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# Transmission of sign languages in Northern Europe

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### 1 Introduction

This chapter presents case studies of sign language transmission in European countries in which the majority of inhabitants all speak a Germanic-based language. Owing to space constraints, we are focusing in this chapter on Switzerland, Germany and the Netherlands as examples of the past and current practices of language transmission in this part of Europe, but by no means should this overview be interpreted as being inclusive of other countries of the region.

### 2 Transmission of the three sign languages of Switzerland

#### 2.1 The spoken language situation in Switzerland

Switzerland recognizes four “*National Languages*,” which are those used by the majority of people in different geographical regions of the country: Eighteen cantons are primarily German-speaking, five French, one Italian, one bilingual French/German and one trilingual canton where German, Italian and Rhaeto-Romansh are spoken. “*National Languages*,” however, have historically not been the same as the “*Official Languages*,” which are those that can be used legally at the federal level. Romansh, for example, became an official language only in 1996. The “mother tongues” actually spoken by Swiss people in their families and local communities are not necessarily either “national” or “official” languages. “Mother tongue” languages used by a large number of persons on a daily basis include the several regional dialects of “Swiss German” and, as approximately 20 percent of the population living in Switzerland have foreign roots, such languages as Spanish, Portuguese, Serb, Croatian, Albanian and English.

There is no standardized form of the Swiss-German and Rhaeto-Romansh dialects learned by many persons as a mother tongue. Spoken Swiss German is lexically and grammatically different from the “Standard German” spoken in neighboring Germany and has no conventional written form. As a consequence,

Swiss German hearing children learn to read and write “Standard German” and not their mother tongue, Swiss German.

This somewhat complex spoken language situation has consequences for Swiss deaf persons. Deaf children from the Swiss German cantons usually do not learn the spoken but unwritten Swiss German dialects of their communities but are taught to read and write “Standard German.” Their hearing families also usually speak with them in Standard German, although this is not a mother tongue of any of them. Deaf children from Rhaeto-Romansh areas have traditionally attended schools for the Deaf in the German-speaking cantons, where they are taught to speak, read and write in Standard German (Boyes Braem *et al.* 2000). Needless to say, the children from other cultural and linguistic backgrounds also have home languages, such as Portuguese or Albanian, which are different from whatever official Swiss language is their school language.

## 2.2 The sign language situation in Switzerland

The three sign languages used in Switzerland are

Swiss German Sign Language (Deutschschweizerische Gebärdensprache, DSGS),

Swiss French Sign Language (Langue des Signes Suisse romande, LSF-SR) and

Swiss Italian Sign Language (Lingua dei Segni Italiana, LIS-SI).

There are no official statistics on deaf persons in Switzerland, but estimates based on the internationally used formula of 0.01 signing deaf persons per thousand of a population, as well as on membership in various clubs and organizations and on clients of interpreter services, would indicate that of the *c.* 7.5 million inhabitants of Switzerland, there are *c.* 7,500 Deaf signers, with *c.* 5,500 in the eighteen primarily German-speaking cantons, 1,700 in the seven primarily French cantons and 300 in the Italian canton. Whether the traditional formula is still valid for the younger generations of deaf children who now routinely receive cochlear implants is an important open question for future research. There are, in addition, *c.* 13,000 hearing signers in the country, an estimate based on the number of participants in sign language classes. There are no figures for children of deaf adults (CODAs).

In the past, signers learned their languages either from Deaf family members or, if they came from hearing families, from Deaf peers at a regional school for the deaf. This has changed radically in the past two decades, due primarily to the fact that, beginning in the 1980s, an increasingly large number of deaf children have received cochlear implantations at an early age and have been educated only in the

spoken language of their region, with no contact with signers. Many signers in these more recent deaf generations have learned sign language as adolescents from the adult Deaf community.

### 2.2.1 Official recognition of sign language

The sign languages of Switzerland are not recognized as either “National” or “Official Languages” in the Swiss Constitution. Part of the state’s reasoning for refusing the Swiss Deaf Association’s 1993 petition that sign languages be officially recognized was that the users of these languages were not all located in one geographical “territory.”

In 1994, the Swiss Parliament did pass a postulate that “recommends sign language for the integration of the deaf and urges, together with the oral language, its support in the fields of education, training, research and communication.”<sup>1</sup> This postulate represented a first step but falls short of an official recognition that sign languages are the natural languages of Deaf people. Any implementation of most of the recommendations in the postulate, especially those concerning educational practices, is left up to the decisions of the numerous different cantonal institutions and governmental offices. In 2002, in a federal law on nondiscrimination of disabled people, a special Article was added to specify that the government could financially help institutions and cantons that encourage sign languages, and that sign language can also be used for official administration proceedings (for example in courts, with social agencies, etc.). It also stipulates that official political speeches on television by members of the Swiss Federal Council (Bundesrat) be translated by sign language interpreters. As a result of the 1994 Postulate and the 2002 and earlier regulations, the federal government now subsidizes sign language classes, the inter-cantonal training of sign language teachers and of sign language interpreters.

## 2.3 Descriptions of the three Swiss sign languages

None of the Swiss sign languages are standardized and all are composed of regional dialects that differ primarily at the lexical level. The five variants of DSGS and five variants of LSF-SR are related to the traditional residential schools for the Deaf in these regions. The regional dialects of DSGS are Basel, Bern, Lucerne, St. Gallen and Zurich. Although living in a different country, the deaf persons in Liechtenstein use a sign language which seems to be closely related to that used in the Swiss German cantons. The main regional varieties of LSF-SR are those of Geneva, Lausanne, Neuchatel, Fribourg and Sion. No research has been done on regional variation of LIS-SI, but deaf persons have informally reported that there

are two main varieties of this language, centered on the cities of Lugano and Bellinzona.

The sign language used in German Switzerland, DSGS, is similar to the sign language used in the southern parts of Germany, LSF-SR to the sign language used in France (LSF) and LIS-SI to Italian Sign Language (LIS). An interesting study that remains to be done is of the extent to which these Swiss sign languages could be considered regional dialects of the sign languages of these neighboring countries, a question that is reflected in the use of abbreviations for these languages. Signers in French and Italian Switzerland usually refer to their languages with the abbreviations that are used for the related sign languages in neighboring countries. DSGS has been used in research publications, but Swiss German signers do not usually refer to their language with any abbreviation.

It is not unusual for a Swiss Deaf person to know more than one of the Swiss sign languages through personal contacts as well as national associations (such as the Swiss Deaf Sports Association), as well as one or more foreign sign languages (especially German, French, Italian and American sign languages). Owing to frequent encounters with persons using other sign languages, including Deaf refugees and immigrants from other countries, many Swiss Deaf signers are also fluent in some form of international signing.

Loan items from other sign languages do find their way into the lexicons of Swiss sign languages, but the direction of borrowing seems to be asymmetrical. Signers of DSGS report a high regard for the aesthetic qualities of LSF-SR and are relatively open to borrowing signs from that language. Signers of LSF-SR, in contrast, report resistance to borrowing from DSGS, which is viewed as the language of the majority group of Swiss Deaf. Signers of DSGS, on their part, report a resistance to borrowings from German Sign Language (DGS), due, again, to feelings of a minority needing to protect itself against a neighboring majority language. In general, deaf persons in Ticino have more contact with deaf in Italy than with the deaf in the German and French areas of Switzerland, which represent “dominating majorities” and with whom they do not share a common spoken language. The LIS-SI variety used around Bellinzona is more strongly influenced by sign languages of immigrants from the former Yugoslavia, Lithuania and Poland.

Signers of DSGS tend to use voiceless mouthings of German-like words or word beginnings with their signing for lexical, prosodic and stylistic purposes (Boyes Braem 2001b). Signers of LSF-SR use more fingerspelling with their signing compared to signers of DSGS, who until very recently have used this very little. As few DSGS signers are as yet as fluent in producing or reading fingerspelling, the use of “initialized” signs is not common for the creation of new DSGS signs. Both fingerspelling and mouthings are used with the signing of LIS-SI.

Deaf signers of both LSF-SR and DSGS have reported that they feel their languages have changed over the past couple of decades, primarily in an expansion of the vocabulary with new lexical items replacing the older signing generation’s paraphrases or simply mouthings alone for describing concepts for which there are no signs. DSGS signers also report that more “signed German” lexical items have crept into their language from the younger generations of Deaf that have attended the Zurich school for the deaf, where a ten-year program of “signed German” was introduced in the 1980s (Maye, Ringli & Boyes Braem 1987).

## 2.4 Swiss sign languages in deaf education

### 2.4.1 *Education and attitudes toward deaf persons in the past*

2.4.1.1 *First schools for the deaf in Switzerland* The first classes for the deaf in German Switzerland were begun in 1777 in the canton of Zurich and involved the use of local signs as well as spoken German. It was in Zurich in 1783 that the historical debate took place between the German proponent of the oral methodology, Samuel Heinicke, and proponents of Abbé Charles-Michel de l’Epée’s “methodological signs.” Schools for the deaf were established in Switzerland between 1811 and 1838, including Johan Heinrich Pestalozzi’s school in Yverdon.<sup>2</sup> All of these schools used sign language together with the spoken language in a “combined method” and employed deaf teachers (Caramore 1988, 1990). As all teachers of the deaf were, until 1924, trained directly in the schools, they became increasingly influenced by the hiring of many fellow-teachers from Germany. By the middle of the nineteenth century already, before the 1880 Congress of Milan, the Swiss schools had become so strongly influenced by German oral methods that they had turned away from their earlier support of deaf teachers and signing.

2.4.1.2 *Eugenics movement and deaf people in Switzerland* Eugenics, a theory of improving the human race through breeding, had an influential following in Switzerland in the first part of the twentieth century and was implemented through several measures affecting the so-called “degenerate” elements of the population, in which deaf persons were included. After World War I, the proponents of eugenics saw the increase in the deaf school population in contrast to the stagnating general population as a danger that the congenitally impaired sections of the population were increasing at the cost of the non-impaired citizens.

According to the then director of the Zurich “Deaf and Dumb Institute,”

The aim of the caretaking of the deaf and dumb is, and must remain, to make itself superfluous. We should not let ourselves be satisfied with

raising our children to be people who strive to be good, capable and able to take care of themselves. We have the duty to help shape the research and to stem the tide of deafness. (Hepp & Nager 1926:11)

The Swiss medical and educational authorities did not choose, however, to adopt the extreme measures of the National Socialists in neighboring Germany, but rather relied on other means, such as the clergy forbidding marriages of deaf persons, placement of deaf women in institutions where their becoming pregnant was less likely, abortions, as well as voluntary – and as a last resort, obligatory – sterilization. These attempts to eradicate deafness continued in Switzerland until the 1950s. The Deaf community began only in the 1990s to re-examine this historical period (Winteler 1995, Boyes Braem *et al.* 2000).

#### 2.4.2 Current educational situation

2.4.2.1 *Cochlear implantation, parents' associations and counseling services* The practice of cochlear implantation is widespread throughout Switzerland, with the entire cost of the procedure covered by the federal Disability Insurance. In 2006, approximately 80 percent of deaf infants were implanted, many of them at as early as thirteen months of age and the medical staff usually does not encourage parents to use sign language with their deaf child. The Swiss Association of Parents of Deaf Children as well as most counseling services for parents do officially mention sign language as a possible form of communication, but their activities in practice, especially in German Switzerland, concentrate primarily on information about cochlear implantation and oral education.

In the late 1990s and early 2000, several playgroups using sign language were started up all over the country; however, most of these playgroups no longer exist, due to the lack of interest of new parents of young deaf children.

2.4.2.2 *Primary and secondary school education* The number of pupils in the day and residential schools for the Deaf has been steadily decreasing over the past decade, as the large majority of Swiss deaf children who have received a cochlear implant are integrated into classes with hearing children, usually without signing support. The small number of deaf children still attending the traditional residential schools tends to have additional disabilities or come from immigrant families.

In French Switzerland, the schools for the deaf in Geneva, Fribourg and Lausanne do have bilingual (LSF-SR/French) programs. In German Switzerland, the Basel school has one experimental bilingual classroom and the Zurich school offers a few classes per week taught in sign language by Deaf teachers.<sup>3</sup> In Italian

Switzerland, although in the past there was a school for the deaf, currently there is no regional school for the small population of deaf children.

After primary school, many Swiss deaf students now attend public high schools with hearing children but some chose to attend a residential secondary school for the deaf in Zurich or in Fribourg,<sup>4</sup> or a vocational training school for the deaf in Zurich.<sup>5</sup> At these schools, almost all of the main teachers are hearing, and few have fluent sign language skills. As approximately two-thirds of the students at the vocational training school are hard of hearing (often due to early cochlear implants), communication between the students themselves can also take place in the spoken language rather than in sign language. At the secondary school for the deaf, signing takes place mainly in the dormitory.

2.4.2.3 *College and university-level education* In order to enter any Swiss university or technical college (*Fachhochschule*), one must have a special diploma (*Matura/Baccalauréat/Maturità*) from a secondary school. Secondary schools for the deaf have in the past not offered this kind of diploma and consequently there have been very few deaf Swiss who have been qualified to enter universities in this country. For those who do make it into a university or college, sufficient interpreting services are often not available for those who wish them.

In the absence of other Swiss university programs that are easily accessible for Deaf persons, the part-time program for training Deaf teachers of sign language<sup>6</sup> has functioned since 1990 as a center for higher education for signing deaf students, a kind of Swiss German “mini-Gallaudet.” This program has been taught in sign language and includes several courses on sign language linguistics and Deaf culture. Deaf persons have also participated as team members as well as informants in all research and development studies of DSGS, from which they receive a kind of “on-the-job” training in research principles and techniques.

## 2.5 Swiss sign language in Deaf communities

Deaf clubs and associations began springing up in many regions of the country in the later nineteenth century providing places where the Deaf could communicate with signs. This was done, however, in face of strong disapproval by the teachers and professionals, who considered themselves to be the public representatives of the deaf. Until the 1920s, deaf who could not demonstrate good oral skills were regarded as peculiar or rebellious, which, until the 1940s, put them in danger of becoming “mentally retarded” wards of the state (Gebhard 2007). In this environment, it is not surprising that many deaf persons chose not to sign when in public, or even to regard signing as a “real” language. In the first church services for the

deaf, one of the first ministers, Eugen Sutermeister (1929), himself deafened as a child, was also a proponent of a ban on signing.

The local associations and clubs were united into a national “Swiss Deaf and Dumb Association” (Schweizerische Taubstummenverein) in 1873. It was, however, not until 1987 that the French and German areas began publications of their own and the dominance of the hearing professionals began to break down (Gebhard 2007). In the early 1980s, the three regional Deaf Associations in the German, French and Italian parts of the country also began to fight for the public recognition of the Deaf person to sign, although at the beginning this was referred to as “signing” and only later as “sign language.” In 2006, the three regional associations joined together into one national organization, the Swiss Federation of the Deaf (SGB-FSS),<sup>7</sup> which, among other things, was responsible for almost all sign language courses in the country as well as the development of sign language learning materials. There are currently more materials available for DSGS than for the other Swiss languages, although the newly nationalized Swiss Deaf Association is currently making plans for producing such products for LSF-SR and LIS-SI as well.<sup>8</sup>

In recent years, a growing number of regional “Communication Forums” (“Kofos”) in the French and German cantons have become important places for conveying information in sign language on political and social topics. In both French and German Switzerland, there is a tradition of sign language theatre and “Deaf slams,” competitions with signed poetry and stories, have become increasingly popular. Deaf Websites and Blogs have also become forums in which Swiss Deaf routinely discuss, among other things, matters relating to their sign languages.

As a counterpart to the many Swiss deaf groups that use and advocate sign languages, there are also organizations, in both the German and French areas, of oral-only communicating deaf persons, who advocate not using sign language.<sup>9</sup>

As Switzerland is such a small, and linguistically diverse, country, networking with Deaf signers from other countries is an important influence on the form and transmission of its sign languages. Swiss French Deaf have contact with signers over the border in France, a connection that was particularly important in setting up the first LIS-SR sign language courses and interpreter training programs in the 1980s. Congresses and cultural events in Germany in the early 1990s had a great influence on the linguistic self-awareness of all Swiss Deaf and a renewed look at some form of signing in the classroom for educators. Several Swiss Deaf from the French and German areas have, since the 1980s, attended Gallaudet University in the United States for shorter or longer periods of time.

## 2.6 Swiss sign languages in society

### 2.6.1 Sign language courses and sign language interpreting in Switzerland

All teachers of sign language courses in Switzerland are themselves deaf. In German Switzerland, there is a permanent training program for these teachers; in the French area, there have been intermittent programs; there have been no equivalent programs in the Italian canton.

Part-time programs for interpreter training began in 1984 in Lausanne/Geneva for LIS-SR and in Zurich in 1986 for DSGS.<sup>10</sup> In Italian Switzerland, there has been only one interpreter training program (1996–1999). Despite these programs, there are clearly not enough trained interpreters for the ever-growing demand in all areas of the country, and the deaf client is often upset by not receiving requested interpreting services.

### 2.6.2 Sign language in the Swiss Media/Internet

In 1998, the bimonthly television program in German Switzerland, which communicated in DSGS, was dropped entirely from the public television. In order to fill the information gap left for a Deaf audience, an Internet TV program ([www.focus-5.tv](http://www.focus-5.tv)) was begun by Deaf persons in 2003 with reports in DSGS, ASL and International Signing. In French Switzerland, the TV program in LSF-SR for the Deaf (“signes”) was never cancelled. In Italian Switzerland, there is no television program for the Deaf on the Italian Swiss television. Since 2007, all Swiss national television stations are legally required to provide sign language interpretation of at least one program per day and, in 2008, the national Swiss television stations in all three areas of the country began, in addition, the interpretation of one daily news program into the local sign languages.

The Swiss government is now required by law to provide official information in sign language on some of its official websites, and some private companies are also beginning to provide information in sign languages. Also available on the Web are DSGS lexicons for technical terms, explanations of health topics in LSF-SR, as well as SignWriting Notation for both of these languages.<sup>11</sup>

## 2.7 Sign language research and development

Research on sign languages in Switzerland has been greatly hampered by the fact that, in contrast to most of its neighboring countries, there are no departments or faculty positions in any university that specialize in sign language or have permanent faculty positions for sign language research. There has been more research published on DSGS than on the other two Swiss sign languages,

with the Swiss National Science Foundation funding most of the major projects.<sup>12</sup>

There being no permanent presence of sign language research at the university level, it is not surprising that few Swiss PhD dissertations involving sign language have been done in Switzerland.<sup>13</sup> In German Switzerland, seminar and master papers involving sign language have been done primarily at the Universities of Basel and Bern, a few of which have been published by a small association founded in 1982 to further sign language research ([www.vugs.ch](http://www.vugs.ch)). In French Switzerland, Professor François Grosjean at the University of Neuchâtel has been one of the most prominent proponents of sign language in this country. His short but influential text “The right of the deaf child to grow up bilingual” has been reprinted in at least thirty different languages<sup>14</sup> and several of his students have also produced unpublished masters papers on topics related to sign language.

## 2.8 Opinions on the future of sign language in Switzerland

The Swiss Constitution guarantees the individual the freedom to use privately any language. In this sense, there is no official oppression of sign languages and, as noted above, some laws allow the use of sign languages in some contexts. On the other hand, there is no official recognition of sign languages as natural languages of Deaf persons. Deaf persons are still regarded, especially by Swiss medical personnel, primarily as disabled persons.

For these societal and cultural reasons, as well as the current practice of not encouraging sign languages in the education of cochlear-implanted deaf children, all three Swiss sign languages are considered by many persons to be endangered languages. However, from the point of view of other (often Deaf) persons, the languages are not ultimately endangered and will always, in some form, be used by Deaf persons.

## 3 Transmission of sign language in Germany

### 3.1 The sign language situation in Germany

The sign language used in the German Deaf Community is referred to as *Deutsche Gebärdensprache* (DGS), German Sign Language, a term widely used in the German Deaf community. As with spoken languages, DGS has a number of regional dialects.<sup>15</sup> One of the regional dialects that has been systematically documented is the Munich dialect (Mally 1993b).

### 3.1.1 Number of sign language users

There are no official figures on the number of sign language users in Germany, nor for hearing children of Deaf signing parents who have acquired DGS as a first language. The German Deaf Association (DGB; [www.gehoerlosenbund.de](http://www.gehoerlosenbund.de)) registered 33,383 deaf and hard-of-hearing members in 1991 and 29,833 in 2005. The reasons for the decline in membership include the improvement of technology (e.g. access to telecommunication) and individual lifestyle choices (e.g. decline of Deaf volunteers in Deaf organizations and clubs) within the Deaf population (Worseck & von Meyenn 2007). At the same time, the website of the German Deaf Association states that there are 100,000 Deaf and deaf individuals living in Germany. According to a census conducted in West Germany in 1950, the prevalence rate for “prelingual deafness” was estimated to yield about 43,000 deaf individuals (van Cleve 1987:252). It is difficult to judge how many of these deaf people are actually signers, as there has been no formal census of sign language users.

## 3.2 History of sign language and the Deaf community in Germany

### 3.2.1 First institutes for the deaf and deaf organizations in the eighteenth and nineteenth centuries

In spite of the lack of empirical documentation on how DGS has emerged and stabilized, it is assumed that the precursors of DGS appeared in the second half of the eighteenth century and the first half of the nineteenth century. Its appearance was likely fostered by the establishment of residential schools for the Deaf, beginning with the very first “Institute for the Deaf and Dumb” founded in Leipzig by Samuel Heinicke in 1778. Some of the first deaf students at these first institutes became teachers there, and consequently, the combined method (i.e., the use of both signed and spoken languages in the classroom) became popular. Thus, while the oralist so-called “German Method” had a significant impact on German deaf education in the following centuries, it was not apparent that it had an immediate effect due to the many Deaf teachers at schools for the deaf.<sup>16</sup>

A second factor that played a significant role in the transmission and dissemination of sign language in Germany in the nineteenth century was the establishment of numerous Deaf clubs, associations and organizations, and newspapers, and the organization of national and European conferences.<sup>17</sup>

The establishment of Institutes for the Deaf as well as Deaf clubs and associations as Deaf “places” (in the sense of Padden & Humphries 2005) resulted in a critical mass of Deaf individuals. This fact implies that it has led to an increase in the number of Deaf marriages and Deaf children born to Deaf families.

### 3.2.2 Oralist movement backlashes in late nineteenth and early twentieth centuries

A wave of “oralism” using “the German method” occurred after the Second International Congress on the Education of the Deaf and Dumb, held in Milan, Italy, in September, 1880.<sup>18</sup> Although only one (hearing) representative from Germany attended the congress, the resolutions had a huge impact on deaf education in Germany: Deaf teachers were forced to leave their jobs, no new Deaf teachers were hired and ultimately the use of sign language was banned from the classroom.

Although the thriving German Deaf community saw these events as a disaster, it tirelessly organized various protests against the implementation of the Milan resolutions. Their two main demands (reintroduction of the “combined method” and reemployment of Deaf teachers) remained mainly unheard until the 1980s (Beecken *et al.* 1999).

### 3.2.3 National Socialism (1933–1945)

A second major backlash against the dissemination and transmission of DGS took place during the era of National Socialism from 1933 to 1945. The National Deaf Association (Reichsverband der Gehörlosen Deutschlands, also known as ReGeDe) was founded in Weimar in 1927 and was necessary at that time, as a large number of Deaf people were unemployed and there was the beginning of sterilization for people with hereditary deafness (“Lex Zwickau,” Boeters 1926).

3.2.3.1 *Laws of 1933 (Gleichschaltung)* When Adolf Hitler came to power in 1933, the laws to consolidate institutional powers (*Gleichschaltung*) were passed, which had a negative effect on the transmission and dissemination of DGS. ReGeDe lost its ability to operate as an independent national association with its own political agenda of preserving sign language and became – either directly or indirectly – involved in the compulsory sterilization of Deaf persons as well as responsible for the exclusion of Deaf Jews from Deaf associations and clubs. ReGeDe was ultimately dismantled in 1945, leaving the Deaf community with no formal organization to advocate its human rights, including the right to use sign language.

3.2.3.2 *Jewish Deaf people and the Holocaust* During the Holocaust, approximately 6,000 Deaf Jewish people were murdered in concentration camps. The ultimate effect was that a significant portion of the transmission and dissemination of DGS was practically “shut down.” After World War II, only about twenty-two Deaf Jews remained in Germany. Many other Deaf Jewish people emigrated

outside of Germany. The language of the Jewish German Deaf who emigrated to Israel seems, along with contact with other signed languages, to have influenced the lexicon of Israeli Sign Language as can be seen by the relatively high degree of similarity between the lexical items of DGS and Israeli Sign Language.

3.2.3.3 *Deaf people and eugenics* In 1933, Germany passed a law called “The Law for the Prevention of Offspring with Hereditary Diseases” (*Gesetz zur Verhütung erbkranken Nachwuchs*). Approximately 17,000 people who had a history of hereditary deafness were sterilized against their will during this time. Church organizations, ReGeDe and the teachers of the deaf actively cooperated with law enforcement agencies and hospitals in enforcing the law by giving them contact information for candidates eligible for sterilization and even explained to deaf children and their parents that there were benefits to this program (Biesold 1999). About 5 to 10 percent of the Deaf community comes from deaf families, and their main contribution to the Deaf community is to maintain the transmission of their language and culture. All of these Deaf from Deaf families were likely included in the 17,000 who were sterilized, thus making it impossible for them to pass on their language and culture to future generations of Deaf and hearing children.

When the government realized that the sterilization of deaf people through the above-mentioned law was not sufficient for eliminating disabled people “unworthy of life,” it initiated a pilot project called the “T4 program” in 1939 to test practical means of gassing people to their death. Under this program, 75,000 to 250,000 people with intellectual or physical disabilities were murdered, including some Deaf persons (Klee 1985). The method developed under the T4 program was subsequently used at concentration camps to kill Jewish people, including Deaf Jewish people.

The rise of National Socialism had a huge impact on the transmission and dissemination of DGS. The *Gleichschaltung* weakened ReGeDe’s ability to advocate for the Deaf community and eliminated Jewish members who happened to be strong leaders; the Holocaust wiped out the Deaf Jewish community; and compulsory sterilization for deaf individuals went unchecked, damaging their self-esteem. The effects of National Socialism continued to reverberate through the postwar decades.

### 3.2.4 Germany after the war

When Germany was divided into zones controlled by American, French, British and Soviet administrations after the war, Deaf people started to reestablish local Deaf clubs and associations. In West Germany, a coalition of these groups was formed in 1948, with one of its aims being the fight for compensation for the many

deaf people who were sterilized. A law mandating compensation for these individuals was not passed until three decades later, in 1965 (Federal Law of Rehabilitation, *Bundesentschädigungsgesetz BEG*). Deaf people in the eastern Zone administered by USSR were not allowed to form a Deaf association until 1957.

During this postwar period, two independent worlds grew up: The world of teachers and administrators in deaf education who took a deficit-oriented view toward deaf people, and the world of Deaf people, which thrived with mostly sports-oriented Deaf clubs and associations in which the use of DGS again thrived. A diglossic situation emerged in which it was considered appropriate to use DGS in private at Deaf clubs or at home but not in public, whereas those who were oral and/or could use the contact language, Sign Supported German (LBG, Lautsprachbegleitende Gebärden) were considered to be “smart” and “intelligent” people. A number of Deaf people were ashamed to use DGS in public,

### 3.2.5 *Resurgence of German Sign Language (and German Deaf community) after the 1970s*

The resurgence of DGS (and German Deaf community) had four catalysts: Deaf activism in the late 1970s onward, linguistic research on DGS, the emergence of the bilingual approach in deaf education and the Deaf community’s rediscovery of its identity as a linguistic-cultural minority.

3.2.5.1 *Deaf activism in the 1970s* The first catalyst came about in the late 1970s when Getrud Mally and Volkmar Jaeger, Deaf activists from Munich and Leipzig respectively, responded to the apathy of the Deaf associations that came about after the rise of National Socialism (Mally 1993a). These activists and their friends sought to reevaluate their Deaf identity and language, and founded a “Communication Forum” and publications that were, and still are, used to raise awareness issues of the education, culture, identity and sign language of the Deaf. These discussions were like an earthquake within the Deaf community.

3.2.5.2 *New research on DGS* A second catalyst occurred in the 1970s when Professor Siegmund Prillwitz at the University of Hamburg was asked by Jochen Kohnert, a professor of deaf education, to investigate ways of enhancing the literacy skills of deaf children in written German. After visiting the school for the deaf in Hamburg, Prillwitz became fascinated with how deaf children conversed with each other using their hands. Around the same time, a deaf man, Wolfgang Schmidt, after a visit to Gallaudet University, began discussing with fellow deaf people, Heiko Zienert and Alexander Meyenn, whether the concept of ASL as a language on its own could be applied to

Germany. It was then that the term “*Deutsche Gebärdensprache*” came into common use, replacing the previously used term “*Gebärden*.” Eventually these three deaf men met Prillwitz and, in 1982, started a research project together on the structure of DGS at the University of Hamburg. They presented their research findings at a congress for Deaf education in 1985 (Prillwitz *et al.* 1985), where they claimed that the communication form that deaf people were accustomed to using was German Sign Language, a full-fledged language with its own lexicon and grammar and not to be confused with Signed German. That discovery was a mind-blowing event for the Deaf community and for educators of the deaf, not only in Germany but also in neighboring German-speaking countries.

The Center (now Institute) of German Sign Language and Communication of the Deaf was founded at the University of Hamburg in 1986 by Professor Siegmund Prillwitz. Its research agenda is quite extensive, ranging from lexicographic projects to the description of DGS, the development of educational materials, notational systems (HamNoSys, *Hamburger Notationssystem*), the development of sign corpora databank and language acquisition studies.<sup>19</sup> The institute has had two full-time degree programs (Sign Languages and Interpreting) since 1992 and has hosted a number of international congresses on sign languages and Deaf history. Convinced that the dissemination of research findings played an important role in the awareness of sign languages as full-fledged languages and the existence of Deaf culture, Prillwitz founded a publishing company, Signum Press ([www.signum-verlag.de](http://www.signum-verlag.de)), in the late 1980s.

At the University of Frankfurt, the focus of research on DGS, under the direction of Professor Helene Leuninger, mainly lies in language production (within the field of psycholinguistics). The research team has also been actively engaged in various projects including the formal description of DGS and bilingualism, the documentation of a religion-related lexicon and the development of courses specially designed for sign language teachers and interpreters.<sup>20</sup>

In 1995, an interdisciplinary research group at RWTH University of Aachen was established by Professor Ludwig Jaeger, a linguist in the German Department; Professor Walter Huber from the Medical School and Professor Klaus Willmes-von Hinckeldey, both neuroscientists at the Medical School. Their agenda is fourfold: (a) development of assessment tools, (b) development of instructional materials, (c) research on psycholinguistic and neurolinguistic processes of DGS and German and on DGS as a medium of communication and (d) information technology.<sup>21</sup>

In the late 1980s and early 1990s, Jens Hessmann and Horst Ebbinghaus led a research project at the Free University of Berlin, investigating the role of mouthing in DGS, and raising the issue of multimodality of sign languages, which is still



under debate today. Hessmann is currently professor and directs the sign interpreting training program at the University of Applied Sciences in Magdeburg-Stendal. Professor Ebbinghaus established the interpreter training program at the West-Saxonian University of Applied Sciences Zwickau in 2000 (now directed by Professor Vaupel) and has been responsible for the Deaf Studies program at Humboldt University in Berlin since 2003.<sup>22</sup>

One important research question, which has not yet been researched, is whether there has been any change in the community and their use of DGS since the first gatherings of Deaf individuals in the nineteenth century. Such analyses await an analysis of historical materials, such as early documentary films with DGS, which were banned during the National Socialist era and were only rediscovered in the late 1980s. As another starting point for an analysis of change in DGS, the second author has conducted ethnographic interviews with German Deaf sign language users, who have noted that older sign language users tend to use more mouthing and less signing space, while younger sign language users tend to use condensed signs, signing space and neologisms more often than the older signers.

The discovery that DGS was a full-fledged language led to highly controversial debates on the methods of deaf education. First, Signed German (LBG) was introduced in the classrooms. In the early 1990s, the school for the deaf in Hamburg started the first bilingual project to use DGS, which met with success (Günther 2004). As a result, a number of other schools adopted the bilingual approach and DGS has become one of the requirements for a degree in deaf education. The success of the bilingual project also led to the formation of a professional association of teachers of the Deaf supporting the bilingual approach (Deutscher Fachverband fuer Gehoerlosen- und Schwerhoerigen paedagogik, DFGS) and the association of Parents of Deaf Children (www.gehoerlose kinder.de) becoming involved in awareness activities, ensuring that DGS be included in the education of Deaf children. Other organizations involving the use of sign language are the National Association of Sign Language Interpreters (BGSD) and an association for specialists working with hearing children and their Deaf parents (Leben auf dem Trapez/Life on the Trapeze).

3.2.5.3 *The modern Deaf community* Another important catalyst took place within the Deaf community in the form of a paradigm shift from a focus on disability to putting more weight on the celebration, preservation and dissemination of DGS. The German Deaf Association (DGB) under Ulrich Hase started a political campaign to get the government to recognize sign language, resulting in a number of bills that came into law (discussed in

the next section). The DGB launched its first German Deaf Culture Festival in Hamburg in 1993, which has continued to be held in various cities until the present.<sup>23</sup> More deaf events celebrating sign language and Deaf culture began being held and became an integral part of the German Deaf community.<sup>24</sup>

Communication forums (*Kommunikationforen*), following the early model in Munich, were founded in several German cities with the purpose of furthering socio-political discussion among Deaf sign language users. Several advocacy and interest groups centering on DGS and/or the German Deaf community have also emerged.<sup>25</sup>

The discovery of DGS as a language had an effect on the media. The weekly TV program for the Deaf (*Sehen Statt Hoeren*) changed its paradigm from Signed German to using DGS, with Deaf presenters and producers in the late 1980s. Efforts have been made to deliver television news in DGS, most notably in Phoenix (a private German channel), and recently a small number of programs in German WebTV became accessible for DGS users.<sup>26</sup> DGS has also become more visible on the Internet in the form of translations of German texts.<sup>27</sup>

3.2.5.4 *Official recognition of German Sign Language* In more recent years, a number of federal and state laws have been passed or revised which acknowledge the linguistic right of Deaf people to use DGS in the public domain, connected with laws for the disabled.<sup>28</sup> There is still no law mentioning that Deaf children have the linguistic right to use DGS in educational settings.

The Constitution of the Federal Republic of Germany (*Grundgesetz fuer Bundesrepublik Deutschland*) does not include any information about the official language status of DGS. Because the constitution and all laws are written in German, it is widely assumed that German is considered the official language in Germany. At the same time, there is a number of federal laws that are relevant for administrative agencies and courts stating that German is the official language.

The German government has adopted and ratified the European Charter for Regional or Minority Languages of 1992,<sup>29</sup> which became German law in January 1999. The charter defines the linguistic and cultural rights and protection of regional and minority languages in a wide range of public and private domains. To date, the German federal government and/or state governments have officially listed Danish, Friesian, Sorbian and Romani as minority languages and Lower German as a regional and minority language. There is no mention of the linguistic and cultural rights and protection of DGS.

The German federal and state governments have partially followed the European Parliament Resolution on Sign Languages of June 17, 1988,<sup>30</sup> concerning the official recognition of sign languages.

One issue that remains is how the official recognition of sign language at the governmental level can be conducted – under either a linguistic and cultural minority model or an accessibility model? The latter model seems to be the case for Germany, as the laws mentioned above seem to be of the kind that allows the Deaf community access to the larger society; they are not necessarily of the kind that protects the interests of the community.

### 3.3 Current issues

This section raises three issues that currently face the transmission of DGS: (a) endangerment by cochlear-implant technology and other biotechnology, (b) multilingualism and multiculturalism within the German Deaf community and (c) confronting the events that occurred during the period of National Socialism.

#### 3.3.1 Cochlear implants and biotechnology

As in many industrialized countries, more and more deaf children in Germany are receiving cochlear implants (CI). Currently, about 80 percent of children with hearing loss of 100 db and above, and 50 percent of children with hearing loss of 80–100 db receive CIs. The majority of deaf children appear to have no opportunity for exposure to DGS during their language development. Doctors and professionals at CI clinics strongly recommend that parents not use DGS with their children (unless a serious delay in speech development is diagnosed) and do not actively seek cooperation with the German Deaf Association or with sign linguists and professionals working at bilingual schools. Consequently, fewer deaf children are enrolled at schools for the deaf. This trend could be interpreted as the next backlash against the transmission of a full-fledged sign language and might turn out to be irreversible. For this reason, huge efforts have gone into raising awareness of the importance of sign language in deaf children's bilingual development (see, e.g., Szagun 2003 and Hintermair 2007). The efforts have come from various levels, e.g. academia through their research, the German Deaf Association through distributing materials, and a number of individuals through scheduled activities.<sup>31</sup>

At the time of this publication, a bill on Human Fertilization and Embryology is under discussion in the House of Lords in the United Kingdom.<sup>32</sup> Clause 14, Section 4, Number 9 of this bill states that “persons or embryos that are known to have a gene, chromosome or mitochondrion abnormality involving a significant

risk that a person with the abnormality will have or develop – (a) a serious physical or mental disability; (b) a serious illness or (c) any other serious mental condition, must not be preferred to those that are not known to have such an abnormality.” As it prevents the birth of certain kinds of people, including deaf people, and deafness is considered as a “serious disease,” it raises two questions for the transmission of DGS that remain to be addressed. First, how can the current draft be compared with the earlier described German “Law for the Prevention of Offspring with Hereditary Diseases”? Second, if the bill is passed in the United Kingdom, will it in turn cause another serious backlash against sign language transmission in the European Union, including Germany, in the twenty-first century?

#### 3.3.2 Multilingualism and multiculturalism within the German Deaf community

The sociolinguistic situation in the German Deaf community has taken on a new dimension as a result of new patterns of migration in Germany during the past few decades. There are ethnic minority groups (e.g., Turkish, Polish, Bosnian or Russian) within the German Deaf community as well as multiethnic Deaf marriages and children growing up with two sign languages. There is an increase in the enrollment of linguistically and culturally diverse Deaf children at schools of the deaf. The new sociolinguistic dimension raises several interesting questions: How is sign language transmission conducted within this context? What is the nature of language contact between DGS and other sign language(s) brought by immigrants? How do Deaf immigrants acquire DGS as a second sign language, and how are they integrated into the German Deaf community?

#### 3.3.3 Coming to terms with the past

Finally, there is the question of how the history of sign language transmission in the era of National Socialism has been dealt with inside the German Deaf community. This issue has received attention recently, but the process of reconciliation has apparently been difficult. For example, to date the current German Deaf Association has acknowledged its role during the era of National Socialism with respect to Deaf Holocaust and sterilization. Most recently, they have officially offered a public apology for its role.<sup>33</sup> At the same time, thanks largely to the efforts of the Deaf educator, Horst Biesold, and other Deaf individuals,<sup>34</sup> research and education have begun in Germany on the backlash against sign language transmission during the time of National Socialism (Biesold 1999, Zaurov 2003). In the summer of 2006, the sixth International Deaf History conference was hosted in Berlin by the Interest Group of Deaf of Jewish Descent (Interessengemeinschaft

Gehörloser Jüdischer Abstammung in Deutschland IGJAD) with its main focus on the Deaf Holocaust and it was the first of its kind on German soil.

The German Association of Teachers for the Deaf (Bundes deutscher Hörgeschädigtenlehrer) has distributed a public apology for its involvement in the compulsory sterilization of Deaf individuals. However, to date, there has been no open dialogue between the German Deaf community and the association on several questions such as the following: How was it possible that teachers and directors who were actively involved in the compulsory sterilization were able to continue their job at schools for the Deaf until their retirement and acted as if compulsory sterilization never happened? Why was the association not involved in ensuring that Deaf people suffering from sterilization received appropriate compensation from the government? In sum, the German Deaf community has been tremendously creative and resilient in transmitting DGS against great obstacles. Second, it is evident that with backing from research findings on German Sign Language, the German Deaf community is able to ensure the continuation of sign language transmission. In addition, the influence of DGS on the ISL lexicon is also a type of language transmission and survival when the language was in danger at home.

#### 4 Transmission of sign language in the Netherlands

##### 4.1 The sign language situation in the Netherlands

In English, the language is referred to as Sign Language of the Netherlands (SLN), and in Dutch as Nederlandse Gebarentaal (NGT).

There are no official statistics on the number of persons who use NGT; estimates are *c.* 10,000 Deaf signers. Crasborn (personal communication) thinks these numbers are probably too high and argues that using a formula of .033 percent of the national population would provide a more accurate estimate of 5,500 signers. The number of fluent signers who show fairly little influence of spoken Dutch (sign-supported Dutch) may well be much lower than this. There are no estimates for the number of hearing (including CODA) signers.

As of 2007, NGT was not yet legally recognized in any Dutch law, although efforts are being made to get legal recognition within an education and a health law (Baker 2000). The Dutch Ministry of Education funds the Dutch Sign Center<sup>35</sup> and there are official national programs for teachers, for interpreter training, and for note-takers for deaf students needing to focus on signed communication in the classroom.<sup>36</sup> There is also an official right to have sign language interpreters through the national Health Care Insurance (AWBZ), although the number of hours and settings are limited.

There has been a distinction in the Netherlands between deaf and hard-of-hearing persons, influenced by their separate schools since the middle of the twentieth century.

Both younger and older Dutch Deaf have a positive attitude toward Dutch, although they might not always like to use their voice.

In the Netherlands, although there are individual deaf persons who do not advocate sign language, there has never been an “oral” deaf group that opposes sign language. The Deaf community usually accepts hearing teachers and researchers, as long as they have sufficient signing skills and a “Deaf” attitude. Within Dutch society, NGT is culturally accepted as a language.

##### 4.2 Description of the Sign Language of the Netherlands

The Sign Language of the Netherlands seems to have evolved from signs used in the Deaf communities, which grew up around the regional schools for the Deaf (see Schermer 1990). The language is related generally to those used in Western Europe and North America (DGS, LSF, BSL and ASL). Slobin and Hoiting (1994) have argued that NGT typologically is, like most sign languages, a verb-framed language, in contrast to spoken Dutch or English, which are satellite-framed languages.<sup>37</sup>

##### 4.3 Signing in deaf education in the Netherlands

###### 4.3.1 Deaf education in the past

The first school for the deaf was established in Groningen in 1790 by H. D. Guyot, who followed de l'Épée's methodological use of local signs to teach a spoken language and also used fingerspelling. The “oral method” became more influential already in the middle of the nineteenth century, although there is some evidence that some teachers continued to use sign-supported Dutch through this period (Hoiting & Slobin 2001).

The inclusion of sign language in deaf education which took place in the period 1950–1990 was helped to a great extent by several individuals: Bernard Tervoort at the University of Amsterdam; Truus van der Lem from the Dutch Foundation for the Deaf and Hard-of-hearing Child (NSDSK), Anne Bouwmeester who taught at the Groningen School, as well as NGT sign language teachers such as Martie Koolhof, Bea Visser and Wim Emmerik (Tervoort 1987, Knoors 1999).

###### 4.3.2 Current educational situation

4.3.2.1 *Cochlear implantation* Today, cochlear implantation is widely used on young deaf children. The baby's deafness is diagnosed in his/her first week of life

and implantations are carried out at the age of two years or even younger. Sign language is mentioned, but not encouraged, in the CI counseling programs. After implantation, the child is classified as “deaf” for only one year, after which there are no official indications of deafness or needs for special schools or guidance, although the child might still be eligible for government-funded use of interpreters. Children with a CI are usually educated in mainstreaming programs (with or without special assistance from sign language interpreters) or in combinations of hearing and deaf schools.<sup>38</sup>

*4.3.2.2 Parents' association and preschool* Deaf children of deaf parents usually acquire sign language at home. A national parent guidance program at different centers linked to the schools for the deaf is open to all parents of preschool (0–5 years) deaf children. The Dutch parents' association FODOK ([www.fodok.nl](http://www.fodok.nl)) is active and supports the use of sign language and bilingualism for all deaf children.

Throughout the Netherlands, there are playgroups and kindergartens using signing for deaf and hard-of-hearing children.<sup>39</sup>

*4.3.2.3 Primary and secondary school education* The Netherlands has five regional schools for the deaf,<sup>40</sup> some of which are for both deaf and hard-of-hearing children (the Bosschool in Arnhem and the Polanoschool in Rotterdam). There is one residential school for the deaf.

Since 1995, the five schools for the deaf have followed a bilingual (sign language, spoken/written language) program. The schools' official policy is usually to offer signed Dutch to deaf children with a CI and NGT to children without a CI. All the schools for the deaf, supported by the Dutch Ministry of Education, put together and published a national sign language curriculum (Werkgroep Sprong Vooruit 2005). In actual practice, however, there is a great deal of variation in how much sign language is actually used. There are several signing teachers and interpreters working at these schools and in the parent guidance programs.

Although one can become a teacher of the deaf without any prior knowledge about the deaf or signing skills, most schools offer an in-service training program, which includes sign language courses. Currently two main deaf institutes<sup>41</sup> are developing a description of communication and sign language skills for their employees.

There is one residential secondary vocational school for the deaf in Haren for pupils who do not want to be in a hearing secondary school as well as two secondary schools for the hard-of-hearing. Mainstreaming into schools with

hearing children (with or without special assistance from sign language interpreters) has increased, especially for deaf children with a cochlear implant.

Hard-of-hearing children have, in the past decades, gone to schools with hearing children who have language disorders. In these schools, there has been a gradual acceptance of communication in sign-supported Dutch (Fortgens & Knoors 1994). Even within the schools for the deaf, there has been a recent revival of sign-supported Dutch, due to the growing number of deaf children with cochlear implants. Terpstra and Schermer (2006) have done a study of the contact situation of NGT and Dutch in classroom situations. Signed Dutch courses have also become popular for persons who have suddenly become deaf.<sup>42</sup>

*4.3.2.4 College and university education* Some deaf and hard-of-hearing students attend regular colleges or universities, often supported by interpreters in sign language or by speech-to-text interpreters. The only universities that offer courses in sign language are the University of Amsterdam and the Hogeschool Utrecht. At Radboud University Nijmegen, students can have a minor in sign linguistics as part of their major course of studies in linguistics.

Deaf students are usually supported in their studies by an interpreter. At the Hogeschool Utrecht, a deaf student can obtain a bachelor degree as an NGT teacher, or a Master's degree in Deaf Studies.

#### 4.4 Sign language in Deaf life in the Netherlands

##### 4.4.1 National Deaf Association

The National Deaf Association (Dovenschap; [www.dovenschap.nl](http://www.dovenschap.nl)) was established in 1977, as an umbrella organization of local, regional and national organizations for and of Deaf people. One of Dovenschap's primary goals is the legal recognition of the Sign Language of the Netherlands, which includes investigations into recognition of the language in laws other than the constitution.

##### 4.4.2 Regional and local groups

Several Dutch cities have Deaf clubs, which function as meeting places for the local signing Deaf and are also where sign language courses take place.

More and more theatre productions, both for children and adults, are made accessible by using interpreters. A national theater for the Deaf (Handtheater) produces plays in NGT.<sup>43</sup> Once every couple of years there is an international Deaf Film Festival,<sup>44</sup> which offers films produced by and for Deaf people. Signed poetry began to be actively developed in the 1980s and 1990s by Dutch Deaf poets, such

as the well-known Wim Emmerik (Emmerik *et al.* 1993, Emmerik *et al.* 2005, Crasborn 2006).

#### 4.5 Sign language in Dutch society

##### 4.5.1 Sign language courses in the Netherlands

Deaf persons who have been trained at the Dutch Sign Center or at the teacher training college, Hogeschool Utrecht, teach the sign language courses.

The courses use printed and DVD sign language materials developed by the Dutch Sign Center for both NGT and Signed Dutch for different groups of learners (parents of deaf children; teachers of deaf children and the general public), as well as DVD-Videos with signed material on different themes aimed at young children.<sup>45</sup> Since 2002, these courses, as well as the schools for the deaf, have had available a standardized basic lexicon of NGT in the form of DVD-ROMs and online.

##### 4.5.2 Sign language interpreting in the Netherlands

As of 2009, there are 238 officially registered sign language interpreters in the Netherlands and an unknown number of unregistered interpreters. A NGT teacher and interpreter training program was established in 1997 at the Instituut Gebaren, Taal of Dovenstudies in the Hogeschool Utrecht ([www.hu.nl](http://www.hu.nl)). Specialized training is available for the deaf blind, as well as to become a “transliterator” in written Dutch.

Interpreting situations occur in educational, counseling, church, courtroom, theatre and cinema settings. The interpreters have their own professional organization and a registry of interpreters.<sup>46</sup>

##### 4.5.3 Sign language in the Dutch media and internet

A daily morning news program is translated into sign language. Many but not all television programs are subtitled. A website ([www.doof.nl](http://www.doof.nl)) provides information on deaf- and sign language-related issues. There is one journal by/for the deaf, *Woord en Gebaar* ([www.woordengebaar.nl](http://www.woordengebaar.nl)), and articles about sign language appear in the Dutch newspapers on a regular basis.

#### 4.6 Sign language research and development

Research on NGT has been well established since the early 1980s. The primary centers for research on sign language currently include the University of Amsterdam ([www.uva.nl](http://www.uva.nl)) and the Department of Linguistics at the Radboud

University Nijmegen,<sup>47</sup> both of which have several active projects, as well as offering BA, MA and PhD degrees, for which several students have written theses on sign language topics. The Dutch Sign Center ([www.gebarententrum.nl](http://www.gebarententrum.nl)) does research and also develops NGT dictionaries and course materials.

Research activities on NGT have been, or are being, done in a wide range of areas. There has been a great deal of research on the lexicon of the language, beginning with the “Communicative Competence” (KOMVA) project (1982–1990), which resulted in the first lexicon of NGT with dialect variants.<sup>48</sup> Since 2002, all national lexicons on CD and DVD-ROMs have been produced by the Dutch Sign Center, which has been supported since 2004 by the federal government and is recognized as the National Lexicography Institute on Dutch Sign Language. A web-based lexicon database containing 12,000 signs has been developed and is maintained by the Dutch Sign Center.<sup>49</sup> A standardized lexicon for education, including many newly developed signs was also produced for second language (L2) learners and schools for the deaf (Schermer 2003).

Deaf persons in Groningen and younger signers in general seem to use more fingerspelling than signers in other parts of Holland. Employing “initialized” signs derived from fingerspelling is a strategy used by some in the deaf community. While there is extensive use of mouthing (Schermer 1990, 2001) by signers, some researchers report that this strategy used in the signing context for disambiguating concepts does not often lead to stable new lexical items (Crasborn, personal communication). Hoiting and Slobin (2001) also report some interesting, though not widespread, borrowing of lexical items from spoken Dutch into NGT. Lexical studies have also been done on name signs, variation and lexical databases.<sup>50</sup>

There has been considerable development of transcription, notation and technological tools in the Netherlands. The KOMVA notation system has been used since 1982 (Schermer & Harder 1985). The media tagging system ELAN, developed and distributed for free by the Max Planck Institute in Nijmegen, is being increasingly used for transcriptions, especially since it has been further developed to serve the specific needs of users of all languages.<sup>51</sup> Crasborn and his group have developed a notation and database tool for phonology research, “SignPhon.”<sup>52</sup>

A first study of adult sign discourse was based on the first KOMVA corpus of NTG (Schermer 1985 and 1990). Using more recent digital and Internet technology, Crasborn’s group at Radboud University Nijmegen has begun developing a large online annotated corpus of video data from NGT.<sup>53</sup>

Numerous studies of NTG have also been done in the following areas: phonology,<sup>54</sup> morphology and syntax,<sup>55</sup> prosody,<sup>56</sup> acquisition,<sup>57</sup> sign language assessment<sup>58</sup> and interpreting.<sup>59</sup>

#### 4.6.1 Deaf people and research

There are still few deaf signers involved as linguistic researchers. As of 2007, there are deaf researchers working at Radboud University Nijmegen, the Dutch Sign Center, the Sign Linguistics Program at the University of Amsterdam and the Hogeschool Utrecht.

Written reports on sign language research appear regularly in magazines such as *Woorden Gebaar* and *Van Horen Zeggen*. The Dutch Sign Center regularly organizes workshops for signers about “new” signs and its lexicon standardization project, as well as an annual workshop on selected grammatical topics. The interpreters’ association, NBTG, also organizes workshops on different topics in interpreting.

#### 4.7 Opinions on the future of sign language in the Netherlands

Some researchers have expressed the opinion that NGT is not an endangered language in the Netherlands (Trude Schermer, personal communication). Among the projects that will help to preserve NGT and Deaf culture are the national lexicography database at the Dutch Sign Center and the Handtheater in Amsterdam, as well as the Corpus NGT project.

However, other persons in the field report they are worried about the emphasis by the medical profession on spoken language for deaf children with a cochlear implant and feel this may well become a threat to the social wellbeing and development of these children, as well as to the Deaf community (Beppie van den Bogaerde, personal communication). Crasborn summarizes the complexity of the future prospects and nature of signing in the Netherlands as follows (personal communication):

Our Corpus NGT project is aimed at recording the present state of the language, including regional and age variation. Since already most deaf people show influence of Dutch in their everyday signing, I expect sign supported Dutch to have taken over in the deaf community in, say, 2050. This decrease of NGT usage is not a big change to deaf communication, but on the other hand, already many more people (including the hearing L2 users) use sign supported Dutch of some type rather than “pure” NGT – even though we still have to find out what exactly that is.

### 5 Concluding remarks

Although the sign languages used in these countries are varied and not necessarily related to each other, in all of these countries over the past thirty years, these

languages have received a growing recognition and appreciation by both deaf and hearing groups.<sup>60</sup> This development has been due to the increased self-awareness and empowerment of the Deaf signers in these countries and, in no small part, to a growing body of linguistic research on these sign languages. However, being prosperous middle European countries with strong medical communities, all of these countries also have experienced a strong trend during this same period to provide deaf children with cochlear implants at a very young age. The result is that while the present adult generation of Deaf, as well as the larger hearing community, know more about and take more pride in the local sign languages than thirty years ago, the majority of the younger generations of Deaf with cochlear implants are either learning no sign language at an early age, or using a sign language heavily influenced by the spoken language of their region.