Trilingual education in Switzerland*

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Abstract

The Swiss Confederation is known for its historical multilingualism. The four national languages are, however, unequally distributed among its inhabitants. Individual foreign-language competence, including English, also varies strongly. The educational system reflects cantonal differences. The article distinguishes between strong, intermediate, and weak forms of trilingual education. The strong form can be found at university level, the intermediate form includes all bilingual models with a course in one additional language, and the weak form is found frequently, in particular, in secondary education. A new model of multilingualism emerges with two national languages, plus English. Research has thus far dealt mainly with the outcomes of bilingual education, but in the near future will focus more on the differences between second- and third-language learning and the outcomes of trilingual education.

1. Introduction

For centuries or even millennia, the territory of what is now called Switzerland has lain at a crossroads of different languages and cultures. The indigenous Celtic population was overwhelmed by the Roman army at the time of Christ's birth, like the rest of Europe, which led to the Romanization of the region. As the Germanic invasions swept over the territory, from the sixth century AD on, the Alamans contributed to the development of a German-speaking population living alongside the Romance communities, which emerged from the contact of the former population with the Romans. For centuries, the German-speaking population had a common language border with the Romansh-, Italian-, and French-speaking people. In 1291, three German-speaking cantons in the center of Switzerland promised eternal peace and mutual help against

the Austrian Habsburgs. This founding myth can be interpreted as the will to control the Alpine passes, the economic and strategic link between northern and southern Europe. The other cantons which successively joined the pact were also German-speaking; the first fully-fledged member canton which comprised a Latin language, French, was bilingual Fribourg/Freiburg, which was accepted in 1481. Other cantons with Italian- and French-speaking populations had the status of subject territories, however, nothing was directly undertaken to germanize the population. After the Napoleonic invasion in 1798, under the Mediation Act in 1803, Grisons (trilingual), Ticino (Italian-speaking), Vaud (French-speaking) alongside with three German-speaking cantons were accepted as full members of the Confederation. The number of cantons thus rose from thirteen to nineteen. Valais (bilingual), Basel (German-speaking), Geneva and Neuchâtel (both French-speaking) joined the Swiss Confederation after the Congress of Vienna in 1815. The ultimate Swiss borders were thus sketched. The modern Confederation was created with the Constitution of 1848, and with it the birth of a multilingual state, at a time of rising nationalism in the neighboring nation-states. Neutrality, federalism, and subsidiarity with the sovereignty of the cantons in the domains of official languages, education, and culture were and are still considered to be the guarantee of relative linguistic harmony.

2.   Sociolinguistic situation

The four national languages of Switzerland are very unevenly distributed. According to the census of 2000, 63.7% of the 7 million inhabitants consider themselves as German-speakers, 20.4% as Francophones, 6.5% as Italian-speakers, 0.5% as Romansh, and 9% indicate other languages as native tongues, in decreasing numbers Serbian/Croatian, Albanian, Portuguese, Spanish, and English. 20% of the inhabitants are non-Swiss residents.

The status of the four languages is enshrined in the Federal Constitution that has been in force since January 1, 2000. Article 4 stipulates that "The national languages are German, French, Italian, and Romansh," whereas article 70–1 outlines the official status of the languages: "The official languages of the Confederation are German, French, and Italian. Romansh shall be an official language for communicating with persons of Romansh language."[1]

But official quadrilingualism in fact hides a more complex sociolinguistic situation. German is split into two varieties; this well-known phenomenon is referred to as "diglossia."[2] This communicative "division
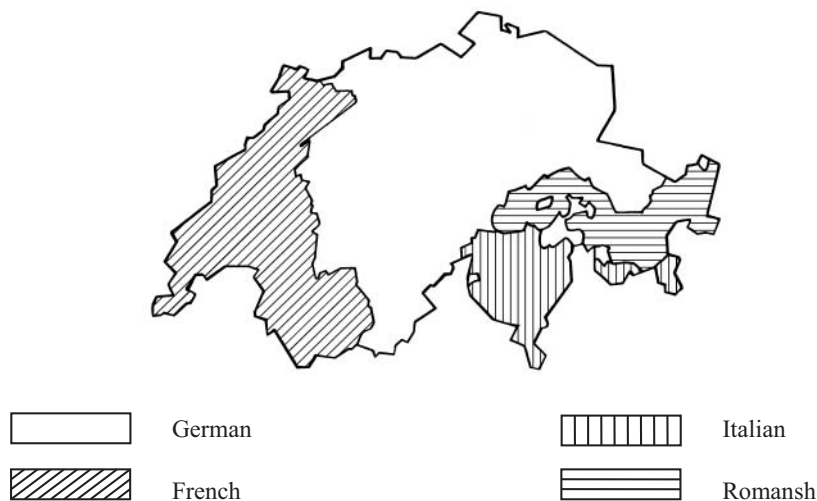
Figure 1. *The national language communities*

of labor" has been extensively investigated in Switzerland (cf. Moulton 1962; Keller 1982; Sieber and Sitta 1986; Rash 1998, 2000). It means that for most written and very formal oral purposes, a Swiss form close to the German standard is used whereas in private and semiformal oral situations and in some short written messages, such as advertisements, poems, folk literature, rock and folk music, journals, letters, SMS, private e-mails, the Swiss German dialects are sometimes also used. If this situation were stable, there would be no cause for alarm, but the increased use of the dialects in schools and media is a matter of concern for both the German- and the French-speaking communities. In this respect, the terms used in the two largest language communities is highly significant: German-speakers refer to standard German as *Schriftdeutsch* (written German) and French-speakers as *bon allemand* (good German)! Both scientific and folk attitudes toward the relationship between dialect and standard German diglossia vary greatly. Some regard it as full bilingualism, others as bilingualism within a language, others still as a written standard with oral varieties. At the school level, standard German has to be integrated in the first grade of primary school, or in the third grade at the latest, and this is what most school laws of the German-speaking cantons state. In fact, however, Swiss German is used throughout schooling, especially during less cognitive subjects as gymnastics and handicrafts, or during partner work and laboratory exercises, even at university level, and, of course, during recess and in informal situations.

Beside national quadrilingualism, enriched by diglossia, the 9% of allophones bring along a large variety of immigrant languages, despite the fact that Switzerland denies being identified as an immigrant country. The maintenance of immigrant languages, though politically and ideologically encouraged, is not given full acknowledgement and is not considered a priority by school boards. Moreover, English as a global language, is a lingua franca for the scientific, economic and cultural communities, and is the extraterritorial communication language, which also serves as a vehicle for a largely accepted universal culture, and is gaining ground (cf. Dürmüller 1986, 1991, 1992, 1997). Many fear that English could ultimately threaten the national languages as a communication base between the indigenous language communities and many raise the question as to its status as a fifth national language (Mittler 1998; Watts and Murray 2001). Many other languages of different status thus complete autochthonous multilingualism, forming it into a multilingual mosaic.

Of course, institutional multilingualism cannot be extrapolated to individual language competence. There are probably few Swiss able to communicate in the four national languages, the simple reason being that more people are apt to communicate in English and Spanish rather than in Romansh and Italian. As in many cases abroad, the language minorities are the ''better citizens,'' at least concerning the ''civic duty'' of mastering national languages. The prototype of the quadrilingual Swiss is likely to be found in a remote Romansh valley where bilingual education (Romansh and German) is the standard for everybody (cf. R. Cathomas and Carigiet 1997; Fried-Turnes 1994; Lutz and Arquint 1982), where the next Italian-speaking village and northern Italy are a stone's throw away, and where a year spent in western French-speaking Switzerland is a must. ''Ski-instructors, for instance, are commonly competent in five languages — Romansch, Italian, German, French and English'' (White 1974: 40). Italian-speaking persons from Ticino usually have a very good command of French, some are also fairly competent in German, but the monolingual Swiss certainly also exists. Short media surveys[3] usually attribute better foreign-language competencies to the German-speakers. French-speakers, with attitudes moulded by a rather normative centralized language, foster more often than not negative attitudes toward the dialects and have high expectations of correctness. In a research project on the cost–value relationship in the area of foreign-language learning (Grin 1995, 1999a, 1999b), the linguistic competencies of the three main language groups were investigated (cf. Tables 1 and 2).

The three largest language communities are remarkably stable; the unilingual hinterland in France, Germany, and Italy strengthens the national languages and cultures. However, the constant regression of the Romansh

Table 1. *Understanding foreign languages*

Level[a]	Francophones		German-speakers		Italian-speakers	
	German	Italian	French	Italian	German	French
1	13.9	12.6	12.2	3.7	16.5	26.2
2	23.0	10.7	34.2	13.4	15.4	44.2
3	40.6	35.1	34.8	33.8	42.9	21.6
4	22.6	41.7	18.8	49.1	25.2	8.1

Source: Grin (1999b: 9).[4]
a.   1 = perfect or nearly perfect; 2 = good; 3 = basics; 4 = nothing or almost nothing

Table 2. *Competency levels in English (means of the four skills)*

Level[a]	Francophones	German-speakers	Italian-speakers
1	13.9	15.7	7.3
2	21.1	29.8	8.1
3	18.3	22.8	21.2
4	46.8	31.7	63.4

Source: Grin (1999b: 10).
a.   1 = perfect or nearly perfect; 2 = good; 3 = basics; 4 = nothing or almost nothing

community is a matter of concern. Romansh, with its five written idioms, plus a synthetic variety created twenty years ago, called Romansh Grischun, must be considered a small and threatened language (B. Cathomas and Pedretti 1994; Furer 1996).

3.   Educational system and policy

3.1.   *Educational policy*

The greatest impact of Swiss federalism is on the education system. Since 26 cantons and half-cantons exist, there are 26 different education systems, with partly substantial differences regarding curriculum design, teaching objectives, teacher training, number of years at primary and secondary schools, etc. At a national level, there is no Ministry of Education, only a coordinating committee comprising the cantonal Ministers of Education (*Swiss Conference of Cantonal Ministers of Education*). There is a federal body located in Bern, the federal capital, and four regional bodies aiming for better regional, cultural, and linguistic coordination (French-speaking Switzerland and Ticino, North-Western, Central, and Eastern Switzerland). Concerning kindergarten and primary school,

the municipalities enjoy considerable autonomy. The coordination principles, called ''recommendations'' or ''declarations'' have no legal force; since 1972, about eighty have been written (CDIP 1995). With respect to language teaching and learning, a number of these principles have been made public. The first of these, titled ''Recommendations and decisions concerning the introduction, reform and co-ordination of the teaching of the national second language to all pupils during compulsory school'' and published in October 1975, recommended starting to teach a second national language in fourth or fifth grade of primary school. Other recommendations concern the integration of migrant children and the teaching of their respective L1 (1972, 1974, 1976, 1985, 1991), linguistic objectives at the interface between compulsory and postcompulsory school levels (1986), exchange programs (1993), the European dimension in education (1993), bilingual teaching (1995), and the launching of the European Portfolio in Switzerland (2001).

Toward the end of the 1990s, as the pressure to introduce English as L2 got stronger and stronger, especially in the Zurich region, and since pedagogic clarifications were necessary, the Conference of Cantonal Ministers of Education asked a group of experts to develop a coherent national concept for the teaching and learning of second and foreign languages in Switzerland (Quelles langues apprendre durant la scolarité obligatoire? 1998). Among others, the fifteen suggested measures concerned exchange programs, the introduction of content teaching in a foreign language, alternative approaches like ''language awareness,'' the use of the European Language Portfolio (Schaerer 1998; Schneider et al. 2001) for better coherence and transparency, the obligation for all pupils to learn, beside L1, another national language, plus English, and the opportunity for all pupils to learn Italian as a third national language.

In November 2000, the *Swiss Conference of Cantonal Ministers of Education* used the concept of 1998 as a base for nineteen ''Recommendations regarding the co-ordination of the teaching of foreign languages during compulsory school'' (6–16-year olds). However, since the cantons could not take a decision concerning the choice of the L2 (national language or English) because of the lack of a clear majority, the recommendations were not formally adopted. It was decided to leave the decision to the regional conferences. Most German-speaking cantons chose English, except those located near the German-French language border, the western French-speaking part (Romandie) decided to maintain German as L2, Italian-speaking Ticino introduced French, German, and English. In fact, English has been integrated into the curriculum for a long time throughout Switzerland. What is actually new is the fact that all pupils have to learn it, not only those who are in streams preparing for high

school and university. The underlying assumption is that every child, in addition to the local L1, has to learn a language of proximity, plus a language for wider communication, thus meeting the guidelines of the Council of Europe and the European Union.

Regarding the integration of migrant children, the cantons choose different measures that are complementary, such as separate language courses, integrated courses, presence of an additional teacher in the mainstream class, etc. The measures vary according to the number of migrant children, which of course is more important in urban centers like Zurich, Geneva, and Basel. The recommendations refer to the integration of the migrant child directly into a class corresponding to his or her age.

Exchange programs enjoy popularity. A central coordination office exists, and in addition, each canton offers an exchange platform. The types of exchanges vary considerably: individual, class, long and short, pupils and teachers exchanges, tenth school year (a whole school year spent in another-language region by the age of sixteen), tailored exchanges on individual demand, for example, as a complement to bilingual programs (cf. *Echanges*). Since the size of the indigenous-language communities differ greatly, and the extended use of the Swiss-German dialects seriously hampers the motivation of the French-speakers, exchanges are frequently organized with Germany and France. Private institutions offer their services, especially for secondary and tertiary education. Students still want to spend some time in English-speaking countries, with a growing variety of different destinations.

Bilingual education is not introduced on a large scale, except in the Romansh and Italian areas in the officially trilingual Grisons where it is compulsory and where pupils are not streamed out. Here again, regional and cantonal differences are great with regard to starting age (from kindergarten to secondary or even tertiary education), duration (modules in L2 or whole subjects during some years), continuity, intensity in the use of the second language (from 10% to 100% of the curriculum), regularity of the program, and linguistic composition of the class, for example, immersion or reciprocal immersion (for overviews cf. Brohy 1998, 2001a; Grin and Schwob 2002).

3.2.   *Teaching conditions*

As teacher training is also a cantonal responsibility, it varies considerably from canton to canton. The old teacher-training schools (secondary level, French *Ecole Normale*, German *Lehrerseminar*) are being replaced by teacher-training colleges (tertiary level). This should ensure a better

starting base for the training and better language competencies of the teachers-to-be. In Geneva, the training takes place at university. Some teacher-training colleges train the teachers for all levels, others only for kindergarten and primary level, like in Fribourg/Freiburg. The teacher-training colleges of Fribourg/Freiburg and Valais/Wallis are bilingual with immersion for all trainees. Generalist teachers usually work in the primary-grades, whereas they are specialists in the secondary grades. This means that every primary school teacher should be able to teach a second language. In 2003, the standard of (at least) three languages for all is fulfilled. As the recommendations stipulate the teaching of a third language at fifth grade within a few years, this will change the training of the teachers, as a specialist teacher will likely teach the L3.

Teaching strategies are based on communicative and postcommunicative approaches, with a growing use of computer technologies, approaches like language awareness, integrated language learning and the use of the European Portfolio.

3.3.   *Trilingual education*

As has been pointed out (e.g. Hufeisen and Lindemann 1998; Beetsma 2002: 11), the concept of trilingual education is extremely polysemic. It is an umbrella term for many different linguistic scenarios. We can distinguish between a strong form of trilingual education, with three languages as medium of instruction, an intermediate form with bilingual teaching

Table 3.   *Forms of trilingual education*

	Strong form	Intermediate form	Weak form
L1	Content teaching + language arts	Content teaching + language arts	Content teaching + language arts
L2	Content teaching + language arts	Content teaching + language arts OR Language across the curriculum or exchanges + language arts	Language arts
L3	Content teaching + language arts OR Language across the curriculum or exchanges + language arts	Language arts	Language arts

plus the teaching of a third language under various conditions, and a weak form with language art lessons in L2 and L3.

Additional L4 and L5 languages are possible (Ticino, optional languages, immigrant languages).

3.4. *Strong forms of trilingual education*

The strong form of trilingual education can be found at university level. The *Università della Svizzera italiana* (USI), located in Ticino, comprises three faculties (economic sciences, communication, and architecture), a fourth one (computer sciences) is under development. The official language of the university is Italian, however, students have to understand at least two other languages (from German, French, and English), since professors teach in their native language and multilingual communication and exchanges are expected: "Grazie alla sua collocazione geografica, politica e culturale, l'USI si è affermata come ateneo plurilingue e pluriculturale, con una grande apertura internazionale" (*Università della Svizzera italiana* Web site). The School of Management in Fribourg/Freiburg offers a bilingual diploma in French and German, plus a postgraduate in French, German, and English; and the bilingual University of Fribourg/Freiburg, which delivers bilingual diplomas, commonly uses English as a scientific language.

Switzerland does not have a strong tradition of private schooling. Due to the extremely short distances, the neighborhood or village school, at least for the kindergarten and primary levels, is usually reached on foot, this walk is considered to be an integral part of socialization. Around 5% of the school population attends private schools, although the number varies considerably with school levels and in urban international centers like Geneva and Zurich. In fact, many Swiss private schools host a foreign clientele. Many schools have created multilingual niches, some more than a century ago. The *Ecole Moser*, for instance, located in two sites in Geneva and Nyon, offers bilingual streams from fifth grade on (German-French). From seventh grade on, one or two subjects are taught in English, in addition, modules and cultural activities are being offered in English, plus Latin from sixth grade and optional Italian in ninth grade.

Under this category we could also include students in bilingual models who attend heritage-language courses and students in bilingual schools in an exchange program. These forms encompass a wide variety of situations. Though bilingual education is currently being evaluated by different research centers and universities, the integration of a third language as some sort of content teaching has not often been considered so far.

3.5.   *Intermediate forms of trilingual education*

Under this category we can consider all the bilingual models which, of course, have to include an additional language, since a third language is compulsory for all pupils according to national standards. Here again, researchers have been busy investigating the outcomes of bilingual education (e.g. Bregy et al. 1996, 2000; Bregy and Revaz 2001; Greub and Matthey 1996; Merkelbach 2001; Schwob 2002; Stern et al. 1995, 1996, 1998; Wokusch and Gervaix 2001) the dynamics with a third language have rarely been considered.

In Samedan, a village of 3,500 inhabitants, located in trilingual Grisons Canton in the upper part of the Engadin near the well-known alpine holiday resort of St. Moritz, a carefully prepared bilingual longitudinal community project was launched in 1996 (cf. Haltiner 1996, 1999). In this model, German is partly introduced from kindergarten on, but Romansh is reinforced at secondary school level. An interdisciplinary team evaluates the outcomes in Romansh and German, academic achievement in mathematics and science, cognitive competencies, attitudes and motivation of pupils, parents, and teachers, and communicative skills in French, the ''third'' language introduced in school in seventh grade. In fact, French is very often L4 or L5, as many children have a good command of Italian, and many migrant languages are present. The results have shown better French L3 competencies compared to a monolingual control group learning French as L2 (Brohy 2001b), but surprisingly with more negative attitudes toward the French language. During two years, all the pupils had additional heritage-language courses in their L1, irrespective of the status of their first language (communal, cantonal, national, or migration language). This project was abandoned, due to the lack of interest of the parents.

In a French-Italian partial immersion project (environmental sciences in Italian), it was hypothesized that bilingual learning would generate positive outcomes in German as L3 (Matthey 1997). This was in fact the case, but the author of the study was cautious about the generalization of the results, since this bilingual project was optional and social factors could interfere.

In Italian-speaking Ticino, four languages will be compulsory for everybody: Italian as L1, French as L2 at third grade, German at sixth grade, and English at eighth grade. The language reform comes into force at the beginning of the school year 2003–2004. French becomes optional from eighth grade on, but immersion and exchange modules in French are offered. The underlying idea is that everybody shoud benefit from at least five years of French lessons, but students with learning problems can

Figure 2.   *Languages in Grisons*
Source: Lia Rumantscha
1. Romansh territory (1a. Romansh majority; 1b. German majority); 2. Italian; 3. German

give up French in eighth grade to make sure that not more than two
foreign languages have to be learned simultaneously at a compulsory
base. The new Ticino guidelines in fact take into consideration the change
of paradigm: French was compulsory and English optional, now French
gets optional in eighth grade. Ticino is the only Swiss canton with four
compulsory languages for all students. Program articulation between the
secondary school (scuola media) and high school and vocational schools
should guarantee a smooth interface between school levels. Considering
the fact that a lot of pupils have immigrant languages as their L1, there
is a generally high impact on language education.

3.6.   *Weak forms of trilingual education*

Although many pupils in the Swiss education system have benefitted from
language arts in L2 and L3, and in the very near future all pupils will
do so, there are not many surveys available on the implementation of
the different languages, language learning, and cross-linguistic influences.
The canton of Zurich has evaluated the implementation of compulsory
English lessons (L3) in secondary school (seventh and eighth grades).

The sample consisted of approximately 4,000 pupils and 300 teachers. One of the results yielded by the study was that pupils found that they could easily cope with the English lessons, whereas the teachers found that for the weaker pupils English was too much of a challenge. Teacher training and didactics should be improved (Rhyn et al. 2002). An incidental type of trilingualism was analyzed in a research project with the learning of French (local L1) and German (local L2) by immigrant children in francophone Neuchâtel (Gajo and Matthey 1997; Gajo and Mondada 2000). According to this research, learning German by children getting bilingual (their native language plus French) is not an easy task, since school is not acting as a mutilingual space and German is too much a school subject without importance in the environment outside school (cf. Späni and Zimmermann 1997 for similar results with French as L2). Interlanguage phenomena were analyzed in a study on cross-linguistic influence between German as L2 and English as L3. In the corpus of written and oral German, the lexical transfers from English to German were stronger than the phonological, orthographic, morphologic, and syntactic transfers (Christen and Näf 2001).

4.   Challenges and problems

The introduction of at least three languages for everybody is a reality in Switzerland. The former Swiss model "Everybody speaks his or her native language and is understood by the other language communities" has clearly shown its limits regarding the national languages. A new model of multilingualism emerges with two national languages, plus English, the main challenge being the choice of the second language. In the near future, regional concepts will yield different types of language competencies, with a Portfolio evaluation guaranteeing thresholds at important interfaces between school levels. One of the main problems is the maintenance of the heritage languages, and the lack of goodwill of the school-boards to really integrate other languages into the curriculum, especially at vocational level. Another challenge lies in the aims of intercultural education. Since Anglo-American culture is so much integrated into any culture, it can hardly be interpreted as any form of intercultural contact, and students have to be aware that real multilingualism is constructed with other linguistic and cultural means; "English-only" as a foreign language is not enough. Competencies in English are considered to be a default competence to be completed by others.

   Teacher training is of course one of the crucial issues in developing high standards in foreign languages, alongside best competencies in the

content areas. The relatively bad results of the Swiss students yielded in the PISA study (cf. Moser 2001) should not degenerate into an exaggerated L1 emphasis; literacy can well be developed across different languages.

5. Conclusion

As we have seen, not many investigations concerning the learning of and the learning in three languages have been conducted in Switzerland, although this is well established. Most studies have been conducted in the field of bilingual education by different research centers and universities.

Yet, a number of political and administrative decisions will probably foster new research projects in a near future. A new language law, called ''Federal law on the national languages and understanding between the language communities,'' which accompanies article 70 of the federal Constitution will be discussed in the national Parliament in the course of 2005. Its article 21 states that a new federal research center on plurilingualism shall develop and will assess plurilingual school models. This should yield some insights concerning the difference between L2 and L3 learning, the transfer of learning strategies, and the relationship between language and content learning. Good networking with institutions abroad will be necessary.

A research project concerning the teaching and learning of English as a L3 will start at the end of 2003 in the western part of Switzerland. It will investigate the teaching conditions for English in the different French-speaking cantons, considering the fact that French is taught as L1, German as L2, that some pupils are integrated in bilingual classes, and that a high percentage have a heritage language as L1. A running supracantonal project concerns cognitive processes and content learning in bilingual education. It deals with the primary and secondary grades (Stern and Badertscher forthcoming).

Future challenges concern the status of the Swiss German dialects, especially regarding the integration of migrant children and the development of adequate tools for the evaluation of L2 and L3. This is not easy when we consider the complexity of situations at cantonal and regional level. A research program of the *Swiss National Science Foundation*, ''Diversity of languages and language competence in Switzerland,'' with a duration of five years and a budget of FrS. 8 million, should give answers in the challenging field of multilingualism at large.

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Notes

* I am grateful to Patricia Pullin and Adrian Stark for valuable comments on a draft version of this article.
1. The other sections of this article read: "[2] The Cantons shall designate their official languages. In order to preserve harmony between linguistic communities, they shall respect the traditional territorial distribution of languages, and take into account the indigenous linguistic minorities. [3] The Confederation and the Cantons shall encourage understanding and exchange between the linguistic communities. [4] The Confederation shall support the plurilingual Cantons in the fulfillment of their particular tasks. [5] The Confederation shall support the measures taken by the Cantons of Grisons and Ticino to maintain and to promote Romansh and Italian."
2. To a certain extent, Italian-speaking Switzerland is diglossic as well. However, the speakers are more willing to use and to switch to standard Italian, *italiano classico*.
3. A survey was also published in "Coopération" (June 1991), the weekly newspaper of a wholesale store. In Ticino, nearly 80% declared to be competent in French, 66% in German. German-speakers came next with 80% being competent in French and over 25% in Italian. Finally, 55% of French-speakers said to be proficient in German and 18% in Italian (see also Scope 1973).
4. My translation.

References

Beetsma, D. (ed.) (2002). *Trilingual Primary Education in Europe. Inventory of the Provisions for Trilingual Primary Education in Minority Language Communities of the European Union*. Ljouwert/Leeuwarden: Fryske Akademy/Mercator Education.

Bregy, A.-L.; Brohy, C.; and Fuchs, G. (1996). *Evaluation de l'expérience d'apprentissage bilingue de Sierre: 1994/95*. Neuchâtel: IRDP.

—(2000). *Expérience d'apprentissage bilingue précoce: résultats des élèves de Monthey et de Sion à la fin de la 2e année primaire: année 1998/99*. Neuchâtel: IRDP.

—; and Revaz, N. (2001). *Evaluation des enseignements/apprentissages bilingues en classes de 4ème primaire de Sierre*. Neuchâtel: IRDP.

Brohy, C. (1998). *Expériences et projets plurilingues dans les écoles en Suisse — Esperienze e progetti plurilingui nelle scuole svizzere — Experienschas e projects plurilings en las scolas svizras — Mehrsprachige Modelle und Projekte an Schweizer Schulen*. Fribourg: APEPS.

—(2001a). Compulsory or free section: implementation and outcomes of bilingual models in Switzerland. In *Language as a tool. Immersion research and practices*, S. Björklund et al. (eds.), 140–156. Vaasa: Vaasan yliopisto.

—(2001b). Generic and/or specific advantages of bilingualism in a dynamic plurilingual situation: the case of French as official L3 in the school of Samedan (GR, Switzerland). *International Journal of Bilingual Education and Bilingualism* 4(1), 38–49.

Cathomas, B.; and Pedretti, B. (1994). Rätoromanische Schweiz. In *Mehrsprachigkeit — eine Herausforderung*, H. Bickel et al. (eds.), 343–370. Aarau: Sauerländer.

Cathomas, R.; and Carigiet, W. (1997). Immersion: und kaum eine(r) merkt's. *Babylonia* 4, 65–69.

CDIP — Conférence suisse des directeurs cantonaux de l'instruction publique (1995). *Recommandations et décisions*, 25–37. Bern: CDIP.

Christen, H.; and Näf, A. (2001). Trausers, shoues und Eis. Englisches im Deutsch von Französischsprachigen. In *Sprachkontakt, Sprachvergleich, Sprachvariation*, K. Adamzik et al. (eds.), 61–98. Tübingen: Niemeyer.

Coopération (1991). *Une Suisse, quatre langues*. June, number 26.

Dürmüller, Urs (1986). The status of English in multilingual Switzerland. *Bulletin CILA* 44, 7–38.

—(1991). Swiss multilingualism and intranational communication. *Sociolinguistica* 5, 111–159.

—(1992). The changing status of English in Switzerland. In *Status Change of Languages*, U. Ammon et al. (eds.), 355–370. Berlin and New York: Mouton de Gruyter.

—(1997). *Changing Patterns of Multilingualism. From Quadrilingual to Multilingual Switzerland*. Zurich: Pro Helvetia.

Echanges (National Board for Exchange Projects). http://www.echanges.ch, the cantonal exchange board of Fribourg/Freiburg. Cf. http://www.bucoli.ch (03/2003).

Fried-Turnes, U. (1994). Ein Modell zweisprachiger Schulung: die Rätoromanen. In *Multikultur und Bildung in Europa*, C. Allemann-Ghionda (ed.), 355–369. Bern: Lang.

Furer, J.-J. (1996). *Le romanche en péril? Evolution et perspective*. Bern: Office fédéral de la statistique.

Gajo, L.; and Matthey, M. (1997). Le bilinguisme: un atout dans l'acquisition d'une troisième langue? *Interdialogos* 2, 30–33.

—; and Mondada, L. (2000). *Interactions et acquisitions en contexte. Modes d'appropriation de compétences discursives plurilingues par de jeunes immigrés.* Fribourg: Editions universitaires.

Greub, J.; and Matthey, M. (1996). *Expérience interculturelle à l'école primaire de La Chaux-de-Fonds: intégration des cours de langue et culture italiennes dans l'enseignement neuchâtelois. Rapport intermédiaire 2, année scolaire 95–96*. Neuchâtel: ODRP.

Grin, F. (1995). The economics of language competence: a research project of the Swiss National Science Foundation. *Journal of Multilingual and Multicultural Development* 16, 227–231.

—(1999a). *Compétences et récompenses: la valeur des langues en Suisse.* Fribourg: Editions universitaires.

—(1999b). *Compétences linguistiques en Suisse: Bénéfices privés, bénéfices sociaux et dépenses (rapport de valorisation).* Bern and Aarau: PNR33/CSRE.

—; and Schwob, I. (2002). Bilingual education and linguistic governance: the Swiss experience. *Intercultural Education* 13(4), 409–426.

Haltiner, R. (1996). Förderung der romanisch-deutschen Zweisprachigkeit in der Volksschule und im Kindergarten von Samedan GR. Schlussbericht zur Konzeptphase. Unpublished manuscript, Samedan.

—(1999). *Förderung der romanisch-deutschen Zweisprachigkeit im Kindergarten und in der Volksschule von Samedan*. Zwischenbericht über die Versuchsphase 1996 bis 1998. Chur: Begleitgruppe zum Schulversuch.

Hufeisen, B.; and Lindemann, B. (eds.) (1998). *Tertiärsprachen, Theorien, Methoden, Modelle.* Tübingen: Stauffenburg.

Keller, R. E. (1982). Diglossia in German-speaking Switzerland. In *Standard Languages*, W. Haas (ed.), 70–93. Manchester: Manchester University Press.

Lia Rumantscha. http://www.liarumantscha.ch (03/2003).

Lutz, F.; and Arquint, J. C. (1982). Die rätoromanische Schweiz. In *Die viersprachige Schweiz*, R. Schläpfer (ed.), 253–300. Zurich: Benziger.

Matthey, M. (1997). Immersion partielle en italien et apprentissage de l'allemand: quels effets? A propos d'une expérience interculturelle à la Chaux-de-Fonds. Contribution au

Congrès SSRE 1997 ''Multilinguisme et multiculturalité: de la recherche aux applications.'' Neuchâtel: Université, CLA.

Merkelbach, C. (2001). *Concept pour un projet d'enseignement bilingue à l'école primaire de Bienne-Boujean. Konzept für das Projekt zweisprachiger Unterricht an der Quartierschule Bözingen-Biel*. Tramelan: ORP (bar 1/01).

Mittler, M. (1998). *Wieviel Englisch braucht die Schweiz? Unsere Schulen und die Not der Landessprachen*. Frauenfeld: Huber.

Moser, U. (2001). *Prepared for Life? Basic Competencies of Young People — A Synthesis of the National PISA 2000 Report*. Neuchâtel: OFS. http://www.pisa.admin.ch (03/2003).

Moulton, William G. (1962). What standard for diglossia? The case of German Switzerland. *Monograph Series on Languages and Linguistics* 15, 133–144. Washington D.C.: Georgetown University Press.

Quelles langues apprendre durant la scolarité obligatoire? (1998). http://www.unibas.ch (03/2003).

Rash, F. (1998). *The German Language in Switzerland. Multilingualism, Diglossia and Variation*. Bern: Lang.

—(2000). Outsiders' attitudes towards the Swiss German dialects and the Swiss standard German. In *National Varieties of German outside Germany*, G. Hogan-Brun (ed.), 67–101. Bern: Lang.

Rhyn, H.; Moser, U.; and Stamm, M. (2002). *Evaluation Englischobligatorium auf der Sekundarstufe I im Kanton Zürich*. Zurich: Universität Zürich. http://www.bildungsdirektion.zh.ch (03/2003).

Schaerer, R. (1998). *Language Policies for a Multilingual and Multicultural Europe: A European Language Portfolio: First Progress Report*. Strasbourg: Council of Europe, Council for cultural co-operation, Committee of education.

Schneider, G.; North, B.; and Koch, L. (2001). *European Language Portfolio. Version for Young People and Adults*. Bern: BLM. http://www.sprachenportfolio.ch (03/2003).

Schwob, I. (2002). *Evaluation de l'enseignement/apprentissage bilingue en classe de 4e primaire de Monthey, Sierre et Sion*. Neuchâtel: IRDP.

Scope (1973). *Die Fremdsprachenkenntnisse der Schweizer. Eine Repräsentativerhebung*. Lucerne: Scope.

Sieber, P.; and Sitta, H. (1986). *Mundart und Standardsprache als Problem der Schule*. Aarau: Sauerländer.

Späni, M.; and Zimmermann, H. (1997). Die Nutzung von sprachlichem Wissen im Fremdsprachunterricht. *Interdialogos* 2, 25–29.

Stern, O.; and Badertscher, H. (forthcoming). *Wissenserwerb im bilingualen Unterricht. Eine empirische Studie zur Bedeutung der Sprache im Sachlernen*. Bern: University of Bern.

—; Eriksson, B.; Le Pape, Ch.; Reutener, H.; and Serra Oesch, C. (1995). Französisch lernen im Sachunterricht. *Schweizer Schule* 3, 3–12.

—; (1996). Französisch-Deutsch: Zweisprachiges Lernen an der Sekundarstufe I. *Bulletin suisse de linguistique appliquée*, VALS/ASLA 64, 9–33.

—; (1998). *Französisch-Deutsch: Zweisprachiges Lernen an der Sekundarstufe I.* Aarau: SKBF.

Swiss Conference of Cantonal Ministers of Education. http://www.edk.ch (03/2003).

Università della Svizzera italiana. http://www.unisi.ch (03/2003).

Watts, R. J.; and Murray, H. (eds.) (2001). *Die 5. Landessprache? Englisch in der Schweiz*. Zurich: vdf.

White, P. E. (1974). The social impact of tourism on host communities: a study of language change in Switzerland. *School of Geography, Research Papers* 9, 1–44.

Wokusch, S.; and Gervaix, Ph. (2001). *Etat de situation de la maturité bilingue. Compétences linguistiques des élèves de 2ᵉ année*. Lausanne: Unité de recherche en système de pilotage.