

4. The expansion of sign language education

Carol A Padden

Alexander Graham Bell is best known to the world as the inventor of the telephone, but he is known to deaf Americans as the husband of a deaf woman, and a frequent commentator on the subject of deafness and deaf education. In 1878, at the invitation of the headmaster of a deaf school in upstate New York, Bell paid a visit to the school and then was interviewed by a local newspaper. Bell was quoted as congratulating the headmaster for his policy prohibiting sign language at the school, adding that 'I think the use of the sign language will go entirely out of existence very soon' (Scouten, 1942). Whatever Bell's genius regarding telephonic communication, it evidently did not extend to prognostications about sign language. Today sign language education has become more broadly used than Bell could have imagined – or desired.

At the time Bell made his prediction, sign language education was under threat both within the United States and throughout the world, a turn of events that Douglas Baynton (1996), a social historian, describes as resulting from a broad social move towards rational and technological ideas of language and human nature. Many schools in Europe had begun undertaking reform projects to replace sign language education for deaf students with education in speech only (Fischer and Lane, 1993; Lane, 1992; Plann, 1997), an endeavour that has left a long legacy of speech education for deaf children that remains to this day in many parts of the world.

The US legacy is somewhat different, mainly because of the durability of its sign language institutions: the survival of schools with deaf teachers, the presence of Gallaudet University exclusively for deaf students, and the efforts of political organizations headed by deaf people. Today sign language education for deaf children in the United States remains prominent. A recent survey of language policies used in programmes with deaf and hard of hearing children in the United States reported that about 55 per cent of the programmes use sign language in some form (Gallaudet Research Institute). This figure accounts for about half of the children surveyed for this report who are considered 'severely or profoundly deaf'; the remainder have lesser degrees of hearing loss, and typically would be directed to more speech-oriented programmes. Of the state-supported schools for the deaf in the

United States, like the one Bell visited in Rochester, New York, and others founded throughout the 19th century, nearly all have sign language as the policy of education. Many public school districts also offer sign language education as one of several 'parental options', along with the choice to attend regular public school classes with hearing children with or without a sign language interpreter.

Recently there have been experiments in bilingual education for deaf children in the United States and elsewhere. A few experimental schools have been established in the United States, free from control of either traditional deaf schools or public school districts and explicitly promoting education in written English and American Sign Language (ASL). In Denmark and Sweden the national schools for deaf children openly bill their philosophy as bilingual in the national written language as well as the sign language of the country (Mahshie, 1995). But perhaps most intriguing of all are new programmes in the United States that are experimenting with primary education conducted in English and ASL for deaf as well as hearing children. Though the experiment sounds modern, there was in fact a similar brief experiment in 1852 when a small school in Connecticut was established for deaf signing children and their hearing siblings. The experiment did not last long, and by 1861 the school was closed for lack of financial support (Van Cleve, 1993).

Sign language education for deaf children

Baynton explains in his history of 19th-century deaf education in the United States (Baynton, 1996) that the ascendancy of Alexander Graham Bell and others like him who actively campaigned against sign language in education came as a result of a significant shift of ideas about language and human behaviour. When the first school for deaf children in the United States was founded in 1817 in Connecticut, quickly followed by new schools in New York (1818) and Philadelphia (1820), sign language was generally accepted as the mode of communication among the students and their teachers. Indeed, the first admissions records at the Pennsylvania Institution for the Deaf and Dumb made little note of whether the children used sign language at the time they arrived at the school, preferring instead to record details about the child's family and whether the parents could afford to pay the expense of educating the child. Pennsylvania had just embarked on an ambitious programme of public education for all its citizens, and state funding of these various endeavours depended on keeping meticulous records of where in the state the deaf children lived, who referred them to the school, and their age in order to determine for how long the school would need to be responsible for their care. Sign language is mentioned casually among the earliest records of the Pennsylvania Institution – it was accepted that deaf children used it, and it was rarely discussed as an object of concern or question.

It would take an intellectual shift, from thinking about humans and language as 'natural' in the romantic sense of the term, to a more 'rational' view of the world, to force sign language to become an object of controversy. Baynton argues that seeds of the anti-sign perspective were already present in early US history, but by the end of the 19th century these sentiments became expressed in full force, especially by very public and influential individuals like Alexander Graham Bell. He opposed sign language because he viewed its gestural form as indicative of a more primitive world, less rational and forward-seeking. Educating deaf children without sign language and wholly in speech was the more advanced goal, since it would incorporate them in mainstream culture. This goal could be reached through 'new scientific' methods of speech education that would overcome the dependence on signing and gesturing. If teachers could be properly trained, and if deaf children spent enough time working on their training tasks, speech could be taught to even the most profoundly deaf child. These would be the themes that Bell and those that followed him would repeat: sign language represents an earlier, more naive existence where humans do not strive to overcome their tendencies, but instead fall victim to them.

Indeed, these sentiments would spread throughout Europe and elsewhere, as schools for the deaf closed down their sign language programmes in favour of expanding rigorous training in oral language. In part to combat the alarming rise of oral sentiment in European and US schools and to push for recognition within the United States, deaf people founded their first national organizations, including the National Association of the Deaf (NAD), during this time. The NAD held its first meeting in 1880 and remains today the leading advocacy organization for deaf people in the United States. The position of the NAD and other organizations through the beginning of the 20th century was to argue, as did their president (Veditz, 1913), that 'sign language was the noblest gift God gave to deaf people', but they were persisting in the rhetoric that Baynton says was no longer in vogue. Bell and others ridiculed 'naturalness' as meaning backwardness and persistence in old ways. 'Natural' tendencies, particularly the fondness that deaf people have for sign language, could be overcome by training and perseverance. The scientific endeavour would reward its forward-looking citizens by bringing them into the advances of modern society.

Through the first half of the 20th century, oralism made inroads into deaf education in the United States, leading to dramatic changes in school curricula (Van Cleve and Crouch, 1989) and pitting oralists against 'manualists'. But by the 1960s, campaigners in support of sign language began to shift to a new rhetoric, one that embraced rather than countered the scientific-rational theme, and argued that there were studies showing that sign language education had a positive effect on the development of intelligence, academic performance and psychological well-being (Mindel and Vernon, 1971; Schlesinger and Meadow-Orlans, 1972). Their argument was a revision of an earlier rhetorical tradition: that sign language was natural, not in the sense

that it descended from ancient times, but in the sense that it was easy to use, and that it promoted normal development in addition to supporting communication within families. They were part of a growing chorus of educators who wanted to advocate sign language education to parents of deaf children.

A new science of sign language

The first sign language classrooms of the 1960s and 1970s in the United States were populated by those with a vested interest in deaf education: hearing parents of deaf children, teachers, psychologists and other staff. Locales of sign language classrooms were in church basements or deaf schools. Sign language books were basic vocabulary books made up of pictures or illustrations of signs, with some notes on how to combine signs together to make sentences (Madsen and Lehman, 1982; O'Rourke, 1980; Riekehof, 1963). None of the books published at this time were grammar books, for the simple reason that there was not yet a concept that sign languages had a grammar.

During this same period, sign language education of deaf people and of hearing professionals who worked with them was almost perfectly convergent. Sign language was learnt largely by those with a personal or professional interest in deaf education. The convergence mirrored the segregation of deaf education and the deaf community. Few deaf children attended schools with hearing children; instead they attended large state-funded schools for deaf children, often located at great distance from their homes. They would be boarded at the schools, returning to their homes infrequently through the school year. Sign language teachers were typically individuals who worked at schools like these, or at churches for the deaf. They taught students who would be expected to have interest in either education or religious services for deaf people. Classes were small, and informally conducted. Training of sign language teachers was non-existent, mainly because the subject was not believed to be complicated. Sign language teachers taught vocabulary lists of signs, and gave advice about how to construct sentences. Byron Burnes, the editor of *Silent Worker*, the official organ of the National Association of the Deaf, wrote in an editorial that though sign language had no grammar, there were expectations and guides to 'good signing' that should be followed by all those using the language (Burnes, 1950). He complained that he saw an erosion of quality of signing, but at the time there was no expectation of a sign language grammar or structure.

The prominence given to sign language in the fields of linguistics and anthropology represented a rapid change, and very recent, occurring only within the past 40 years. As with the first transformation of rhetoric about sign language, it would take another social and intellectual shift to complete this ascendancy. A great deal of credit for this shift is ascribed to William C Stokoe, who, when newly hired as a professor of English at Gallaudet University, had begun reading in cultural and linguistic anthropology. Not having been

trained in deaf education, or having had any meaningful contact with deaf people before arriving at Gallaudet, Stokoe viewed sign language with completely new eyes. He wondered if the sign language he was beginning to learn and use with his students might not be a foreign language after all (Stokoe, 2001).

He had spent time in Edinburgh during the 1950s and worked hard to learn the Lallans Scots dialect while there, and it struck him that the language of his students and of the deaf community at Gallaudet was just as hard to learn, and ought to be accounted for on its own terms. He set out, with his colleagues Dorothy Casterline and Carl Croneberg (1965), to write a dictionary and grammar of what he called 'the American sign language', a new term for what had been called simply 'the sign language'. Stokoe is credited with many things, but especially with obstinacy and an ability to endure ridicule, both of which he called upon in great measure as he fought against surprising opposition to publish his dictionary of American Sign Language. As he explains, he found that instead of embracing his project, many hearing educators and even his deaf colleagues at Gallaudet thought he was deluded or wrong, accusing him of embarking on a vanity project.

The dictionary was unlike anything published before; it proposed that signs could be reduced to a set of discrete 'cheremes' or sub-lexical units: the handshape, the movement of the handshape, the hand's orientation, and the location of the hands in a sign (Stokoe et al, 1965). Instead of listing signs according to their English translations, he grouped them according to handshape, and then he coded each sign using a notation system he himself developed (which is still in use today by sign language linguists and bilingual educators of deaf children). Stokoe also published a description of grammatical categories in American Sign Language, and principles of syntax. It was not detailed, but it was startling in what it proposed.

A simple history would credit Stokoe single-handedly for this revolution of ideas, but by his own admission he was inspired by his reading in cultural and linguistic anthropology and was inspired by the work of those who sought to describe little-known languages around the world. He conceived the idea of a dictionary at a pivotal moment in linguistics. As Frederick Newmeyer explains in his history of linguistics (1986), the post-Second World War generation of linguists – those whom Stokoe had been reading – shared two views of languages: that they could be described according to structural properties proposed by Ferdinand de Saussure (which is why they were called structuralists), and that all languages shared the same properties. Stokoe had been reading the work of George Trager and Henry Smith, who described languages according to their phonological structures. Stokoe thought he would try his hand at describing sign language using the same principles: to discover what units combine to form a word, and how they are arranged in sequence.

At almost the same time that Stokoe published his grammar of 'the American sign language', a new National Theatre of the Deaf was founded in

the United States made up of deaf actors who for the first time performed outside the deaf community on professional stages throughout the world. As I have discussed elsewhere, the act of performing before the hearing public spurred the creation of a new self-consciousness by deaf actors about their language (Padden, 1990; Padden, in press). Once on stage, deaf actors became more reflective about their language and experimented with ways to explain themselves to the larger hearing public. They began to echo Stokoe's structuralism in the content of their performances. In a scene from the first original production of the National Theatre of the Deaf, called *My Third Eye*, deaf actors Freda Norman, Ed Waterstreet, Richard Kendall and Linda Bove explained that their language was made up of signs distinguished from one another by their handshapes and movements (Padden and Humphries, 1988). It was a sign language lesson from the stage, blended together with evocative pieces about the actors' experiences of oppression of those using sign language in their deaf schools. The deaf actors were articulating a new voice, one that deaf people in the community began to assume, that their language should have a status equal to that of all other human languages of the world.

At the same time that deaf actors began to rework their public performances, there came an explosion in the science of sign languages throughout the world, one that would deeply influence sign language education at the turn of the 21st century. William Stokoe's work was occupied with the systematic description of sign language structure. Soon other scientists would emerge on the scene, and like Stokoe they had little or no background in deaf education. Furthermore, they would profess to no involvement in deaf education. Their scientific goals lay elsewhere, in the fields of psychology, neurolinguistics and theoretical linguistics (Bellugi and Studdert-Kennedy, 1980; Klima and Bellugi, 1979; Poizner, Klima and Bellugi, 1987). Where Stokoe's contribution was to propose a structural analysis of sign languages, that of Ursula Bellugi and Edward Klima was to move sign languages squarely into the centre of modern debate about the nature of language, the brain and cognition, a very powerful place to be at the turn of the century (Emmorey and Lane, 2000).

The new field of sign language linguistics would expand throughout the world, in much the same fashion as within the United States, and as it reached language and cognition laboratories in Europe, South America and Asia, it would become a means for advocating sign language development in these and other areas. Today there are sign language laboratories in numerous universities around the world, from Bristol University in the United Kingdom to Stockholm University in Sweden and the University of Haifa in Israel, to name only a few. Studies of sign language structure across sign languages of the Americas, Asia, Europe, Africa and Australia can be found in a number of recent volumes, ranging from grammar to language acquisition and reading development (Ahlgren et al, 1994; Brentari, 2001; Chamberlain et al, 2000; Fischer and Siple, 1990; Lucas, 1990; Siple and Fischer, 1990).

Sign language education in colleges and universities

The scientific study of sign languages had broad reach beyond the sciences alone; it had an impact on the teaching of sign languages to adults. Until the 1970s, sign languages were usually taught in deaf education or in churches, and occasionally at colleges and universities, but not with equal status to that of foreign languages. As academic interest in sign languages increased in major research universities across the United States, courses have begun to appear in academic departments, sometimes alongside offerings in Spanish, French, German and other languages. In Europe and Asia the growth of sign language classes has also been notable, driven both by academic interest and by government projects to increase the availability of sign language interpreters for deaf people. In Japan and Scandinavia, sign language classes are not offered in colleges or universities; instead they are taught in interpreter training programmes run by community organizations and funded by the government (Y Osugi and A Bergmann, personal communication). In the United Kingdom, sign language classes are taught both as a further education (ie adult education) subject and in some universities as a higher education (ie university) subject (G Turner, personal communication).

In the United States the expansion of ASL education has been one of the most surprising consequences of the recognition of sign languages by the sciences. The language now ranks behind Spanish as the most common foreign-language choice at some universities, ahead of French and other languages that held that rank through to the end of the 20th century. It is a popular language of choice for students in adult education and community colleges, state teaching colleges and even in research universities like the University of California, San Diego. Many students taking ASL classes have never met a deaf person before, and do not plan careers in deaf education or with deaf people. Indeed, the sheer numbers of students of ASL each year (variously estimated at around 200,000) would exceed the capacity of deaf schools, deaf organizations or social service agencies to absorb them.

The motive of students taking ASL classes seems to be entirely different from that in the last generation. Students view ASL as an exotic example of the human language capacity and want to study the language on its own terms. Other students say they choose ASL as a second language because they think there is greater likelihood that they will meet an ASL signer than an Italian speaker within the United States. One might decry the shift of interest away from learning about other nations and languages of the world, but it has been argued that the 'cognitive revolution' that brought human language and cognition to the forefront of intellectual enterprise at the start of the 21st century has made its way to foreign language education as well. Students are taking foreign languages, including ASL, because they want to learn how languages work and how they are used by communities of users. Indeed, the teaching of foreign languages has changed to include cognitive and structural

topics as well as language education per se. University students may or may not be contemplating careers in the foreign language, but in choosing ASL their motives are academic and professional.

The popularity of ASL classes has even extended to the high school level, with many high schools offering ASL classes as electives, alongside other special subjects. Again the motives of high school students are similar to those of college students: they are attracted to the unusual properties of sign languages and use the modality of the hands and eyes as a way to learn about languages and communication. And even more recently, a few elementary schools have begun offering after-school classes in ASL, along with music and sports, in part driven by literature in popular media suggesting that early education in a sign language may afford communicative and verbal advantages to babies and young children.

Marilyn Daniels (2001) has proposed that pre-schoolers and children attending kindergarten can benefit from a small amount of sign language instruction in the school curriculum, using evidence from a small-scale study comparing US children who were exposed to instruction of ASL vocabulary to those who had no such instruction. The children who learnt some signs scored better on the Peabody Picture Vocabulary test, a measure used to determine the size of a child's spoken language vocabulary. She also claims a benefit for literacy development, since larger vocabulary size is correlated with success at learning to read. It is not clear whether her result is due to instruction in sign language specifically, or to any kind of second language instruction (say in Spanish) that can help children learn new vocabulary. Daniels argues that it is specifically the physical and visual nature of sign languages that helps with vocabulary learning, a claim that is so novel that it needs to be evaluated carefully in other research. But her work has drawn attention from the popular media, and hearing parents of hearing children have grown interested in the possibilities of sign language, a very unusual turn of events considering the status of sign languages 30 or 40 years ago.

The future of sign language education

The model of education for most deaf children throughout the world until the 1970s was in segregated schools. In the United States, each state had its own state-supported boarding school, sometimes more than one, which attracted large numbers of deaf children. Similar policies of grouping deaf children together in special schools were supported in Europe, Asia and South America (Fischer and Lane, 1993). Spurred on by disillusionment with residential institutions, the United States and many other countries in the world undertook a massive shift to move deaf children out of boarding schools and into mainstream school settings. Indeed, by 1990 almost 75 per cent of all deaf children in the United States were educated in public schools and not in the older

school settings (Van Cleve, 1993). Against the wave of integration, deaf schools began to be viewed as anachronisms, their architecture too reminiscent of older institutional models of education. Some of these schools would close, and others would reinvent themselves, no longer boarding schools but regional schools serving cities and areas within the state, as in California, New York, and Maryland.

Many of the reinvented regional schools redesigned their curricula, integrating sign language education explicitly into the design of classrooms, the hiring of teachers and revision of their curricula. In many, though not all, the revised curricula are called 'bilingual', where instructional materials and techniques use both written English and ASL. Teachers are required to be bilingual themselves, and to teach not only English but ASL structure as well in a curriculum designed to encourage language development and literacy in both languages. In public schools with special programmes for deaf children, the use of sign language is less explicitly acknowledged. Most public school programmes use a blended system of sign language and spoken English called 'total communication'. Some of these programmes also use an engineered sign language that incorporates novel manual vocabulary invented to represent English. For this reason, Baynton (1996) points out that the sign language revolution in education at the end of the century needs to be qualified: the language of the deaf community in the United States, ASL, is often not named as the language of instruction in most public schools programmes; instead, the official policy is more likely to be 'total communication' that includes some form of sign language.

Counterbalancing the efforts of public schools are a few novel experiments, particularly in charter schools around the United States to experiment with bilingual approaches. Examples of these can be found in Colorado, Minnesota and Utah. There is currently a bilingual charter school for deaf children in Tucson, Arizona, where hearing children are permitted to enrol, reviving the brief 19th-century experiment to educate deaf children together with their hearing siblings (Van Cleve, 1993). Most of the hearing children have some connection to the deaf community, either because their parents are deaf and ASL signers, or because they work in the community, and the parents desire a broad language education for their children in ASL as well as English. There are also day care and pre-school programmes in both ASL and spoken English, including deaf and hearing children from the local community in places around the country. These are very small-scale efforts, not likely to overtake the educational order as it currently stands in the United States, but like the experiments to teach sign language vocabulary to pre-schoolers and children attending kindergarten (Daniels, 2001), they are motivated by a different conception about sign language education. Whether this novelty will be sustainable in the long run, or will fail again as the 19th-century experiment did, it is too soon to tell.

It is easy to recognize how dramatic changes have been in acceptance of sign language and interest in the language. Where hearing parents were once

counselled not to use sign language, many schools and programmes now offer early infant education programmes where parents can learn sign language while their children are still very young. Scandinavian countries have aggressive programmes to teach sign language to hearing parents of young deaf children (Mahshie, 1995). Sign language classes in the United States as well as elsewhere show no sign of abating in popularity, with enrolments in colleges and universities having continued to increase for over 20 years. Hearing children in the United States can take pre-school classes alongside deaf children where the medium of communication is ASL as well as spoken English.

Despite these remarkable changes, Baynton offers no cheery predictions about the future (1996). While it is true that sign language has reached a level of unprecedented recognition, he observes that the sentiments that opposed sign language education have not disappeared. The same scientific-rational impulse that led Bell to advocate oral training for deaf children has transmogrified into a techno-rational campaign where the rhetoric of technology and biomedicine has made deep inroads into sign language education, notably in schools and programmes for deaf children. Children who receive cochlear implants, a device surgically placed inside the cochlea to provide amplified sound, are commonly directed to programmes without sign language so that they can fully focus on speech and auditory training. When Bell visited the Rochester School in 1878 he was impressed with the headmaster's method of using only the manual alphabet in all school communication, to the exclusion of sign language. The policy was a good one, Bell argued, because the presence of sign language distracts children from the task of learning English. Sign language's ease of use was not seen as a desirable quality; indeed, it would lead the children astray because they would succumb to their instincts (Van Cleve, 1993).

The same argument applies again almost unchanged nearly 120 years later, that children with implants should not acquire sign language or meet other signers because doing so might compete with their ability to learn to speak and use their device to hear. If the scientific study of sign languages had fully advanced their cause, sign languages would be not seen as burdens or distractions; instead they would be viewed as additional languages that could be learnt without risk to the acquisition of the other language. But as it remains now, the scientific study of sign languages has yet to reach its pinnacle: of achieving, in scientific as well as popular realms, universal acceptance of sign languages.

It is hard to know whether the conflicting trends are because of an unfinished project – that is, that sign languages have not yet been fully brought into the world of human languages and more research needs to be done to convince parents and school directors – or because the move to embrace sign languages and recognize their uniqueness will always exist alongside the drive to celebrate spoken language, or certain spoken languages, above all other languages. We can only hope that universal acceptance prevails, because above all, we can then celebrate genius in all its different forms, not just in a few.

References

- Ahlgren, I, Bergman, B and Brennan, M (1994) *Perspectives on sign language: papers from the Fifth International Symposium on Sign Language Research*, International Sign Linguistics Association, Deaf Studies Research Unit, University of Durham, UK
- Baynton, D C (1996) *Forbidden Signs: American Culture and the Campaign Against Sign Language*, University of Chicago Press, Chicago, IL
- Bellugi, U and Studdert-Kennedy, M (1980) *Signed and spoken language: Biological constraints on linguistic form*, Verlag Chemie, Weinheim
- Brentari, D (2001) *Foreign vocabulary in sign languages: a cross-linguistic investigation of word formation*, Lawrence Erlbaum Associates, Mahwah, NJ
- Burnes, B (1950) *Silent Worker*, p 2
- Chamberlain, C, Morford, J P and Mayberry, R I (2000) *Language acquisition by eye*, Lawrence Erlbaum Associates, Mahwah, NJ
- Daniels, M (2001) *Dancing with words: signing for hearing children's literacy*, Bergin & Garvey, Westport
- Emmorey, K and Lane, H (2000) *The Signs of Language Revised: An Anthology to Honor Ursula Bellugi and Edward Klima*, Lawrence Erlbaum Associates, Mahwah, NJ
- Fischer, R and Lane, H (eds) (1993) *Looking Back: A Reader on the History of Deaf Communities and their Sign Languages*, Signum Press, Hamburg, Germany
- Fischer, S D and Siple, P (1990) *Theoretical issues in sign language research (Vol. 1: Linguistics)*, University of Chicago Press, Chicago, IL
- Gallaudet Research Institute (2000) *Regional and National Summary Report of Data from the 1999–2000 Annual Survey of Deaf and Hard of Hearing Children and Youth*, GRI, Gallaudet University, Washington, DC
- Humphries, T (1996) Of deaf-mutes, the strange, and the modern deaf self, in *Culturally affirmative psychotherapy with deaf persons*, eds N S Glickman, M A Harvey et al, Lawrence Erlbaum Associates, Mahwah, NJ
- Klima, E and Bellugi, U (1979) *The signs of language*, Harvard University Press, Cambridge MA
- Lane, H (1992) *The Mask of Benevolence: Disabling the Deaf Community*, Alfred A Knopf, New York
- Lucas, C (1990) *Sign language research: theoretical issues*, Gallaudet University Press, Washington, DC
- Madsen, W J and Lehman, L A (1982) *Intermediate conversational sign language: American sign language with English translations*, Gallaudet College Press, Washington, DC
- Mahshie, S (1995) *Educating Deaf children Bilingually: With Insights and Applications from Sweden and Denmark*, Pre-College Programs, Gallaudet University, Washington, DC
- Mindel, E D and Vernon, M (1971) *They grow in silence: the deaf child and his family*, National Association of the Deaf, Silver Spring, MD

- Newmeyer, F J (1986) *The politics of linguistics*, University of Chicago Press, Chicago, IL
- O'Rourke, T (1980) *ABC: A Basic Course in Manual Communication*, National Association of the Deaf, Silver Spring, MD
- Padden, C (1990) Folk explanation in language survival, in *Collective Remembering* ed D Middleton, Sage, Los Angeles, CA
- Padden, C (in press) Afterword, in *Signing the Body Poetic: Essays in ASL Literature*, eds D Bauman, J Nelson and H Rose, University of California Press, Berkeley, CA
- Padden, C and Humphries, T (1988) *Deaf in America: Voices from a Culture*, Harvard University Press, Cambridge, MA
- Peters, C (in press) Deaf American theatre, in *Signing the Body Poetic: Essays on American Sign Language Literature*, eds D Bauman, J Nelson and H Rose, University of California Press, Berkeley, CA
- Plann, S (1997) *A Silent Minority: Deaf Education in Spain, 1550–1835*, University of California Press, Berkeley, CA
- Poizner, H, Klima, E S and Bellugi, U (1987) *What the hands reveal about the brain*, Mit Press, Cambridge, MA
- Riekehof, L L (1963) *Talk to the deaf; a manual of approximately 1,000 signs used by the deaf of North America*, Gospel Pub. House, Springfield, MO
- Schlesinger, H S and Meadow-Orlans, K P (1972) *Sound and sign; childhood deafness and mental health*. University of California Press, Berkeley, CA
- Scouten, E L (1942) *A revaluation of the Rochester method*, The Alumni Association of the Rochester School for the Deaf, Rochester, NY
- Siple, P and Fischer, S D (1990) *Theoretical issues in sign language research (Vol. 2: Acquisition)*, University of Chicago Press, Chicago, IL
- Stokoe, W, Croneberg, C and Casterline, D (1965) *A dictionary of American Sign Language on linguistic principles*, Gallaudet College Press, Washington, DC
- Stokoe, W C (1960) *Sign language structure: an outline of the visual communication systems of the American deaf*, Department of Anthropology and Linguistics University of Buffalo, Buffalo
- Stokoe, W C (2001) *Language in hand: why sign came before speech*, Gallaudet University Press, Washington, DC
- Van Cleve, J and Crouch, B (1989) *A Place of Their Own: Creating the Deaf Community in America*, Gallaudet University Press, Washington, DC
- Van Cleve, J V (1993) The academic integration of deaf children: A historical perspective, in *Looking Back: A Reader on the History of Deaf Communities and their Sign Languages* eds R Fischer and H Lane, Signum Press, Hamburg, Germany
- Veditz, G (1913) *The preservation of the sign language* [Film]. National Association of the Deaf, Silver Spring, MD

5. Foreign language education in context

Michael Byram

Three fundamental functions of all national education systems, and of compulsory education in particular, are to create the human capital required in a country's economy, to develop a sense of national identity, and to promote equality, or at least a sense of social inclusion. In various degrees and forms these have been educational aims since the foundation of national education systems in Western Europe and North America and were exported, together with the forms of schooling, to other parts of the world by the colonial powers in the 19th and 20th century. The learning of a foreign language was in the early stages of this development rather anomalous. It was not essential to the economy since it was, above all, colonial languages that were used in trade or supplemented by knowledge of other languages by a few intermediaries. It did not function in policies of equality or social inclusion but rather was anti-thetical to these since only an elite learnt foreign languages. And it was, if anything, a potential threat to national identity because it introduced learners to different beliefs and values. However, in practice the threat was minimized by teaching methods based on translation, which by definition involves seeing another language and the values and beliefs it embodies through the framework of one's own language, and one's own beliefs and values.

Some of the purposes and forms of education remain unaltered, but social changes of the late 20th and early 21st centuries that are encapsulated in the words 'globalization' and 'internationalization' have given new meaning and significance to foreign language learning. One example of this is to be found in Western Europe, and increasingly in Central and Eastern Europe. The creation of a single market in Europe is a microcosm of globalization and has led to increased mobility and frequent interactions among people of different languages. This in turn has led to a political will to develop a new concept of identity, a European identity, which is fostered by increased foreign language learning. A second example is China, where entry into the World Trade Organization is creating a demand for language learning on a major scale but where access to international communication, particularly through the Internet, is perceived as sufficiently threatening to national values and beliefs to lead to censorship.

Foreign language education is thus no exception to the need to locate all education in its social, economic and political context. There are factors to be