I somewhat modified

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6 All Hungarian language sources quoted in this paper are my translations.
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Figure 3 (Borbély 2001, 35) by inserting a new phase between phases 2 and 3 of the Hamers and Blanc’s model (see Figure 4). The new phase reflects a stage in the language shift process which has the most balanced bilingual speakers ($L_x = L_y$). Hamers and Blanc do not refer to this phenomenon in the figure of the unidimensional model but mention it in its description (see above).

![Unidimensional model of language shift (Hamers & Blanc 1989, 176)](image1)

Figure 3: Unidimensional model of language shift (Hamers & Blanc 1989, 176)

In the revised version of their 1989 volume, Hamers and Blanc modified their unidimensional model of language shift (2000/2003, 297), in which they illustrated the stage of balanced bilingualism and completed it also with regard to the various generations: “the first generation is still monolingual in $L_x$, while the last is already monolingual in $L_y$. It is important to note that, as we move along the continuum, $L_x$ does not remain the same but its domains of use, that is, its functions and forms, change in contact with those of $L_y$; $L_{x1}$, $L_{x2}$, $L_{x3}$ etc.” (idem.) (see Figure 5).

![Unidimensional model of language shift (Hamers & Blanc 2000/2003, 297)](image2)

Figure 5: Unidimensional model of language shift (Hamers & Blanc 2000/2003, 297)

In my project, I aimed to explore whether in the Kétegyháza community there had been a phase in the bilingual process where the majority or the entire community understood and used both Romanian and Hungarian to the same extent.

Concerning the features of language shift investigation, Gumperz (1982) claims that linguistic characteristics or variables must be brought to the surface which separate the successive generations of speakers and which can be interpreted as the result of language change (ibid., 40). Sociologists...
and sociolinguists measure the extent of the disappearance of a language by observing the relative frequency of language use in certain domains (Fishman 1966, 426). The longitudinal study of the Romanian–Hungarian language shift process is primarily an "explorational" investigation (see Kontra 2003, 23), as, among others, the following research topics are included in it: the description of the regularity of language choice reflecting gender and generation differences; the language skill differences of the two languages in various age groups. Besides language shift, dialect death is also a topic of the LongBiLing research project, as language extinction is not an automatic consequence of language shift but definitely the death of a dialect.

The basic question of LongBiLing is: how does bilingualism work in a community where language shift is taking place? More specifically, I seek to answer the following research questions:

(1) Has the Romanian–Hungarian bilingualism ever had a stage when the entirety or the majority of the community understood and spoke both languages to the same extent? Could this phenomenon apply only to a small part of the community, one or two generations or a certain group (e.g., professional people)?

(2) In which language use domains (situations) is sustainable bilingualism the most characteristic?

(3) Do real time data confirm the generational change and thus the stability regarding individuals and the variability and the change regarding the community? In other words, do we interpret generational change while not excluding individual variability (see the model by Labov 1994, 83)?

The times of the three studies were: 1990 (Time one = T1); 2000/2001 (Time two = T2); and 2010/2011 (Time three = T3). The oldest of the subjects was born in 1903 (T1), the youngest subjects were born in 2000 (T3). In this sense, the real-time period of the research covers 20 years, and the apparent-time period is nearly a century. The pool of subjects consists of all adult and child samples in the study. When selecting the adult sample of T1, the primary criterion was that all subjects should

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7 There are research projects on the disappearance of Slovak dialects in Hungary (e.g., Gyivicsán 2003; Uhrín 2007; Tuska 2009; Zsilák 2010) on German speakers in Hungary (cf. Erb & Knipf 1999; Bindorffer 2001; Erb 2007), as well as in Boyash and Roma (Réger 1979; Kemény & Janky 2003; Pálmainé Orsós 2007; Bartha 2007), Bulgarian (Menyhárt 2007) and Serbian (Borbély 2014) communities.

8 I will discuss this research issue in another paper.
be Romanian–Hungarian bilinguals and that they were ready to give a recordable interview in Romanian. In other words, the adult sample represents the population of the Romanian community that were bilingual and at the time of the first study (1990) were willing and able to use Romanian. Because of the language shift itself, it is quite problematic to identify the population of the Kétegyháza Romanian community, and in this situation, it is difficult to describe who belongs to it. Considering only the three criteria of ethnic background of the parents, Romanian language use and the belonging to national minority, the following questions can be formulated: Can we include individuals whose parents are/were already Romanian–Hungarian bilinguals, but (s)he himself/herself does not speak Romanian anymore?; Or can we consider somebody else whom I regard as Romanian, but (s)he does not see himself/herself as a member of the community? Is someone a member of the population who speaks Romanian but does not consider himself/herself as a part of the community or another person who does not speak the language but claims to be the member of the Romanian minority community? For this reason, the random sampling is impossible in such a population.

The differences between the population and the sample are demonstrated by means of two tables (population – Table 1, sample – Table 2). While, the number of the speakers with Romanian mother tongue in the population (Romanians in Kétegyháza) decreased by 40% between 1990 and 2001 according to census data in the sample pool, there was only a 1% drop in the above-mentioned period. As to belonging to the Romanian national minority, there was a 56% percent decrease in the population in a decade, in the sample pool there was a 10% increase. It is worth noting regarding these data that between 1990 and 2001 the language shift in the Kétegyháza Romanian community was more momentous than ever before (see Table 1: 40%, 56%). The reason for this – not reflected in the sample – is that those Kétegyháza residents who claimed to be Romanians and gave an interview in Romanian did maintain their Romanian ethnic

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9 There are no Romanians present in the population who do not speak Hungarian to some extent in addition to Romanian.

10 The census data do not authentically show the actual numbers of minority groups in Hungary, as the census taking methods are always determined – as Petrusán (1994, 315) notes – “by the political philosophy of the given period”. For this reason, Csobai (1994, 322–324) suggested to rely on the statistics of other disciplines in the historical research of minorities (e.g., church registers). It also results in unreal data, if the participants of the census are not aware of the identity mode categories used in the questionnaire.
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and linguistic identities, as opposed to most of the Kétégyházán Romanians. The data from 1990 are therefore distorted favorably\(^\text{11}\) and consequently, this also applies to the data of T2 and T3.

**Table 1:** Population: number of speakers with Romanian mother tongue and number of members of the Romanian national minority in Kétégyházá according to the census data of 1990 and 2001 (source: Hungarian Central Statistical Office)

<table>
<thead>
<tr>
<th>Year</th>
<th>Speakers with Romanian mother tongue</th>
<th>Members of the Romanian national minority</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>1,786</td>
<td>1,488</td>
</tr>
<tr>
<td>2001</td>
<td>1,075</td>
<td>660</td>
</tr>
<tr>
<td>Extent of the change</td>
<td>(-711) ((-40%))</td>
<td>(-828) ((-56%))</td>
</tr>
</tbody>
</table>

**Table 2:** Sample: answers to the questions *Which language did you learn to speak as a child?/*Are you Romanian? in 1990 and 2000/2001

<table>
<thead>
<tr>
<th>Year</th>
<th>Speakers with Romanian mother tongue</th>
<th>Members of the Romanian national minority</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>88%</td>
<td>73%</td>
</tr>
<tr>
<td>2000/2001</td>
<td>87%</td>
<td>83%</td>
</tr>
<tr>
<td>Extent of the change</td>
<td>(-1%)</td>
<td>(+10%)</td>
</tr>
</tbody>
</table>

In 1990 I could select from the population an adult sample of three bilingual generation groups. However, after twenty years, due to the process of language shift it was impossible to find a sufficient number of Romanian speaking young subjects (selected also by their gender and education level). The choice of the panel restudy (instead of trend study) for this project was due to the limited number of young subjects who could participate in the restudies (T2 and T3). When selecting the subjects of the second and the third project, a new viewpoint was introduced (in accordance with the principles of the panel study), namely, that the information should be the same as in the first project (cf. column 5 of Table 3). I also interviewed new subjects in the last two projects (T2 and T3). This was motivated by providing more data from those bilingual subjects who were accessible in the

\(^{11}\) This statement is supported by the population and sample data reflecting Romanian identity (see Tables 1 and 2).
periods of the two new data collections. I could interview 33 adult subjects all three times (T1 + T2 + T3), thus these recordings alone make up about 100 hours of recorded material. This corpus will provide the foundation for future research on language variation and change. The children’s sample pool of the three LongBiLing fieldwork projects (N = 126) was obtained from the higher grades of the Kétegyháza Romanian primary school; it is therefore a trend study. In 1990 and 2010 a questionnaire-based survey was conducted with the teachers of the school (N = 17). Table 3 contains data on the subjects who participated in at least one of the projects and their participation is documented (sociolinguistic interview, test, and questionnaire; N = 361). The subjects whom I talked to or observed at various places in the village during the three fieldwork projects\(^{12}\) contributing to the research with qualitative data are not listed in Table 3.

While planning empirical research, linguists are often uncertain about how many subjects to select for an investigation. According to experts in statistics, “the more subjects there are, the more reliable the data are”. The number of subjects, however, is mainly determined by the objectives of the project, the number of researchers and the budget. G. Varga’s advice regarding the number of subjects and that of the data can definitely be useful when planning the sample. “Our subjects are not only parts of a social group but also independent individuals; there might be plenty of individual features in their lives and current lifestyles, and these features may come to light in their language use too. By increasing the number of subjects and the amount of data, we can ensure to limit the role of accidentality, also that individual characteristics do not dominate our material but it reflects typicalities.” (G. Varga 2010, 164).

<table>
<thead>
<tr>
<th>Project year</th>
<th>Adults</th>
<th>Children</th>
<th>Teachers</th>
<th>The identical adult respondents of T1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990 (T1)</td>
<td>96</td>
<td>50</td>
<td>8</td>
<td>—</td>
</tr>
<tr>
<td>2000/2001 (T2)</td>
<td>68</td>
<td>38</td>
<td>—</td>
<td>42</td>
</tr>
<tr>
<td>2010/2011 (T3)</td>
<td>54</td>
<td>38</td>
<td>9</td>
<td>33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>218</strong></td>
<td><strong>126</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

\(^{12}\) There were some Hungarians among them: with two Hungarian women married to Romanian men I conducted the interviews in Hungarian.
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Labov (1994, 76) points out that panel studies are expensive and time-consuming procedures. If the research is planned as a panel study from the beginning, the initial sample must be large enough to take the inevitable losses into account. An unplanned panel study – according to Labov – will be left with a reduced sample, perhaps too small for statistical significance, but nonetheless extremely valuable for the interpretation of the original observations. Although Labov did not attempt to estimate the size of the first sample pool, my experience also supports his arguments. My experience with panel studies is that out of the 96 subjects of T1, 42 were available for a second time (T2), and 33 could participate in the study also for a third time (T2+T3). Consequently, if we conduct a repeated panel study, the sample pool of T1 should be at least twice the size of T2, and if there is a third project, the sample pool of T1 must be at least three times the size of T3. In other words, the size of the sample pool of T1 should be planned backwards. Nahkola and Saanilahti collected two corpora, the first in 1986, the second in 1996. Originally, the first corpus consisted of tape-recorded interviews of 46 subjects, and only 24 of them could be recorded twice and were included in both corpora (Nahkola & Saanilahti 2004, 76). Their data also justify my calculations.

In LongBiLing the application of several combined (quantitative and qualitative) methods were the most efficient. One of these methods was the recording of the at least one-hour-long Romanian sociolinguistic interview with the adult subjects (cf. Labov 1984). Parts of the sociolinguistic interview were the following: (a) guided conversation, (b) interview on language use, (c) self-test ranking language skills and (d) a vocabulary test. Another successful anthropological method of the data collection of LongBiLing is participant observation, which provides the opportunity to observe the village (see Gal 1979). The observed language choice domains (events) of the village are as follows: church (Orthodox Church, Baptist house of prayer, pilgrimage with subjects from Kétegyháza in Romania, funerals), school (end-of-term ceremony, graduation ceremony), shopping (shops, market and post office), community life (conversations in the street, conversations in the kindergarten/primary school).

13 The outcome of the three LongBiLing projects is a 250-hour audio database, which does not only provide the linguistic data of language shift research but also the opportunity to document an endangered Romanian dialect in Hungary.

14 Participant observation was relatively easy, as I was born in Kétegyháza and I am a member of the Romanian national minority community, although I have been living in Budapest since I started university. For the period of T1, I moved to Kétegyháza with my two children who attended the same kindergarten (from May until August) as I, my parents and my grandparents had (Borbély 2001, 64).
cafés, “pogácsa” festival), etc. Furthermore, recordings were also prepared at these events (liturgy, end-of-term ceremony). These situations yield data primarily on language choice and on attitudes and ideologies regarding languages, bilingualism, national majority and national minority communities. They are also suitable to test to what extent the data collected during the interviews correlate with the phenomena observed in real life.

The third type of data collection in LongBiLing took place in the Romanian school, involving with pupils and teachers. Recordings with the children consisted of a short conversation and a vocabulary test with 100 images or drawings (this vocabulary test was also conducted with the adult subjects). The teachers filled in a questionnaire with 32 (open and closed) questions in writing on school language use, the language skills of children and on Romanian language teaching.

Table 4: The frequency distribution of the Kétégyháza Romanian respondents by age, gender and education (T1 = 1990; N = 60; T2 = 2000; N = 60)

<table>
<thead>
<tr>
<th>AGE (years)</th>
<th>EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GRADES 4-7</td>
</tr>
<tr>
<td></td>
<td>GENDER</td>
</tr>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>1990</td>
<td>5</td>
</tr>
<tr>
<td>40–58</td>
<td>5</td>
</tr>
<tr>
<td>18–39</td>
<td>5</td>
</tr>
<tr>
<td>2000</td>
<td>5</td>
</tr>
<tr>
<td>60–79</td>
<td>5</td>
</tr>
<tr>
<td>50–68</td>
<td>5</td>
</tr>
<tr>
<td>28–49</td>
<td>5</td>
</tr>
</tbody>
</table>

The adult sample pool of T1 and T2 is a judgement sample (see Wardhaugh 2006: 155). The groups that had been selected based on the variables of age, gender and education, represented the demographic and social groups of the community. I will analyze the data of the language use interview conducted with 60 subjects each in the projects T1 and T2. 42 subjects were identical in T1 and T2. The distribution by age, gender and education of the 60–60 subjects is summarized in Table 4.

In the various age groups of the population, education indices changed, which was also reflected by the sample of T2. That is why this mode category differs in the elderly group (59–69/69–79-year-olds) from those of the middle-aged (40–58/50–68-year-olds) and the young groups (18–39/28–49-year-olds) (see Table 4).

Kétegyháza is situated in Békés county, close to the Hungarian–Romanian border (within 20 kilometers). The population of the village was 4,525 in 1990, 4,354 in 2001, and 3,808 in 2011 (cf. Hungarian Central Statistical Office, see the Romanian population of the village in Table 1). As to socio-economic changes: at the beginning of T1, in 1990, the Soviet monument with the red star\(^\text{16}\) in the center of the village was still standing, but today, it is the memorial of the residents of the village who were killed in the World Wars. The collective farm was just about to be privatized, so the majority of the population was still working there or commuted daily to the nearby cities to work. By 2000, following the privatization, the employment structure of the village had greatly changed. A significant part of the population was inactive as pensioners, disability retirees or unemployed. Out of the 76 parents of the 38 children attending the higher grades of the local Romanian national minority school during T2 (born between 1984 and 1990), 36 had no work (their mothers were either housewives or both parents were disability retirees).

The Hungarian Parliament adopted the minority law almost unanimously on 7th July 1990 (whose amended version came into effect on 1st January, 2012). As a result, the first minority (since 2014, nationality) self-governments were established both at local and at national levels. In Kétegyháza, the first Romanian self-government was also set up in 1994. As far as the cultural activities of the Romanian community\(^\text{17}\) are concerned, the local Romanian civil organization, the Kétegyháza Romanian Association founded a Romanian choir, organized a Romanian folk dance camp in the summer, and started running Romanian folk dance courses in one of the local kindergartens. It is also an important change that the priest serving in the local Orthodox Church during T1 – who originally came from the nearby Méhkerék – had been replaced by a priest from Romania by T2.\(^\text{17}\) This change is quite crucial from the perspective of Romanian language use, as the new priest spoke only the standard Romanian variety and was not familiar with the Kétegyháza dialect when he first moved

\(^{16}\) The community leaders replaced the red star with a concrete ball.

\(^{17}\) The structure of the leadership of the Romanian Orthodox Church in Hungary also changed. In 1990, the lead organization of the Romanian Orthodox Church in Hungary was the “vicariate” led by a Romanian “vicar” from Hungary. At the time of T2 (from 1999 onwards), the Church was led by a Romanian bishop from Romania, and it was turned into a diocese. Consequently, a much more lively relationship evolved with the Romanian orthodox community from Romania.
to Kétegyháza. Neither did he speak or understand Hungarian, so he began learning both in Kétegyháza. This is worth mentioning as Romanian orthodox churchgoers who do not speak Romanian cannot actually communicate with their priest. Furthermore, those people of the congregations who have the belief about their own dialect that it is less correct than standard Romanian do not speak with the priest from Romania either, as they are afraid that “they and their mistakes will be made fun of”, if they speak in their home dialect.

The following changes could be observed regarding the language use and the sense of identity of the Kétegyháza Romanians during T2 (in comparison to T1). The use of Romanian is increasingly restricted to the home domain. I observed on several occasions that local Romanians who have just spoken Romanian in their homes or in their yards switched to Hungarian as soon as they stepped out in the street. During T2, on some occasions, it could be explained with the presence of sewage workers coming from other Hungarian settlements, while at other times, no one was out in the streets, and Romanians still switched over to Hungarian. Once, when I asked a sixty-year-old Romanian man in the street for the address of a subject, he wanted to know whether I came from Romania. I also encountered similar cases in T1 and T3. The 21-year-old Romanian daughter-in-law of one of the subjects came to visit her mother-in-law and found her and me in the middle of an informal conversation. Naturally, we were speaking in Romanian. This situation greatly confused her: she said a couple of words to her mother-in-law in Hungarian and then left immediately, and completely ignored me in her deep embarrassment. All these cases signify that the use of Romanian had ceased to be widespread by T2.

Based on the data of T1, several decades preceding it, it was quite common to hear remarks such as the following you eat Hungarian bread, speak Hungarian then!, you are barking again!, etc. when Hungarians heard Romanians speak their mother tongue among themselves. I asked my subjects how they had reacted to these remarks. The older subjects said that they had objected to them, rejected them or ignored them. The younger generation ignored such remarks. In T2, however, some young people with Romanian origin, who (now) had a Hungarian identity, reasoned for not speaking the language of their ancestors with the following argument: we speak Hungarian, as we eat Hungarian bread. According to one of the subjects, a 24-year-old man of Romanian origin made the following rude comment when he overheard a Romanian conversation between his grand-
mother\textsuperscript{18} and her neighbor: \textit{they are barking again!} It is the aggressive way of accommodating to the Hungarian majority, when a (former) member of the bilingual community identifies with the emotions of the majority and turns against the language of his ancestors. Figure 6 covers around 70 years from the community’s life and summarizes how the subjects felt about the (formerly common, then much less frequent) remarks of the Hungarian community. The phenomenon itself that the subjects perceived these remarks as rare could be interpreted as one of the consequences of the language shift. This is also why there are milder responses to them such as ignoring them (“I don’t care about it”), accepting them (“we speak Hungarian as we eat Hungarian bread”); (aggressive) identification (“they are barking again!”). The various responses to the negative remarks are present simultaneously (T2) and correspond mainly to the generational and Romanian identity of the speakers.\textsuperscript{19}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure6}
\caption{The negative remarks of the majority community reacting to Romanian language use and the Romanian community’s attitudes towards them then and later}
\end{figure}

\textsuperscript{18} In language shift processes, the level differences in the command of a language among generations often stand in the way of the communication between grandparents and grandchildren. Zelliger (2001, 176) reported that among the respondents of the investigated Hungarian diaspora in Upper-Austria several parents pointed out that due to the poor Hungarian language skills of their children, contact with the monolingual Hungarian grandparents was often restricted to greetings.

\textsuperscript{19} Some of the studies focus on the one-word clichés and stereotypes used for the minorities in everyday Hungarian. (e.g., \textit{számbogár} ‘German cockroach’). In connection with these, Forgács (2000, 68) claims that as the distinction between benevolent, slightly condescending humor and rude mockery is often very blurred, the education of a modernizing nation on the way to Europe should involve intercultural aspects in order to overcome ethnic enemy images as well. Today, the terms \textit{minority} and \textit{nationality} should also be listed among these due to their negative connotations.
As for higher education, language exams have become necessary in Hungary (between T1 and T2), the value and importance of the Romanian language increased. According to the majority of the subjects, most of the community members do not keep in touch with their relatives and friends in Romania anymore. The number of trips to Romania dropped significantly from the period between 1994 and 1996, and the number of visits to relatives combined with shopping was also going down.

The conclusions of the observations of T2 are that the socioeconomic, minority policy and community (macro and micro) changes during the past 10 years have the following effects:

- Changes benefiting language maintenance: the minority act, the reinforcement of community and local values instead of the internationalist values; the social appreciation of language.
- Changes with ambivalent effects (positive and negative) on language maintenance: changes in employment.
- Changes harming language maintenance: stronger prejudices against the local Romanian dialect (primarily among the youth); the former negative remarks (attitudes) of majority Hungarians; decreasing number of trips to Romania.

The real-time data of the investigation

When investigating the functional distribution of the languages used in bilingual (national minority or immigrant) communities, the majority of

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20 Romanians in Hungary began to value Romanian more due to the fact that according to the higher Education Act of 2005 (Act no. 139/2005) college or university students can only obtain their degrees if they hold at least an intermediate level certificate in a foreign language (FL), but even further FL requirements can be set by the institutions. As Kontra H. & Bartha (2010, 70) pointed out, “such measures can exert a great deal of negative washback: students tend to be much more concerned about passing a FL exam than about achieving competence in a FL”. More severe than that is the process which has been going on since 2005 (since the act making language exams mandatory to earn a degree) that thousands of university and college students are not capable of earning either their language exams specified by the university or their degrees. Molnár (2012) reported that the short-term solution of this unfortunate situation seems to be solved by the so-called “language exam amnesty”, as the new National Higher Education Act allows universities to grant the degrees to those students who have not been able to pass their language exams for the preceding three years, provided they pass the language exam prepared by the university by 2016. The issue of the “frozen” degrees could only be solved long-term if a satisfactory language teaching system was devised for all three levels of education.
researchers concentrate on the description of the synchronic variability of language choice. This is rooted in the fact that the regularities of language choice variability – in addition to other phenomena – are fit to illustrate the development stages of bilingualism and of language shift. In the projects mentioned earlier in the paper, the changes in apparent time are investigated by data collected at a certain point in time focusing on generational differences (e.g., Kontra 1990; Bartha 1993; Sándor 1996; Csernicskó 1998; Göncz 1999; Sándor 2000; Lanstyák 2000). In this study, I explore the language choices typical of the language shift situation in Kétegyháza affecting the various language choice domains. I would not like to go into detail about the social causes of the changes, but I look for connections regarding the Romanian–Hungarian language shift process manifesting itself in the language choice situations. In the description of the phenomenon, the dependent variables are the language choice situations of the domains, where several language choice situations are connected to the same domain. For instance, for the domain ‘home’, I investigate four language choice situations: what language is being spoken (a) with his/her spouse, (b) sibling, (c) children and (d) grandchildren. The number of the explored language choice situations is 25.\textsuperscript{21} I mapped the language use variability typical of these situations using three language choice categories: (1) Romanian; (2) Romanian and Hungarian, and (3) Hungarian. I will show in what ratio the three language use categories occurred in the language use interviews\textsuperscript{22} when I asked the subjects about their language choices. The first (Romanian) and the third (Hungarian) categories represent monolingual speech, while the second covers situations in which the speakers use both languages, sometimes Romanian, sometimes Hungarian or alternating the two (in code switching or code mixing). While interpreting the analysis, following Grosjean (1995, 261–264), I call this phenomenon bilingual mode as far as the language choice situations are concerned.

I will demonstrate the changes in language choice during the decade by using the differences between the data of T1 and T2. I used this principle consistently, even if the differences in group averages were small (see also in Nahkola & Saanilahti 2004, 78). I find this important, as we have

\textsuperscript{21} I analyze 25 out of the 27 situations all having the same response categories referring to language use.

\textsuperscript{22} The data here were obtained in 1990 with the same questionnaire as ten years later. As the interview was in Romanian, these questions were also formulated in the Kétegyháza Romanian dialect (see Borbély 2001, 282–293 for the Hungarian translation of the entire questionnaire; the questions discussed in the book can also be found in the Appendix).
no precise information about the pace of linguistic changes; neither do we have information about how and at what pace the decade that I investigated impacted linguistic changes (if it can be measured at all). I will therefore explore the percentage distribution patterns and regularities of the monolingual Romanian, the bilingual Romanian–Hungarian and the monolingual Hungarian modes in the local language use, on the basis of the data collected at T1 and T2.

**Results: the effect of real time on the variability of the languages used in the various language choice domains**

Having analyzed the variability of language choice and change (in the course of a decade) in terms of the distribution of the three language use categories (Romanian, Romanian and Hungarian and Hungarian) in several language choice situations, the following conclusions can be drawn. It is characteristic of the relationship between language choice domains (and of their language choice situations) and the language shift process that at the beginning of the language shift the language (A) of the community is used as a full language (Menn 1989, 335) in all domains, roles and functions. Later, at subsequent stages of the process, the community (A) language is gradually replaced by the majority (B) language. For example, among Csangos in Moldova, researchers experienced the following stage. Language A is used at home, local shops, while going to church, pub; Language B is used in situations at the post office and at the doctor’s (Sándor 1998). In a Hungarian speech community in the USA Language A is used in the following situations: church, Hungarian speech community and family life (Bartha 1993). It signifies the completion of the language shift process, if (the majority) Language B has turned into a full language (Menn 1989, 335). Usually, this takes place in a community when the majority language enters the family sphere (Hamers & Blanc 1989, 176). Based on these findings it will be obvious in what language use situations Romanian is spoken, and where Romanian–Hungarian bilingualism can be sustained (see sustainable bilingualism at the domain level).

I will point out which domains (language choice situations) are connected to Romanian and which to Hungarian in the Kétégyháza Romanian–Hungarian language shift process by taking the highest percentage value as the basis from the three language use categories in the T1 and T2 data. According to this, at the time of T1 and T2 the domains and language choice situations connected to Romanian are as follows church: praying, conversations with churchgoers, sermons; home: conversations with
siblings; community, conversations with the elderly; work: conversations with farm hands; written texts: epitaphs. Two remarks are in order here. In two language choice situations (conversations with siblings and with farm hands) in the T1 data, opting for Romanian did not reach 50%, but ten years later it did. Furthermore, the language of epitaphs had gone through such a significant change in ten years that the Hungarian and Romanian language choices became equal. I would still list it here, as in T1, that opting for a Romanian language epitaph reached 78.6%. Language choice situations connected to Romanian are summarized in Figure 7.

Figure 7: Situations connected to the Romanian language in Kétegyháza according to the percentage distribution of T1 and T2 data

Domains and language choice situations connected to both languages are as follows church: funerals, weddings; health care system: conversations with patients in the waiting room; education (memories of the language of education): conversations with pupils in recess. I want to remark on concerning two situations. Weddings and recess: even though bilingual use reached 50% only in T1, I still included it in the figure. The language choice situations connected to Romanian–Hungarian bilingualism are presented in Figure 8.

The domains and language choice situations connected to Hungarian are as follows home: spouse, children, grandchildren; education: school classes; work: colleagues; public affairs: administrator of mayor’s office, weddings; public health care: doctors in hospital; shopping: shop assistants, market vendors, postman, counting; written texts: official letters;
Sustainable bilingualism and language shift

Figure 8: Situations connected to Romanian–Hungarian bilingualism in Kétegyháza according to the percentage distribution of T1 and T2 data

other: swearing. Out of the 25 language situations, those connected to Hungarian come to 14. I have remarks to four of them:

The language used in conversations with market vendors changed considerably during 10 years. The language choice frequencies connected to Hungarian in T2 were half of the results of T1.

In three language choice situations (spouse, colleagues and swearing), the figures of the use of Hungarian did not reach 50%. The language choice situations connected to Hungarian are described in Figure 9.

Figure 9: Situations connected to the Hungarian language in Kétegyháza according to the percentage distribution of T1 and T2 data
Out of the 25 situations explored in the two fieldwork projects, 7 can be connected to Romanian (see Figure 7), 4 can be connected to Romanian–Hungarian bilingual language use (see Figure 8), and 14 can be connected to Hungarian (see Figure 9). It can therefore be stated that in the functional distribution of the two languages, Hungarian is more dominant. Consequently, it can be assumed that the Romanian–Hungarian language shift process has reached its second stage and is proceeding toward completion (see the Hamers and Blanc’s language shift model). For this reason, these data do not seem to confirm the hypothesis of transitory balanced bilingualism (see Figures 3, 4 and 5).

Above, I described the varied relationship between language choice situations, the Romanian and Hungarian languages and the related changes. Based on these – in the retrospect of 10 years – I want to raise the question: what change characterizes the language shift process? Mesthrie (2001, 495) stated that the process of shift from one language to another is often “gradual, involuntary, and unconscious”. Next, I explore the issue of \textit{gradualness} so typical of language shift, analyzing how serious language use changes related to the various domains were. Upon the completion of the analysis, want to answer the question to what extent language shift is actually gradual – as Mesthrie claims it.

It is important to note that the analyses are based on the data obtained from the self-descriptions of the subjects. I have no accurate measurements as to what degree these reflect reality. My observations – which I did not carry out with a systematic methodology and cannot support with data – confirm that the language shift process became more advanced between 1990 and 2000/2001, and the use of Romanian decreased. The responses of subjects that refer to other kinds of changes (e.g., language shift has been reversed) were perhaps influenced by the altered political conditions, language ideologies, the focus of the fieldwork project, the person of the fieldworker, etc. It cannot be excluded completely either, however, that with certain subjects, different conditions really affected a reversed language use.

First, I analyze the change in the first language use category: Romanian monolingual mode. The extent of the change in the 25 investigated situations is presented in Figure 10.\textsuperscript{23} The use of Romanian increased in 15 situations, decreased in 8, and did not change in 2. There is one situation in which there was an increase exceeding 25% during 10 years (church wed-

\textsuperscript{23} In Figures 10, 11 and 12, the axis $y$ refers to the percentage frequency; axis $x$ refers to the changes between T1 and T2 of the percentage frequency of the 25 situations: the figures show the degree of the differences between T1 and T2.
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In 5 language choice situations, there was an increase of 10–15.7% (counting, sermons, patients, market vendors and siblings). In 9 situations, the increase was between 0.3–8.3% (churchgoers, spouse, mayor’s office, recess, elderly, swearing, shop assistants, farming hands, and postman). The two situations without change were the official letters and the doctors, as in these situations there was nobody who used Romanian either in T1 or in T2. In 7 language choice categories the use of Romanian decreased by 1.7–9.9% (school classes, prayer, registry office weddings, grandchildren, colleagues, children and funerals). The largest-scale decrease in the use of the Romanian language occurred in epitaphs: 30.3%.

Figure 10: The degree of change between 1990 and 2000/2001 in Kétegyháza in the 25 language choice situations in language use category Romanian monolingual mode. Situations: 1 = church wedding, 2 = sibling, 3 = market vendor, 4 = patients, 5 = sermon, 6 = counting, 7 = postman, 8 = farm hand, 9 = shop assistant, 10 = swearing, 11 = elderly, 12 = school/recess, 13 = Mayor’s office, 14 = spouse 15 = churchgoers, 16 = official letters, 17 = doctors, 18 = school/classes, 19 = prayer, 20 = registry office weddings, 21 = grandchildren, 22 = colleagues, 23 = children, 24 = funerals, 25 = epitaphs.

Regarding the category Romanian–Hungarian bilingual mode, I found the following changes. Out of the 25 language choice situations, there was an increase in bilingual mode in 11 situations, there was a decrease in 12 situations, and there was no change in 2 situations (see Figure 11). In one situation (market vendor), the increase was over 20%. In 4 situations, the growth was between 10.8–18.6% (children, shop assistant, postman and doctors). In 6 situations there was an increase of 1–8.6%. There was no change in bilingual mode in the conversations with the elderly and in official letters. With the elderly, language shift did not apply to official letters,
The degree of change between 1990 and 2000/2001 in Kétegyháza in the 25 language choice situations in language use category Romanian–Hungarian bilingual mode. Situations: 1 = market vendor, 2 = doctors, 3 = postman, 4 = shop assistant, 5 = children, 6 = Mayor’s office, 7 = counting, 8 = funerals, 9 = colleagues, 10 = farm hands, 11 = spouse, 12 = official letters, 13 = elderly, 14 = swearing, 15 = registry office weddings, 16 = grandchildren, 17 = epitaphs, 18 = churchgoers, 19 = school/class, 20 = prayer, 21 = siblings, 22 = patients, 23 = sermon, 24 = school/recess, 25 = church wedding.

since it was already complete. There was a decline in bilingual mode by 2.2–10% in the following 9 situations: swearing, registry office weddings, grandchildren, epitaphs, churchgoers, school classes, prayers, siblings, patients. There was a decrease by 15.7–16.7% in situations ‘sermon’ and ‘recess’. The largest-scale decrease (25%) occurred in the bilingualism of church weddings.

The Romanian–Hungarian language shift process was drifting towards the increasing choice of Hungarian. Out of the 25 situations, there was a growth in using Hungarian in 11, there was a decline (to various extents) in 14, and there was no change in 1 (see Figure 12). The use of Hungarian increased the most (34%) in epitaphs. Concerning the language choice in recess at T1 and T2, there was an increase by 13.3% in the use of Hungarian. In 8 language choice situations (funerals, colleagues, sermons, classes, registry office weddings, prayers and grandchildren), there was a growth of 3.3–9.4% in opting for Hungarian. There was no change regarding official letters, as already in T1, all subjects claimed to have written to authorities in Hungarian. In 9 situations (church weddings, spouse, patients, swearing, elderly, children, farm hands and Mayor’s office), Hungarian was opted for
The degree of change between 1990 and 2000/2001 in Kétegyháza in the 25 language choice situations in language use category Hungarian monolingual mode. Situations: 1 = Epitaphs, 2 = School/recess, 3 = grandchildren, 4 = Prayer, 5 = registry office wedding, 6 = School/class, 7 = sermons, 8 = churchgoers, 9 = colleagues, 10 = funerals, 11 = official letters, 12 = church weddings, 13 = spouse, 14 = patients, 15 = swearing, 16 = elderly, 17 = children, 18 = spouse, 19 = farm hands, 20 = Mayor’s office, 21 = shop assistants, 22 = counting, 23 = doctors, 24 = postman, 25 = market vendor.

less frequently by 0.6–10%. In 3 situations (shop assistants, counting and doctors), there was a drop of about 16.7–18.6% in using Hungarian. There was a decrease by more than 20% (23.3%) in conversations with the postman. The largest scale drop (38.3%) in using Hungarian occurred in the conversations with market vendors.

Summing up the effect of the past 10 years, language shift was not a simple gradual change. Since I interviewed mainly the same subjects, it became clear that although in some situations a continuous language shift could be observed, in others language shift was stationary or even reversed. Naturally, the latter phenomena occurred at the situational and sample level (subjects were those who were ready to give an interview in Romanian in T1). Thus, at the level of language choice situations, according to the data obtained from Romanian–Hungarian bilingual speakers, the language shift process had an oscillating motion, while at a community level, language shift was proceeding gradually but not totally unidirectionally.

With the analysis of the 25 situations in Kétegyháza, based on the two individual fieldwork projects (see Figure 13), it is now even more obvious that “using” the same subjects, a simple gradual, continuously advancing...
Romanian–Hungarian language shift process could not be justified. My findings revealed that although this process shows a trend toward language shift, it was occasionally oscillating.

![Figure 13](image)

**Figure 13:** Language choices percentage averages over the 25 situations for the two fieldwork projects and the three language use categories

Changes in individual speakers over the 20 years of language shift

I finish this paper with the discussion of changes over 20 years. Out of the 96 subjects of T1, 33 participated in all three fieldwork projects (T1 = 1990, T2 = 2000, T3 = 2010). According to Wölck (2004) generational continuity and language transfer, especially from parents to children, are crucial for linguistic reproduction. To focus on this issue we will highlight here the results concerning a language choice situation in home domain (conversations with children – *What language do you speak with your child*?), which is crucial from the perspective of language shift, as it is related to the intergenerational transmission. Figure 14 summarizes the data on the language choices in the above-mentioned domain in all three fieldwork projects. An analysis of the sample by individual subject demonstrates what changed in Romanian–Hungarian language shift in this type of intergenerational transmission. Axis $x$ represents the 3 answers of the 33 subjects ($N = 99$) in chronological order, positioning it on axis $y$ according to the language use category ($1 =$ Romanian, $2 =$ Romanian and Hungarian, $3 =$ Hungarian) during the three fieldwork projects. For instance, the first
Subject (first on the left) gave category 1 in T1, T2 and T3, saying that he spoke Romanian with his child. The second and third subjects always chose category 3, saying that they used Hungarian with their children. The fourth subject had no children, so there are no marks on the axes. The age of the subjects decreases from left to right. The oldest subject (born in 1925) is placed on the left of the figure, while the youngest subject (born in 1973) is on the very right of the figure.

Figure 14: Answers to the question What language do you speak with your child? for the three fieldwork projects, 33 informants, and three language use categories (1 = Romanian, 2 = Romanian and Hungarian, 3 = Hungarian)

Having analyzed the answers of the 33 subjects in real time, I understood that there was no change in the case of 19 subjects regarding Romanian–Hungarian language choices. Throughout the two decades, 1 subject spoke only Romanian with his/her child, 1 other subject spoke both languages, and 19 spoke only Hungarian. Change could be observed in 8 cases: 4 subjects went through the longitudinal trend of the Romanian–Hungarian language shift, meaning that Romanian/Romanian–Hungarian language use was replaced by monolingual Hungarian in

\[24\]

In harmony with Hamers & Blanc’s model, I call the diachronic language change “longitudinal trend of language shift”, meaning that the very same speaker (social, demographic group, speakers’ community, domain or situation, etc.) goes through changes typical of language shift, which manifest themselves in the second and/or third fieldworks compared to T1. This may have three types: L1 > L2; L1 > L1+2; L1+2 > L2, but the quality of type L1 > L1+2 may not be identical with the other two and for a certain period of time, all three types can be reversed (e.g., while there is a bilingual generation present in a community – cf. reversing language shift, Fishman 2004).
time. There were 4 subjects, however, who demonstrated the opposite tendency, which means that their monolingual Hungarian language use turned into bilingual language mode or bilingual language mode developed into monolingual Romanian mode. The responses of the other 6 subjects of the sample were partially or entirely missing. Two of the subjects had no children. Four subjects had children during the 20 years of the longitudinal study, one of whom spoke only Romanian with his/her child at the time of T3. The reason for this was that his/her spouse was born in Romania and was a monolingual Romanian speaker. The other 3 subjects used only Hungarian with their children at the times of T2 and T3. The language use of the 33 subjects and their children are presented in Figure 15 (pie chart), using the longitudinal data. The distribution of the 99 answers collected longitudinally in two decades is as follows: 7 are monolingual Romanians, 12 are bilingual, and 69 are monolingual Hungarians. The pie chart illustrates well how much Hungarian is replacing Romanian.

Figure 15: The answers to the question *What languages do you speak with your child?* for the three fieldwork projects by three language use categories, in total
Summary

In this paper I have presented the findings of a longitudinal research project investigating language shift. In the introduction I aimed to give a comprehensive description of longitudinal studies. It was the objective of the research project on Romanian–Hungarian language shift to show how the functions of the two languages are distributed and how they changed during the next two decades. I want to highlight three theoretical and one methodological findings. Taking the Hamers and Blanc’s language shift model as a framework, based on the results we can claim that the process has passed the point where a stage of balanced bilingualism could be established in the minority community. Instead community is advancing towards the completion of the Romanian–Hungarian language shift. As to the gradualness of the language shift process, we can state that on the level of language choice situations there is an oscillating (not unidirectional) motion present. As compared to 1990, by 2000, Romanian was increasingly preferred in certain situations, while in others, Romanian and Hungarian were both used side by side, and yet in others, Hungarian was preferred. The findings of the two decades confirm the same phenomenon, because not only those changes could be observed that characterize the longitudinal tendencies of language shift. According to the findings of the project, bilingualism is most sustainable in situations connected to the elderly, namely, the church and the home (see Figures 7 and 8). The methodological outcome of the three fieldworks was that the sample pool of T1 should be established according to the number of future fieldworks and the number of subjects one plans to involve in my last fieldwork, as the sample pool of T1 should always be at least twice as large as that of T2 and at least three times as large as that of T3.

An important experience of my longitudinal study of twenty years is that in the process of the Romanian–Hungarian language shift the phenomenon of sustainable bilingualism can occasionally be observed. It can be explored what types of linguistic, individual and community requirements/constrains/patterns are needed for the appearance of sustainable bilingualism. Consequently, when planning a longitudinal study in a community undergoing a language-shift process, it is advisable to have a broader perspective that also covers sustainable bilingualism.
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References


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Appendix: The processed questions of the LongBiLing questionnaire

1a What language(s) do you speak with your spouse?
   (1) Romanian (2) Both (3) Hungarian

1b What language(s) do you speak with your siblings?
   (1) Romanian (2) Both (3) Hungarian

1c What language(s) do you speak with your children?
   (1) Romanian (2) Both (3) Hungarian

1d What language(s) do you speak with your grandchildren?
   (1) Romanian (2) Both (3) Hungarian

1e What language(s) do you speak with the elderly?
   (1) Romanian (2) Both (3) Hungarian

2a What language(s) do you speak with your Romanian colleagues at work?
   (1) Romanian (2) Both (3) Hungarian

2d What language(s) do you speak when you are helping your neighbors or your relatives at the corn harvest?
   (1) Romanian (2) Both (3) Hungarian

3e In what language(s) do you pray?
   (1) Romanian (2) Both (3) Hungarian
3a What language(s) do you speak with fellow churchgoers before and after the church service?
   (1) Romanian (2) Both (3) Hungarian
3b What language(s) does the priest use when he is giving a sermon?
   (1) Romanian (2) Both (3) Hungarian
3c What language(s) does the priest use at weddings?
   (1) Romanian (2) Both (3) Hungarian
3d What language(s) does the priest use at funerals?
   (1) Romanian (2) Both (3) Hungarian
3f In what language do you curse or swear?
   (1) Romanian (2) Both (3) Hungarian
4b When you were at school, what language(s) did you speak with your schoolmates in recess?
   (1) Romanian (2) Both (3) Hungarian
4c What language(s) did you learn at school?
   (1) Romanian (2) Both (3) Hungarian
5a In what language(s) do you manage your tax issues at the local council or at the mayor’s office?
   (1) Romanian (2) Both (3) Hungarian
5b What language(s) are used at registry office weddings?
   (1) Romanian (2) Both (3) Hungarian
6b In what language(s) do you speak with other patients in the waiting room of the doctor’s office?
   (1) Romanian (2) Both (3) Hungarian
6c What language(s) do you use with the doctors at the hospital (in Gyula)?
   (1) Romanian (2) Both (3) Hungarian
7a What language(s) you speak in the local shop, if the assistant is Romanian?
   (1) Romanian (2) Both (3) Hungarian
7b What language(s) do you speak at the market while shopping, if the market vendor is Romanian?
   (1) Romanian (2) Both (3) Hungarian
7c In what language(s) do you count money?
   (1) Romanian (2) Both (3) Hungarian
7d What language(s) do you speak with the Romanian postman?
   (1) Romanian (2) Both (3) Hungarian
8b Do you read in Romanian?
   (1) Yes (2) No
9a When writing an official letter (addressing the local council/mayor’s office), what language(s) do you use?
   (1) Romanian (2) Both (3) Hungarian
9b Who do you normally write to in Romanian?
   (1) Romanian (2) Both (3) Hungarian
9c What language is the epitaph on your parents’ graves?
   (1) Romanian (2) Both (3) Hungarian.