

## 8 American Sign Language and deaf culture

### How people communicate

Most people communicate with the world through sound: listening to a friend talk, watching a movie without subtitles, or knowing not to step off the curb because they hear a truck coming. This state of interacting with the world is so natural for most humans that people forget the complexity of hearing and don't typically even give a name to the group of people who live this way. When this group *is* given a name, they are called *hearing* in contrast with a much smaller segment of the population who do not communicate naturally with the world through sound, for whom we will use the familiar, but complicated, name, *deaf*.

The hearing often think of deafness as a tragic lack of hearing – as purely a deficiency to be overcome. Defining deafness as a lack of hearing is an oversimplification in at least two crucial ways. First, it essentializes complex, multi-faceted people in terms of the one ability they are sure to find difficult or impossible. As noted in Chapter 2, defining a category of people in terms of a single attribute is common in the reproduction of stereotypes. In this chapter, we will see how an ideology that reduces deaf identity to simply the inability to hear severely limits the agency of deaf people, manufacturing disability out of difference. Second, more subtly, construing deafness as merely a lack of hearing greatly constrains the ability of the hearing to see their deaf friends, neighbors, children, and fellow citizens as fully human.

When the hearing mention language, they are almost always referencing spoken (or written) language. Whether it is to complain about someone's accent or to criticize word choice, most of the hearing rarely think about sign languages or the variation that might exist within them. The experience of the deaf in a hearing world is all but erased in their minds. This erasure, however, is about more than lack of experience with people who are deaf. It is about the primary ideology hearing people have about deaf people: the belief that deafness is a deficit, not just a difference, and believing the deaf to somehow be helpless and pitiful.

Deafness is typically acquired through some sort of environmental event such as loud noise or childhood illness but can also, less commonly, be inherited. According to the US National Institutes of Health, an estimated 10% of deaf babies are born to deaf parents (known as "deaf of deaf"), but the other 90% of the time a deaf child will be born to hearing parents either due to an inherited trait for deafness or through illness during pregnancy. In the 1960s, for example, there was a pandemic of the disease rubella (aka German measles) which led to the "rubella bulge" of some additional 8,000 babies born deaf in North America during the years 1962 to 1965. This bulge is associated with dramatic and far-reaching changes to deaf education and culture which will be discussed later in this chapter. Even if not present at birth, deafness can come to literally anyone at any time through, for example, chicken pox, mumps, diabetes, prolonged exposure to loud noises, momentary exposure to extremely loud noises, etc.



Figure 8.1 Sign language depicted on the wall of the Washington School for the Deaf in Vancouver, WA

The view of deafness as a deficit is often framed as a lack of language and an inability to communicate. This belief reflects a discriminatory language ideology that does not recognize the fact that *sign languages* (like American Sign Language; see Figure 8.1) are basically the same as spoken languages except for a difference in modality (vision vs. sound). There are sign languages all around the world, each with its own complex grammar and each serving as the foundation for a distinct community and culture. The hearing are so accustomed to understanding the world through sound, it may be difficult for them to imagine a society that isn't entirely dependent on sound. Perhaps counterintuitively, then, we will begin this chapter on American Sign Language and deaf culture with a brief description of what sound is, precisely, and what it means to be hearing. This will allow us to address the question of what it means to be deaf without the usual assumptions and simplifications.

### **What it means to be hearing**

Sound is movement. If a tree falls in the woods, it unquestionably makes a sound – regardless of the presence or absence of hearing human ears. Actually, it makes quite a range of sounds, from the high-pitched whistling of twigs through the air to the aperiodic crackle of crushing leaves to the deep boom of the massive trunk impacting the earth. These movements produce vibrations that emanate from their source in a sphere of waves through the air, through the ground, and through any ears that happen to be present. Low sounds, like the booming trunk, produce long, slowly undulating waves while high sounds, like the whipping twigs, produce short, quickly undulating waves. The human ear (see diagram in Figure 8.2) is part of a delicate system for transducing these waves into patterns of neural stimulation in the brain. Vibrations in the air are shaped and filtered

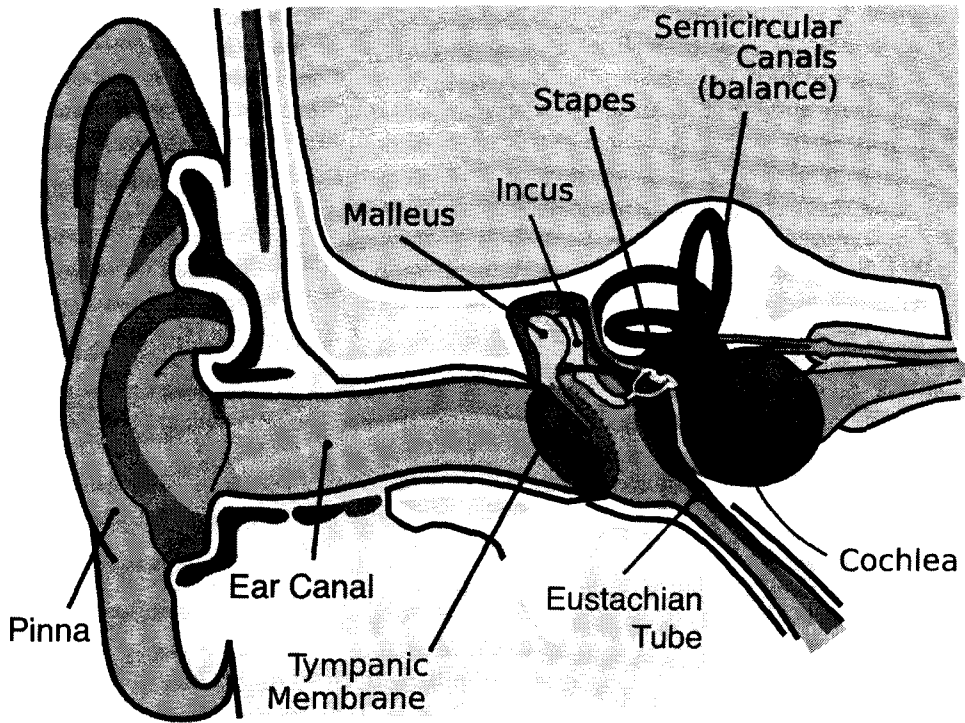


Figure 8.2 The anatomy of the human ear

by the pinna or outer ear; they are channeled through the ear canal to the tympanic membrane (aka ear drum) where this thin membrane vibrates in sympathy with the air. These vibrations are amplified by the three smallest bones in the body, the malleus, incus, and stapes, so they can be transferred from air to the salty liquid inside the cochlea. The human cochlea, as in all mammals, is a coiled tube lined with fine hairs. Different parts of this lining respond to different frequencies, triggering neurons to send a pattern of electrical signals to the brain. The louder a sound is, the greater the movement of these hairs; so that the barely audible noise of leaves landing may cause very little movement, a tree falling causes more movement, and an extremely loud sound such as a bomb or a canon being fired can cause instantaneous, permanent damage in even the youngest and healthiest of ears.

Even younger hearing people with *ideally* functioning ears can only hear waves that vibrate between 20 Hz and 20,000 Hz (vibrations per second). Pigeons, with some of the best low frequency hearing in the animal kingdom, can hear sounds as low as 0.5 Hz while some moths can hear sounds as high as 300,000 Hz (fifteen times the human range). More than this, hearing human ears are especially sensitive to sounds that vibrate between 1,000 Hz and 4,000 Hz while the lower and higher frequency sounds than this narrow window must be increasingly loud just to be detectable. In other words, even a perfectly functioning human ear is limited in terms of the frequencies and loudnesses it can turn into data for the brain to interpret as information.

If any portion of this delicate chain of hearing does not conduct, amplify, transduce, or transmit sound in a way that allows the person to make informative use of the patterns of vibrations in the air, this person is called *deaf*. If any portion in this delicate chain requires

increased energy (associated with louder sounds) to make use of these patterns of vibration, this person is called *hard of hearing*. Given the complexity of this system, there are many ways to be deaf. Essentially, deafness, in the medical sense, means that somewhere between the outer ear and the brain's auditory cortex, some portion of the auditory system is not passing along the narrow range of frequencies that the larger hearing community considers "sound."

### **Hard of hearing**

The National Association of the Deaf, citing *Deaf Life*, "For Hearing People Only" (October 1997), states that "'Hard-of-hearing' can denote a person with a mild-to-moderate hearing loss. Or it can denote a deaf person who doesn't have/want any cultural affiliation with the deaf community. Or both. The HOH dilemma: in some ways hearing, in some ways deaf, in others, neither."

And while many people associate this term with older adults, those who have lost some sense of hearing due to presbycusis, or age-related hearing loss, the label can be applied to people of any age. The World Health Organization (WHO) says that 466 million people around the world have hearing loss. This number includes 34 million children.

Even if the auditory cortex in the brain doesn't receive information associated with a sound wave, the rest of the deaf body can still sense the vibrations of the wave. The rumble of thunder, the whispery feeling of a breeze across one's face, or the contented purr of a cat still convey their information into feet, skin, or lap and will still elicit the same trepidation, calm, or comfort they might produce in a hearing body. Finally, it must be stressed again that not all people who are functionally deaf are without hearing altogether. All deaf people still have a relationship with sound regardless of how useful it is to them in daily life; deaf bodies, like hearing bodies, create vibrations as they move through the world, but for the deaf, this can often mean feeling uncomfortable and constrained by a hearing world that judges and scolds them for the difficulty of controlling the loudness and timing of their own voices – phenomena they cannot themselves perceive.

### **Deaf culture**

A hearing attendee at a deaf dance party would likely be surprised by how incredibly loud such parties can be. The urge to jump around rhythmically in the company of one's friends and potential love interests is not the exclusive possession of the hearing, and, indeed, deaf dance parties need to be loud so that the music will vibrate through the floor and into the feet of the dancers. Often, the hearing cannot comfortably attend such parties, even with high quality ear plugs. Not only does the physical nature of sound make dancing accessible to deaf partygoers, but there are professional deaf dancers in every genre. On the other side of the dance floor, there are many successful deaf musicians, like percussionist Dame Evelyn Glennie, rapper Sean Forbes, singer Mandy Harvey, and many others.

In addition to deaf dance and music, there is an entire genre of poetry that is simultaneously language and the performance of that language. Deaf poets who use sign languages (described in text box 2) use handshape rhyme and iconic movements in much the way that spoken poetry might use rhyming words and iconic sounds (e.g., repeated [z] sounds in a poem about bees). But beyond this, sign language poets can bring an entire world of movement and facial expression to their poems that even non-signers can understand and be moved by. The body movements between signs take on new, expressive emotional meanings of their own while variations in the way the signs themselves are created can evoke imagery simultaneously with meaning. Sign language poets can also employ simultaneous signs (e.g., signing *crying* with the left hand while sharing a story of loss with the right) to set a kind of linguistic back beat to the rhythm of their own verse.

## **Deaf poetry**

You can find all sorts of deaf poets on the internet! Check out these artists:

### ***Mari Klassen***

Canadian-born poet and ASL program developer for British Columbia's provincial outreach program for the deaf and hard of hearing, Mari Klassen, has been a poet since childhood. In the video linked in the QR code, she interprets an example of counter poetry. In counter poetry, the first half of the poem has one meaning, and the second half of the poem is the same series of signs in reverse for a completely different meaning.



### ***Douglas Ridloff***

Poet, artist, and performer Douglas Ridloff is a sign language poet and director of ASL SLAM. ASL Slam was founded in New York City in 2005 by Bob Arnold and Jason Norman as an open mic event for deaf poets and artists to showcase their sign writings. Ridloff took the event over shortly thereafter and has brought ASL Slam on world tours and established events in Boston and Chicago. In the video linked in the QR code, you can watch Ridloff perform his poem "Symbiosis."



Another surprise awaiting a hearing attendee at a deaf dance party is that many of the revelers at such an event do not consider themselves disabled and, indeed, would not choose to become hearing even if a magic potion existed that could make them so. Of course, no such potion exists. There are assistive devices, hearing aids, and cochlear implants (see later in this chapter) that can provide some access to the hearing world for deaf people, and many deaf people use and benefit from these devices, but they are not without their shortcomings and controversy.

Just as there are many physical ways in which deafness can occur, there are many responses to being deaf. The physical state in which the brain receives information regarding sound through the ear is not the same as participating in deaf culture in the United States and anglophone Canada, and participating in activities like deaf dance parties. Participation in deaf culture typically requires knowledge of American Sign Language. *Sign languages* have naturally emerged in communities of deaf individuals all over the world. People tend to expect speakers of different languages to also have distinct cultures, and sign languages are no different. The distinctiveness of deaf culture in the United States is not due to shared deafness but instead emerges from the use of a language that is entirely distinct from English, namely *American Sign Language* (or ASL). To understand deaf culture, it will be necessary to have some additional background on sign languages.

### **Sign languages and American Sign Language**

The first thing to understand about sign languages is that they are, in every imaginable sense, languages. This observation may seem like mere tautology, but it has had a profound impact on the way linguists think about what it is they study. Humans have an innate need to engage in language. This engagement is both mental and physical; sign languages teach us that language's physical expression can take place just as naturally and effectively through visual signs as through sounds. Although these two modalities offer different affordances and constraints, they have equal communicative capacity. Any message – whether it is communicating the weather, singing the National Anthem (see Figure 8.3), or telling one's deepest



Figure 8.3 Children at St. Rita's School in Cincinnati, OH, sign the National Anthem in 1918

secrets – can be relayed in any language of any type. And while sound is the most natural way of communicating for hearing people, sign language is the most natural means of communication for those who are deaf.

### Things to know about ASL

NPR published a detailed but compact account of what ASL is and how it works, featuring the experiences of ASL users from Gallaudet University describing, in sign, the structure of their language. These students wish hearing people knew simple things like the signs for “please,” “thank you,” “I’m sorry,” and “how was your day?” They would like hearing people to know that not all sign languages are the same, that there are accents, slang, and baby talk in ASL, just as there are in any other human language. In short, the students in this video would like the hearing world to know that ASL is a full and beautiful natural language. The chapter you are reading was written by hearing authors who benefited from the work of deaf scholars and ASL researchers and from the inspiration of these students. In the video linked in the QR code, you can watch the original NPR video that inspired this chapter.



The second critical thing to understand about sign languages is that they, like any other human language, are social constructs emerging from and, in turn, strengthening the communities that use them. Sign languages are not exclusively used by people who are themselves deaf, but it is certainly the case that these languages tend to evolve among communities of deaf or hard of hearing children. Particularly since the 1960s, many people in these communities of sign language users have come to see themselves as members of a linguistic and cultural minority group who are proud to be deaf – many of whom see themselves not as lacking hearing but as having gained deafness.

The dominant sign language in North America today is ASL (see Figure 8.4 for ASL’s system of alphabetic and numeric hand shapes). Padden (2010) puts the number of native ASL users in the United States and Canada at roughly 250,000 signers and at least that many second language ASL signers. ASL, like any human language, has its own phonology, morphology, syntax, and semantics, and it is *not* merely English performed with the hands, arms, and facial expressions. Although such a system of *signed English*, with signs used to express English words in English-like sentences, does exist and is often used between hearing and deaf speakers to facilitate communication, it is slow and cumbersome compared with actual ASL (Stokoe 2002).

How can we know for ourselves whether ASL signs are analogous to English words? Linguist David M. Perlmutter suggests the following simple test: If ASL signs stood for English words, one would expect to be able to find a sign for each English word. If a single English

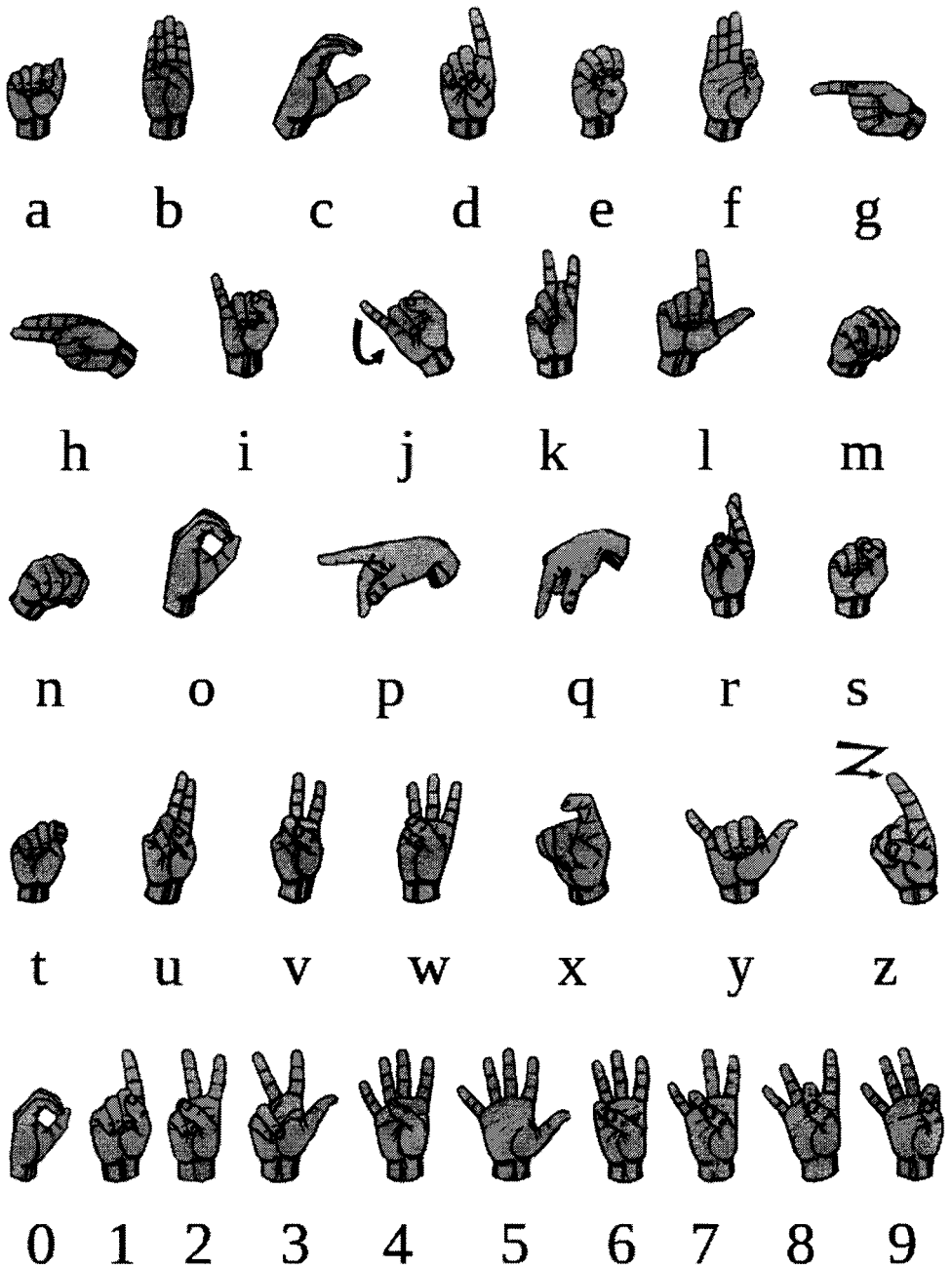


Figure 8.4 The signs for letters of the English alphabet used to spell out English words in signed English and ASL

word has multiple meanings, like the word *right* which can mean “correct,” “the opposite of left,” “a legal entitlement,” “morally good,” etc., then one can expect to be able to find a single ASL sign with all these meanings. However, ASL signs express their meaning directly; they are not mediated through English words, so these many meanings are expressed by an equal number of unrelated signs, just as they are expressed by multiple different words in French, Spanish, Russian, Japanese, and most other languages.

Truly revolutionary linguistic work by William Stokoe (1960) and his graduate students demonstrated to a skeptical world in the early 1960s that the “natural” sign language in use by their students at Gallaudet University (a university established specifically for deaf students; see discussion later in this chapter) was as robust and efficient as any other human language. Linguists have since provided abundant evidence for the rich patterns of structure at every level of sign languages. That is, the same kinds of variation in sounds, words, grammar, etc. that can be found in spoken languages can also be found in sign languages.

One can compare how these structures are exhibited in both spoken and signed languages. Spoken languages have speech sounds organized into grammars of minimally contrastive sound units composed of resonance, noise, silence, and pitch. By minimally contrastive, we mean that a word like *fan* can become the word *van* simply by vibrating one’s vocal cords during the first speech sound (the [f] becomes a [v]). This makes [f] and [v] minimally contrastive sounds, and it means that *fan/van* form what linguists call a minimal pair. Sign languages have gestures organized into phonological grammars of minimally contrastive units composed of handshape, movement, location, orientation, and non-manual markers (e.g., facial expression). The words for *onion* and *apple* in ASL share handshape, movement, orientation, and non-manual markers but differ in terms of the location parameter. *Onion*, shown on the left of Figure 8.5, is produced with right hand in the “X” handshape (see X in Figure 8.4) with the knuckle of the index finger placed near the temple or high on the cheek (near the eye) and rotated twice in a clockwise direction. *Apple* is identical but performed with the hand against the cheek, shown on the right in Figure 8.5. Thus, just as the English



Figure 8.5 The ASL signs for *onion* (left) and *apple* (right) represent a minimal pair, contrasting only in terms of location of the sign

Source: images courtesy of Nóra McGowan

words *fan* and *van* display a minimal contrast between vibrating or not vibrating one's vocal cords, the ASL words for *apple* and *onion* show minimal contrast in terms of location.

Because only about 10% of deaf babies have parents who are themselves deaf, the usual mode of effortless transmission of language(s) from parent to child is typically absent because the deaf baby's parents do not (usually) know American Sign Language. Some hearing parents even resist the use of sign languages with their children, hoping instead to teach the child to read lips and to produce speech by imitating the mouth movements of hearing speakers. As we will see, gestural imitation is necessary if deaf children are to perform spoken language. Hearing children receive highly informative auditory feedback about their voices when producing speech sounds both through their own ears and through their own bones. Without this feedback, it can be extraordinarily difficult for a deaf or hard of hearing child to learn the precise movements and timing needed to make the sounds of English in a way that is intelligible to even the most caring listeners committed to upholding their end of the communicative burden.

We have learned (e.g., in Chapter 5 and Chapter 6) some of the ways that speech sounds can come to index social meanings so that the resonances of one's vowels can reveal a childhood spent in Michigan or Alabama, and the use of, for example, different patterns of intonation can communicate an African American or a Jewish American identity (e.g., Burdin et al. 2018). This same phenomenon occurs in sign languages as well, so that people from different parts of the country sign with different regional varieties. Just as with spoken languages, variable uses of signs and different manners of signing carry indexical meanings that may be used to distinguish between white and African American signers, signers who identify as male and female, young and old signers, and so on. These processes of variation and change are the soul of human language. It is through these processes that "languages" as recognizable, nameable social constructs come to exist in the first place. And just as American English is a cluster of dialects that have separated from the cluster of dialects one might call British English, ASL is best understood as a cluster of dialects that share many words, parts of words, and ways of connecting words together. And just as being a native speaker of a particular dialect of American English comes with social consequences, so does being a native speaker of a particular dialect of ASL.

### **Martha's Vineyard Sign Language**

One consequence of American Sign Language being an entirely separate language from American English is that ASL is *not* mutually intelligible with British Sign Language (BSL). They are distinct systems with different words, different ways of connecting subjects and verbs to objects, different ways of including information about what a verb is even doing in the sentence. A native signer of ASL wishing to visit London and communicate with signers there would need to study BSL as a second language just as a hearing traveler might need to study Russian to visit Moscow or Thai to visit Bangkok. This may come as a surprise to the hearing reader, but perhaps even more surprising is the fact that a signer of ASL can travel to such places as France, Bolivia, or Russia and communicate much more easily than they could in Great Britain or Ireland because ASL is a relative to the sign languages spoken in those places. This is, again, because American English and American Sign Language have entirely distinct histories and unique relationships with other languages. For example, Figure 8.6 is a chart showing the BSL representation of the letters of the Latin alphabet, which can be compared to the characters in Figure 8.4.

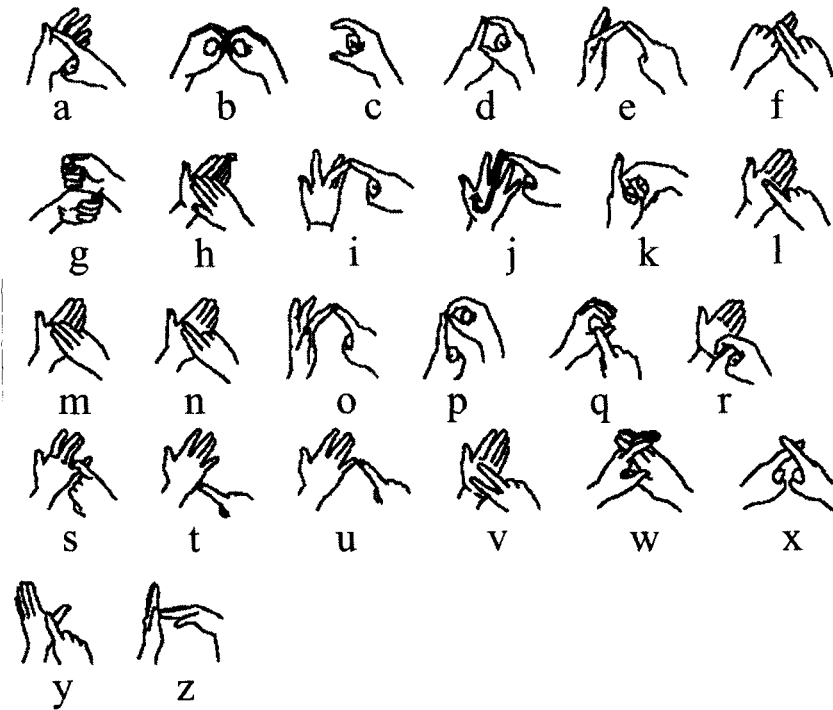


Figure 8.6 The Latin alphabet in British Sign Language

Speech does not leave fossils, so there are no records of the first time a group of hearing human beings expressed their innate need to communicate with one another. One can deduce, however, from the fact that every human community ever encountered has at least one spoken language, that such a system will arise whenever a group of hearing humans is brought together. Unlike with spoken language, there are multiple documented events of precisely this kind of spontaneous generation of a language happening with sign languages. Where there is a population of deaf people, if no one prevents them (and, as we'll see in the history of deaf education in America, even if people *do* try to prevent them), a sign language will emerge. Often this new language will show no obvious influence either from other sign languages or from spoken language(s) – truly the genesis of a new human language.

Importantly for the history of sign language in America (although not necessarily for the history of ASL, see later), one such system emerged on Martha's Vineyard (see Figure 8.7) in the 18th century. Martha's Vineyard Sign Language (MVSL) thrived throughout the 19th century but use of the language declined, and the last native signer passed away in 1952. Martha's Vineyard is a small island off the southern coast of Cape Cod in Massachusetts.

The island was originally inhabited by the Wampanoag (discussed in Chapter 7), who called it *Noepe*. The Europeans who lived on the island in the early 18th century shared it with the Wampanoag who lived on three separate reservations: Chappaquiddick, Aquinnah (aka Gay Head), and Christiantown. The population of Europeans included sheep farmers, whalers, and fishers who formed a small and close-knit community that included in its

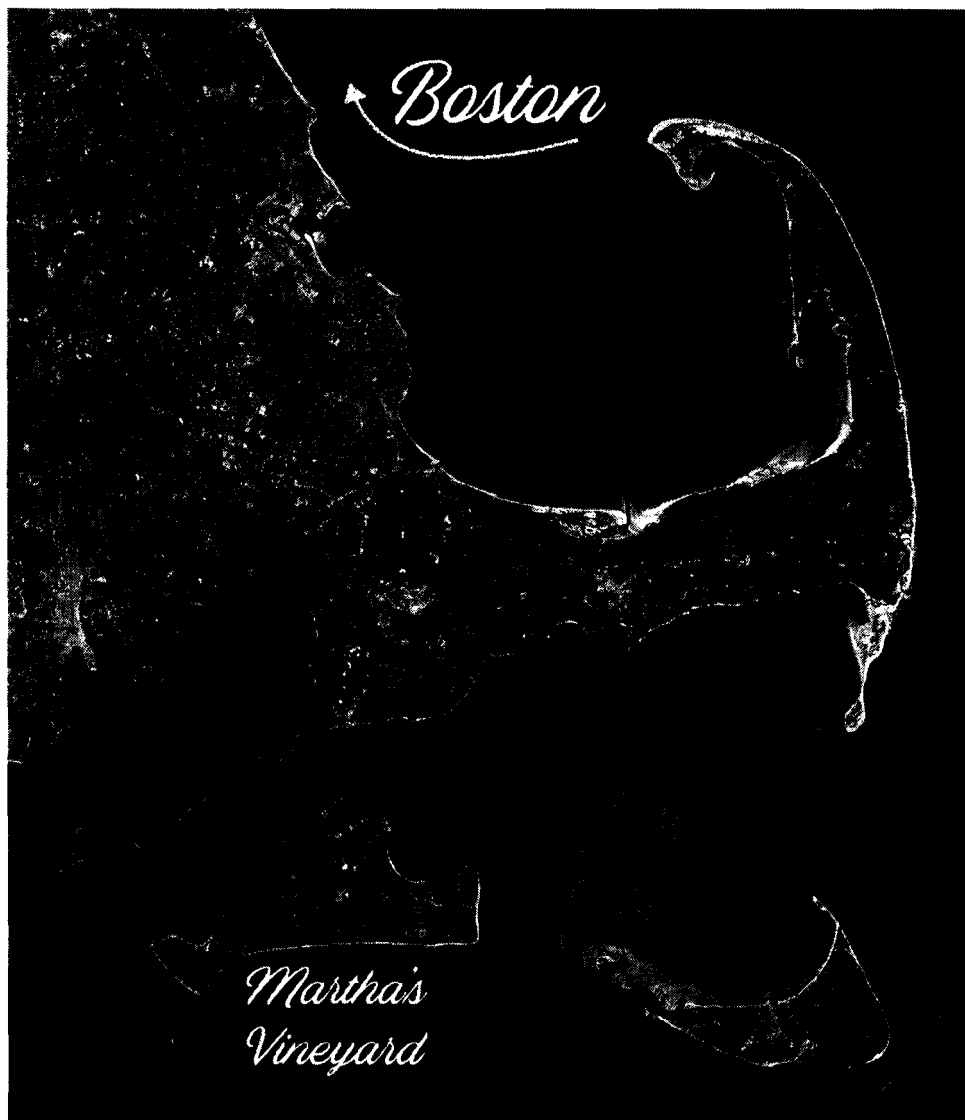


Figure 8.7 Map of Cape Cod and vicinity

genetic makeup a recessive trait for heritable deafness. There were deaf members of the European community on the island as early as 1714 (Groce 1985). Through a founder effect, whereby a population descended from a relatively small group of colonizing ancestors has reduced genetic diversity, the island soon boasted a higher-than-average rate of deafness among its residents. By one account, 45 of the island's roughly 350 residents were deaf at a time when the rate for the rest of the nation was closer to 1 in 5,700. In this small community with a high incidence of deafness, MVSL emerged naturally as a means of communication on the island.

When all the families in the area are interrelated and congenital deafness is commonplace (as it was on Martha's Vineyard at this time), it is reasonable to assume that everyone knew at least a few deaf people, and most people, deaf and hearing, had deaf relatives, friends, and neighbors. This is precisely the kind of social situation in which bilingualism thrives. Children will be born into families already fluent in a robust and evolving system of signs and, even more importantly, they will be comfortable interacting with deaf people. Ideologies about what counts as effective communication and what can be expected as reasonable accommodation among neighbors come to include sign and speech as equally valid, equally viable codes. MVSL came into common use among hearing and deaf neighbors alike such that deafness, precisely because it was widely accepted as normal, essentially disappeared as a source of social differentiation.

### **Being neighborly**

Of course, any community can show the kind of welcoming and inclusive environment found on Martha's Vineyard. Indeed, in a neighborhood in Newtown, Massachusetts, in 2019, a group of more than 20 neighbors learned ASL to communicate with their new neighbor, Samantha, a 3-year-old girl who was born deaf. People signed up for an ASL class and learned the language to help this girl and her family feel at home. In describing this phenomenal level of support, the neighborhood's ASL teacher, who acknowledged the importance of children having full access to language, said, "What this community is doing to support Sam shows the power people have to really change one person or one family's life" (ABC7.com 2019).

In this bilingual English/MVSL community, both languages were learned in the home or in early childhood. Groce (1985) cites many reminiscences from islanders discussing the use of MVSL among hearing residents. One resident recounted that one could go to the dual-purpose general store/post office in the early 20th century, where:

You'd go along and get your mail, or you'd buy half a pound of salt pork. . . . They'd gather every night. There'd be conversations going on between these deaf people, some of them are talking, making sign language, some of them are talking to hearing people, back and forth, and it was give and take. You never thought anything about it. And even these little kids . . . knew the sign language. And these older men would stop and talk to them kids, make signs back and forth, laugh and chuckle.

(Groce 1985: 60)

Notice this informant's use of "talking" to refer to both sign and speech inclusively; her language ideologies clearly include a belief that using sign for everyday communication is unexceptional and an understanding that deafness is a normal and unremarkable human characteristic.

This knowledge of sign and general comfort with deafness had powerful social consequences for what it meant to be a deaf person on Martha's Vineyard. Deaf people on Martha's Vineyard then were run-of-the-mill members of the broader community. Many deaf people

in other places at this time were limited by a worldview that excluded them, shunned them, or simply expected them to lack ability. Deaf people on Martha's Vineyard were expected to participate in religious services.

They would come to prayer meetings; most all of them were regular church people, you know. They would come when people offered testimonials, and they would get up in front of the audience and stand there and give a whole lecture in sign. No one translated it to the audience because everyone knew what they were saying. And if there was anyone who missed something, somewhere, somebody sitting near them would be able to tell them about it.

(Groce 1985: 62)

And deaf men and women were expected to work the same jobs, participate in the social life of the island, and generally just be Vineyarders.

We would sit around and wait for the mail to come in and just talk. And the deaf would be there, everyone would be there. And they were part of the crowd, and they were accepted. They were fishermen and farmers and everything else. And they wanted to find out the news just as much as the rest of us. And oftentimes people would tell stories and make signs at the same time so everyone could follow him together. Of course, sometimes, if there were more deaf than hearing there, everyone would speak sign language – just to be polite, you know.

(Groce 1985: 60)

This demonstrates that many of the disabling effects people associate with an inability to hear are not about hearing at all but rather emerge from the limitations placed on the deaf by the language ideologies and social expectations of the hearing. Deaf members of a society in which the prevailing language ideologies devalue the role of signed communications will suffer because of those ideologies – either finding themselves transformed into a minority group essentialized by their disability or required to participate in spoken communication that crucially depends on the only ability they are sure not to have. We will return to this theme of inclusion and exclusion again in the discussion of deaf culture.

### **Oralism vs. manualism**

Outside of special situations like Martha's Vineyard, in places where the percentage of deaf people in the population is typically small and language ideologies valorize speech and hearing over signed communication, living in a deaf body is made considerably more restricting. While MVSL and its signers were thriving on Martha's Vineyard, educational leaders and advocates for the deaf in much of Europe and North America sought to extinguish the use of sign languages among deaf children and adults. Proponents of *oralism* argued that deaf and hard of hearing children should be taught to read lips and to speak by imitating the speech gestures of the hearing. These scholars, teachers, and advocates saw that communicating and learning in sign language, or *manualism*, tends to create tight-knit communities among the people who share a sign language. Some hearing people openly feared that the tight-knit communities formed by a shared language would encourage intermarriage between the deaf and, therefore, tend to increase the number of deaf babies in the world. Others merely saw these communities of deaf people as isolating themselves from and limiting access to the

hearing, or “normal,” world. For oralists, then, the goal of education was to eradicate sign language and push deaf individuals to try to learn spoken English:

There is no problem which more nearly concerns every teacher in a school for the deaf than that of securing and maintaining speech intelligibility. Normal speech possesses a rhythm, a sing-song, of a natural kind, which, to the accustomed listener, is an aid to intelligibility, and often triumphs over gross phonetic faults. The speech of a deaf child lacks this natural rhythm, which can only be acquired through hearing.

(W. Carey Roe, Oralist, Principal at Royal Institution for the Deaf, July 1933, in Haycock 1933: 251)

Even with modern assistive devices like hearing aids and cochlear implants, learning to read lips and produce spoken language is a very different (and much more difficult) task for deaf people compared to the acquisition of spoken languages by hearing children. This is not to say that oralism’s goals are completely impossible. With sufficient time, energy, and struggle, it is possible for even a child who has been born profoundly deaf to acquire some speaking and lip-reading abilities. Lip-reading (or speech-reading as it is sometimes known among practitioners) takes advantage of a skill that all sighted listeners have to supplement (and even, under some conditions, override) the auditory speech signal with information from lip movements, jaw movements, tongue position (when visible), and facial expressions. Typically, without being consciously aware of it, hearing sighted people take in these visual cues and use them to disambiguate aspects of an utterance that might otherwise be unclear. People often become more aware of the usefulness of the visual components of the speech signal later in life when typical aging of the ear can make tasks like understanding someone in a crowded room more difficult. Lip-reading is most beneficial, therefore, to the hard of hearing – where partial hearing is present and the visual and acoustic signals can be used together or the acoustic signal can be boosted by means of an assistive device.

### **McGurk Effect**

The way hearing people unconsciously depend on visual cues during speech perception was dramatically demonstrated by McGurk and MacDonald (1976). They combined auditory and visual stimuli in an experiment that asked listeners to identify, on an answer sheet, what syllable they heard. In a control condition, for example, participants might have heard the syllable *ga* while watching video of a person saying *ga*. The more exciting trials happens when McGurk and MacDonald presented non-matching video and audio. The vast majority (98% of adults) of listeners hearing a voice say *ba* and seeing a carefully synchronized video of a person pronouncing *ga* would report hearing *da*. A similar, albeit weaker, result was obtained by combining a voice saying *pa* with video of a face pronouncing *ka* which would reliably cause the fused perception of *ta*. McGurk and MacDonald replicated this result with children as young as 3 years old as the listeners. Even when the audio is presented clearly, via headphones, under laboratory conditions to participants with typical hearing, participants cannot resist what has come to be known as the McGurk Effect. Indeed, one of

the most remarkable facts about this study is that even when listeners have the experiment explained to them and are instructed to hear *ba* instead of *da*, most participants will still report hearing *da*. Visual cues, even for hearing listeners, are simply part of the speech signal.

In the absence of any acoustic signal, or in cases where the acoustic signal is extremely attenuated, the information provided by lip-reading is of limited value. The speech sounds made with the lips ([p], [b], and [m] in English) are clearly visible but cannot be differentiated from one another by sight alone, so *pit*, *bit*, and *mitt* are impossible to distinguish except through context. Sounds using the lips and teeth together ([f] and [v] in English) or the teeth and tongue (the two sounds in English at the beginning of *thin* and *this*) can, again, be easily differentiated from other speech sounds but not from one another. Consonants at the back of the mouth ([k], [g], and [ŋ], the sound at the end of *wing* in English) can, depending on the neighboring vowel(s), provide some visual information that allows them to be differentiated from consonants produced further forward in the mouth. Beyond this, however, the remaining consonants and all vowels are all but impossible to distinguish visually with any accuracy.

Also missing in lip-reading are almost all of the prosodic cues (pitch, loudness, and duration) that hearing interlocutors use to help distinguish syllables, words, phrases, and sentences. Without either some auditory information or an unusually strong expectation of what a speaker is trying to say, even the most accomplished lip-reading by a deaf listener will contain many errors. In the absence of other forms of feedback that could highlight these errors to the speaker or lip-reader, these errors are likely to go undetected and could, in the worst case, leave the speaker with a strong sense that they have been well understood by a listener who is utterly confused and discouraged.

Compared to lip-reading, the production by spoken language by a deaf individual is more likely to succeed. Here, at least, the hearing interlocutor will typically know if they cannot understand what is being said, so opportunities for stealth miscommunication are rarer. Again, with sufficient time, energy, and struggle on the part of the deaf child, and with clear, accurate instruction from dedicated teachers, it is possible for a deaf speaker to learn to imitate most physical movements required to produce spoken language. This includes learning precise ways to move the lips, tongue, jaw, vocal cords, diaphragm, and even the velum (the port high at the back of the mouth that divides the nasal passages from the rest of the vocal tract and permits consonants like [m] and [n]). Methods vary for this instruction, but generally the student must rely heavily on the sense of touch to learn to feel the tongue gently and fleetingly touching the roof of the mouth and different teeth in carefully coordinated succession. The hands can be used to feel whether the vocal cords are vibrating and whether the nasal passages have been made to vibrate.

### **Understanding the speech mechanism**

To understand how speech articulation works, try this: Say (in prolonged form) the sounds [f] and [v] while gently touching the front of your throat. The buzzing you feel when you say [v] is the vibration of your vocal folds (a feature linguists refer to

as “voicing”), and it is the only thing that differentiates these two sounds. Or try this: Place your fingers on your cheekbones and say [aba]. Do the same thing with [ama]. The buzzing you feel is your nasal cavity vibrating, which is how you can make a distinction between [m], a nasal sound, and [b], a non-nasal or oral sound.

As indicated by the quote from Roe earlier in this section, the process of learning under oralism can be all-consuming. “Securing and maintaining speech intelligibility” becomes the primary focus of teacher and student so much so that educational content like science, mathematics, literature, and history are lost in the effort to approximate, but never match, the speech and hearing abilities that come naturally and effortlessly to the hearing. Still, oralism, as an educational philosophy, was the dominant paradigm in the United States, Great Britain, and numerous other countries from the mid-19th century through, in many places, the 1970s. In 1880, the so-called Second International Congress on the Education of the Deaf (“so-called” because, oddly, there had been no first conference) in Milan brought together delegates from Italy, Great Britain, France, the United States, Sweden, Belgium, and Germany. Of the 164 delegates in attendance, only one was deaf. The Milan conference issued eight resolutions urging governments to take the necessary steps to ensure that all deaf children receive an education but that the modality and content of that education should ban the use of sign languages in favor of an oralist methodology. Consequences of this meeting included the banning of sign language instruction, the firing of teachers of the deaf who were themselves deaf, and a wholesale switch to oralist teaching methods that lasted for generations.

One outspoken and influential proponent of oralism in America was Alexander Graham Bell. In addition to being credited with inventing the telephone, Bell was a eugenicist and Social Darwinist who feared the creation of a “deaf race” that would be deleterious to the purity of the human race (Bell 1884). Bell warned that a number of factors could result in such a scenario: the creation of residential schools for the deaf, the instruction of deaf children by deaf teachers, and the possibility of two deaf parents having deaf children. Of particular concern for Bell was the use of sign languages by the deaf, writing:

As there are 1,500 hearing persons for every one deaf-mute, it seems difficult to formulate any plan which would restrict their choice of partners in life to deaf-mutes alone or to the hearing members of deaf-mute families. . . .

What more powerful or efficient means could be found than to teach the deaf-mutes to think in a different language from that of the people at large? This is what we do. In the majority of our institutions for the deaf . . . a special language is used as the vehicle of thought, a language as different from English as French or German or Russian.

(Bell 1884: 42)

Bell’s recommended solution, which he personally put into action with generally poor outcomes in Scotland, Wisconsin, and Washington D.C., was to shut down residential schools for the deaf where a mixture of hearing and deaf teachers would instruct a population of deaf students using sign language in favor of day schools where hearing teachers would instruct pupils in lip-reading and speech by means of imitation.

In his time, Bell was considered a lifelong advocate for the deaf and for deaf education. His mother, Eliza Grace Bell (née Symonds), was hard of hearing and could make out some sounds by means of a speaking tube. She was a musician and young Alexander's primary teacher. Bell's wife, Mabel Bell (née Hubbard), became profoundly deaf after surviving scarlet fever at the age of 5 and was a student of Bell's oralist methods prior to their marriage. Bell's father, Alexander Melville Bell, was an oralist teacher who developed a system of writing, called Visible Speech, intended to present deaf students with an articulatory description of speech movements in the hope that it would enable them to produce more natural-sounding speech in the absence of feedback from their ears. Even so, Bell's efforts to wipe out sign language and to require that all deaf children be instructed via oralist methods have tarnished his reputation in the deaf community and left him a deeply unpopular figure to this day.

A contemporary of Bell's who espoused the opposing manualist view for deaf education was Thomas Hopkins Gallaudet. Gallaudet was tasked with founding the first school for the deaf in the United States. He was already familiar with the manualist efforts of Abbé de l'Épée and his successor, Abbé Sicard, who had repurposed the sign language of Paris for use as the most natural mode of instruction in schools for the deaf in France. L'Épée saw the use of visual sign language for deaf students as bringing students in through the window when the door was barred. In other words, l'Épée espoused using the most comfortable and natural form of communication available for the student to allow a focus on education rather than focusing on eradicating that form of communication. However, it was not to France, but to oralist England, that Gallaudet initially went seeking instruction in how to teach deaf students. There he found himself denied access to the methods of the monopolistic Braidwood Academies and feared he might be forced to return to America empty handed. As fate would have it, though, Gallaudet was in England at the same time as the Abbé Sicard and two of his assistants: Jean Massieu and his student Laurent Clerc. These French manualists eagerly welcomed Gallaudet and instructed him in their methods. Gallaudet was even able to convince Laurent Clerc to accompany him back to the United States where they founded what is now the American School for the Deaf in Hartford, CT, on April 15, 1815. The school opened and began serving students in 1817.

American Sign Language as it is used today can trace its roots directly to the founding of this school. Most of the students at the school in the early years came from Martha's Vineyard, but significant groups also came from Henniker, New Hampshire and southeastern Maine. These groups would have brought knowledge of their own community sign languages and home signs. Clerc brought his native command of French Sign Language (or *langue des signes française*, shortened as LSF). What emerged within the Hartford school, and later at a new school in Philadelphia that Clerc was also central in establishing, was a new language: ASL.

It is tempting, given the large number of MVSL signers present at this early school, to speculate that ASL is, at its core, MVSL. Alternatively, it is tempting to speculate, given that Clerc's LSF formed the basis for the language of instruction and that modern ASL shares so many words with modern LSF, that ASL is merely a dialect of French Sign Language. Neither of these extremes is supported by the available evidence, however. Groce's interviews provide evidence that children at the Hartford school returned to Martha's Vineyard using an unfamiliar sign language that was no longer MVSL. Clerc's own journals report that the language in use among the students was not his own LSF but reflected many words and constructions brought by the students themselves, rather than the faculty (Padden 2010). About 60% of the vocabulary of ASL comes from LSF with the other words coming from

MVSL and still others emerging on their own in the context of the school. Unlike languages imported from Europe (like English or Spanish), ASL is truly an American language.

In April of 1864, at the same historic moment that the US Congress was approving the 13th Amendment, which abolished slavery, they also approved the charter for the Columbia Institution for the Instruction of the Deaf, Dumb, and Blind. Edward Miner Gallaudet, Thomas Hopkins Gallaudet's son, was the Institution's first superintendent, and the school, now Gallaudet University, bears his father's name. The ASL sign for the elder Gallaudet is made by indicating the temple of his eyeglasses, and this is also the first half of the name sign for Gallaudet University. It is difficult to overstate the significance of Gallaudet University to the deaf community over the past 150 years. It is the only liberal arts college in the world designed to foster barrier free communication for deaf and hard of hearing students. And since its inception, Gallaudet has always incorporated sign as a mode of instruction, even during the long period when sign languages were banned at all residential schools in the United States.

### **Name signs**

Many readers might be familiar enough with ASL to know how to spell their name in finger spelling (if not, try it by using Figure 8.4). Readers may not be familiar with the idea that ASL users do not simply spell all people's names every time. Instead, name signs are developed; these are signs for individuals that are given by culturally deaf people. They create unique signs that follow the structural rules for this naming practice in accordance with the local and culturally acceptable ways of naming within the community. They are also typically reflective of the personality of the recipient.

When William Stokoe arrived at Gallaudet to teach English in 1955, he was a specialist in Middle English (especially Chaucer) with no training in either sign languages or linguistics. He and the many other hearing professors were instructed to speak normally, so that the students could lip-read, while presenting some of the words in signed English (substituting signs for English words and using English grammar rather than the grammar and lexicon of ASL) and fingerspelling any words he did not know how to sign. The prevailing, published academic wisdom of the time was that the deaf had, at best, "broken language." Even within Gallaudet in 1955, Stokoe was told by older colleagues that his deaf students would understand only the simplest language and therefore "could not achieve full mental development." Stokoe even reports one colleague who used overtly racist language and compared their eager students to dogs to reassure him that he would still enjoy teaching the deaf because they tried so hard to please (Stokoe 2002: 3).

It was in this extremely prejudicial educational environment that Stokoe recognized that the system of signs his students and deaf colleagues used to communicate with one another was far more complex and expressive than the awkward signed version of English he used in his own teaching. In 1960, he documented this robust language in the paper *Sign language structure*, which provides a scientific analysis as evidence of the status of sign language as true human language. He provides a detailed analysis of the many parallels he observed between sign language and the organization and structure of sounds in spoken languages. He

proposes a nascent system for capturing sign language in writing, briefly discusses the existence of sign language dialects, and describes ongoing efforts to understand the morphology and syntax of the language in use at Gallaudet among the deaf. This groundbreaking research became the first serious study of what is now known as ASL.

Stokoe did not invent ASL nor did he discover ASL (in the same way that Newton did not “invent” gravity and Columbus did not “discover” America). Stokoe’s real, significant, and far-reaching contribution to deaf culture was to describe ASL in a way that forced even ardent skeptics to recognize that, in fact, ASL is a regular human language like any spoken language. By bringing this kind of credibility to ASL, Stokoe showed that the deaf were not only able to produce language but were capable of much, much more than people had previously assumed. Stokoe’s students, of course, already understood that the signing they used to interact with their community was a language, but Stokoe deserves credit for being able to see past the prevailing language ideologies of his day. Hearing teacher after hearing teacher, for generation after generation, failed to effectively reach deaf students by speaking at them in a language that they could not hear. Stokoe recognized the possibility that when there were clear communication breakdowns between himself and his students that perhaps the failing was not in the generations of ill-served deaf students but in the mode of communication teachers had attempted to use. Stokoe was not the first to see this, of course. L’Épée had seen it. Sicard, Massieu, Clerc, and the Gallaudets had seen it. Thinkers as far back in recorded history as Socrates seem to have seen it as well. But William Stokoe taught himself and then used the scientific tools of linguistics to enable others to see it too.

Recent evidence from functional Magnetic Resonance Imaging (fMRI) suggests that signing depends on the same areas of the brain that support speech in the hearing and, crucially, does not depend upon the areas of the brain activated for non-linguistic gestures (Tabak 2006: 129–131). Related to this, there is convincing evidence that a foundation in sign language is the best way to foster later development of proficiency in a second language – be that second language accessed through speech/lip-reading or reading and writing (Lillo-Martin et al. 2016). Yet there is still much that is not understood about sign languages and how they work. We cannot yet answer simple questions like how many sign languages exist in the world right now or how they all historically relate to one another. Unlike with spoken languages, we cannot reconstruct older forms of sign languages to understand how, and at what rate, these languages change. Finally, we do not yet fully understand the interaction between sign language acquisition and the use of cochlear implants. Cochlear implants are assistive devices that can bring sound sensing abilities to people with either congenital or acquired deafness. There is some research suggesting that the bilingualism granted to cochlear implant recipients by a firm foundation in sign language can improve, or at least does no harm to, their later acquisition of speech (Quadros et al. 2016).

### **Language ideology and deaf culture**

Language ideologies like monolingualism constrain and shape what a deaf person is allowed to achieve. These ideologies shape everything from the intimate moment of how a hearing parent feels about having a deaf baby to the very public architectural decisions made by and for the hearing (from the placement of walls to the arrangement of chairs in a classroom to the presence of a vibrating air conditioner) that can be inconvenient or even painful to the deaf who must also inhabit these spaces. The deaf represent a minority group, and ASL and other sign languages are minority languages in minority/majority relationships with their ambient spoken languages.

It is difficult to reconcile the low success rates of oralist teaching with the apparently sincere belief among so many of its proponents, like Bell, that their work was in the best interest of the deaf people whose lives they so profoundly diminished. Markowicz (1972), writing at a time when oralism was still the dominant, standard form of deaf education in the United States, reports the results of a study finding that, at 88 oralist schools surveyed, only 5% of deaf children 16 or older had achieved the 10th grade – which their hearing peers typically reach when aged 15 or 16. In a separate study, only 12% of deaf children in these schools had achieved competence in reading English. Still, these oralist methods persisted into the 1980s, and the resolutions of the 1880 Milan conference were not formally rescinded until 2010 when the 21st International Congress on the Education of the Deaf released a formal declaration acknowledging the damage caused by the 1880 ban on sign language in deaf education.

How is it possible for well-meaning (hearing) teachers and academics to cling for so long to such a destructive approach to deaf education? The answer lies in some of the advice William Stokoe reports being given when he first arrived at Gallaudet. Even within the comparative safety of that bastion of sign language and deaf culture, many of Stokoe's colleagues conceived of the deaf as essentially and fundamentally incapable. They, like Bell, the Milan conference, and literally generations of oralist advocates and teachers, unquestioningly and uncritically accepted language ideologies that disabled their own ability to recognize the deaf as full human beings; these ideologies constrained the hearing's willingness to see the deaf as fully human and thereby diminished their own humanity.

If one begins with the presumption that deafness is primarily a medical disability and inability – no matter how noble one's motives might be – then the failure of an oralist mode of education will seem to be a failure of the “disabled” students rather than resulting from the modality of instruction. As with any unquestioned belief, it is exceedingly difficult to see through one's own ideologies and the prevailing ideologies of one's community and to consider the possibility that it is the mode of instruction that is to blame. Successfully seeing through these ideologies requires radical thinking and empathy, but it is not necessary to wait for exceptional individuals like Gallaudet and Stokoe to act as Prometheus and bring this insight to the world. This kind of self-critical thought is well within the ability of anyone willing to invest the effort and ask difficult questions.

One can begin to unpack the way these ideologies shape the deaf experience by analyzing *audism*. At its core, audism is the belief that one who can hear the typical range of frequencies at the typical volume is superior to someone who cannot. This ideology makes it feel natural or “common sense” to view sign languages as inferior to spoken languages (or, worse, to view them as not being languages at all) and to view anyone who cannot live as the hearing do (particularly anyone for whom sign language is the most natural means of communication) as inferior. The ideology of audism constructs the deaf and other sign language users as disabled, leaving the hearing person infected with this negative stereotype susceptible to truly appalling ideas like eugenics or comparing deaf students to dogs, as Stokoe's colleague did. Audism is merely an ideology and not a fact about the universe; in the natural experiments in history where this ideology has not been dominant, the deaf have prospered.

The situation Groce describes on Martha's Vineyard in the 18th and 19th centuries is one such natural experiment. As we have seen in the words of the Vineyarders themselves, the deaf were fully capable members of the community: they were fishers, shopkeepers, parents, and worshippers alongside their hearing neighbors. Every role that was available to hearing residents of the island was available to deaf residents. They were just normal people unhindered by discriminatory language ideology and its unquestioned dismissal of the deaf as fully human.

A strikingly different social situation has occurred within Gallaudet University since the 1960s. In 1988, Gallaudet was in the process of hiring its seventh president. There were three final candidates for the position, two deaf and one hearing. Students rallied to have one of the (fully qualified) deaf candidates selected – even holding a candlelight vigil the night before the selection was to be made. Students were unhappy when the board selected the only hearing candidate but were enraged when the chair of Gallaudet University’s governing board, Jane Bassett Spilman, was reported to have said, “the deaf are not yet ready to function in the hearing world.” Rallies quickly turned to protests (see Figure 8.8) as the Deaf President Now (DPN) movement marched thousands of students to the White House and Capitol building and then, on March 8, 1988, used bike locks to close administration buildings and barricaded the campus with their cars. Their unrest forced Spilman to resign, and the new board immediately replaced the seventh president with I. King Jordan, Gallaudet’s eighth president and, after 122 years of operation, its first deaf president. Jordan served until 2006.



*Figure 8.8* Deaf President Now students protest the selection of another hearing president at Gallaudet University

The selection of I. King Jordan through pressure from the DPN movement marks an unusual inflection point in the acceptability of a language ideology. It also demonstrates that audism, as an ideology, and oralism, as a teaching methodology, are separable. The vast majority of oralists have consciously or unconsciously accepted the superiority of hearing. The necessity of DPN demonstrates that even among those who espouse a manualist philosophy and advocate for the incorporation of sign language as a mode of instruction have also, again, consciously or unconsciously, accepted an audist ideology. After the success of the DPN movement and during the subsequent presidency of I. King Jordan, audism has come to be recognized as an unacceptable and discriminatory belief at Gallaudet. The ideologies surrounding the capabilities of deaf people have shifted so much that now Fred Weiner, a graduate of Gallaudet who was active in the DPN movement and is now an administrator at the university, describes a change in the culture whereby “being a deaf person at Gallaudet [is] considered a typical experience” and the university is “operating as a typical university who happens to have deaf people attending” (Goldgeier & Mcleskey 2018).

The final ideology we will consider here is one we have really been pursuing all along: the view of deafness as purely a medical deficit, or the *medical model* of deafness. At the beginning of the chapter, we indicated that most people communicate with the world through sound. Hearing people outnumber deaf people by a large percentage and not all deaf people sign. And it really is the case that many forms of deafness, either from birth or gained later in life, *are* the result of medical conditions. The development and distribution of a safe and effective vaccine to fight rubella, for example, is correlated with a measurable decrease in the number of deaf children entering American schools. This relationship leads many to view deafness itself as a medical condition that can only have negative impacts on the sufferers’ lives. But what we have shown through the cases of Martha’s Vineyard, ASL, Gallaudet University, and other examples is that the medical deficit ideology really is just an ideology. It is countered by the *cultural model* of deafness which views it as fundamentally positive. Under this model, deaf people are a linguistic and cultural minority organized around a visual and manual mode of communication with their own accents, art, poetry, dance, architecture, and more. To the extent that deafness is a struggle in a hearing-dominated society, that struggle is created by the medical deficit ideology and not by the deafness itself. While the origins of deafness might, indeed, be medical, the resulting deaf baby, child, or adult is simply a human being with dreams, ambitions, rights, and language attitudes.

### **The beauty of community**

Actor, model, and dancer Nyle DiMarco’s first language is ASL. He grew up in Frederick, MD, where he attended the ASL/English bilingual Maryland School for the Deaf. He attended Gallaudet University in nearby Washington, D.C., where he earned a bachelor’s degree in mathematics. DiMarco rose to fame soon after graduation by being named the 2015 winner of the reality television show *America’s Next Top Model*. He was also the winner, with dancing partner Peta Murgatroyd, of the ABC television show *Dancing with the Stars* in 2016. DiMarco is a deaf activist and has a moving way of describing deaf life: “We have our own culture, our own community. A lot of people don’t realize that. They just assume that deaf people are very unfortunate, very disabled, but no. I think the biggest misconception is that people think deaf people are not able to do things.”

### **Ideologies within the deaf community**

Just as there are many ways to be deaf, there are many ways to live as a deaf person. Within the American deaf community itself, ASL is a marker of social identity (Hill 2015). The term *deaf* is one end of a spectrum. One can also be *hard of hearing* which describes someone with some hearing ability who may also use ASL and other sign languages. Someone who is *oral deaf* has no or little hearing but does not embrace deaf culture and prefers oral communication to sign languages. People who are *late-deafened* may have little or no hearing ability due to some injury or illness and may prefer signed or oral communication. Finally, one can also be *hearing*, although this term does not necessarily imply that one rejects deaf culture or preclude one from being an ally of the deaf community; these meanings are often intertwined.

Within the deaf community, assistive devices are highly controversial and can serve to further demarcate one's social identity. Some deaf people consider assistive devices anathema to deaf culture while others happily use and support the use of hearing aids and cochlear implants. The situation is contentious and highly personal. Hearing aids are essentially just personal amplifiers, worn discretely near the ear, with microphones that pick up the most important frequencies for speech and relay them, via a small earbud, into the ear. A cochlear implant, by contrast, is a medical implant that is inserted into the cochlea (the coiled tube lined with fine, delicate hair cells) to turn microphone signals into direct electrical stimulation of the auditory nerve cells (Copeland & Pillsbury 2004).

Cochlear implant hearing is not at all like natural human hearing, and not all who receive a cochlear implant will then acquire spoken language. As a further complication, the likelihood that a cochlear implant user *will* acquire spoken language decreases as the child grows older. The highest success rates are seen when deaf babies receive cochlear implants when they are very small to maximize their exposure to the normal period of first language acquisition. One common trope on the internet is the video of a deaf baby hearing their mother's voice for the first time. These beautiful moments sometimes go viral but there are no viral videos of the long and sometimes unsuccessful process of learning to translate those first aural sensations to speech perception. But for those for whom the technology works, the effect can seem very like the magic potion described earlier in the chapter. Babies who are born deaf to hearing parents (90% of deaf babies) could grow up to have hearing-like communication abilities. Here, as might be imagined, the language ideologies of monolingualism, audism, and medical deficit have profound impacts, and the discussions often become heated.

Ultimately the decisions one makes about deafness – for oneself or on behalf of a child – are highly personal. What an understanding of language variation and language ideology can teach people, definitively, is that the decision is not between a life filled with language and culture and a life of silence with neither. American Sign Language, like all sign languages, is a fully expressive, fully communicative human language. It is part of a robust culture of deaf, hard of hearing, and hearing signers who have access to art, culture, education, and careers built around the use of ASL. Fears of communicative deficit through deafness are arbitrary social constructs. These arbitrary social constructs have very real consequences for the lives of deaf and hard of hearing people, but these consequences come from the limitations imagined upon the deaf by the hearing rather than the deafness itself.

### **Discussion questions**

1. How are sign language and spoken languages similar? How are they different? How do these two modes compare to writing? Think about these three modes of communication and write a list of similarities and differences.
2. American Sign Language, which shares some of its history with French Sign Language, looks very different than British Sign Language (BSL). See the BSL fingerspelling chart in Figure 8.6 in the chapter and describe how the letters in BSL differ from those in ASL (found in Figure 8.4 in the chapter).
3. Why do you think it was important to the students at Gallaudet University to have a deaf president? What did it represent for them? How did it transform the community?