

## A Two-Handed Manual Alphabet in the United States

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Our contribution to this festschrift has its origins in the grassroots of the Deaf community as well as in the hallowed halls of the ivory tower. The pioneering work of Edward Klima and Ursula Bellugi, from data collection to technical argumentation to acquiring funding for sign language research, has allowed a great number of scholars to benefit either directly or indirectly. Such benefit has also accrued to members of the Deaf community, who have always known that there existed a language and culture, but who are now empowered to study it from the inside. This piece, written by a linguist, a psychologist, and an interpreter married to a Deaf man, demonstrates the influence that Klima and Bellugi have had on many levels of scholarship and on the lives of Deaf people.

During a course on American Sign Language (ASL) structure, a sign meaning "no good" came to our attention. It was performed using what appeared to be the British two-handed alphabet letters N-G. This sign was described by Battison (1978), but according to our informant, it was not British. It was "from the old alphabet—the one all the older Deaf people know." This "old alphabet" is a two-handed American manual alphabet.

The most common form of American fingerspelling is single-handed. Two-handed fingerspelling is typically associated with British Sign Language (BSL; Deuchar, 1984) and with its documented descendants in Australia, New Zealand, Indonesia, and the former Yugoslavia (Carmel, 1982). In Canada's Maritime Provinces, a few signers use (or at least know) the British manual alphabet (Simon Carmel, personal communication, January 30, 1990; Michael Rodda, personal communication, February 12, 1990), likely learned from British teachers at the Halifax school. There has been much manual communication research in the past 30 years, but with the exception of Battison's (1978) mention of the two-handed #N-G, there is no reference to any American alphabet other than the current single-handed one.

Yet there is a two-handed American alphabet that has been observed throughout the United States and with which many American signers are familiar. In many American residential schools for Deaf children, people apparently used this alphabet occasionally until about 1950, in the dormitories and on the playgrounds. Few people now use it productively, although some can demonstrate it by reciting it letter by letter, in order.

Older Deaf people, and those who associate with them, take its existence for granted; younger Deaf people may not know it at all, and even fluent hearing signers may never have seen such an alphabet if they do not associate with older Deaf signers. This two-handed alphabet is obviously similar to the British manual alphabet, but it also shows some distinctive differences from the British, which are discussed later.

## COMPARISON WITH BRITISH FINGERSPELLING

### Overview

The American two-handed system is quite similar to the British system. Most of the consonants in the American two-handed alphabet are the same as, or cognate with, the consonants of the British manual alphabet. The most striking difference from the British is the vowels.

### Vowels

The British manual alphabet uses fingertip vowels: The letter A is a point to the thumb; E, a point to the index finger; I, to the middle finger; O, to the ring finger; and U, to the little finger, as if the five vowels are being listed or counted off. The fingerspelled forms are not derived from the shapes of the written letters. These vowels have been in use for centuries, as evidenced by their appearance in Wilkins's 1641 document. Sutton-Spence (1995) called the vowels the most robust part of the British manual alphabet and a holdover from an arthological system in which specific locations on the hand represented letters, to which the signer pointed in order to spell out words.

The American two-handed alphabet, however, has a totally different set of vowels, shown in Fig. 14.1. Four of the five vowels clearly look like their orthographic forms. The U has both a one-handed (illustrated in Fig. 14.1) and a two-handed variant (the same handshape laid on the palm of the nondominant hand). Oddly, the O, which is one of the few one-handed letters in this alphabet, is often made with the nondominant hand.<sup>1</sup> The letter I in this alphabet, a point to the eye, may be a pun on the English word *eye*, or a remnant from a corporal system (described by LaFin, 1692), in which the signer pointed to specific body parts to represent specific letters.

### Consonants

Most of the consonants look very much like the British ones. The notable differences are presented in Figs. 14.2 and 14.3. The letters J and Z are completely different from their British counterparts.

Although the American Z does not look like its British counterpart, a Z very much like this one appears on early British manual alphabet charts (Smith, 1864). A British illustration from Defoe (1732) shows this Z. In fact, some members of Deaf British families remember seeing elderly relatives using this Z earlier in this century, even though it had vanished from the charts by then.

<sup>1</sup>After shooting the photographs for Figs. 14.1 through 14.3, we realized that our model is ambidextrous and switches hands frequently while signing. As a result, some of our claims regarding dominant versus nondominant hand may not be supported by the photographs. We have, however, also seen other nonambidextrous models switch dominance for C, L, O, and P.

The other differences are less substantive. F is articulated symmetrically in the British alphabet but asymmetrically in the American one, in which the nondominant hand uses only an index finger extension. T involves a switch between dominant and nondominant hands. The L and C are made by the dominant hand outlining an American one-handed L (or C, respectively) on the nondominant hand.

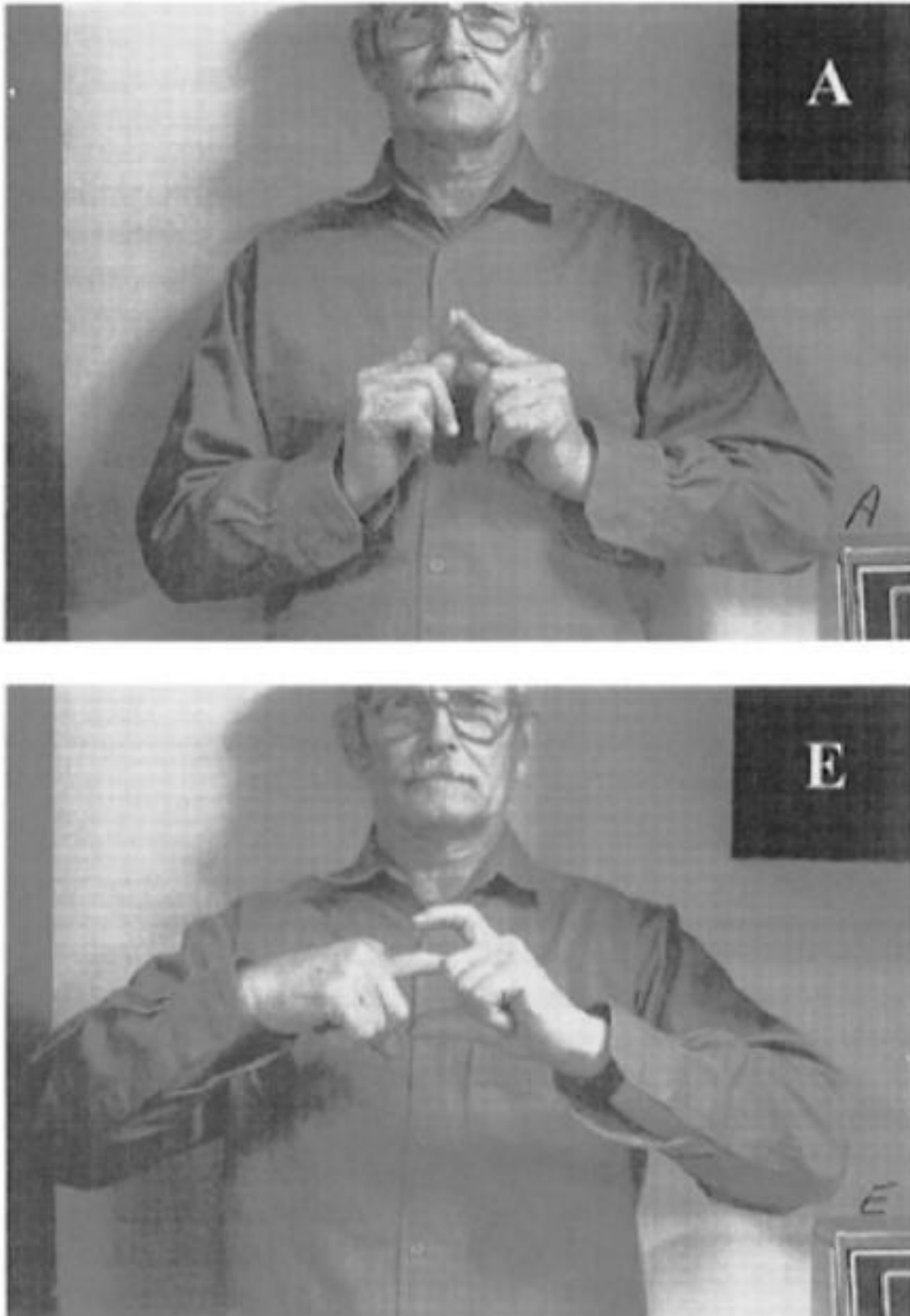
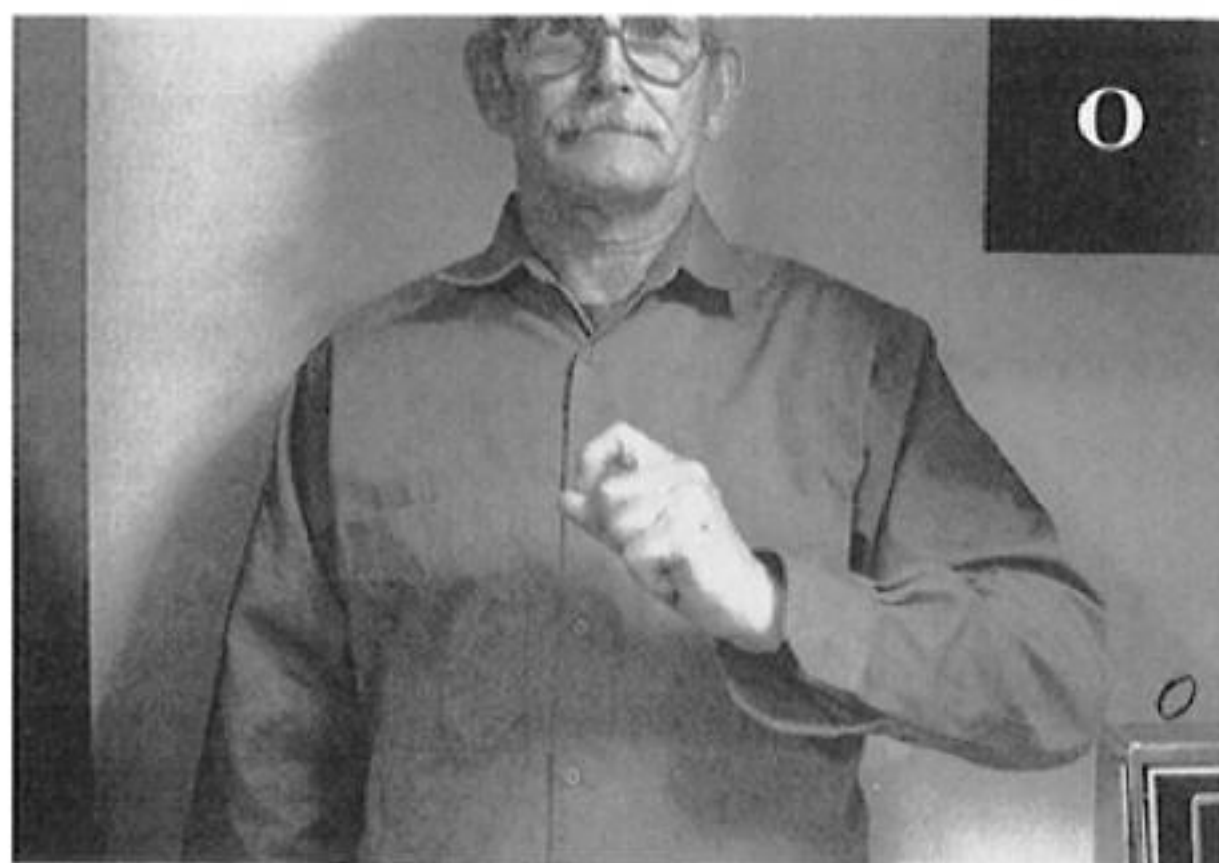
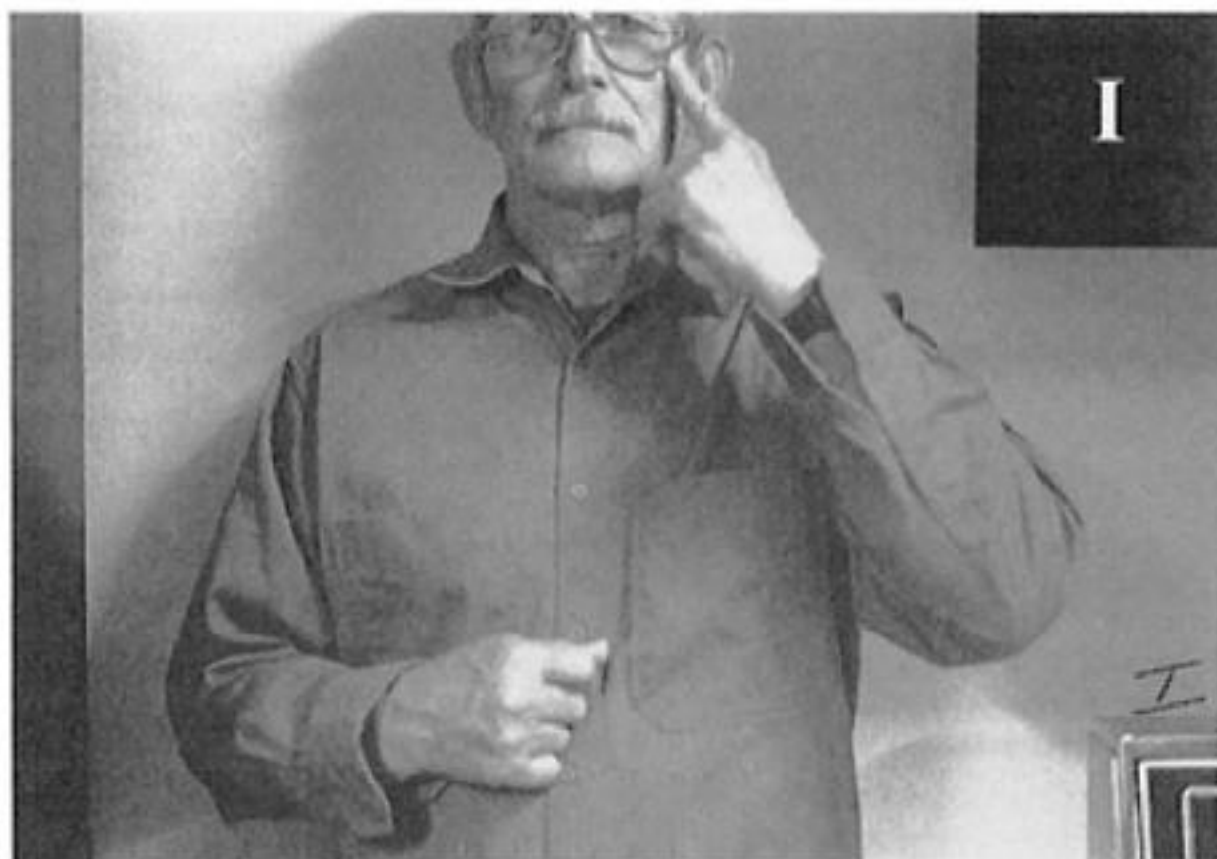


FIG. 14.1. American two-handed vowels.

If one relies on fingerspelling charts for information about the British manual alphabet, there are a number of consonants that seem to be systematically different in the two alphabets. Several of the handshapes from older British charts involve the extension of more fingers than do the American versions. The finger extension seems to be conditioned to a large extent by coarticulatory effects; British vowels are done on extended fingers. However, Bencie Woll



(personal communication, January 24 and February 22, 1990) noted that fingerspelling charts show, at best, citation forms and not necessarily what the letters look like in actual use.

Especially in the case of older charts, we do not know if the charts are prescriptive or descriptive: that is, whether they show how someone thought the letters should look or how someone observed that they actually looked. Even the most modern British finger-spelling chart published in Sutton-Spence and Woll (1999) is also just of citation forms. It does not show the handshapes that occur in actual use as a result of coarticulatory effects. Moreover, charts do not show regional, contextual, or idiosyncratic variation. Because it



is difficult to find Americans who still use the two-handed alphabet, we often see what people remember about the alphabet, rather than the alphabet in use, and we rarely see whole words. Therefore, caution should be exercised in interpreting differences between British and American letters.

### **WHO USED THIS ALPHABET?**

So far, we have collected reports of the use of this alphabet from Michigan, Washington State, Idaho, Montana, Utah, Tennessee, North and South Carolina, Kentucky, New York, Iowa, New Hampshire, Texas, Kansas, West Virginia, Maryland, Louisiana, Pennsylvania, New Jersey, Ohio, Massachusetts, and Wisconsin—all over the United States. There is no obvious geographic pattern here. It seems likely that, as we collect more data, we will find it in even more states. Usually people are glad to be reminded of it. The only expressions of shock are that we, hearing people, know it or that they have not seen it for a long time. Typical comments are: “I haven’t seen that for 20 years.” “Oh, I haven’t seen that in years, but if my parents didn’t want the kids to understand them, they always used it!” “My dad used to use that sometimes, for a joke. I thought he made it up. You mean other people know it too? I had no idea!” We have recently heard that in North Carolina, there are isolated mountain communities where people are still using the two-handed alphabet. One elderly Deaf informant there, who used it only with his family members, both Deaf and hearing, expressed surprise that “outsiders” knew it. Our subjective impression is that most American Deaf people who were in residential schools prior to



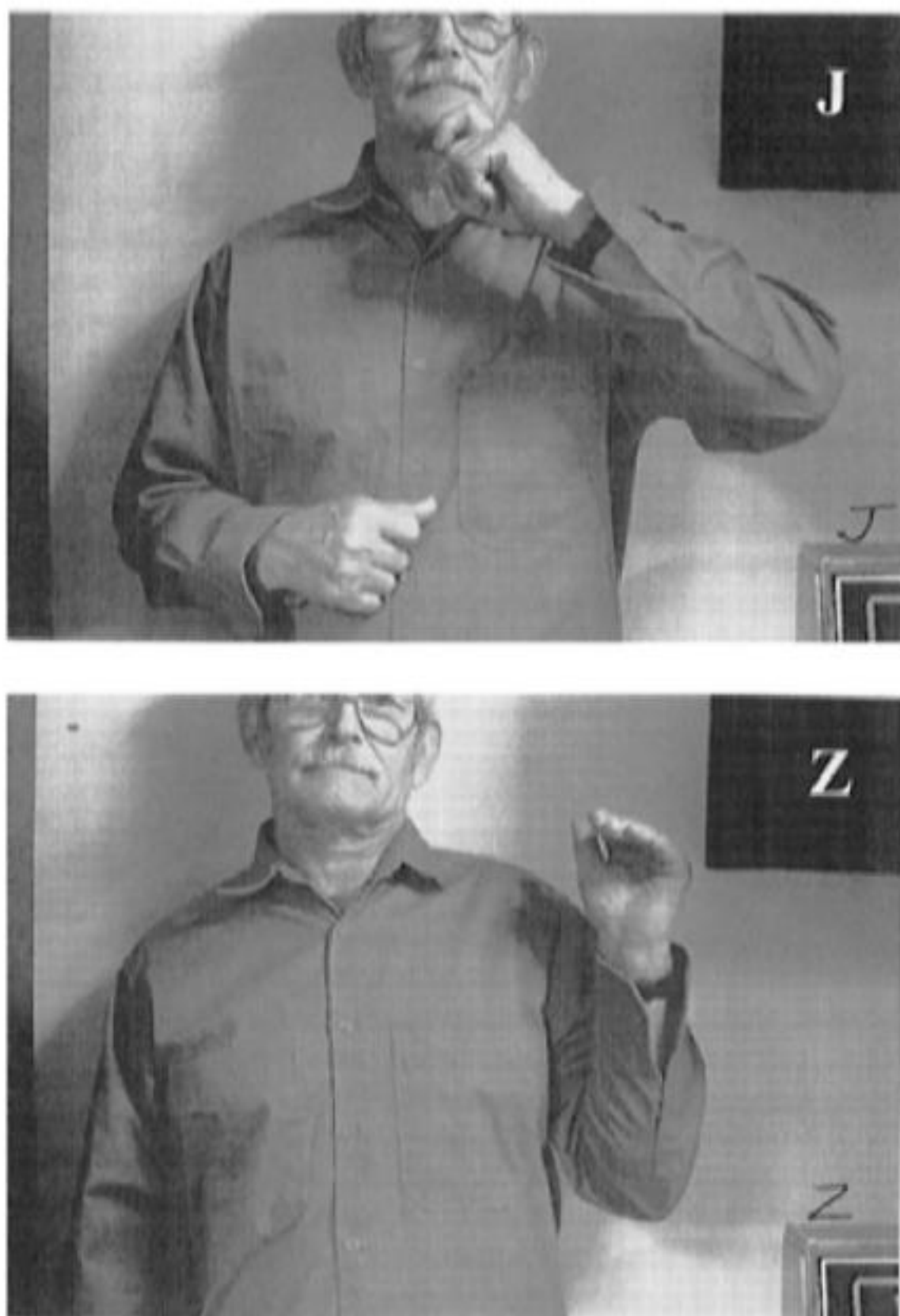


FIG. 14.2. American J and Z.

World War II know this alphabet, and many younger Deaf people at least recognize it. A few people report having seen older people using the alphabet but not having learned it themselves.

As far as we can determine, although many people can demonstrate this alphabet, it is rarely used. In general, only older signers can use it both receptively and expressively. Some of these people report that they still use it among themselves.

However, it must once have been used considerably more. Several phenomena point to this. One is the existence of at least one fingerspelled loan sign derived from this alphabet, the #N-G meaning “no good” cited earlier. Interestingly, although the N and the G of this

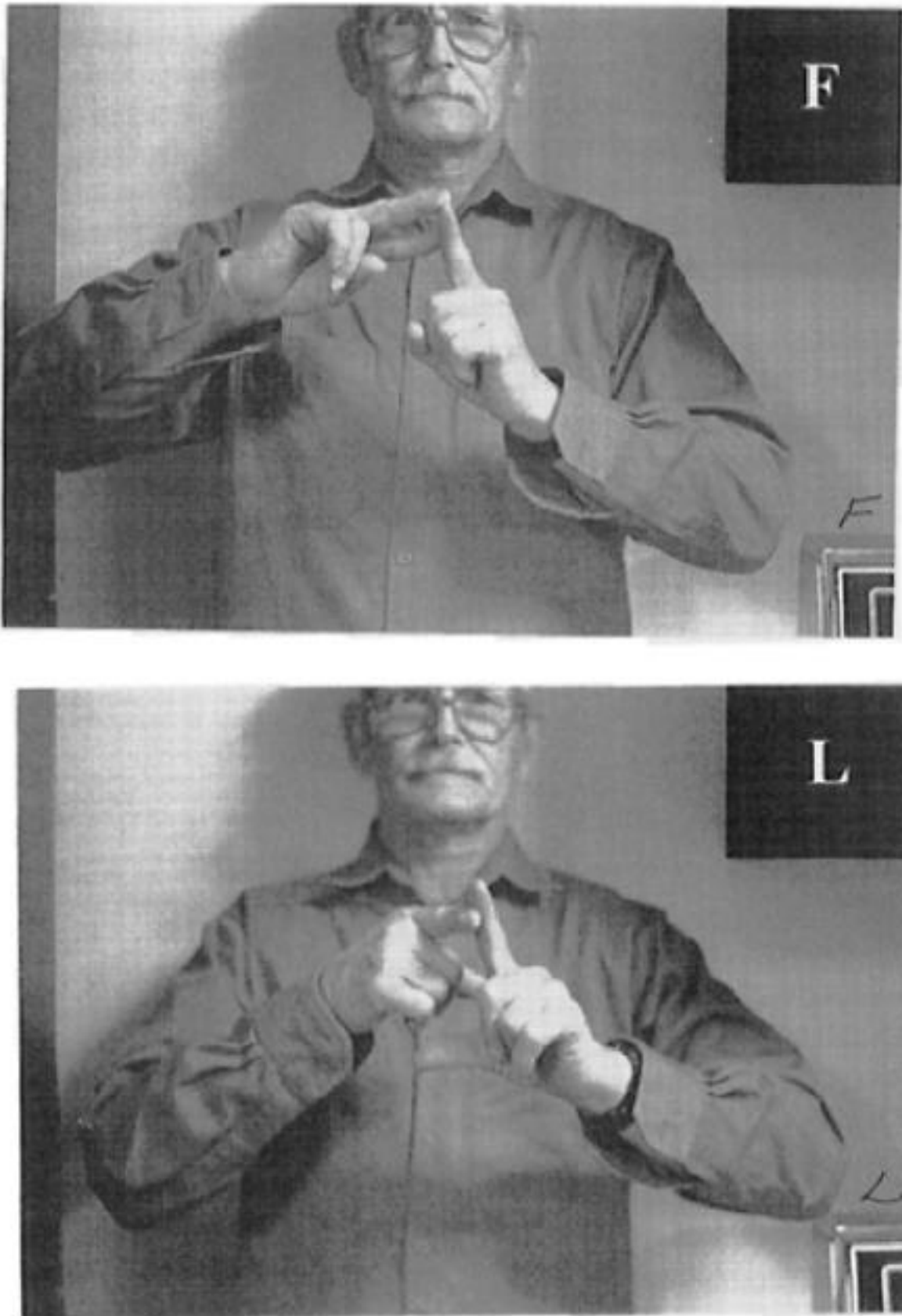
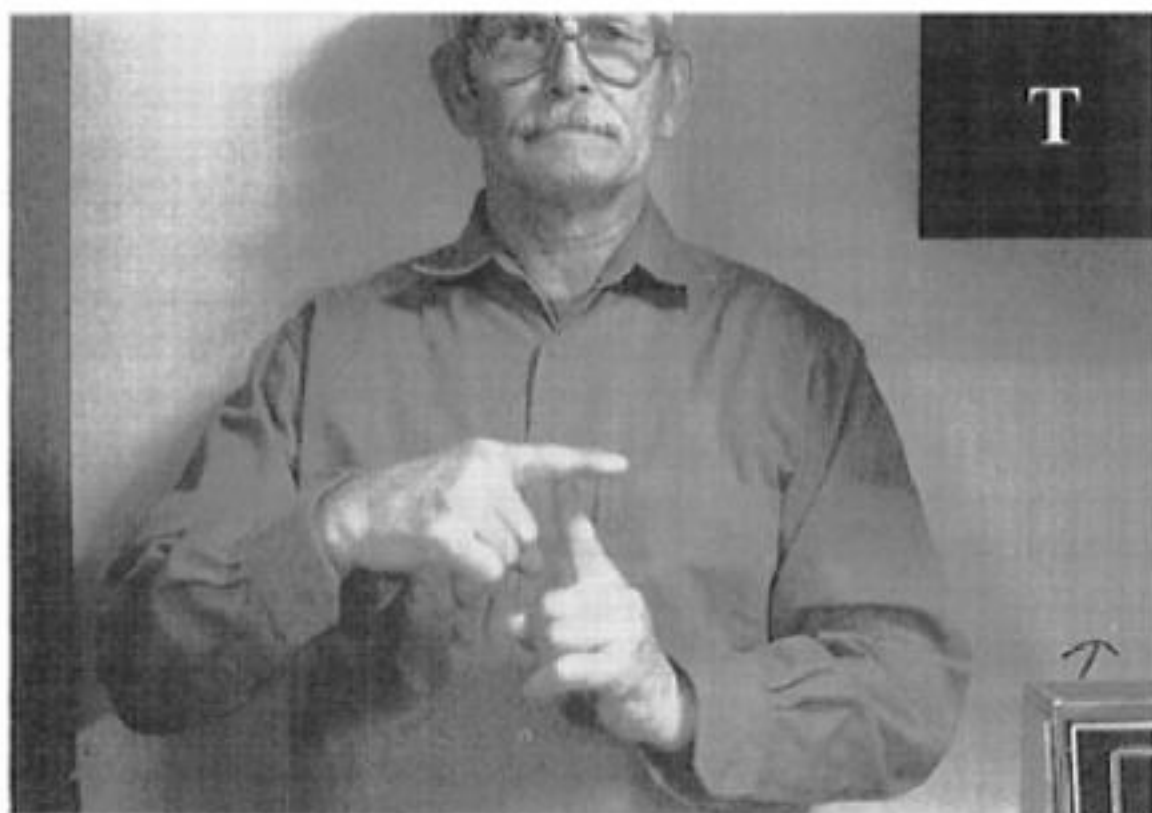


FIG. 14.3. American F, L, and T.

alphabet are identical to the N and G of the British manual alphabet, the two-handed finger-spelled loan sign #N-G is not used in Britain. Also, some signers who are far from fluent in this alphabet recognize certain words spelled in it. These words include #C-O-F-F-E-E and #T-O-D-A-Y. Presumably, these finger-spellings were once used commonly enough that younger Deaf people recall them, even if they cannot use the alphabet fully themselves. Third, some older Deaf people whose English names start with J have the J of this alphabet as their name sign, even though they may not be aware, without prodding, of the source of the name sign. Loan signs and name signs must have come from an alphabet that was in use at the time.



The alphabet seems to have been transmitted within families, from Deaf parents to their children, and within residential schools for Deaf children. Sometimes Deaf children who learned it at residential schools taught it to their families when they returned home. However, we have collected numerous anecdotal reports of hearing relatives of Deaf children learning it from other adults in the early 1900s. In each case, the relatives decided to learn some way to communicate with the Deaf child and, in a time before early intervention programs, found someone in the community, Deaf or hearing, who taught them this alphabet. Interpreters have reported going to hospitals to work with elderly Deaf people and finding the hearing family members struggling to communicate using the two-handed alphabet, which they had learned long before.

This alphabet is, however, clearly dying. There is in fact more variation in the forms of the letters than we have discussed here. In particular, some of the least frequently used letters (J and Z) have a number of variations, often apparently because signers cannot remember how to articulate them. Variability in the forms of rarely used items is common in a dying language, and the same may be true of a dying subsystem of a living language (Dorian, 1978).

### **HISTORY OF THE AMERICAN TWO-HANDED ALPHABET**

So far, the only printed historical evidence we have found of this alphabet is the Michaels (1923) chart (Fig. 14.4). This chart appears at the end of his book. Although the Z on this chart is like the modern British one, the J is clearly the American one described previously, and there are a few other letters that, although not quite like the most common American ones, are clearly a variation on the alphabet we are discussing. Many people have reported having seen the two-handed alphabet in print in the early 1900s (in a Boy Scout manual; in the *Little Blue Primer* or *Little Green Primer* in Tennessee; in a thick brown book of American Indian stories; and in a pamphlet like a comic book that a bookstore in Flint, Michigan, sold to students from the Michigan School for the Deaf). The only one of these sources that we were able to substantiate, and that one only very indirectly, is the Boy Scout manual. According to Sutton-Spence (1994), a sign language book by Benjamin Green,



published in Ohio in 1916, includes a chart of the British two-handed alphabet. This book states that "this alphabet is used almost exclusively by the English Deaf, but it is used to some extent in this country and Canada.... This book is being sold to the Boy Scouts at 25 cents each." Because we do not know who Green was or how knowledgeable he was, it is not clear whether Americans were actually using the British manual alphabet at the time or whether current-day Americans are simply remembering that particular Boy Scout book.

The alphabet is so similar to the British that there is obviously a historical connection. Bencie Woll (personal communication, 1990) pointed out the absurdity of maintaining that the Deaf people of the United States were sitting meekly on the shore, hands at their sides, waiting for Clerc to arrive and teach them to sign. We can assume that the Deaf people of America were signing (and perhaps fingerspelling) something before Gallaudet and Clerc imported French Sign Language and French finger-spelling and founded the American School for the Deaf in 1817. Before Clerc, American signing probably had elements of the sign languages of various European countries. British fingerspelling could readily have been brought to America with British Deaf immigrants, possibly as early as colonial times. Or perhaps some of the American children sent to study at the Braidwood schools in England (Lane, 1984) in the late 1700s or early 1800s brought it back with them. It is surprising that we know so little of BSL influence on ASL.

Similarities between a few of the American two-handed letters and early British forms (e.g., the Z described in Smith, 1864, and Defoe, 1732) suggest the possibility that this alphabet came to America in the 1700s or early 1800s. Because this Z is highly iconic, it is of course possible that it was invented twice. Nevertheless, even though the resemblance could be coincidental, we find it at least tantalizingly suggestive of a connection with earlier British fingerspelling. Interestingly, the two-handed alphabet of Indonesia has a Z like the American one. The Indonesian alphabet also came from the British one, but we do not know when it was brought to Indonesia.

Further evidence of such a connection, although admittedly even more tenuous, is that an asymmetrical F something like the American F also shows up on some British fingerspelling charts from the 1700s and early 1800s. However, the F's have varied so much that we are not sure how important this fact is. Another bit of evidence is that some British alphabets from between 1800 and 1850 have J's using the same (American one-handed) X handshape, but in neutral space, not on the face. This could again be coincidence, as the J in space looks like the written J, but it also suggests the possibility that the American J comes from an earlier British J. These similarities with the older British fingerspelling charts suggest the possibility that the American two-handed alphabet could have come from an early dialect of British fingerspelling that was brought to this country.

What about Canada? Some older Deaf people in the Maritime Provinces of Canada use the British alphabet, but we have so far found only one Canadian signer who knows the American two-handed alphabet. A school for the Deaf was established in Halifax, Nova Scotia, in the 1850s, using BSL. People used British fingerspelling there until about the 1920s. There are still Deaf people from the Maritimes who know the British alphabet because they or their parents learned it in school. However, so far there is no evidence that the American two-handed alphabet either developed in or was used in Canada. What about Martha's Vineyard? This island off the Massachusetts coast had a high incidence of hereditary deafness, and it is reported that Deaf and hearing alike used a sign language (Groce,



FIG. 14.4. Manual alphabet chart, from J.W.Michaels, 1923, Atlanta, GA: Home Mission Board Southern Baptist Convention, p. 162.

1985). The Islanders were descendants of immigrants from one small region of England, and these immigrants might have brought their own signing (and fingerspelling) with them. According to Groce, the fingerspelling that the Island Deaf used was standard American one-handed spelling, learned at the American School for the Deaf. However, Ronnie Wilbur

(personal communication, 1994) reported that a two-handed X was used on the Vineyard. Moreover, Bahan and Nash (1998) reported that two-handed fingerspelling was in use there. So it is possible that Martha's Vineyard signing was a link in the development of this alphabet.

We do have one other small but interesting clue. A Deaf woman raised in India recognized the American two-handed alphabet because it is used in schools for the Deaf in some parts of India. She said that schools in other parts of India use the British alphabet. Another Deaf man, also from south Asia, demonstrated "his" fingerspelling to us, which included the American vowels. We do not know yet how this American two-handed alphabet was brought to this region; however, it is possible that in colonial times there were several dialects or variants of the British manual alphabet and that the same dialect was brought to south Asia and America; or that, as Richard Meier (personal communication, 1991) has suggested, Americans, perhaps missionaries, brought the American two-handed alphabet to Asia.

A likely hypothesis is that this alphabet was used among the Deaf of this country before 1817. Perhaps, after French sign and fingerspelling became well established, this alphabet went underground and became a private, "in-group" code rather than a public means of communication.

## SUMMARY AND CONCLUSIONS

This study is significant for several reasons. First, it is a powerful demonstration of the reality of Deaf cultural history, namely, how little of the story of Deaf people has been told. This alphabet is tremendously widespread among American Deaf people and apparently was part of the culture of residential schools for the Deaf until comparatively recently; yet it was not documented.

Methodologically, it demonstrates the importance of collecting signed data from informants of various ages. Some studies have focused on younger, college-educated Deaf informants. Yet this alphabet is known mostly among older signers. A study of younger signers would miss it altogether. There are probably other aspects of manual communication that will die out along with their users unless information from older Deaf people is collected.

Historically, it at least hints at how Deaf people in America may have communicated prior to the importation and widespread use of French Sign Language (or at least, French signs and the French manual alphabet) in educational settings. Although it has long been recognized that Deaf Americans must have had a sign language before 1817 (Woodward, 1978), we know virtually nothing of what it was like. This alphabet provides a clue.

The American two-handed alphabet described here suggests origins that go back not to the French but to the British manual alphabet. Yet the vowels appear to be unique to former British colonies. If we assume that this alphabet is derived from the British, where did differences between the two alphabets—particularly the vowels—come from? Britain itself uses the fingertip vowels that were documented as early as 1641. Did the American vowels come earlier, say, with the Mayflower in 1620? Were the fingertip vowels discarded and a new set invented? Perhaps all two-handed alphabets (or at least those representing Roman characters) came from a pan-European manual alphabet, which the British adopted, replacing the vowels

with their fingertip vowels (Sutton-Spence, personal communication, August 13–14, 1998). Unfortunately, we will probably never know, but we hope that this discovery will encourage other researchers to continue to explore other genetic and social relationships among the world's signed languages.

### ACKNOWLEDGMENTS

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### REFERENCES

- Bahan, B., & Nash, J.C.P. (1998). The formation of signing communities. In J.Mann (Ed.), *Deaf Studies IV Conference Proceedings*. Washington, DC: Gallaudet University Center for Continuing Education.
- Battison, R. (1978). *Lexical borrowing in American Sign Language*. Silver Spring, MD: Linstok Press.
- Carmel, S.J. (1982). *International hand alphabet charts* (Rev. ed.). Henrietta, NY: Author.
- Defoe, D. (1732). *The life and adventures of Duncan Campbell*. London: E.Curll.
- Deuchar, M. (1984). *British Sign Language*. London: Routledge & Kegan Paul.
- Dorian, N.C. (1978). The fate of morphological complexity in language death. *Language*, 54, 590–609.
- Green, B. (1916). *A handbook in the manual alphabets*. Toledo, OH: Author.
- Groce, N.E. (1985). *Everyone here spoke sign language: Hereditary deafness on Martha's Vineyard*. Cambridge, MA: Harvard University Press.
- LaFin. (1692). *Sermo mirabilis* (or the silent language).
- Lane, H. (1984). *When the mind hears: A history of the Deaf*. New York: Random House.
- Michaels, J.W. (1923). *A handbook of the sign language of the deaf*. Atlanta, GA: Home Mission Board Southern Baptist Convention.
- Smith, S. (1864). *The deaf and dumb: Their deprivation and its consequences; the process of their education, with other interesting particulars*. London: William MacKintosh.
- Sutton-Spence, R. (1994). *The role of the manual alphabet and fingerspelling in British Sign Language*. Unpublished doctoral dissertation, University of Bristol, UK.
- Sutton-Spence, R. (1995). Very early manual alphabets. *Signpost*, 8, 32–35.



- Sutton-Spence, R., & Woll, B. (1999). *The linguistics of British Sign Language: An introduction*. Cambridge, UK: Cambridge University Press.
- Wilkins, J. (1641). *Mercury: Or the secret and swift messenger*. London: John Maynard and Timothy Wilkins.
- Woodward, J. (1978). Historical bases of American Sign Language. In P. Siple (Ed.), *Understanding language through sign language research* (pp. 333–348). New York: Academic Press.