Languages in Contact

# Languages in Contact 

French, German and Romansch in twentieth-century Switzerland

Uriel Weinreich

With an introduction and notes by
Ronald I. Kim and William Labov

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## Introduction

# Uriel Weinreich and the study <br> of language contact in Switzerland, 1951-2011 

## 1. Uriel Weinreich and Languages in Contact

During his short life, Uriel Weinreich (1928-1969) so profoundly influenced so many fields of linguistics that more than four decades after his premature death, his achievements continue to inspire scholars from a range of disciplines and countries. Within Yiddish linguistics, he continued the pioneering efforts of his father Max, founder of the Yiddish Scientific Organization (YIVO). College Yiddish remains a model of pedagogical and descriptive clarity and the best vehicle for students to gain control of Weinreich's native language. The Linguistic and Cultural Atlas of Ashkenazic Jewry initiated by him has reached completion as a massive documentation of dialectal diversity of the one-time Yiddish-speaking world. His pioneering work in semantics (Weinreich 1980) has influenced several generations of workers in that field. His sociolinguistic perspective argued for the study of linguistic use, variation, and change within the full social, cultural, and political context of speech communities. In the last months of his life, Weinreich wrote the first third of "Empirical foundations for a theory of language change" (Weinreich, Labov \& Herzog 1968). This article laid out the principles for the study of linguistic variation and change through fieldwork in present-day speech communities, as well as the application of such research for historical linguistics ("using the present to explain the past"). It heralded the birth of what is now called the variationist approach to the study of language.

Yet precisely because of his prodigious accomplishments, even Weinreich's intellectual heirs have rarely paused to consider how much more he could have influenced the development of modern linguistics if he had lived a normal lifespan. This is nowhere more true than in the field of bilingualism and language contact, one of Weinreich's lifelong personal and research interests. Born in 1926 in Wilno, Poland (today Vilnius, Lithuania), Weinreich grew up speaking Yiddish, Polish, and Hebrew, and from a young age became familiar with Russian, German and, after his arrival in the United States, English, as well as many other European and non-European languages. This polyglot upbringing, extraordinary by present-day standards but hardly unusual among Central and East European intellectuals of the prewar generation,
constantly informed his research on bi- and multilingualism and the linguistic outcomes of language contact. Weinreich's experiences and fieldwork not only led him to argue passionately against the then prevailing belief in the evils of bilingualism, but convinced him that no adequate study of a language, much less of multiple languages, was possible without close consideration of the speakers and their communities.

Most of those engaged in the study of multilingualism and language contact agree that the fundamental concepts and research agendas were first expounded by Weinreich in his renowned 1953 monograph Languages in Contact. At the time, many scholars assumed that the structures of two or more linguistic varieties largely, or even entirely, constrained the possible outcomes of contact among them. Although of course not everyone believed that linguistic structure actually determined the direction and extent of change, there was a widespread view that one could e.g. compare the phonemic inventories of two languages in contact, and (at least partially) predict the kinds of possible effects of one system on the other.

Weinreich argued that any proper study of language contact had to take into account not only linguistically internal facts, but also descriptions of the communities in which two or more languages were spoken. Citing a wide array of case studies from Europe, North America, and elsewhere, he demonstrated in Languages in Contact (pp. 83-110) that the linguistic outcomes of language contact, or "interference", are in large part conditioned by social-cultural variables, including extent and degree of bilingualism; length of contact; geographical and demographic distribution; social factors, e.g. religion, race, gender, and age; use in different social functions, e.g. education, government, media, and literature; and political and ideological factors, including those of prestige and "language loyalty".

Weinreich's thesis has since been universally accepted in contact linguistics, and provided the foundation for all subsequent research, including the monograph of Thomason and Kaufman (1988). In this influential study, the authors distinguished different levels of intensity in situations of language contact, and made the fundamental distinction between borrowing and shift. Thomason and Kaufman in fact went so far as to argue for the irrelevance of language-internal factors, or "the failure of structural constraints on interference." Most other specialists find this view too extreme, and agree with Weinreich that both internal (structural) and social factors play a role in shaping the linguistic results of contact, as they do in language change more generally. ${ }^{1}$ A large proportion of research in language contact today is concerned with determining whether certain kinds of contact-induced change (e.g. borrowing

1. See e.g. Sankoff 2002, Winford 2003.
of inflectional morphology, pronouns and other closed-class items, or syntax) are possible and, if so, the social conditions under which they may take place. ${ }^{2}$

Today, contact linguistics is one of the liveliest and fastest growing areas of linguistics, and has profited enormously from the convergence of different approaches and collaboration among scholars from many fields, including sociolinguistics, historical linguistics, dialectology, Second Language Acquisition, and linguistic anthropology. Weinreich himself would surely have been pleased by the remarkable progress of language contact studies, and also by its increasingly interdisciplinary nature, which he did so much to further in his own pioneering research.

## 2. Before Languages in Contact: Weinreich's dissertation and fieldwork in Switzerland

Languages in Contact grew out of Weinreich's 1951 Columbia University dissertation Research Problems in Bilingualism, with Special Reference to Switzerland, in which he laid out the principal themes of his subsequent scholarship. This dissertation contains a lengthy and detailed report of language contact in Switzerland, especially contact between German and Romansh in the canton of the Grisons (Graubünden). Weinreich went to Switzerland in 1949, and traveled in the French-German border region of Fribourg and the Romansh-speaking regions of the Grisons, compiling statistics on language knowledge and use and describing in maximal detail the social, economic, cultural, and political conditions of the communities there. Much like the German scholar-explorers of the late 19th and early 20th century such as Gerhard Rohlfs, Weinreich took photos of the land and its people and became familiar with the full spectrum of everyday life in the villages and towns, from traditional agricultural practices and local customs to modern attitudes and cultural influences from the outside world. Only thus, he believed, could one understand the linguistic outcomes of language contact, the ways in which speakers themselves incorporate elements of one language into another, and the forces promoting or retarding language shift.

Weinreich incorporated large portions of his dissertation into Languages in Contact, especially the general discussion in Part One, but the bulk of the detailed linguistic and ethnographic description of the French-German and GermanRomansh contact situations remained unpublished, and he himself never returned to his dissertation. As a result, scholars of multilingualism with an interest in Switzerland have had to content themselves with the condensed presentation in
2. For a survey of recent scholarship, see the papers in Matras \& Sakel 2007.

Languages in Contact, e.g. the summary of German-Romansh phonological interference on pp. 14-19, or the brief mention of linguistic attitudes and bilingualism along the German-French linguistic boundary in western Switzerland on p. 60. Those working on language contact in general have also been deprived of Weinreich's own exemplary demonstration of his research program for the study of multilingual communities. For these and other scholars, Weinreich's dissertation has long since been a "ghost citation", one regularly appearing in bibliographies, but which virtually no one has actually seen.

## 3. Multilingualism and language contact in Switzerland since 1951

It goes without saying that Switzerland has changed enormously in many ways in the decades since 1951, and these developments cannot fail to have consequences for the patterns of language use and contact in that famously multilingual country. Weinreich's detailed investigation of linguistic and social patterns in mid-20th-century Switzerland provided a snapshot of a society which, despite decades of industrialization, urbanization, and regional migration, remained quite traditional in many ways. Outside of the big cities, many people were still engaged in agriculture, or were in daily contact with those living off the land, and the overwhelming majority were locally born. Relatively few Swiss had traveled abroad, and direct interaction with speakers of other languages (including non-Swiss varieties of German, French, or Italian) was correspondingly uncommon. Furthermore, as is clear from Chapters 7 and 10, religious affiliation often played as much of a role as linguistic differences in the social and political life of those living along the French-German linguistic border in Fribourg or in the mixed German-Romansh environment of central Grisons.

Switzerland today is not only one of the wealthiest societies on earth, but like other western European countries has seen significant population shifts since World War II, both immigration as well as internal migration. Resident foreigners and (more or less) temporary foreign workers make up fully $22 \%$ of the population according to a 2008 report, with $40 \%$ of them coming from countries outside the European Union. The proportion of Swiss residents claiming a first language other than the four official tongues (German, French, Italian, and Romansh) is estimated at $10 \%$, higher than the number of Italian native speakers in Switzerland. ${ }^{3}$ More and more Swiss regularly move around the country for personal, educational, or work-related reasons, and some $70 \%$ of the total population now lives in cities and towns. Even more significantly for the linguistic

[^0]landscape, English is now universally present in schools as well as popular culture, and many if not most younger Swiss have a good working knowledge of the language.

These developments have naturally affected the linguistic situation in Switzerland as a whole, and pose a challenge for the country's longstanding model of multilingualism. There has been a growing tendency for Swiss of different native tongues to use English when communicating with each other, a practice made necessary by the fact that even many younger Swiss are not proficient in any of the other national languages. The relation between the two dominant languages, German and French, has also undergone a shift since Weinreich's time: whereas French historically carried greater prestige, and bilingualism was far more common among German speakers, in recent decades the balance of power has shifted in favor of German, prompting occasional complaints from Romance speakers (see e.g. Grin 2000). Nevertheless, relations between German and French Swiss remain for the most part cordial and, perhaps most importantly, the language border between German- and French-majority areas has barely changed over the past century (cf. Rash 2002:118-9). Despite the persistence of the cultural and linguistic divide known as the Röschtigraben (op. cit. 123-4), the country has fortunately suffered almost none of the Flemish-Walloon conflict that came to dominate the politics of postwar Belgium.

In the Grisons, and especially the central Grisons, the contact situation has been less directly affected by the spread of English than by the acceleration of those trends which Weinreich observed in 1951. ${ }^{4}$ Increasing urbanization and mobility, greater educational and employment opportunities, the decline of traditional rural ways under the onslaught of modernity, and shift to a service- and tourism-based economy have all contributed to the decline of Romansh and shift to Swiss German, the language of prestige and power. ${ }^{5}$ As a result, many localities which maintained a Romansh majority until World War II have since become predominantly German-speaking, e.g. Bonaduz (Cavigelli 1969) or Domat/Ems (Rash 2002: 120). As already foreseen by Weinreich (197ff., 232), visitors today to such world-famous skiing and hiking resorts as St. Moritz or Flims (Romansh San Murezzan, Flem) may see road signs in Romansh, but are unlikely to hear very much of the language from locals working in tourist-related businesses, who can all converse in English and German as well as other Romance languages.

[^1]To be sure, linguistic developments in the Romansh-speaking areas have not been all negative. The campaign to defend Romansh and halt or even reverse language shift in the first half of the 20th century, recounted (and lightly ridiculed) by Weinreich in Chapter 11 below, has gained some momentum in the following decades, along with other linguistic minority movements in western Europe. Perhaps the biggest boost to the fortunes of the language was the creation of a single supradialectal written standard by Heinrich Schmid in 1982. This Rumantsch Grischun, a sort of orthographic koine or compromise among the three major dialects (Surselvan, Surmeiran, and Vallader), has significantly raised the profile of Romansh not only in the Grisons but throughout Switzerland, and is responsible for the growth of printed media and educational publications. The decision of the Swiss government in 1996 to award Romansh the status of an official language, albeit one with limited functions compared to the other three, has also made the language more visible on a national level: titles of federal documents and institutions now regularly appear in German, French, Italian, and Rumantsch Grischun, as well as English. Grammars of this new standard have appeared (see e.g. Caduff, Caprez, and Darms 2006), and although it remains for the most part a grapholect, it has begun to find acceptance as a spoken medium, e.g. in Radio e Televisiun Rumantscha, broadcast from the cantonal capital of Chur.

Nevertheless, Romansh continues to suffer from relatively low prestige and perceived lack of utility, and many Romansh speakers have concluded that their language is not worth maintaining or passing on to the next generation (Tagliabue 2010). Census figures bear this out: according to the 2000 census, less than 40,000 people in all Switzerland, and $15 \%$ of the population of Grisons, claimed Romansh as their best language (bestbeherrschte Sprache; Furer 2005). Of the 120 communities in the traditional Romansh-speaking territory of 1860 , only 66 still had Romansh majorities in 2000, forming four noncontiguous areas. Particularly in the Sutsilvan region of central Grisons, the shift from Romansh to German has continued largely unabated, and today $80-90 \%$ of the population in most places speaks German as a first language. Barring dramatic changes in local attitudes, the language will almost certainly disappear from the Sutselva within the next few decades, and even in the two strongholds of Surselva and the Lower Engadine its long-term survival is very much in question. The rise of Rumantsch Grischun has further divided Romansh activists into those who believe in the new standard as the future of the language, and those who see it as an artificial creation that would only further alienate the remaining speakers. ${ }^{6}$
6. On problems associated with the acceptance, learning, and use of Rumantsch Grischun, see Furer 1988, Posner \& Rogers 1993:233-4, and Tessarolo \& Pedrotti 2009. For an excellent overview of some recent developments in and challenges facing Romansh, see the articles,

None of these developments would have surprised Weinreich, who concluded on the basis of his research that " $t \mathrm{t}]$ he sociocultural setting in which languages are in contact not only determines the presence or absence, the direction, and the extent of language shift but, along with structural factors, plays a role in controlling the direction, extent, and nature of linguistic cross-influences in the languages" (336). ${ }^{7}$

## 4. The present edition

It is our privilege to present at last Uriel Weinreich's dissertation to a wider audience. To our knowledge, Weinreich left only two complete copies of Research Problems in Bilingualism, one in the Columbia University Archives, the other - on which this edition is based - in the personal library of William Labov. The entire text has been digitized from the typescript and is reproduced here in full, with only minor alterations. Chapters and sections have been reformatted from the original; in particular, the unwieldy Chapter 3 of Part 2, which took up nearly $60 \%$ of the bulk of the dissertation, has been broken down into several more easily digestible pieces, which appear here as Chapters 6-13. Old-fashioned linguistic usages have been modernized, e.g. Weinreich's use of the present subjunctive; likewise, obsolete or idiosyncratic terms such as morphologic, unilingual, or bilinguality have been replaced with respectively morphological, monolingual, and bilingualism, and "hissing" and "hushing" fricatives with their modern equivalents "alveolar" and "palatoalveolar". (We have however retained his affectionate opposition of "mothertongue" and "other-tongue".) Phonetic notation has been updated in accordance with the IPA, as Weinreich himself surely would have wished, but the palatoalveolar fricative and affricate phonemes are represented following his practice as /š/, /ž/, $/ \check{c} /, / \mathfrak{j} /$ and the (alveo)palatals as $/ \dot{c} / /, / \hat{j} /, / \mathrm{n} / /, / \overline{1} /$, symbols which will be familiar to all linguists today.

Weinreich's black-and-white photos have been reproduced, thereby offering the 21 st-century reader invaluable insight into those aspects of the physical environment and social behavior that he considered essential to a proper understanding of language contact and its linguistic consequences. The meticulously drawn full-color maps have mostly been adapted to grayscale, and bar graphs reformatted using Microsoft Excel; otherwise, all figures have been reproduced in their original form.
photo essays, and multimedia resources at "Little islands of Romansh", on the website swissinfo. ch of the Swiss Shortwave Service and Swiss Radio International.
7. For recent overviews of German-Romansh linguistic interference, see Rash 2002:130-2 and Pfister 2004 (with extensive bibliography).

The remarkable progress of contact linguistics in recent decades has naturally invalidated or called into question several of Weinreich's conclusions. We have not attempted to identify all such instances, instead restricting ourselves to comments on especially noteworthy or outdated points, as well as selected references to more recent literature. As noted above, Weinreich's observations of the linguistic and social situation in mid-20th-century Switzerland have been supplemented by remarks on developments over the past 60 years. All of these additional notes are enclosed in square brackets, following the procedure of Labov 2006.

Many people contributed to the realization of this edition, and it is a great pleasure to acknowledge them here. Beatrice Weinreich graciously and enthusiastically granted her permission for the publication of her late husband's dissertation. Gillian Sankoff's encouragement and moral support were crucial to the success of this project, especially in its early stages. Piotr Chruszczewski of Wrocław University and the Wrocław Philological School of Higher Education kindly invited Ronald Kim to speak at Poland's first-ever international conference on language contact, held in Wrocław in May 2010 and sponsored by those two institutions as well as the Wrocław branch of the Polish Academy of Sciences. ${ }^{8}$ Kees Vaas of John Benjamins has been indispensable in seeing the volume through to publication.

Above all, we would like to thank Sue Sheehan of the University of Pennsylvania Linguistics Laboratory, who painstakingly dissected the original volume, including the photos, and twice ran the entire text through Optical Character Recognition, first in 2008 and then again in 2010. Thanks in no small part to Sue's untiring efforts, we have been able to sustain our collaboration across continents over the past three years.

We hope that the present volume will interest not only those working on the languages of Switzerland, or specialists in language contact, but all scholars today whose work builds on the broad and lasting foundations laid over half a century ago by Uriel Weinreich. This edition is dedicated to them.

| Ronald I. Kim | William Labov |
| :--- | :--- |
| Poznań, Poland | Philadelphia, USA |

April 2011

## References

Ausländerinnen und Ausländer in der Schweiz. Bericht 2008. Neuchâtel: Bundesamt für Statistik.
8. See R. Kim 2011, with additional discussion of Weinreich's life and legacy.

Billigmeier，Robert Henry．1979．A Crisis in Swiss Pluralism：The Romansh and Their Relations with the German－and Italian－Swiss in the Perspective of a Millennium［Contributions to the Sociology of Language 26］．The Hague：Mouton．
Caduff，Renzo，Caprez，Uorschla N．\＆Darms，Georges．2006．Grammatica d＇instrucziun dal rumantsch grischun．Fribourg：Seminari da rumantsch da l＇Universitad da Friburg．
Cavigelli，Pieder．1969．Die Germanisierung von Bonaduz in geschichtlicher und sprachlicher Schau［Beiträge zur schweizerdeutschen Mundartforschung 16］．Frauenfeld：Huber．
Furer，Jean－Jacques（Gion－Giachen）．1988．Rumantch Grischun：Hope and Danger for the Romansh．Laax：Fundaziun Retoromana．［non vidimus］
Furer，Jean－Jacques（Gion－Giachen）．2005．Eidgenössische Volkszählung 2000．Die aktuelle Lage des Romanischen．Neuchâtel：Swiss Federal Statistical Office．
Grin，François．2000．Language policy in multilingual Switzerland．In Multilingualism and Government：Belgium，Luxembourg，Switzerland，Former Yugoslavia，South Africa，Kas Deprez \＆Theo Du Plessis（eds．），71－81．Pretoria：Van Schaik．
Kim，Ronald I．2011．Uriel Weinreich and the birth of modern contact linguistics．In Proceedings of the Conference＇Languages in Contact＇，Wrocław，21－23 May 2010 ［Philologica Wratisla－ viensia，Acta et Studia，Vol．4］，Piotr P．Chruszczewski（ed．），99－111．Wrocław：Wydawnic－ two Wyższej Szkoły Filologicznej we Wrocławiu．
Kristol，Andres Max．1984．Sprachkontakt und Mehrsprachigkeit in Bivio（Graubünden）．Linguis－ tische Bestandesaufnahme in einer siebensprachigen Dorfgemeinschaft［Romanica Helvetica 99］．Berne：Francke．
Labov，William．2006．The Social Stratification of English in New York City，2nd edn．Cambridge： CUP．
Liver，Ricarda．1999．Rätoromanisch．Eine Einführung in das Bündnerromanische．Tübingen： Narr．
Matras，Yaron \＆Sakel，Jeanette（eds．），2007．Grammatical Borrowing in Cross－Linguistic Perspec－ tive．Berlin：Mouton de Gruyter．
McRae，Kenneth D．1983．Conflict and Compromise in Multilingual Societies：Switzerland．With a foreword by Marcel Schwender．Waterloo：Wilfrid Laurier University Press．
Pfister，Max．2004．Italienisch und Rätoromanisch／Deutsch．In Sprachgeschichte：Ein Handbuch zur Geschichte der deutschen Sprache und ihrer Erforschung，2．，vollständig neu bearbeitete und erweiterte Auflage，4．Teilband［Handbücher zur Sprach－und Kommunikationswis－ senschaft，Band 2．4］，Werner Besch，Anne Betten，Oskar Reichmann \＆Stefan Sonderegger （eds．），3203－3217．Berlin：de Gruyter．
Posner，Rebecca \＆Rogers，Kenneth H．1993．Bilingualism and language conflict in Rhaeto－ Romance．In Trends in Romance Linguistics and Philology，Vol．5：Bilingualism and Linguistic Conflict in Romance［Trends in Linguistics．Studies and Monographs 71］， Rebecca Posner \＆John N．Green（eds．），231－52．Berlin：Mouton de Gruyter．
Rash，Felicity．2002．The German－Romance language borders in Switzerland．Journal of Multi－ lingual and Multicultural Development 23（1／2）：112－36．
Sankoff，Gillian．2002．Linguistic outcomes of language contact．In The Handbook of Language Variation and Change，J．K．Chambers，Peter Trudgill \＆Natalie Schilling－Estes（eds．）， 638－68．Oxford：Blackwell．
Swiss Shortwave Service／Swiss Radio International．2006．＇Little islands of Romansh＇．〈http：／／ www．swissinfo．ch／eng／specials／romansh／index．html＞；articles dated 8 Aug－3 Oct 2006.
Tagliabue，John．2010．In multilingual Switzerland，one tongue struggles．The New York Times， 29 Sept 2010．〈http：／／www．nytimes．com／2010／09／29／world／europe／29swiss．html〉．

Tessarolo, Mariselda \& Pedrotti, Gian Peder. 2009. Languages in the canton of Grisons. International Journal of the Sociology of Language 199: 63-88.
Thomason, Sarah Grey \& Kaufman, Terrence. 1988. Language Contact, Creolization, and Genetic Linguistics. Berkeley CA: University of California Press.
Trudgill, Peter. 1972. Sex, covert prestige and linguistic change in the urban British English of Norwich. Language in Society 1(2): 175-195.
Weinreich, Uriel. 1953. Languages in Contact: Findings and Problems. With a preface by André Martinet [Publications of the Linguistic Circle of New York 1]. New York. (Second printing, The Hague: Mouton, 1963.)
Weinreich, Uriel. 1980. On Semantics. Edited by William Labov \& Beatrice S. Weinreich. Philadelphia PA: University of Pennsylvania Press.
Weinreich, Uriel, Labov, William \& Herzog, Marvin I. 1968. Empirical foundations for a theory of language change. In Directions for Historical Linguistics: A Symposium, Winfred P. Lehmann \& Yakov Malkiel (eds.), 95-188. Austin TX: University of Texas Press.
Winford, Donald. 2003. An Introduction to Contact Linguistics [Language in Society 33]. Malden MA: Blackwell.

# RUSEARCH PROBIMAS IA BITIFGUALIBM, WITH SPECIAL REFERRANCE TO <br> SWITZFRILND 

## by

Ur1•1 H•1nr•10n

## Submitted in Partial Fulf11lment of the Requirementa for the Degere of Dootor of Philosophy, in the Faoulty of Philowophy. Columbla University

## April 1951

Title page of Weinreich's 1951 Columbia University dissertation

## Foreword to the original

## 1. Definition of bilingualism

In general terms, bilingualism exists when one speaker follows more than one language norm in his speech or writing alternately, depending on the circumstances of his utterance. A more precise definition involves at least two controversial factors: the proficiency with which the speaker follows the two norms, i.e. the relative degree of knowledge of each language; and the amount of difference between the two languages.
"Of course," says Bloomfield (177, p. 56), ${ }^{1}$ "one cannot define a degree of perfection at which a good foreign speaker becomes bilingual; the distinction is relative." From the point of view of the individual, all learning of a second language falls within the category of bilingual problems; from the linguistic point of view, bilingualism becomes of interest as soon as it is "strong" enough to affect the speech of the individual. L. Michel (60) has formulated three "powers" of bilingualism: bilingualism of simple understanding (first power), bilingualism of understanding and expression (second power), and bilingualism of thought (third power). To avoid a pseudo-problem it seems best, however, to start out with the view that bilingualism occurs in varying degrees, and in the course of study to develop ways of measuring the degree of a person's bilingualism.

The second controversial factor concerns the amount of difference between the languages necessary to constitute bilingualism. A knowledge of German and Dutch, for example, would generally be considered a less dramatic example of bilingualism than, say, of German and Japanese. The presence of bilingualism becomes debatable when there is knowledge of two linguistic systems, one of which is considered (by extralinguistic criteria) to be a dialect, the other its corresponding standard language. The matter becomes more questionable still when the difference in the systems is merely one of style, and the two languages do not even have separate names. From the present point of view, the amount of difference between the languages is best treated as another variable. The less isomorphism between the two languages, i.e. the more mutually exclusive their forms, and the fewer automatic conversion patterns which can be set up between them, the greater are the problems of learning and interference with which the bilingual is faced.

[^2]
## 2. Purpose and scope of this study

A substantial part of the world's population is and has long been bilingual; little wonder, then, that the "bilingual problem" has evoked wide and continual interest in so many quarters. Geographers, ethnologists, and anthropologists have described bilingual populations; sociologists have examined the functioning of coexisting languages in a community; jurists have studied the legal status accorded to minority languages in various states; the inquiries of educators interested in bilingual children have stimulated psychologists to analyze the effects of bilingualism on persons of all ages. Finally, linguists have sought to understand the simultaneous adherence of an individual to two or more language norms. The literature on this subject is therefore vast and varies considerably as to approach and conclusions.

Divergent as the various studies have been in their purpose and scope, they are all essentially complementary in understanding a phenomenon of so many dimensions. The psychiatrist who generalizes about language disturbances of bilinguals but fails to make linguistically sound observations on his subjects' speech behavior lessens the validity of his conclusions. Similarly, the linguist who makes theories about language influence but neglects to account for the sociocultural setting of the language contact leaves his study suspended, as it were, in mid-air; "talk of substrata and superstrata must remain stratospheric unless we can found it solidly on the behavior of living observable speakers." ${ }^{2}$ What is direly needed is "a more exact treatment of the conditions under which....an influence [of one language on another] is possible and the ways it would work." ${ }^{3}$

Of course, the linguist might desire, and is entitled, to abstract speech and language from considerations of a psychological or sociological nature, and set up purely linguistic problems about bilingualism. He may seek causes for the receptiveness of a language to foreign influence in its structural weaknesses; he may trace the treatment of foreign material in conformity with the structure of the borrowing language. But the extent, direction, and nature of influence of one language upon another can be explained also, and sometimes more convincingly, in terms of the speech behavior of bilingual individuals, which is conditioned by the social interrelation of the two languages in the community in which the individual lives. Structural questions can be better seen in a sociocultural frame. The linguist will do well to look for a formulation of the sociocultural setting in which the two languages considered are in contact; he will put a question as to any characteristic types of speech behavior which are a product of that context. His basic task of studying the
2. Haugen (203), p. 271.
3. Leopold (216), I, p. xiii.
mutual influences of two languages in a given bilingual situation will then gain in depth and significance.

The first part of this thesis constitutes a brief summary and evaluation of the widely scattered literature dealing with the subject; it outlines the various ways in which bilingualism has been approached and groups them under several points of view. In the second part, problems of bilingualism in Switzerland are scrutinized more closely. The contact between dialects and their respective standard languages is examined, greatest attention being given to that between Schwyzertütsch and Standard German; then the contact between the several different Swiss languages in bilingual areas is considered, with two such areas, one French-German (a static situation) and one Romansh-German (a dynamic situation), studied in detail.

## Acknowledgments

I am deeply grateful to Professor André Martinet for his guidance and help from the earliest to the final stages of this dissertation. It was under his supervision that the master's thesis, ${ }^{4}$ on which Part One is based, was written and the research for Parts Two through Four carried out. I also thank Professor Roman Jakobson, now at Harvard University, for his encouragement at the outset of the project, and Professor Joseph H. Greenberg for his helpful criticism on each part of the dissertation.

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The friends and teachers in Switzerland who have helped me so wholeheartedly are almost too many to enumerate. I should like to express my indebtedness at least to the following: Rudolf Hotzenköcherle, Professor of German; Jakob Jud, Professor of Romance Linguistics; Eugen Dieth, Professor of Phonetics and Director of the Phonetic Laboratory; Richard Weiss, Professor of Folklore; and Manfred Szadrowsky, Professor of Germanic Linguistics (all at Zurich University); furthermore to the Schweizerische Gesellschaft für Volkskunde in Basle for permission to use the unpublished material of the Swiss Atlas of Folk Culture; to the Ligia Romontscha for its constant assistance (especially to Mr. Stiaffan Loringett, its president, and to Dr. Jon Pult); to Dr. Andrea Schorta, editor of the Grison Romansh Dictionary; to Professors Ramun Vieli and

[^3]Rudolf O. Tönjachen of the Grison Cantonal School; to my friends Gion Barandùn in Feldis and Margritta Salis in Thusis; to Dr. G. Gangale of Copenhagen University; and to the countless informants who gave me so freely of their time and hospitality, especially Mr. Peter Gees in Almens and M. A. Blaser in Wallenried.

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Above all, I am grateful to my wife, Beatrice S. Weinreich, for her able and substantial help at every stage of the project. Without her participation in it, and without her encouragement in moments of dismay, I could not have brought the work to its present form.

## Note on terminology and abbreviations

As far as possible, language has been used in the technical sense of langue, and speech of parole. For the sake of consistency, language community and language area are used. Linguistic was generally used with the meaning of 'pertaining to linguistics', while language, as an adjective, was favored in the meaning 'pertaining to language'.

French and German are to be understood as 'French-language' and 'Germanlanguage', respectively, without political implications. German, moreover, includes Schwyzertütsch unless otherwise stated. For French Swiss, the use of Swiss-German welsch or Swiss-French romand was avoided to prevent confusion with "Welsh" and "Romansh."

Raetoroman (in this unconventional spelling) is used as a noun or adjective to denote the ethnic group; Romansh is its language. The distinction is thus parallel to that between "Jew(ish)" and "Yiddish."

The Grisons was used as the name of the canton; Grison is the corresponding adjective; Grisoner indicates the inhabitant of the canton.

For an explanation of the choice of geographic names which have equivalents in two languages, see Appendix D.

The following abbreviations are used:

| A | answer | GER | German | SCHWZ | Schwyzertütsch |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ACC | accusative | M | masculine | SG | singular |
| ADJ | adjective | N | noun | STD | Standard |
| COLL | collective | NEUT | neuter | SURS | Sursilvan |
| DAT | dative | NOM | nominative | SUTS | Sutsilvan |
| F | feminine | PL | plural | V | verb |
| FR | French | P.P | past participle |  |  |

PART I

General research problems

## CHAPTER 1

## The bilingual individual

### 1.1 Psychological and neurological theories of bilingualism

Psychological conceptions of bilingualism are contingent on theories of speech behavior in general; hence they vary from one school of psychology to another, and it is hard to find a common denominator to which they might be reduced.

An early coherent theory of bilingualism was constructed by I. Epstein (27). A student of associational psychology with a multilingual background of his own, Epstein turned to observation and introspection for answers to questions which were prompted by his own experience. Thinking, as Epstein sees it, is the association between ideas and words. A direct association between an idea and a foreign word, he finds, is possible. But the knowledge of one language interferes with the learning of subsequent ones. According to earlier studies on memory, when an association $a b$ has been established, the formation of a second association, $a c$, is inhibited; and once $a c$ is also formed, the reproduction of either $b$ or $c$ in association with $a$ is inhibited. For each idea, the bilingual therefore has multiple concurrent word associations which interfere with each other, especially in the "expressive" uses of language (i.e. speaking and writing). It follows that bilingualism is an obstacle to verbal thought (idéation). Particular embarrassment is caused by the use of the uncustomary language in a given domain or in talking to a person with whom another language was used previously.

Although Epstein's work was widely praised, it immediately ran into criticism on theoretical grounds. W. Stern, the noted student of child language, pointed out (94, p. 107) that Epstein's conclusions apply only to adults, and that his associational psychology has been superseded by a more modern "psychology of thought." As Stern sees it, "the difference in languages...not only leads to the associative phenomenon of interference, but is a powerful stimulus to individual acts of thought, to comparing and differentiating activities, to the realization of the scopes and limitations of concepts, to the understanding of nice shadings of meaning."

The importance of associational interference has subsequently been questioned even by those who do not deny its theoretical premises. ${ }^{1}$ The issue has been taken up

1. A brief survey of the criticism is to be found in Braunshausen (17), pp. 35 f .
repeatedly in the debate on the "direct" vs. "indirect" methods of foreign-language teaching. A further elaboration of the theory of interference has come from German writers who have suggested that the greater the differentiation in the topical and environmental domains in which two languages are used, the less interference in associations; only a functionally undifferentiated use of two languages induces "inorganic" bilingualism which is subject to interferences of associations. ${ }^{2}$

American psychologists so far have apparently refrained from formulating theories on bilingualism, as no experiments in this field have been undertaken. ${ }^{3}$

The study of bilingual aphasics has recently led to the formulation of a neurological theory of bilingualism. A. Leischner, after a thorough study of all reported cases, has suggested (50) that at the posterior edge of the Sylvian fossa and in the adjoining parietal regions of the brain, there can be assumed to exist a language-switching mechanism. "Complete rigor [Erstarrung] in one language or the ability to switch at will from one language to the other one are the only ways in which this switching center can function or be disturbed" (p. 773). ${ }^{4}$ The theory of an anatomically localized control center in bilinguals may someday help to account for individual differences among bilinguals with respect to the amount of speech mixture (cf. $\$ 3.3 .1$ below).

### 1.2 Characterizing and measuring bilingualism

Out of the discussions on the psychological theory of bilingualism has come the realization that the particular relationship of the individual toward the two languages is not indifferent to the prediction of his speech behavior. A number of methods of characterizing and measuring this relationship have been tried; some of the factors used in the characterization of bilingualism are experimentally measurable, while others can at least be explicitly formulated.

### 1.2.1 Relative proficiency

A convenient table for comparing stages of bilingualism based on the relative proficiency in the two languages, ranging from ability to follow conversation to perfection in speech, was proposed by E. Malherbe (56, pp. 18ff.). The South African Survey of
2. Cf. Ittenbach (43), Volkmer (101), Geissler (33, p. 100).
3. Esper (28), in his experiments on associative interference, did not make any conclusions bearing directly on bilingualism.
4. Goldstein, without the benefit of the latest evidence, doubts the possibility of localizing the switching function (35, pp. 140f.).

Bilingualism in 1938 (ibid.) employed a more precise scheme, in which children were scored in their language proficiency by means of special tests, with the score in each language expressed in numbers from 1 to 100. A Bilingual Quotient was then obtained by the following formula:

$$
\text { Bilingual Quotient }=\frac{\text { Score in 2nd language }}{\text { Score in 1st language }} \times 100
$$

The bilingual quotient turned out to be a highly useful basis for comparing and grouping bilinguals. Similar methods for measuring relative proficiency in the two languages were used earlier by the Bikchentays (12) in testing bilingual children (Tatar and Russian) in Moscow. The Galis ${ }^{5}$ measured relative proficiency of bilingual children (Spanish and Catalan) by various memory and association tests. H. Saer (78) obtained a bilingual quotient from the ratio of the time taken by children to supply associations for mixed English and Welsh stimulus words. If the average reaction time for English stimuli, divided by that for Welsh stimuli, yielded a quotient of 1.0 , the subject was termed "truly" bilingual. In a later elaboration of her method, ${ }^{6}$ Saer also devised ways for comparing absolute reaction time; this opens the possibility of rating fluent and inhibited bilingual speakers. By selecting her stimulus words appropriately, Saer was also able to test reactions to emotionally charged words against responses to everyday ones. On this basis, she could delineate the spheres of discourse in which bilinguals were more at ease in one language or the other. Moreover, Saer outlined a possible method of distinguishing types of bilinguals by the high or low ratio of "translation responses." ${ }^{\text {" }}$

Saer's research thus provides the tools for statistical studies on bilingual speech behavior. Unfortunately, it has not evoked the cooperation of linguists which it deserves. These new tools have also never been tried out on Swiss bilinguals. ${ }^{8}$

### 1.2.2 Degree of specialization in function of the languages

For many bilingual persons, the use of the two languages is specialized according to the interlocutor, the subject matter, the occasion of the utterance, or the mode

[^4]of utterance (speech or writing). Hoffman (42), in looking for a way to measure the bilingual "background" of an individual, compiled a "schedule" which could be used to bring out the functional specialization of languages of a bilingual. ${ }^{9}$ However, as L. Lehrer has pointed out (49, p. 320), this schedule would prove inadequate outside the United States, where the role of the common language cannot be assumed to be as constant as that of English there.

Some writers have attempted a typology of bilingualism on the basis of presence or absence of specialization. The differentiation between "organic" and "inorganic" bilingualism was mentioned above (p. 4); Geissler (33, pp. 24ff.) distinguishes between orderly (geordnet) bilingualism, in which each language is assigned to its sphere of persons, and disorderly (ungeordnet) bilingualism, where the specialization is blurred, and which can pass into contrary (entgegengesetzt) bilingualism, in which the domains are not separated. ${ }^{10}$ Michel (60) distinguishes the two kinds of bilingualism as in sensu composito and in sensu distincto.

Where one form of the specialization of functions is prevalent among a group, the social aspect of the bilingual problem emerges. For example, when a whole group of people use another language with their children than with members of their own generation, a language shift can be said to be taking place. (A case of this type is discussed on p. 28 below.) If the functions are specialized according to the occasion or "style" of the utterance, there arises a kind of "stylistic bilingualism," in Grootaers's terminology (38), such as exists in China, Greece, or German Switzerland. These possibilities are discussed further on pp. 21ff. below.

### 1.2 3 Attitude toward the languages

Language teachers have long been aware that the attitude of the person to a language governs his performance in the language. Minkowski (61) has dramatically shown by a study of bilingual aphasics how the attitude toward a language affects the breakdown and recovery of speech in stricken persons. In a situation of an imminent language shift, a person's attitude toward the languages may determine whether he or she will participate in the shift. ${ }^{11}$

A positive attitude toward a language may derive from a number of sources. The most obvious one is utility. W.R. Jones (46) found that $91 \%$ of the tested pupils of

[^5]10. Weiss (106), in his review of Geissler, considers this dual typology an oversimplification.
11. Cf. Geissler's examination (32) of language attitudes of young Germans in Belgrade on the verge of language shift.
both mother-tongues in an English school in a bilingual area of Wales considered it useful to study Welsh. The utility of German among a group of Raetoroman students was found to be universally appreciated (see pp. 208-9). The estimated utility value of an other-tongue is probably the foremost reason for studying it. Besides the simple usefulness of a language for communication proper, the mastery of a language is considered valuable, under certain social conditions, as a means to social advancement. In this consideration, the achievement of perfection in a language, the elimination of all traces of the former language, may become important. In Switzerland, French in former patois territory is an example of a language which is learned for its value in social advancement, not merely for communication.

Another source of positive attitudes toward a language is to be found in its very status as a mother-tongue. Most persons develop an emotional, pre-rational attachment to the language in which they receive their earliest and most fundamental training in semiotic behavior. Because unanalyzed "total situations," ${ }^{12}$ in which such behavior is learned, are most frequent in infancy and childhood, it is usually the mother-tongue which enjoys the resulting strong attachments. ${ }^{13}$ However, emotional involvements of later life (e.g. love affairs, ${ }^{14}$ patriotic attachments to a new country, ${ }^{15}$ etc.) are also apt to produce it. The total situations usually also provide the basis for mastery of the language which is not to be equaled later for any other-tongue; rationalizing, a person feels that his native language is richer, more subtle, more expressive than others. The value seen in a mother-tongue is "absolute"; two languages are hardly comparable on this basis.

A further source of positive attitude toward a language derives from the intellectual or esthetic appreciation of the literary culture which is expressed in the language. This source is operative in the cases of people learning foreign "cultural" languages. In many countries, the learning of the great languages of civilization occupies a prominent place in the higher educational system, and "culture" is practically synonymous with bilingualism. ${ }^{16}$

The multiplicity of sources of value of a language to an individual makes the problem of relative rank and of prestige more complicated than it has seemed to many writers

[^6]13. Récatas (151) has shown on the basis of field studies in Macedonia how the prestige of the mother-tongue outweighs all considerations against it.
14. Cf. the case described by Minkowski (61).
15. See Schneerson's description (87) of changing language attitudes among Jewish immigrant children in Palestine.
16. Cf. Meillet and Sauvageot (57), pp. 8f.
to date. ${ }^{17}$ "To sociologists and anthropologists prestige is one phase or aspect of the superiority-inferiority relation." ${ }^{18}$ Prestige has been defined as the value that a thing possesses which allows it to be ranked in a hierarchical order. ${ }^{19}$ Yet from the preceding discussion, it is evident that the various aspects of prestige, stemming from different sources, are not strictly commensurable. It is hardly possible, on logical grounds, to rank a language with "mother-tongue prestige" higher or lower than one with great utility value. To an individual, more than one language can have prestige at the same time. (It is precisely the inability to rank languages on a common scale of values that can, under certain conditions, produce emotional conflicts, especially if the functions of the languages overlap.) The two languages of a bilingual, being incommensurable in rank, assume a specific, irreducible prestige configuration. The study of various possible prestige configurations in bilingual or multilingual situations has hardly begun; an attempt in this direction is made in Parts II-IV of this dissertation. The correlation of attitude to and proficiency in a given language, which has never been tested, is one of the most promising fields of cooperative research for linguists and psychologists.

Since the same prestige patterns are usually applicable to more than one individual, the problem of prestige also has an important sociological phase. Some further remarks on this topic will be found on p . 20 below.

### 1.2.4 Manner of learning

In the characterization of a person's bilingualism, a number of circumstances surrounding the learning of the languages are important, such as the following: ${ }^{20}$
a. Age. The achievements in the other-tongue and "interference" phenomena in the mother-tongue are different according to the age of the learner. The concentration of foreign-language teaching upon the high-school and college level in the United States and many other countries reflects the general view as to the optimum age for language learning. ${ }^{21}$ In the educational systems of bilingual areas where the problem has been considered at all, instruction in the foreign language

[^7]has usually been kept out of at least the first four grades of primary school. ${ }^{22}$ An educational experiment, with the cooperation of qualified linguists, on the performance effects of earlier and later introduction of a second language would doubtless be a worthwhile undertaking. ${ }^{23}$ (On age differences in language learning among Swiss children, see pp. 203ff. below.)

There are areas in the world where children are destined to become bilingual long before entering school. These infant bilinguals face problems of a special kind. ${ }^{24}$ It has been asked, for example, at what age children become aware that they are learning two languages. Geissler (33, p. 23) claims that not until the age of three does a child become aware of its bilingualism. Ronjat noted the first consciousness of bilingualism at $1 ; 6$, and full awareness at the age of $3 ; 0(74$, p. 81); in Leopold's case (216, IV, p. 14), the child knew the names of the two languages at the age of $2 ; 2$.
b. Simultaneous or staggered learning. Even without a comprehensive psychological theory of bilingualism, experiments can be set up to investigate the effects of simultaneous and staggered learning of two languages. Again, the help of qualified linguists is necessary in judging the performance of the learners.
c. Association of languages with interlocutors during early learning. A number of writers have emphasized that the association of familiar persons with only one language each prevents a proneness to speech mixture, or "disorderly" bilingualism, later on. This conclusion was reached by M.E. Smith (90) in an experiment on eight children. Grammont counseled Ronjat in the same vein (74, p. 3). Even Stern (95) has expressed the opinion that "the setting [Einbettung] of a language in a definite and constant situation leads to the facilitation of learning it" - a rather premature conclusion in view of the limited number of cases examined. A good deal of research is still in order. In Chapter 12 of this study, the question of the association of languages and interlocutors is discussed from a somewhat different point of view.
d. Early specialization in the domains of discourse. The learning of two languages in a bilingual family or from a bilingual play environment usually equips a child with the necessary parts of the languages for dealing with everyday things in both tongues, but the child which studies certain subjects in school in only one language
22. Cebollero (20), p. 72. Hardy (39) discusses the deplorable results of the exclusion of native languages from colonial schools in the European colonies.
23. Arsenian urged such research in 1937 (2, p. 143). Geissler's descriptive and speculative material (33), though suggestive, is based on only 17 actual cases and is therefore hardly conclusive.
24. See Leopold (51).
will have difficulty in discussing these learned topics in its other language, and in an attempt to do so it will be prone to mix the languages. When specialization of this kind affects not an individual, but a large group or an entire language community, this may have a decisive effect on the lexical development of the language. A formulation of this specialization is therefore a further requirement in the characterization of bilingualism. (For examples of specialization in Schwyzertütsch and Romansh, see Part III of this study.)
e. Modes of learning. The commonplace that visual aids reinforce the learning of a language finds support in two cases of bilingual aphasics reported by Minkowski (62), in which Swiss men recovering from aphasia regained the use of Standard German and French before Schwyzertütsch - presumably because they had had the support of visual images in learning the standard languages. ${ }^{25}$ Although various methods of teaching languages to bilingual children, or those destined to be bilingual, have been developed, ${ }^{26}$ experimentation on optimal methods for various cultural environments is still wanting. The problem is of basic interest to schools in bilingual areas ${ }^{27}$ (see $\$ 1.4$ below).

### 1.2.5 Difference between the languages

Finally, it is important, in characterizing bilingualism, to refer to the amount of difference between the two languages involved. It is clearly not irrelevant to the performance of the bilingual whether the two languages differ much or little. A similarity between them increases the pitfalls of wrong analogy, while a greater divergence burdens the learner with additional patterns. The methodological difficulty involved in formulating the amount of difference between languages is outlined in $\$ 3.1 .1$ below.

### 1.3 Effects of bilingualism

The effects of bilingualism in terms of speech mixture are taken up in Chapter 3. Here its alleged effects on certain other aspects of behavior are outlined.

### 1.3.1 Effects on language-learning performance

Does the learning of two languages impair, quantitatively, the capacity for speech development of an individual? In practice the problem resolves itself mainly into

[^8]26. Cf. Coale and Smith (22), Meriam (58), and Powers and Hetzler (68).
27. Arsenian (2), p. 143; cf. also Agard and Dunkel (1).


[^0]:    3. For these and many more statistics, see Ausländerinnen und Ausländer in der Schweiz: Bericht 2008.
[^1]:    4. For more recent general discussions of language shift from Romansh to Swiss German and the associated sociolinguistic issues, see Billigmeier 1979, McRae 1983:216-25, Posner \& Rogers 1993:232-40; Rash 2002: 120-3, 130-2, and the individual references below. Liver 1999 gives a useful survey of the external and research history, structure, and sociolinguistics of Romansh.
    5. This is especially the case for the growing percentage of Romansh speakers living outside of the traditional Romansh territory, e.g. in Zurich and other major Swiss German cities.
[^2]:    1. Numbers in parentheses refer to the bibliography on pp .369 ff .
[^3]:    4. Uriel Weinreich, Present-Day Approaches to the Study of Bilingualism, Columbia University Master's Thesis, 1949 (103).
[^4]:    5. See Bovet (15), pp. 4ff.
    6. Ibid.
    7. I.e. responses which gave the translation of the stimulus words into the other language, rather than an association in the stimulus language.
    8. A few pilot tests on German-Romansh bilingual children in Feldis (Grisons) have shown the applicability of similar tests there, with highly promising results if the stimulus words were chosen judiciously.
[^5]:    9. Hoffman's "schedule" was used in expanded or modified forms by Arsenian (2) and by Fishman (30).
[^6]:    12. The term is borrowed from Segerstedt (88) to designate a situation in which meaning of forms is established by direct association of signifier and referent, without the mediation of other signs.
[^7]:    17. E.g. Bloomfleld (177, p. 461). Cf. the discussion in $\$ 2.2 .3$ below.
    18. Bienenstock (11), p. 245.
    19. Kaufman (47), following Davis (25), p. 93.
    20. Cf. Arsenian (2), p. 51.
    21. Cf. Swadesh's statement ( 255, p. 60 ) that we consider "an empiric fact the observation that the more fully adult a person is at the time he comes in contact with a new language, the less likely he is to attain full control of it."
[^8]:    25. Cf. Goldstein (35), pp. 144-6.
