

Chapter 4

Language shift

Andreia Caroline Karnopp

University of Zurich

Language shift has always existed. Conquests were the first historically attested cause of language shifts, then migrations prompted these types of changes, and today it is mainly language diffusion that triggers this language contact phenomenon. There are some promoting and/or impeding factors for shift, but not a single condition evokes the same patterns of language use in all language contact situations. For this reason, and because each language community should thus be considered and analyzed in its own terms, this chapter discusses the most significant approaches, models, methods and examples of possible language choice patterns and trends, and finally, also addresses possible factors that may or may not boost language shift within a particular linguistic community.

1 Introduction

Since *language shift* (LS) is always preceded by language contact or collective multilingualism (Ostler 2011: 320), it is important to include this social phenomenon in the discussions addressed in this book. Even if LS can occur at an individual level (*language attrition* (LA)),¹ it usually refers to the change in usage of a given language community from a language A to a language B in all situations and domains. This change in linguistic practices is usually observable as a bi- or multilingual period within one or across several generations.

LS is often described as a kind of “transitional phenomenon” (Böhm 2010: 33) of changing language contact situations. It refers to a shift away from a “healthy”

¹LA is about “forgetting” an L1 or an educationally acquired language. It thus describes the loss of language skills by an individual and can in a way be considered as a reversal of language acquisition (Lambert & Freed 1982).



language state due to a “disorder” or a range of “disorders”² of the affected languages. *Language maintenance* (LM), in contrast, describes a relatively stable,³ language contact situation in which bilingual speakers, speaker groups or an entire linguistic community continue using the minority or heritage language,⁴ despite the pressure of the majority and socially dominant language and other influencing factors. Consequently, the mentioned “disorders” can provoke different patterns of language use, which is why each language contact situation must be considered separately. What all the situations have in common, however, is that LS affects only groups and communities which are in contact with

²The term “disorder(s)” here refers to the fact that a previously rather stable speech contact situation – described above as “healthy” – can become unstable and cause a “disorder” as a result of various mostly related factors, and therefore change the habitual language use (clearly visible in stage B of Figure 1).

³LM is described here as “relatively stable”, because long-lasting and intensive language contact can lead to interferences (see the borrowing-scale of Thomason & Kaufman 1988) and further language contact phenomena.

⁴The literature employs various terms such as community language, (im)migrant language, ethnic language, and home language. Among these terms, heritage language is probably the most commonly used (Pauwels 2016: 23). It refers to a language that is passed down or acquired by individuals from their family or ancestral background, and is typically associated with immigrant or minority communities residing in a country where another language dominates. A heritage language carries cultural and emotional significance by reflecting the individual’s heritage and ethnic identity.

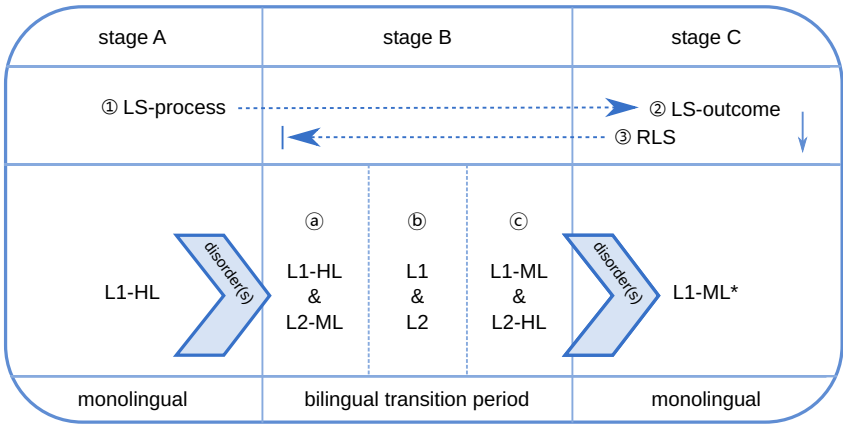


Figure 1: *Language Shift Model*. L1 = first language; L2 = second language; HL = heritage language; ML = majority language; L1-HL = abandoned/heritage language; L1-ML* = target/majority language (can contain phonetic, morphological, syntactic, semantic and prosodic traces from the HL).

a more dominant and more powerful social group. This is why LS is generally understood as “a barometer of inequality between linguistic minorities and the majority” (Heinrich 2015: 613).

LS is not a recent phenomenon, but has occurred throughout history in different societies and in diverse places (Puthuval 2017: 4). Ostler (2011: 326–328) supposes that LS started happening with the Neolithic revolution and the related establishment and settlement of humankind – however, it can be assumed that these processes were already taking place before this period. Between 3000 BC and 1500 AD, dominant languages spread mainly through wars and subsequent conquests of rural societies. Since then, the languages of European conquest have prevailed, e.g. Spanish in Latin America, Portuguese in Brazil or English in the USA. Dominant languages are therefore often associated with overseas explorations, invasions and migrations. Before the 20th century, *migration* was the major factor causing a group to be affected by LS. Nowadays, in contrast, the physical *diffusion*⁵ of so-called world languages is playing an increasing role because young people often learn one of these rather than maintain their parents’ minority language.

Like in most of the LS literature, this chapter will mainly discuss the language use of minority groups, i.e. migrant communities and territorial linguistic minorities, with a special focus on the former. Therefore the model in Figure 1, which is based on Fishman’s (1964) three-generational model, illustrates the different phases typically leading to LS in migrant groups. Likewise Weinreich (1953) assumes that at least three generations are necessary for LS to happen. Ortman & Stevens (2008: 6), in contrast, point out that in many *intergenerational* analyses, the so-called “mother tongue shift” occurs mainly in the second and third generations. In this regard, LS can be understood here as a reversible process ③ or as a gradual and progressive process ① of the dynamics of a natural multilingual language community. On the other hand, LS is sometimes also analyzed as an outcome ② of a language contact situation: the use of the languages changes across the three stages in Figure 1. A monolingual stage A is followed by a situation of language contact, caused, for instance, by migration. A bilingual transition pe-

⁵ *Language diffusion* (LD) often happens on an individual level and is promoted by *cohabitation* (founding bilingual families) or *recruitment* (new employment, military, etc.) (Ostler 2011: 323–324). In certain domains a LS can then progress quickly and widely. *Linguistic diffusion*, on the other hand, refers to a shift of individual linguistic variants within a language – which can also be caused by language contact – on an individual or social level over a longer period of time. Both speakers and listeners can give different preferences to individual variants or even generate new variants (Gong et al. 2012).

riod then follows, which is often *diglossic*⁶ and in which the collective language choice is *variable* (Fasold 1984). This middle stage, which is at the heart of the progressive LS process ①, can last for one or more generations, and may affect an entire language community as follows. Three different types of bilingualism are distinguished for stage B: ③ supplementary, ⑥ complementary (see LM), and ⑦ replacive bilingualism (Haugen 1972). Given that the preferred language can influence the language skills of every individual speaker (in LS situations the L1-HL, and in reversed language shift (RLS) situations the L1-ML), the three types of bilingualism can also co-occur within the same community. The bilingualism phase is then followed by another not necessarily purely monolingual stage C, as Fishman (1964) showed in idealized form. The target language can still contain traces of the L1-HL in the form of code mixing or code switching (see *shift variety* in Section 3, and Chapter 3), or even adopt new features from the heritage language and thus end up as a new variety or language (see Chapter 5).

1.1 LS as outcome

Languages are social entities that need an associated society in order for their memory not be lost. This means that if speaker groups or societies, for example migrants, do not live in their home countries and lose contact with them, there is a good chance that they will shift more quickly to the L1-ML. Therefore, a language's survival depends on who speaks what, to whom and when (Fishman 1964).

The *transmission* of an L1-HL to the following generations can be disrupted, impeded, or stopped during the three LS stages (see Figure 1) for various reasons, e.g. if a language community dies out, or if it is conquered by another group that speaks a different language.⁷ In cases like the latter, speakers make or are forced to make a “social choice” in order to better integrate themselves (or not) into the new society (Ostler 2011: 325). In other words, the preference for one of two or more contact languages automatically generates social closeness or distance. So if a bilingual speaker chooses the L1-ML, they automatically select social proximity to the out-group and social distance from the in-group – and vice versa. At this

⁶*Diglossia* is a special form of bilingualism of a language community in which a “high” and a “low” variety coexist. While Ferguson (1959) distinguished between two variants of the same language (e.g. the case of German and Swiss German in the German-speaking part of Switzerland), Fishman (1967) extended this definition to language contact situations of unrelated varieties (e.g. Hindi and Tamil in India).

⁷It is important that we take into account here that LS does not end with a person's life or the life of a group, but rather represents a shift or a change from generation to generation (Jagodic 2011: 195).

point in the process, the corresponding L1-HL is threatened if it is not spoken by another group or if it is not used for a specific purpose. In these cases there is a danger for L1-HL to become an *endangered language*.⁸ The former mother tongue is then gradually replaced from generation to generation by the L1-ML (*obsolescence* or *language death* at group level and *attrition* at speaker level, e.g. Crystal 1991). According to Nettle & Romaine (2000: 7), more than half of the over 6000 languages spoken in the world are currently at such a stage. The process is mainly affecting small minority languages in Australia, the Pacific and in North and South America. Normally, such an advanced state of LS is irreversible, and has therefore achieved its *morbid endpoint*⁹ (Pauwels 2016: 18).

1.2 Reversing LS

If a speech community sees a reason to take active steps to preserve an endangered (heritage) language, and if the language policy of a region or country supports these actions, an *ongoing*¹⁰ LS-process can change direction and be reversed (Reversing Language Shift, RLS), if it has not yet reached the morbid endpoint. The heritage language can be documented by linguists and stored in archives, or get actively preserved and maintained through revitalization (Ostler 2011: 315). This reversal requires a new distribution of power between the language communities, which may lead to a different language policy. The idea of many supporters of minority languages is to teach it to the younger generation in school so as to enable them to use it regularly and pass it on to subsequent generation(s) (Puthuval 2017: 4). If an L1-HL plays a part in defining a sense of identity, if it hosts the community's culture and traditions, and if it is the basis of knowledge and experience, nowadays people or institutions often eagerly try to preserve that language. In this respect, language diversity is still a universal phenomenon, even though LS is the social norm (Pauwels 2016: 84).

⁸Without adequate documentation, frequent use between L1-HL speakers in different situations and domains, and without transmission to the next generation, a language is *endangered* and thus threatened with extinction (see EGIDS, the 13 levels of language endangerment/vitality proposed by Brenzinger et al. 2003: 2 based on Fishman's (1991) 8-level GIDS – see also Section 2).

⁹The difference between a *morbid endpoint* of a language and *language death* is that in the former case a language can still be spoken by other language communities. On the other hand, the term *language death* can be understood conclusively, because in this case a language is not spoken anymore, because it has been forgotten or simply not learned or passed on, and therefore no longer exists.

¹⁰LS is to be viewed as a process in which different factors come together. This can be extremely dynamic. For this reason, and to be predictable at all, a model must be flexible and able to take account of changing circumstances. Therefore I use the term *ongoing*, like Pauwels (2016: 112).

1.3 LS-process

On the other hand, LS can also be understood as a process, in the sense that the dominant language spreads at the cost of the minority language (Böhm 2010: 31). Language “lives” and is associated with an *ongoing* learning process that can lead to changes such as variant formation (see Chapter 2 on accommodation), speaker-related language mixing (see Chapter 3 on code-switching), new languages or varieties (see Chapter 5 on contact languages) and thus to long-term change (language shift or language change). Due to differences in individual settings, situations, speakers, etc., there is still no uniform and general definition of the LS phenomenon. As Pauwels (2016: 19) explains:

it may take one or more generations of speakers before the language is entirely abandoned. It also implies that the shifting away from the L1 does not occur simultaneously across all its users or functions and settings. The rate and speed of the shift process will vary from community to community. In some cases the process is relatively swift, within one or two generations, and in other contexts it will take much longer.

The duration of the shift process therefore depends on various influencing factors (see Section 4): While some language communities change their main language within only one generation, for instance, Dutch migrants in New Zealand (see van Rijk 2017), other migrant groups manage to maintain their L1-HL over several decades or centuries, such as the Amish in the USA (see Sağlamel 2013) or the Swiss in Brazil (see Karnopp forthcoming).

Figure 1 represents an overview of the phases typically involved in LS in a bilingual language community with language contact. However, this model does not hold for all settings or all contact situations with LS as an outcome. The transition period between a monolingual setting with language A and a monolingual setting with language B can be more multifaceted than depicted in Figure 1. The transition phase is discussed in more detail in the following subsections. Section 2 discusses the main approaches to LS, presents theoretical models, and summarizes the methods typically used in LS research. Language choice patterns, which are key to the process of LS, will be discussed in Section 3. Section 4 gives an overview of possible factors promoting LS. Finally, Section 5 summarizes the most important conclusions of the chapter and points out promising routes for future research.

2 Approaches, models, and methods

The various approaches to the study of language shift are best understood by observing the transition period from the initial monolingual setting preceding the shift to the final “monolingual” setting following it. As Figure 2 illustrates, the bilingual transition period of an LS involves not only factors regarding an individual speaker, but also often produces a situation where wider social, even societal phenomena become relevant. Furthermore, a finer differentiation between three social levels ① micro, ② meso, and ③ macro will be helpful in assessing the approaches, models, and methods presented in this section.

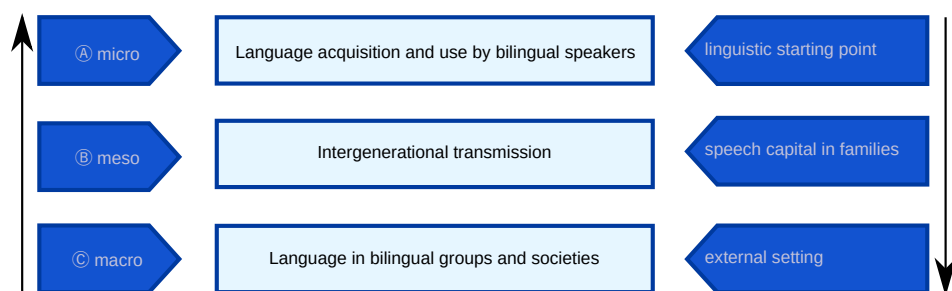


Figure 2: Social model for LS-processes, based on Sasse (1992: 63).

2.1 Approaches and models

LS and its counterpart, LM, both have a multidisciplinary nature. Since the beginning of the 20th century, they have attracted the attention of a number of scholars from a variety of disciplines, including (language) sociology, anthropology, social psychology, sociolinguistics, contact linguistics, demography, politics and history. If a language is to be considered in connection with its speakers and an entire society, this can sometimes lead to an interdisciplinary challenge – because each discipline has its own questions and methods, it may be difficult to make them compatible with each other. Since LM/LS studies are characterized by a wealth of approaches, models, and research methods, only a portion of the most influential ones are introduced in what follows (however, in Section 4 some of these will be taken up with regard to factors that can promote or slow down LS).

Kloss initiated the systematic study of LM for ethnic minorities in Germany. His key text (Kloss 1966) on language choice in correlation with a wide range of

individual and group factors led to the development of a quantitative taxonomic-typological model.¹¹ This was the first attempt to capture the dynamics of LM and LS. Based on Kloss's work, Haugen (1972) developed his concept of "language ecology"¹² in migrant settings and expanded the field from Europe to North America. His descriptive and explanatory model was the first to take into account the interaction between languages, their speakers, and the social environment. Fishman's (1972) study on "language use patterns" is one of the most important contributions to LMLS research. Using his famous question "who speaks what language to whom, and when", shift processes can now be analyzed across a range of (originally) five main domains: *family, education, employment, friendship, and religion* – although these may vary depending on each specific language contact situation. Fishman assumes an ideal language contact situation in which all members are multilingual, regardless of the language competence of its individual speakers. If the analysis of an *intragroup* within domains and further factors is extended to an *intergroup* situation, language contact can be analyzed not only at the micro level but also at the macro level (Werlen 2004: 335–336, see also Figure 2). The "ethnolinguistic vitality model"¹³ of Giles et al. (1977) includes such socio-psychological factors as *status, demography, and institutional support*. To analyze the vitality perceptions of languages in contact within and between minority and dominant groups, language identity and language attitudes play a decisive role (see Section 4). The fourth milestone is Gal's (1979) study on language use in bilingual communities at the Austrian-Hungarian border. She was the first to take into account *social and communicative networks*¹⁴ (see also Dorian 1980). Language choice plays a very important role in this. However, if both contact languages are equally appropriate in a network, it is not possible to predict which language bilingual speakers will choose in which communicative situation. With her new qualitative approach in this field Gal was able to show that for certain language groups, at a specific historical moment, language choice can be variable.

Gal's pioneering study was followed by further research and enhanced concepts. For instance, Bourdieu's (1977, 1982) *linguistic markets* – a term that stands

¹¹In a taxonomic-typological model, language is named on the basis of types and systematically classified with regard to its structural and functional features.

¹²In his model, Haugen used the ecosystem as a metaphor to show how languages behave in different language contact situations and how endangered languages can be preserved, similar to endangered species.

¹³Giles et al. (1977: 308) understand "ethnolinguistic vitality" to be the distinctive and active collective behavior of a minority group in *intergroup* relations.

¹⁴Gal (1979) understands "social and communicative network" as the environment in which a speaker normally interacts in a given unit of time.

as a metaphor for the places where linguistic exchange occurs and linguistic “capital” can be exchanged; Lieberman’s (1980) distinction between *age-grading* (linguistic changes on an individual level) and *age-cohort* (linguistic changes within an age group) analyses; Smolicz’s (1980) *core-values* and their relationship to LM, with regard to the most important cultural and social values of a linguistic community; Tajfel’s (1981) *social identity theory*, which is intended to explain *intergroup* behaviour; Fishman’s (1991) discussion of RLS and the necessary redistribution of power within a community, as well as the promotion of the 8-level *Graded Intergenerational Disruption Scale* (GIDS), an evaluative framework for identifying endangered languages; and Edwards’ (1992) *typology of language endangerment*, which includes factors for the viability of endangered languages.

Although the approaches and models listed here are fundamental for a better understanding of the dynamics of LS processes, each of them also has individual weaknesses. In addition, they can only shed light on a specific part of the whole phenomenon. For example, Kloss’s (1966) clear-cut factors are not necessarily unequivocal indicators of LM for all migrant contexts. On the other hand, additional factors – not taken into account by Kloss – may also lead to the preservation of a heritage language (e.g. Clyne 1991 in his research on migrants in Australia). Fishman’s (1972) model is based on a clear domain-by-domain shift, which is nowadays extended to further domains, as each language contact situation is unique and can therefore generate additional “exchange locations”. On the other hand, Fishman’s domains can be inhibited by other language contact phenomena such as code-mixing and code-switching (see Chapter 3). His proposal is thus better placed within an expanded *domain continuum* – from public to private domains – by taking into account both the LS of a single speaker and the LS within the language community. Smolicz’s (1980) core-value theory was also criticized by Clyne (1991) because of its relative simplicity: the definition of “group” is problematic, the model is inapplicable to several group affiliations, and language attitudes can change, even if they are normally considered to be stable over a longer period of time (e.g. RLS). Newer approaches and models aim at *hybridity* and *continuity*, with abstract and episodic-concrete language material being made comparable and tested using various factor combinations. One of the first hybrid models for LS was published by Wei (2002) with his concept of “market, hierarchy, and network” that makes interaction strategies of individual speakers combinable with the community-wide norms and values.

In summary, while in the initial phase of LS research the focus was on universal and abstract variables and systems (© in Figure 2), which were based on top-down approaches and aimed at the development of traditional-generative models at the macro level, Haugen’s (1972) descriptive approach paved the way

for research that aims to capture the macro level by defining the micro level (Ⓐ in Figure 2) of a social system. Since then, research approaches within the study of LS has shown a preference for user/agent-based bottom-up models.¹⁵ Even if the meso level (Ⓑ in Figure 2) was not directly addressed here, it is crucial, especially for the preservation of a minority language, since it deals with *intergenerational* transmission. If the language is not transmitted to the next generation, it will be forgotten and lost within the language community (e.g. Gal 1979, Brenzinger et al. 2003). Starting from the meso level, LS can be viewed in two different ways: By default, an intergenerational LS is normally assumed, that is, a change between generations or age groups within a language community (see Figure 2 (Ⓑ–Ⓒ), Lieberman 1980). The Lagged Generation Model by Myers et al. (2006, cited in Ortman & Stevens 2008) serves this purpose. However, since LS can also happen within a single speaker (see LA), the *intragenerational* change must also be taken into account. Intragenerational change can be analyzed by the Period Cross Section Approach, discussed in Myers, Park & Min (2006, cited in Ortman & Stevens 2008, see Ⓐ–Ⓒ in Figure 2). In this regard, Lutz (2006: 1423–1424) states in her study on Latino youth in the USA that “the shift from Spanish to English as a usual language appears to occur as children progress through the school system”.

2.2 Data gathering methods

Language data for LS research can be collected in various ways: through large-scale (macro-level) surveys and census data (see Ⓒ in Figure 2), or through observing language use by individuals through participatory observation, interviews, tests, and experiments (the micro and meso levels Ⓐ–Ⓑ in Figure 2) (Pauwels 2016: 48). A distinction is also made between real-time and apparent-time methods. In a real-time study, the language use of different age groups is observed over a longer period of time. Longitudinal studies can show a possible language change of a community as progress through time. Apparent-time methods, often implemented as a one-shot case study, focus on the speech patterns of different age groups – younger and older speakers – at a specific moment in time and can indicate a language change in progress.

Using a questionnaire is the most commonly applied method for data collection in LMLS investigations. It can be applied to large-field studies, which tend to target quantitative data, or to smaller-field qualitative analyses. A challenge

¹⁵For differences between generative and usage-based models, see Langacker (2000) and Prochazka & Vogl (2017).

regarding all methods that employ interviews, in addition to the choice of informants, is the interviewer's role. In certain cases a bilingual interviewer or a member of the group under study may be preferred. This helps to ensure the authenticity of the linguistic data, and that trust and solidarity with the informant can be established. The questionnaires themselves vary, featuring e.g. closed-ended questions, multiple-choice questions, point scales, open questions (Pauwels 2016: 53–61).

Surveys and census data are often used in longitudinal studies, providing objective data for comparison. Within the field of LS these data can be used to assess, for instance, number of speakers, geographical distribution, and socio-demographic profiles (Clyne 1991). However, surveys can be expensive and they address only a portion of the targeted group at a time. Censuses, on the other hand, are more exhaustive, but data regarding language use is often inaccurate or even subjective and therefore not especially valuable. Regarding this concern Buda (1992: para. 16) adds that:

respondents may not be fully conscious of their own language usage patterns, or may wish to portray them in a socially or culturally favorable light. Very often the respondent's assessment of his or her own language ability and usage represents more of what he or she would wish them to be, and less of what they really are.

In the same vein, Pauwels (2016: 66) notes that a self-assessment of language skills is not comparable with accurately measured linguistic proficiency in reliability.

3 Language choice patterns and trends

The Fishman question – who speaks what language to whom, and when – can be further expanded with the question of *how well* a language is spoken. Pivotal for answering these questions is *language choice*, the selection of a language in a given communicative situation. As language choice patterns are variable and often difficult to generalize, LS can be seen as a long-term consequence of language choice (Holmes 2013: 53). Fishman (1965: 68) suggests that language choice must first be analyzed in individual face-to-face meetings before approaching the “problem of the broader, underlying choice determinants on the level of larger group or cultural settings”. In this regard, language choice patterns within a stable bilingual setting can be further applied to interpret less stable contact situations (see Figure 1). A domain analysis concerning the three social levels (see

Ⓐ–Ⓒ Figure 2) is useful to observe some general language choice patterns and trends. In what follows, the expanded Fishman question will be used as a framework for this more encompassing analysis.

3.1 Who?

The question *who* speaks a specific contact language can be viewed, for example, in relation to *age-related* patterns. Many studies (e.g. Gal 1979, Wei 2002, Karnopp forthcoming) show that older speakers would rather maintain an L1-HL, while younger people often shift much faster to an L1-ML. This has to do with the fact that older migrants are usually more dependent on their heritage language. Learning the majority language is often more difficult for them – if they learn it at all – and their *social networks* tend to the in-group. However, the use of L1-ML can also increase for older generations, for instance if they spend a lot of time within the out-group during their working years (see Subsection 3.4). Likewise, younger generations may grow up in an L1-HL environment, but starting with school or earlier – through older siblings or media exposure – they come into contact with the majority language (*speech capital*, Ⓑ in Figure 2). Pauwels (2016: 84–85) notes in this connection that if the second generation does not speak the heritage language as well as the first generation, and, additionally, if their language displays more contact phenomena, such as code-switching (see Chapter 3), LS progresses faster.

On the other hand, *gender-related patterns* can influence language choice, even if researchers do not agree on this. Labov (1990: 213–215) therefore proposed the “gender paradox”, which states that women can be both conservative and innovative in language use. But whether the female gender inspires or slows down LS depends on the role relationship and status in a given minority (Pauwels 2016: 86–88). Hence, a monolingual housewife who never obliged or enabled to learn the majority language, and who also cares for her (elderly) parents, rather tends toward LM. In contrast, a bilingual woman who no longer lives in a migrant context may prefer L1-ML, possibly affecting her proficiency in the HL (LA), although a “healthy” bilingualism (LM) cannot be excluded here either.

3.2 To whom?

In addition to the individual circumstances of each bilingual speaker, it is equally important to consider *to whom* someone speaks one of two or more contact languages. Again, this is closely related to a speaker’s social network, role relation-

ship and the conversational topics:¹⁶ if a bilingual person works in the countryside and only has contact with members of the in-group, an increased use of the L1-HL and thus LM is more likely. In contrast, a small in-group network and a low common routine can boost LS.

The home domain also helps to show how the role relationship within a family can change over generations, as the home is usually the last location to be affected by LS (Heinrich 2015: 616). If the speech capital¹⁷ in families is low, or parents consider it unfavorable to transmit a language (transmission pattern), this can have a negative effect on the language setting and use. Pauwels (2016: 84–89) emphasizes that in migrant communities it is often the case that parents of the first generation use the L1-HL regularly among themselves, and with others the same age and older. In parent-child conversations there is a continuum of reciprocal to non-reciprocal use of the heritage language. The second generation therefore can learn the heritage language, but use it less and are not as likely to *transmit* it, especially in exogamy families. Nevertheless, the L1-HL can be used again more frequently when children have to look after their parents in old age.

3.3 What language and how well?

A distinction between *inter-* and *intraindividual* variation is useful at this point, since nobody speaks the same way all the time, and the speaker's choice among varieties – languages or speech styles (language choice pattern) – is usually linked to the corresponding social context in some way (Gal 1979: 12–17, see also Chapter 2). In any case, bi- or multilingual speakers normally know which of the two or more languages in contact to use with whom, and when (linguistic competence and linguistic performance).¹⁸ Depending on the *speech capital* ® of the parents or older siblings, speakers in minority settings can unconsciously learn several languages simultaneously (bi- or multilingualism) the *competence* of each speaker may differ as follows: Endogamy, a practice of marital union within a particular social, cultural, or ethnic group, influences LM within the family domain.

¹⁶ Along with domain analysis, these are further factors Fishman (1964) considers in order to best determine the language choice within a speech community.

¹⁷ Bourdieu (1977: 18) defined speech capital as the mastery of a language. Speech capital is closely related to cultural capital, since it is not only important to learn grammar and vocabulary, but equally vital for the speaker to identify with the culture's language attitude and prestige.

¹⁸ According to Chomsky (1965: 3) every person has an unconscious grammatical knowledge of a language which is innate and allows them to understand and speak. Within this concept, he makes a fundamental distinction between *competence* – which includes knowledge by the speaker and listener of a language – and *performance* – which describes the actual use of a language in specific conversational situations.

When both parents are bilingual or exclusively speak a common L1-HL, there is an increased tendency toward LM in the home domain (endogamy pattern). Conversely, when couples come from different ethnic backgrounds or one partner is from the majority society (exogamy pattern), the probability of LS is considerably higher (Pauwels 2016: 89). Holmes (2013: 65) thus states that “[m]arriage to a majority group member is the quickest way of ensuring shift to the majority group language for the children”. In contrast, an L1-HL can be infrequently spoken and transmitted to the next generation due to, for instance, negative attitude, negative prestige, lack of institutional support, or the dominance of other (world) languages of greater economic interest (diffusion pattern). Often the heritage language is then only hesitantly used due to uncertainty. In an environment with such a low linguistic starting point (A in Figure 2), the children may not acquire the full competence in a minority language and thus the performance can contain inaccuracies (see *semi-speaker* in Dorian 1980: 87). According to Wei (2002: 116), such speakers tend to use “linguistic innovations, structural changes, and new varieties of language”.

On this account, recent LS studies not only focus on language choice patterns, but also on how languages influence each other within their linguistic levels. This can happen on a lexical as well as on a grammatical level, as Thomason & Kaufman (1988: 35) showed with their “five level scale of borrowing”.¹⁹ In their opinion, the *contact-intensity*, and not the *language structures*, determine possible outcomes of language contact. However, later studies also confirm the influence of the latter (e.g. Treffers-Daller (1999)), because

speakers in general are able to construct new word formation devices, new syntactic forms and generally are linguistically creative, in the well-documented Chomskyan sense, even if input of a specific structure is slight or lacking. (Gal 2008: 591)

During an *ongoing* shift process, language contact effects usually happen between the middle and the last stage (see Figure 1). In my own research on the Swiss colony called Helvetia in São Paulo (Karnopp forthcoming), where the speakers today are strongly assimilated to the L1-ML, I was still able to identify some *salient patterns*, as some informants showed a different, and for the region rather atypical, pronunciation of some consonants in both contact languages. For

¹⁹Thomason & Kaufman (1988: 37) define *borrowing* as the “incorporation of foreign features into a group’s native language: the native language is maintained but is changed by the addition of the incorporated features”.

instance, the common retroflex [ɭ] of the region is hardly used by the older bilingual generation, while the youngest generation uses it more than the surveyed young generation of the out-group, in order to differentiate themselves linguistically. Another finding are neologisms (*word-formation pattern*), such as *xeníssimo* (very beautiful), composed of the Swiss German adjective *scheen* (beautiful) and the Portuguese superlative suffix *-issimo*.

Sometimes even in the third and last LS phase (see Figure 1) there can still be some “remnants” of the former language contact situation. This is the case, for example, when bilinguals “create” new *shift varieties*, recognized and adopted subsequently by the entire language community (see *shift-induced change* in Thomason and Kaufman 1988: 38). In Ireland, for instance, comparatives are double marked in non-standard Irish English, as in “working more harder” (Hickey 2010: 153). According to Hickey, this shift can have two causes: either the form was taken from the Irish comparatives, formed by the particle *níos* ‘more’ as well as the inflection of the adjective; or it comes from an older form of English, where this *doubling pattern* also occurred.

3.4 When?

For a better understanding of LMLS processes the study of interactional settings are central and imperative. A fundamental distinction is made between public and private domains, which – as I have already mentioned – should be treated as a *continuum*, as they are not always clearly delimitable. For example, if someone teaches at home, this domain becomes both private and public. The *labor market*, on the other hand, is considered to be a public space, although acquaintances and friendships between colleagues or business partners can also be cultivated here, which in turn produces more of a private character. The labor market thus has many facets, of which four possible language contact situations are shown below.

Minority members who work in a family business, for example farmers with a little village shop, may have a smaller social network that is often limited to the in-group. If an L1-HL enjoys positive prestige in such an environment, LM can be expected. However, if a migrant no longer lives within their language community because they moved to the next larger city for professional reasons, the tendency to use L1-ML in everyday life increases drastically. If the use of the heritage language then also decreases within the family domain, attrition (LA) can be the consequence. It becomes even more challenging when a heritage language speaker works in a multi- or international company, where the linguistic exchange takes place exclusively in a *lingua franca*, such as English or Spanish

(diffusion pattern). The probability that a minority language will “survive” under such circumstances is at this point rather low within the labor market but not impossible. Another complex language contact situation occurs on construction sites, where members of different ethnic groups work together. Language contact phenomena such as accommodation (see Chapter 2) or code-switching (see Chapter 3) are common here, since many construction workers have often not (yet) properly learned the majority language. In order to still be able to communicate with each other, the L1-ML is drastically simplified and usually pronounced with a noticeable accent, which leads to this variety being strongly stigmatized (negative *prestige*). For mutual understanding to be possible, only common knowledge of the meaning and application of the words referring to construction are important. Today this “primitive language” is considered a *learner variety* – and not a pidgin, even if there are simplified structures in both of them (see Chapter 5) – of migrant workers (Riehl 2014: 129–135).

Other (rather) public domains proposed by Fishman (1972) are *education* and *religion*. The school is not only a possible pivot point for learning (heritage) languages, but is also crucial for their revitalization and preservation (see RLS, Figure 1). Consequently, it is important to have, for instance, a supportive language policy as well as for the minority group(s) to be interested in preserving and cultivating these languages. For example, the Swiss descendants in Helvetia (Karnopp forthcoming) built their own private school shortly after the foundation of the colony, where their children could learn High German – since this is the official standard language in German-speaking Switzerland – as well as Swiss history and culture. After the nationwide ban on learning and using foreign languages, official German lessons were discontinued.²⁰ Since the school was nationalized in the 1980s and had to open its doors to non-Swiss descendants, LM was not possible anymore within this domain. Either way, Pauwels (2016: 95–96) points out that when private schools consider the L1-HL of a language community, the programs usually focus only temporarily on bilingualism. Their aim is to prepare the students for linguistic assimilation towards L1-ML. However, in-group children often go to mainstream schools, where they only communicate in the majority language anyway.

On the other hand, the church is an important meeting place for religious (minority) groups. The Helvetians have always been devout Catholics, and therefore they built their own church, and some of them still believe their harvest depends

²⁰High German courses were offered in the 1990s and have again been introduced since 2015. However, these efforts are only moderately fruitful and, in my opinion, are not leading to a language revival in Helvetia.

on the good will of Saint Nicholas. Until the ban on foreign languages, the mass was said in High German. To this day, the Helvetians have maintained their tradition of exchanging greetings in front of the church after the official part of the service. However, what has changed is the language: the discussions have shifted from Swiss German to “regional” Portuguese – with very few interferences like *Giotä Sunnti* (‘Have a good Sunday’).

4 Factors that can promote LS

Why is it that one minority group assimilates and its language dies, while another one maintains its linguistic and cultural identity? (Bradley 2002 cited in Pauwels 2016: 58)

Most studies on LS have repeatedly focused on identifying causes and factors which can promote or slow down the LS process. On this basis, scholars have tried to generate a *unique set of factors* that make LS predictable within every language community. However, certain factors may achieve differential effects, even in very similar contact situations. Kloss (1966) noticed this early and suggested a typology in which he not only offered a set of *clear-cut* factors (which clearly promote LM), but also *ambivalent* factors (which can promote LM and LS). These ambivalent factors are:

- linguistic attitude:²¹ speakers with negative feelings towards their L1-HL tend towards LS;
- educational level: speakers with little or no education tend towards LM, which can be ascribed to the fact that their social network is often smaller and more limited to in-group contacts, while a speaker with a higher degree may work outside the community and therefore has more frequent contact with the majority;
- linguistic and cultural similarity: contact languages from the same language family may or may not tend toward LS, depending on whether the desire for assimilation or differentiation is greater;
- numerical strength of the group: language communities with a smaller number of L1-HL speaker tend to be more LS oriented, because they have little common routine;

²¹*Linguistic attitudes* describe a positive or negative evaluation through social status of a language or variety in contact.

- other socio-cultural characteristics such as *role of the family* (if an L1-HL is not used anymore for communication within a family – in other words, low *speech capital* – and is no longer *transmitted* to the next generation, the tendency is towards LS).

Fishman (1972) presented his domain analysis for speech communities. Each of these contains domain-specific factors with regard to *addressee* (to whom a specific language is spoken), *setting* (in which environment a language in contact is used), and *topic* (which subjects promote the language choice) – discussed in greater detail earlier in this section.

Giles et al. (1977) suggested three factors to define a minority group's vitality: *status* (economic, social, socio-historical, and language status), *demography* (distribution and numbers of speakers), and *institutional support* (formal and informal facilities). They explain that minority groups with a higher vitality (*high attitude, high prestige, common routine*, etc.) tend to differentiate themselves from the dominant group, while those with a lower vitality show faster assimilation, and thus a faster LS.

In Gal's (1979) pioneering study, she considered social causes (6) such as *urbanization* (LS often takes longer in rural areas than in cities), *industrialization* (new and better qualified jobs, achievable e.g. through higher education, can also lead to LS), *loss of isolation* (once rural regions have been taken over by political power, LS progresses), and different *social and communicative networks* that can influence language use and language choice. Dorian (1980) adds *migration, mobility of people* (the progress of means of transport and communication makes people much more flexible and enables them to move within a short time to another linguistic environment), and *community size* (see *numerical strength of the group* in Kloss (1966) to the list of factors pushing LS.

Smolicz's (1980) core-value theory states that *symbolic group values* – for instance language attitude and prestige, family cohesion, and religious and cultural unity – have a significant influence on LMLS and can thus convey a different identity.²² For example, if the L1-HL is handled as a *core-value* within a language

²²*Identity* is a term very difficult to define because it is dynamic and changeable. It stands for, among other things, a correlation between "being me" and "belonging to the group". Every human being has different "identities" which predominate depending on the situation or the people with whom one is interacting. Within language contact research, ethnic/national (group membership, e.g. based on physical, religious or social factors), social (e.g. social stratification), geographical (e.g. language and dialect) and contextual (e.g. secret languages) identities can be relevant (Riehl 2014: 172–173).

community, LM is more likely. In contrast, a negatively assessed heritage language of a single speaker (i.e. attitude) or the majority (i.e. prestige) makes LS more likely.

In more recent case studies and theoretical literature, further factors in analyzing LS stages are proposed (see e.g. Lutz 2006, Ortman & Stevens 2008, Böhm 2010, Jagodic 2011, Ostler 2011, Sağlamel 2013, Heinrich 2015, Pauwels 2016, Perez 2016, Puthuval 2017, van Rijk 2017, and Karnopp forthcoming). These include:

- age: in minority communities older people tend to be bilingual, while younger people sometimes hardly understand or speak the L1-HL;
- gender: gender roles in the society (see Section 3);
- language transmission: if an L1-HL is not passed on to the next generation, younger people no longer speak the heritage language, which provokes LS;
- religion: if in a bilingual colony the sermon is delivered in L1-ML, it is more likely that the majority language will be maintained in conversations after the church service (see Section 3);
- marital status: exogamy usually leads to LS;
- linguistic, social and ethnic identity: identification with a group often supports assimilation, which can promote LS or LM, depending on the situation;
- language prestige: if a bilingual language community has a greater appreciation for the L1-ML, LS is foreseeable;
- literacy: if a contact language is not read or written, there is also a tendency toward LS;
- media:²³ low medial contact with the L1-HL can cause LS.

Holmes (2013) proposes a classification into economic, political, institutional, demographic, attitudinal, educational and socio-cultural factors. For her, these categories are the ones that can be held responsible for the speed of LS within a bilingual community.

²³By the term *media* I mean not only written sources (newspapers, magazines, etc.), but also digital media such as television and, above all, the internet, computers, smartphones and tablets, which nowadays make contact with the home country easier and more accessible.

As already mentioned above, my current research (Karnopp forthcoming) looks at the language contact situation of the Swiss colony Helvetia in São Paulo, Brazil. Since its foundation in 1888, the *language usage patterns* within the colony have undergone some fundamental changes (see also Section 3). Initially Helvetia was a *language island* and therefore linguistically quite well isolated and shielded. The everyday language was the L1-HL – a Swiss German dialect from the canton of Obwalden – and when communication with the out-group was required, a translator was called in. After the First World War, the colony's own school had to hire Portuguese teachers and introduce the Portuguese language and other subjects related to Brazil like history and geography. Most of the Helvetians slowly became bilingual and could then communicate with the out-group (*outside diglossia*). At the start of the Second World War, all foreign languages were banned in Brazil and everyone who continued to use them risked a fine or even arrest. These circumstances then led to *inner diglossia*, which henceforth favored LS in all domains within the colony. Today only a few of the oldest generation surveyed still speak and understand the old Swiss German dialect – often with a slight accent or interferences from Portuguese (see Section 3) – and with this advanced linguistic assimilation to the Brazilian out-group LS reached its *morbid endpoint* there.

In order to illustrate more precisely which major factors led to this outcome within the Swiss colony in São Paulo, I defined fourteen main social and individual factors on the basis of the proposed social model (see Figure 2):

At the micro level Ⓐ: (1) rapid decrease of L1-HL usage in *all domains* – today the old Swiss German dialect has, even in the *home domain*, a very low *common routine*, (2) *growing language diffusion* among young Helvetians, who would rather learn Spanish or English than High German or the dialect of their ancestors, (3) *low linguistic attitudes and values* toward their heritage language – because it is no longer needed for communication within the community and therefore considered useless.

At the meso level Ⓑ: (4) *lack in transmitting* the L1-HL after the Second World War, (5) *small group size* which is still decreasing today, (6) *increased exogamy*, among other things to avoid hereditary diseases, (7) *little contact with the homeland* because the Swiss relatives rarely speak Portuguese and fewer than 30 Helvetians speak Swiss German or High German.

At the macro level Ⓒ: (8) *length of stay since arrival*, because the degree of attachment to Switzerland tended to diminish due to little contact with the

homeland (7) and *low medial contact*, (9) *low geographical concentration* due to resettlement to neighboring bigger cities, which offered more economic opportunities and security, (10) *industrialization* and *career change* away from the peasant lifestyle, (11) lack of *isolation*, especially after the Second World War, due to *political pressure*, (12) *no institutional support* of the L1-HL, (13) *no official written standard*²⁴ is available for the heritage dialect to date – neither in Switzerland nor in Brazil –, (14) *low language prestige* because older bilinguals often have a (slight) accent probably caused by language contact, and this is often criticized by younger Helvetians and the out-group.

To conclude, I would like to discuss in more detail the factor that is currently considered one of the main causes leading to LS: *language diffusion*. Globalization and the resulting convergence of languages has been increasingly discussed in recent years. Although heritage languages with a larger population can be supported by the language policy of a given region/country, their use in many migrant settings is diminishing. As I have shown above, in some cases, mostly older people continue to speak a heritage language or are at least *semi-speakers* (Dorian 1980), while younger people often have no opportunity to learn it due to insufficient preservation, transmission, institutional support, or desire to ensure revival. Consequently, what can happen is that younger migrants learn other languages – apart from the L1-ML – which, for instance, can help them in economic terms (Holmes 2013). In this regard, India, Pakistan and China show the growing importance of English as a world language. In these countries, speaking English generally increases chances of financial security. Only with competence in this *lingua franca* is it possible to obtain a high rank in the business world, where English determines all financial activities. In contrast to this, Nawaz et al. (2012: 74) explain that in India the less prestigious Punjabi does not guarantee any financial security and is associated with the low and uneducated majority. Lastly, a high bilingualism rate, even if applied in clearly different *domains*, can cause language contact phenomena such as accommodation (see Chapter 2) or code-switching (see Chapter 2). If learning second languages other than the heritage language becomes more important within a bilingual group, individual factors such as attitude, identity, language loyalty,²⁵ and consequently language prestige also come into play. For example:

²⁴Since the standard language in German-speaking Switzerland is High German, it is the language taught in school and used in official contexts (*medial diglossia*, see Glaser (2014)). Moreover, a universal grammar for Swiss German dialects does not exist because there is a dialect continuum.

²⁵*Language loyalty* is a term used to describe a speaker's (conscious or unconscious) relationship with her or his mother tongue.

They [i.e. speakers of a minority language – AK] may feel shame when other people hear their language. They may believe that they can only know one language at a time. They may feel that the national language is the best language for expressing patriotism, the best way to get a job, the best chance at improving their children's future. (SIL 2022)

Lastly, and to return to my current research, even if the Helvetians appreciate their ancestors and their efforts, their L1-HL will probably not experience a revival there because it has lost its vitality and its social network. The Swiss dialect is still considered important for cultural events such as yodeling, but useless in terms of everyday language use, and therefore largely irrelevant within the colony. Consequently, the L1-HL no longer possesses importance as a *core-value* in Helvetia, which is why the LS process will be completed soon.

5 Discussion

From what we have seen so far, it emerges not only that languages are “alive”, but also that every language contact situation is *dynamic* and thus *different*. In the scenario of *ongoing* LS, an individual speaker, a group or a whole language community *can choose* between an L1-HL and an L1-ML, although this usually happens unconsciously. Buda (1992: para. 8) confirms this by arguing that “[t]he phenomenon of language shift takes place out of sight and out of mind”. RLS, on the other hand, certainly happens much more consciously, since it relies on the *will* of individuals, and of the whole language group, to reintegrate the heritage language into their *social network* for specific purposes (see Figure 1).

LS can also happen when more than just two languages are in contact. In similar settings, Perez (2016) observed that the shift commonly goes towards one of the more prestigious languages. Consequently the *prestige*-factor is certainly one of the important determinants with regard to LMLS. However, in her study of the language contact situation in the Anglo-Paraguayan community New Australia, different circumstances led to the fact that the population did not shift to Spanish, a global language, but rather chose to adopt the indigenous language Guaraní.

This chapter highlights the need for approaches, models and methods that can be adapted to exceptional and constantly changing settings, while considering both *inter-* and *intragroup* variation. However, it is important to acknowledge that these methodological choices often involve different research goals at the individual, group, and societal levels (see ①–③ in Figure 2). With the inclusion

of my current research, I wish to reaffirm the fact that the dynamics influencing individual and social changes can be very different in each language contact situation. Therefore the tools that need to be developed for the study of LMLS have to be *hybridized*. Ideally, this would be done by designing a framework that includes a universally applicable *continuum*, from which every researcher would take only what they need for their research goal. The right path to designing this framework has already been taken by recognizing that there are *no specific factors* that can be applied to all LMLS situations, because some factors may or may not promote different language-choice patterns. Now it is only a matter of implementation.

References

- Böhm, Manuela. 2010. *Sprachenwechsel: Akkulturation und Mehrsprachigkeit der Brandenburger Hugenotten vom 17. Bis 19. Jahrhundert*. Berlin: De Gruyter.
- Bourdieu, Pierre. 1977. The economics of linguistic exchanges. *Social Science Information* 6(16). 645–668.
- Bourdieu, Pierre. 1982. *Ce que parler veut dire: L'économie des échanges linguistiques*. Paris: Fayard.
- Bradley, David. 2002. Language attitudes: The key factor in language maintenance. In David Bradley & Maya Bradley (eds.), *Language endangerment and language maintenance: An active approach*, 1–10. London: Routledge.
- Brenzinger, Matthias, Arianne M. Dwyer, Tjeerd de Graaf, Colette Grinevald, Michael Krauss, Osahito Miyaoka, Nicholas Ostler, Osamu Sakiyama, María E. Villalón, Akira Y. Yamamoto & Ofelia Zepeda. 2003. *Language vitality and endangerment*. Paris: Document adopted by the International Expert Meeting on UNESCO Programme Safeguarding of Endangered Languages, Paris, 10–12 March 2003. <http://unesdoc.unesco.org/images/0018/001836/183699e.pdf>.
- Buda, Janusz. 1992. Language shift in Australia and Canada. *Ōtsuma Women's University Annual Report: Humanities and Social Sciences XXIV*. <http://www.f.waseda.jp/buda/texts/langshift.html>.
- Chomsky, Noam. 1965. *Aspects of the theory of syntax*. Cambridge: MIT Press.
- Clyne, Michael G. 1991. *Community languages: The Australian experience*. Cambridge: Cambridge University Press.
- Crystal, David. 1991. *Language death*. Cambridge: Cambridge University Press.
- Dorian, Nancy. 1980. Language shift in community and individual: The phenomenon of the laggard semi-speaker. *International Journal of the Sociology of Language* 25. 85–94.

- Edwards, John. 1992. Sociopolitical aspects of language maintenance and loss: towards a typology of minority language situations. In Willem Fase, Koen Jaspaert & Sjaak Kroon (eds.), *Maintenance and loss of minority languages*, 37–54. Amsterdam: John Benjamins.
- Fasold, Ralph. 1984. *The sociolinguistics of society*. Oxford: Blackwell.
- Ferguson, Charles. 1959. Diglossia. *Word* 15(2). 325–340.
- Fishman, Joshua. 1964. Language maintenance and language shift as a field of inquiry: A definition of the field and suggestions for its further development. *Linguistics* 2(9). 32–70.
- Fishman, Joshua. 1965. Who speaks what language to whom and when? *La Linguistique* 1(2). 67–88.
- Fishman, Joshua. 1967. Bilingualism with and without diglossia; diglossia with and without bilingualism. *Society for the Psychological Study of Social Issues* 13(2). 29–38.
- Fishman, Joshua. 1972. Domains and the relationship between micro- and macro-sociolinguistics. In John J. Gumperz & Dell Hymes (eds.), *Directions in sociolinguistics: The ethnography of communication*, 106–125. New York: Holt, Rinehart & Winston.
- Fishman, Joshua. 1991. *Reversing language shift: Theoretical and empirical foundations of assistance to threatened languages*. Clevedon: Multilingual Matters.
- Gal, Susan. 1979. *Language shift: Social determinants of linguistic change in bilingual Austria*. New York: Academic Press.
- Gal, Susan. 2008. Language shift. In Hans Goebel, Peter H. Nelde, Zdenek Stary & Wolfgang Wölck (eds.), *Kontaktlinguistik: Ein internationales Handbuch zeitgenössischer Forschung*, 586–593. Berlin: Walter de Gruyter.
- Giles, Howard, Richard Y. Boruhis & Donald M. Taylor. 1977. Towards a theory of language in ethnic group relations. In Howard Giles (ed.), *Language, ethnicity and intergroup relations*, 307–348. London: Academic press.
- Glaser, Elvira. 2014. Wandel und Variation in der Morphosyntax der schweizerdeutschen Dialekte. *Taal en Tongval* 66(1). 21–64.
- Gong, Tao, Mónica Tamariz & Gerhard Jäger. 2012. Individual and social effects on linguistic diffusion. In Thomas C. Scott-Phillips, Mónica Tamariz, Erica A. Cartmill & James R. Hurford (eds.), *The evolution of language: the evolution of language: proceedings of the ninth international conference (evolang9)*, 142–149. Singapore, Havensack: World Scientific.
- Haugen, Einar. 1972. The ecology of language. In Einar Haugen (ed.), *The ecology of language*, 325–339. Stanford: Stanford University Press.

- Heinrich, Patrick. 2015. Language shift. In Patrick Heinrich, Miyara Shinso & Michinori Shimoji (eds.), *Handbook of the Ryukyuan languages*, 613–620. Berlin: Mouton de Gruyter.
- Hickey, Raymond. 2010. Contact and language shift. In Raymond Hickey (ed.), *The handbook of language contact*, 151–169. London: Wiley-Blackwell.
- Holmes, Janet. 2013. *An introduction to sociolinguistics*. 4th edn. New York: Pearson.
- Jagodic, Devan. 2011. Between language maintenance and language shift: The slovenian community in Italy today and tomorrow. *ESUKA-JEFUL* 2(1). 195–213.
- Karnopp, Andreia Caroline. Forthcoming. O português falado por descendentes suíços no brasil: Uma análise preliminar em uma colônia suíço-brasileira chamada helvetia em são paulo. Unpublished doctoral thesis, University of Zurich.
- Kloss, Heinz. 1966. German American language maintenance efforts. In Joshua Fishman (ed.), *Language loyalty in the United States*, 206–252. The Hague: Mouton.
- Labov, William. 1990. The intersection of sex and social class in the course of linguistic change. *Language Variation and Change* 2(2). 205–254.
- Lambert, Richard D. & Barbara F. Freed. 1982. *The loss of language skills*. Rowley: Newbury House.
- Langacker, Ronald W. 2000. A dynamic usage-based model. In Suzanne Kemmer & Michael Barlow (eds.), *Usage based models of language*, 1–63. Stanford: CSLI.
- Lieberson, Stanley. 1980. Procedures for improving sociolinguistic surveys of language maintenance and language shift. *International Journal of the Sociology of Language* 25. 11–27.
- Lutz, Amy. 2006. Spanish maintenance among English-speaking latino youth: The role of individual and social characteristics. *Social Forces* 84. 1417–1434.
- Myers, Dowell, Julie Park & Seong Hee Min. 2006. *A new model of intergenerational mobility of immigrants in the U.S., 1970 to 2000*. Paper presented at Annual Meeting of the Population Association of America, March 30–April 1, 2006, Los Angeles.
- Nawaz, Sana, Ayesha Umer, Fatima Anjum & Muhammad Ramzan. 2012. Language shift: An analysis of factors involved in language shift. *Global Journal of Human Social Science* 12(10). 73–80.
- Nettle, Daniel & Suzanne Romaine. 2000. *Vanishing voices: The extinction of the world's languages*. New York: Oxford University Press.

- Ortman, Jennifer & Gillian Stevens. 2008. *Shift happens, but when? Inter- and intra-generational language shift among Hispanic americans*. Paper presented at the Annual Meeting of the Population Association of America, April 17–19 2008.
- Ostler, Nicholas. 2011. Language maintenance, shift, and endangerment. In Rajend Mesthrie (ed.), *The Cambridge handbook of sociolinguistics*, 315–334. Cambridge: Cambridge University Press.
- Pauwels, Anne. 2016. *Language maintenance and shift*. Cambridge: Cambridge University Press.
- Perez, Danae. 2016. English and language shift in Paraguay's New Australia. *World Englishes* 35(1). 160–176.
- Prochazka, Katharina & Gero Vogl. 2017. Quantifying the driving factors for language shift in a bilingual region. *PNAS* 114(17). 4365–4369.
- Puthuval, Sarala. 2017. Stages of language shift in twentieth-century Inner Mongolia, China. *Proceedings of the Linguistic Society of America* 2(28). 1–14.
- Riehl, Claudia M. 2014. *Sprachkontaktforschung*. Tübingen: Narr Franke Attempto.
- Sağlamel, Hasan. 2013. What language change tells us: The Amish case. *Journal of Narrative and Language Studies* 1. 1–17.
- Sasse, Hans-Jürgen. 1992. Language decay and contact-induced change: Similarities and differences. In Matthias Brenzinger (ed.), *Language death: Factual and theoretical explorations with special reference to East Africa*, 59–80. Berlin: Mouton de Gruyter.
- SIL. 2022. *Language attitudes*. <https://www.sil.org/language-assessment/language-attitudes> (12 July, 2022).
- Smolicz, Jerzy J. 1980. Language as a core value of culture. *RELC Journal* 1(11). 1–13.
- Tajfel, Henri. 1981. *Human groups and social categories: Studies in social psychology*. Cambridge: Cambridge University Press.
- Thomason, Sarah G. & Terrence Kaufman. 1988. *Language contact, creolization, and genetic linguistics*. Berkeley: University of California Press.
- Treffers-Daller, Jeanine. 1999. Borrowing and shift-induced interference: Contrasting patterns in French-Germanic contact in Brussels and Strasbourg. *Bilingualism: Language and cognition* 2(1). 77–101.
- van Rijk, Daniëlle. 2017. *Language maintenance and shift of people of Dutch descent in Chile*. Universiteit van Tilburg. (MA thesis).
- Wei, Lee. 2002. Competing forces in language maintenance and language shift: Markets, hierarchies and networks in Singapore. In Maya Khemlani David

- (ed.), *Methodological and analytical issues in language maintenance and language shift studies*, 113–126. Frankfurt am Main: Peter Lang.
- Weinreich, Uriel. 1953. *Languages in contact*. New York: Linguistic circle of New York.
- Werlen, Iwar. 2004. Domäne / domain. In Ulrich Ammon, Norbert Dittmar, Klaus J. Mattheier & Peter Trudgill (eds.), *Sociolinguistics - an international handbook of the science of language and society*, 2nd completely revised and extended edition, vol. 1, 335–341. Berlin & New York: Walter de Gruyter.

