# Savages and Deaf-Mutes

# Evolutionary Theory and the Campaign Against Sign Language.

Douglas Baynton

A late nineteenth century movement to prohibit sign language in the schools dramatically transformed the education of deaf people in the United States. From 1817, when the first American school for deaf pupils was founded, until the 1860s, nearly all educators of the deaf considered sign language indispensable. Several generations of teachers not only used "the noble language of signs", as teachers often termed it, but devoted much effort to using it well (Turner 1848: 78). They respected and admired sign language, cultivated their signing skills with care and pride, and wrote learned treatises on its nature and proper use. Beginning in the 1860s, however, a new generation waged a campaign to replace the use of sign language in the schools with the exclusive use of lip-reading and speech. The reasons for the turn against sign language were many and complex, but among them was the influence of the new theories of evolution. Evolutionary theory fostered a perception of sign languages as inferior to spoken languages, fit only for "savages" and not for civilized human beings.

In the latter decades of the century, two hostile camps developed within the field of deaf education, with the mostly older "manualist" educators defending the use of sign language against their mostly younger "oralist" adversaries. Most schools began offering oral training in the 1860s and 1870s, but this was not the crux of the issue for oralism's advocates. They insisted not only that training in oral communication be offered, but that all classes be conducted solely by oral means. Oralists charged that the use of sign language damaged the minds of deaf people, interfered with the ability of deaf children to learn English, and reduced the motivation of deaf children to undertake the difficult but, in their view, crucial task of learning to communicate orally. They sought the complete abolition of sign language in the schools, in hopes that it would then disappear from use outside of the schools as well.<sup>2</sup> In the larger sense, the oralist movement failed. Sign language continued to be used and vigorously defended by the deaf

community. Deaf parents passed sign language on to their children, and those children who were deaf passed it on to their schoolmates. Indeed, even most schools that were trying to discourage the use of sign language found they could not do without it entirely, reserving it for the always substantial number of older "oral failures". Oral communication was simply too impractical for many deaf people, and sign language too cherished by the deaf community, for the latter to disappear completely.<sup>3</sup>

Oralism nevertheless did have a profound impact on deaf education. By the turn of the century, nearly 40 percent. of American deaf students sat in classrooms from which sign language had been entirely banned; over half were taught orally for at least part of the day (Bell 1899: 78-79). By the end of World War I, nearly 80 percent. of deaf students were taught entirely without sign language (see the *Volta Review* 1920: 372). Oralism remained orthodoxy until the 1970s when sign language began to return to the classroom.

The advocacy of oralism was not new in the late nineteenth century. Oralism had been promoted in the United States before the 1860s, but with little success (Lane 1984: 281-336). Why did manualism remain dominant throughout most of the nineteenth century, only succumbing to the oralist challenge at the end of the century? What had changed?

The campaign against sign language in deaf education was not an isolated phenomenon unconnected to larger developments in American culture. Rather, it was symptomatic of a new understanding of human history — and of the place of sign language in that history — that accompanied the rise of evolutionary theory in the late nineteenth century.

#### A New Past

This new understanding of human history was evident in the 1899 keynote address by the president of Amherst college, John M. Tyler, to the summer convention of the American Association to Promote the Teaching of Speech to the Deaf. America would "never have a scientific system of education", Tyler insisted to his audience of oralist teachers and supporters, "until we have one based on the history of man's development, on the grand foundation of biological history". Therefore, the "search for...goal[s] of education compels us to study man's origin and development", he contended,

and he then outlined for his listeners the two major theories of that origin and development (Tyler 1899: 19-21). The first was the creationist theory, the belief that "man was immediately created in his present form, only much better morally, and probably physically, than he now is. Man went downhill, he fell from that pristine condition". The second was the theory of evolution. Tyler felt confident that he could "take for granted" the truth of the theory of evolution and that most of his listeners had "already accepted it" (Tyler 1899: 19-21 and 26).

Here was a crucial cultural change that separated those first generations of teachers who used sign language from the later generations who attempted to do away with sign language. Most of the former came of age before the publication of Charles Darwin's *Origin of Species* (1859), and had constructed their understanding of the world around the theory of immediate creation. Most of those opposed to the use of sign language belonged to a younger generation whose world view was built upon an evolutionary understanding of the world.

While natural selection (the mechanism Darwin advanced in 1859 to explain how evolution worked), was not widely accepted in the United States until after the turn of the century, the general idea of evolution itself quickly found widespread acceptance (Bowler 1989, Greene 1981, Ellegard 1990, and Hofstadter 1955). Evolutionary thinking pervaded American culture during the years that oralism became dominant in deaf education. That is, evolutionary analogies, explanations and ways of thinking were ubiquitous. Psychologists theorized mental illness as evolutionary reversion. Criminologists defined "the criminal type" as a throwback. Social policies were defended or attacked on the basis of their ostensible likelihood to further or stunt evolution. Even sin came to be described as "a falling back into the animal condition". 5

Evolutionary theory set the terms of debate in deaf education as well. It was no coincidence that oralist theory began to transform deaf education in the United States during the same period that evolutionary theory was radically changing how Americans defined themselves and their world. The most important aspect of that change for deaf people and their education occurred in attitudes toward language — specifically the relative status and worth of spoken and gesture languages.

# New Responsibilities

Tyler continued his address by admonishing his audience of teachers that the recent discovery of the laws of evolution gave them important new responsibilities. While humanity was "surely progressing towards something higher and better", there was no guarantee that it would continue to do so (1899: 22). Echoing a neo-Lamarckian interpretation of evolutionary theory common at the time, one that was especially popular in the United States, Tyler explained that continued human evolutionary progress would require active effort (Bowler 1989: 296-99). The human race would continue its onward and upward course only if certain 'bequests from our brute and human ancestors' were consciously eliminated. Quoting from an unidentified poem, he exhorted his listeners to "Move upward, working out the beast/And let the ape and tiger die" (Tyler 1899: 22, 26).

Just as the adult must put away childish things, Tyler explained, so must the human slough off that which is brutish. By studying the characteristics that separated the higher animals from the lower and tracing "how Nature has been training man's ancestors at each stage of their progress", teachers could find vital "hints as to how we are to train the child today". If, in short, they could "find what habits, tendencies, and powers Nature has fostered, and what she has sternly repressed" then they would know what they ought to encourage and what to repress. It was crucial, Tyler insisted, to

[M]ake our own lives and actions, and those of our fellows, conform to and advance [what had been the upward] tendency of human development in all its past history [else our] lives will be thrown away (1899: 22-26).

Tyler's speech would have held no surprises for his listeners. His ideas were the common currency of educated and popular discourse by 1899. Nothing he said would have seemed the slightest bit radical or unusual to his audience of oralist teachers. Indeed, it would have confirmed beliefs already firmly held and (to their eyes), explicitly associated with their work -- an association that concerned the relationship, for their generation, between speech and gesture, on the one hand, and humanity and lower evolutionary forms of life on the other.

# Condillac and the History of the Species

It was commonly speculated throughout the nineteenth century that humans had relied upon some form of sign language before they had turned to spoken language. Readers should see Hewes (1973: 5), Diamond (1959: 265), Sommerfelt (1954: 886-892) and Tylor (1878: 15). The idea seems to have originated with the French philosopher Etienne Bonnot de Condillac in the mid-eighteenth century.

When Condillac historicized Locke's empiricist epistemology, taking Locke's explanation of the psychological development of the individual and projecting it onto the history of the human species, he naturally directed his attention to the question of the origin and development of language. In a section of his Essay (1746) subtitled 'On the Origin and Progress of Language' Condillac began with the conventional affirmation that reason and speech were gifts from the Creator to "our first parents". Having satisfied orthodoxy, he then went on to speculate about how language might have been invented by people if by some chance it had been necessary to do so — say, if two untutored children had survived the great flood alone and had had to create a new language between them. Suggesting this hypothetical circumstance allowed Condillac to theorize, from a basis of sensualist philosophy, that such children would first be limited to inarticulate cries, facial expressions, and natural gestures in their communication with each other.<sup>6</sup>

In the *Essay*, Condillac supposed that gestures — or what he called the "language of action" — would be confined to the early stages of linguistic and intellectual development, and because of its inferiority would gradually be superseded by speech. However, as the German historian Fischer has recently pointed out (1993: 431-433), Condillac markedly revised the views he held in 1746 in his *Grammar* (1775), after visiting the Institution for Deaf-Mutes in Paris where he conversed with its founder, Abbé de l'Epée.

He came to believe that the "language of action" was not necessarily inferior to speech in what it could communicate, and that it could be "extended sufficiently to render all the ideas of the human mind". What Fischer called "this revolutionary view" about the independence of language efficiency from its medium was also the view of most nineteenth-century American manualists, with one important exception. Unlike Condillac, the

manualist assertions that language was originally a gift from God were not mere formalities, but matters of fundamental belief.

By the nineteenth century, the question of the origin of language had become an important topic of philosophical discussion. Condillac's theory of the primacy of gesture had found a great many adherents. Manualist teachers, most of them college-educated men, were well aware of the discussion. As experts on sign language, they were naturally interested in the possibility that gestures preceded speech, and they frequently alluded to the theory in their professional journals and conferences. They were pleased by, and took pride in, the idea that "sign or gesture language is of great antiquity"; that "many philologists think that it was the original language of mankind" and that sign language might have been "in the designs of Providence, the necessary fore-runner of speech".

As evangelical Protestants, manualists interpreted the theory in terms of Biblical history. According to their creationist understanding, humanity had come into the world essentially in its present form. They disagreed on finer points, i.e. the precise nature of the first humans, for instance. Some held to the literal story in Genesis, arguing that God had created Adam and Eve with a complete language ready for use. Others sought to adapt the Biblical account to recent intellectual trends, treating it more loosely, suggesting that God had originally given humans the capacity for language and had left them to develop that capacity themselves over time.

Of those who believed that language developed over time, many argued that some form of gesture or sign language must have been used before spoken language (see Peet, 1855: 20 for extended discussion, and Valade 1873: 31). But, even though humans were thought perhaps to have developed in some ways since the creation, such as in language, it was widely held that humans had remained the same morally and intellectually — or that these faculties had actually degenerated (Peet 1855: 15 and Tyler 1899: 20). The idea that sign language preceded speech did not imply inferiority within the framework of the manualists' Protestant beliefs — indeed, it was a mark of honor.

# Different Interpretations

Oralist educators of the late nineteenth century, however, would show an even greater interest in the idea that sign language preceded speech, and gave a very different interpretation to its significance. To the manualist generation, "original language" meant "closer to the Creation". It held different connotations for post-Darwin oralists, for whom it meant, instead, closer to the apes. According to the theory of evolution, humanity had risen rather than fallen. It was the end product of history rather than its beginning. In an evolutionary age, language was no longer an attribute inherent in the human soul, one of an indivisible cluster of abilities that included reason, imagination, and the conscience, conferred by God at the Creation. It was, instead, a distinct ability achieved through a process of evolution from animal ancestors. Sign language came to be seen as a language low in the scale of evolutionary progress, preceding in history even the most "savage" of spoken languages and supposedly forming a link between the animal and the human. The "creature from which man developed in one direction, and the apes in another", probably used rudimentary forms of both gesture and speech, as one writer in science speculated. While in humans the "gesture language was developed at first", speech later supplanted it. On the other hand, "in the apes the gesture-language alone was developed" (Jastrow 1886: 555-556).

Linguists of the late nineteenth century commonly applied to language theory what has been called "linguistic Darwinism". Inferior languages died out, they argued, and were replaced by superior languages in the struggle for existence (Stam 1976: 242-250). Gestural communication seemed to have been an early loser. The American philologist, Williams Dwight Whitney, for example, believed that human communication once consisted of

[A]n inferior system of...tone, gesture, and grimace...[It was through the] process of selection and survival of the fittest that the voice has gained the upper hand (Whitney 1876: 291).

# The Stigma of Inferiority

The languages of early humans could not be directly studied, of course. No fossils are left recording speech, gesture or expressions of the face. Anthropologists, however, began in the latter decades of the nineteenth century to see the so-called "savage races" as examples of earlier stages of evolution. Assuming a model of linear evolutionary progress, they depicted them -- Africans, American Indians, Australian Aborigines and others -- as "living fossils" left behind by the more rapidly progressing cultures (see Bowler 1989: 233 and Hoxie 1989: 115-145 for apposite discussion). This way of understanding evolution provided them with an ostensible means of studying early human cultures and language.

An eminent British anthropologist, Edward B. Tylor, for example, noted in his Researches Into the Early History of Mankind that

[S]avage and half-civilised races accompany their talk with expressive pantomime much more than nations of higher culture[s] [indicating (to him) that] in the early stages of the development of language ... gesture had an importance as an element of expression, which in conditions of highly-organised language it has lost (Tylor 1878: 15 and 44).

Although Tylor took a great interest in gestural languages and was apparently familiar with British Sign Language besides having friends who were deaf, he held to the prevailing evolutionary assumption that sign language was a primitive — and therefore inferior — form of communication.<sup>8</sup>

Garrick Mallery, a retired U.S. Army colonel who studied American Indian cultures for the Bureau of Ethnology at the Smithsonian Institution, was probably the foremost expert in the nation on Indian sign languages. His articles and lectures were sometimes reprinted in the *American Annals of the Deaf*. Along with early anthropologists, he believed that while early humans had probably not used gestures to the complete exclusion of speech, it was likely that "oral speech remained rudimentary long after gesture had become an art".

While Mallery associated sign language-use with a lower stage of evolution, he nevertheless had a genuine fascination and respect for sign languages, as Tylor did. He defended aboriginal users of sign language

against charges that they employed gestures only because their spoken languages were deficient. The common traveler's story that some aboriginal spoken languages were not sufficient by themselves to permit conversations after dark was not true, he insisted. He argued that the use of sign language was largely a function of the number of disparate languages spoken within a region, believing that "as the number of dialects in any district decreases, so will the gestures", since, he thought, the primary use of sign language was inter-tribal communication.

Still, Mallery viewed the transition to speech as a clear indication of human progress. For example, the invention of writing influenced people to "talk as they write" and therefore to gesture less. He speculated that gesture signs were most common among people who hunted ("the main occupation of savages") because of the need for stealth. Sign language was then used in other contexts simply by force of habit. To Mallery, it was undeniable that the use of gestures existed in "inverse proportion to the general culture". He concluded that the most notable criterion for distinguishing between "civilized" and "savage" peoples was to be found

[I]n the copiousness and precision of oral language, and in the unequal survival of the communication by gesture signs which, it is believed, once universally prevailed (Mallery 1880b: 13 - cited in Sebeok 1978).<sup>9</sup>

Mallery, however, did not believe that sign languages were *inherently* inferior or primitive. Indeed, he argued that they could potentially express any idea that spoken languages could. Thus, nearly one hundred years before modern linguists rediscovered sign languages and began to take them seriously as authentic languages, Mallery spoke confidently of "conclusive proof that signs constitute a real language" (1880b: 80).

His argument was that sign languages were historically inferior. That is, they were relatively undeveloped because they were less used in recent times than spoken languages. Many of these ideas have been (and are being) amended, of course. In a recent and fascinating book, Farnell has corrected the long-held assumption that Indian Sign Language (or Plains Sign Talk, [PST] as it is more properly called) functioned only as a *lingua franca* for intertribal communication (Farnell 1995: 1-3). She discovered that among the

Assiniboine people of northern Montana, at least, PST is an integral part of the language for everyday interactions and especially for formal story-telling.

The distinction between *inherent* inferiority and *historical* inferiority that Mallery made, however, was not often observed by popular writers or the critics of sign language in deaf education. For most people, sign language was simply the inferior language of inferior peoples, thus the language used by deaf people became increasingly linked in the public mind with the languages of "savages". In his day, references such as Tylor's to "the gesture-signs of savages and deaf-mutes" (1878: 547) became commonplace in both popular and scholarly publications.

Darwin himself wrote of gestures as a form of communication "used by the deaf and dumb and by savages" (1872: 61). After noting that sign languages were "universally prevalent in the savage stages of social evolution", Mallery suggested that it was likely that "troglodyte" humans communicated "precisely as Indians or deaf-mutes" do today (1880b: 12-14).

A contributor to *Science* magazine commented that sign languages were used by

[T]he less cultured tribes, while the spoken language is seen in its highest phase among the more civilized...[adding that sign language was also used] in the training of the deaf and dumb (Jastrow 1886: 556).

A reporter for the New York Evening Post, in an article on the prolific gestures of Italian immigrants, noted that

[P]hilosophers have argued that because among most savages the language of gesture is extensive...[the use of gesticulation with (or in lieu of) speech is a] sign of feeble intellectual power, and civilization must needs leave it behind (Cited in Fox 1897: 398 and 400).

He pointed out that deaf people as well as American Indians also use gestures to communicate.

## The Idea of Progress

One might expect the literature of deaf education to deal in more concrete terms with issues related to the actual lives of deaf people, but here, too, the association of sign language with peoples considered to be 'inferior' colored all discussions. Oralist teachers exacerbated the situation, fretting that sign language was "characteristic of tribes low in the scale of development" (Gordon 1899: 206). Gardiner G. Hubbard, president of the Clarke Institution (one of the first oral schools) complained that the sign language of deaf people "resembles the languages of the North American Indian and the Hottentot of South Africa" (1868: 5). J.D. Kirkhuff of the Pennsylvania Institution asserted that "as man emerged from savagery, he discarded gestures for the expression of his ideas", thus it followed that deaf people ought to discard them as well, and, it fell upon their teachers to "emancipate the deaf from their dependence upon gesture language" (Kirkhuff 1892: 139).

A leading oralist in England, Susanna E. Hull, wrote that since spoken language was "the crown of history", to use sign language with deaf children was to "push them back in the world's history to the infancy of our race". Since sign language was the language of "American Indians and other savage tribes", she asked, "shall sons and daughters of this nineteenth century be content with this?" (Hull 1877: 236). According to Katherine Bingham, the sign language of deaf people was identical to the gestures used by "a people of lowest type" found to exist "in the ends of the earth where no gleam of civilization had penetrated" (1900: 22). The theory that speech supplanted sign language in an evolutionary competition was so common that the oralist Emma Garrett could make an elliptical reference to it as early as 1883, assuming her readers would understand the allusion: "If speech is better for hearing people than barbaric signs, it is better for the deaf; being the 'fittest, it has survived" (Garrett 1883: 18). In 1910, oralists were still arguing the same point in the same way; that it was wrong "to leave [deaf people] a few thousand years behind the race in the use of that language of signs from which human speech has been evolved" (Crouter n.d., from the Gallaudet Archives).

Manualists had been well aware, of course, that American Indians used sign language. In fact, delegations of Indians were occasional visitors to schools for the deaf where they conversed with deaf students and teachers in pantomimic signs. On one such occasion at the Pennsylvania Institution in 1873, as Mallery explained it,

[I]t was remarked that the signs of the deaf-mutes were much more readily understood by the Indians than were theirs by the deaf-mutes, and that the latter greatly excelled in pantomimic effect (1880a: 7).

Mallery thought this was not surprising when it was considered that what is to the Indian a mere adjunct, was to the deaf-mute "the natural mode of utterance".<sup>10</sup>

While manualists often compared the sign language of deaf people to that of American Indians, in the same paragraph they were apt to compare it to the high art of pantomime cultivated by the ancient Romans, or note the syntactical features it shared with ancient Latin, Greek Hebrew or Chinese languages (Peet 1868: 4 and 6-7).<sup>11</sup> None of these comparisons were thought to *demean* sign language, rather, they provided evidence that gestural communication was an ability "which nature furnishes to man wherever he is found, whether barbarous or civilized" (Gallaudet T.H. 1847: 59).

If sign language appeared to have been used more in the past than in the present, this did not imply inferiority to them in the same way it would for the oralist generation. When the manualists thought of 'progress', it was social progress, an accumulation of knowledge and accomplishment, not an improvement in the actual physical and intellectual capacities of human beings. As Harvey Peet affirmed for his colleagues in 1855:

[W]e find in our philosophy no reason to reject the Scriptural doctrine, that the first man was the type of the highest perfection, mental and physical, of his descendants. Races of men sometimes improve, but, in other circumstances, they as notoriously degenerate. It is at least full as philosophical to suppose the inferior races of men to have been degenerate descendants from the superior races, as to suppose the converse (Peet 1855: 16).

# Competing Theories

One theory of history for the manualists' generation was that civilizations rose and fell rather than climbed continuously. Languages and peoples did not ascend ever higher over the course of history, but rather had their birth, growth and culmination, "like the language of the Hebrews for instance, or the splendid tongues of Greece and Rome" (Peet [Isaac] 1890: 214). Languages

could not *perpetually* progress, for the "tendency of every language is toward change, decay, and ultimate extinction as a living organism" (Wilkinson 1881: 167). The examples of Sanskrit, Hebrew, Greek and Latin were evidence that all languages changed over time and finally "passed into that doomed of death and silence which awaits alike the speaker and the speech" (Wilkinson 1881: 167). Languages changed, but they could as well decline as improve. There was no reason to assume that present languages were better than past ones.

Americans who came of age in the late nineteenth century looked to a different past than this. Because sign language was supposed to have been superseded long ago by speech, it was to their way of thinking necessarily inferior. As such, it deserved extinction. An oralist in 1897, pointing out that manualists had often commented upon the similarities between the sign languages of American Indians and deaf people, suggested that he would not question the truth of this observation nor deny that it was worth noting. He would attribute to the observation, however, a very different significance than had his predecessors. While "savage races have a code of signs by which they can communicate with each other", he wrote, surely "we have reached a stage in the world's history when we can lay aside the tools of savagery" (Wright 1897: 332-333). Because of progress in enlightenment, schools were

[F]ortunately able now to give our deaf children a better means of communication with men than that employed by the American Indian or the African savage (Wright 1897: 333-334).

And just as sign language had been supplanted by speech in the advance of civilization, so too was the use of sign language in deaf education -- like all the ideas of "a cruder and less advanced age" (1897: 334) -- being rendered unnecessary by progress.

If oralists associated sign language with Africans who, in evolutionary terms were considered to be "savages", then what did they do when they encountered African-American deaf students?

Information specifically on the education of black deaf children is difficult to come by. The subject was rarely raised at conferences or addressed in school reports and educational literature. At least in the American south,

however, where schools for the deaf (like schools for the hearing) were typically segregated, oral education was clearly not extended to blacks on the same basis as whites.

For example, at the 1882 meeting of the Convention of American Instructors of the Deaf, after the superintendent of the North Carolina Institution had given a report on the new oral program established in his school, he was asked, 'has any experiment been made in the institution to teach colored children?' The superintendent replied

[I]n a separate building, one mile from the main institution, there are thirty colored children...with a separate teacher in charge. No instruction has been given in articulation, and none will be given at present (*Discussion* 1882: 105-106).

## African-American Deaf Students

Five southern schools for black deaf students were listed in the *American Annals of the Deaf's* annual directory in 1920, located in North Carolina, Texas, Maryland, Virginia and Oklahoma. Most of the schools were never listed, for example, the Georgia and Mississippi schools, both established in 1882, because, even though they were physically separated from the main school, they were not formally independent but rather "colored departments" under the direction of the white school (see *Annals* 1882: 125-126).

In 1920, the Virginia State School for Colored Deaf and Blind Children and the Oklahoma Industrial Institution for the Deaf, Blind and Orphans of the Colored Race, were the only two schools in the United States that still described themselves as "manual". By this time, all other schools for the deaf described themselves as "oral" or "combined". White schools in Virginia and Oklahoma were listed as "combined", with the majority of their students being taught orally.

North Carolina did teach slightly over half of its black students orally, but four out of five of its white students were so taught. Maryland used oral methods with two of the twenty-four black deaf students it had in its student population, but oral methods were used with 110 out of 129 white students. The Texas Deaf, Dumb and Blind Institute for Colored Youths had converted from "manual" to "combined" about ten years earlier, nevertheless, by 1920, it was still teaching fewer than a third of its students by oral methods, while at

the Texas school for white deaf students, nearly three-fourths of the students were taught orally. In addition, the school reported that only one of its twelve teachers was an oral teacher and that the oral class consisted of thirty pupils — a size that would effectively preclude successful teaching by oral methods in the view of oral teachers then, and today. In contrast, the Texas school for white students had an average of ten pupils in their oral classes, which was the typical size in other state schools for oral classes.<sup>12</sup>

Apparently, overcrowded classes were a general problem at black schools in the south. A black deaf teacher from the North Carolina school, Thomas Flowers, expressed to the 1914 convention of teachers his hope that soon, "certain discouraging features will be lifted from the teachers of the colored deaf" so that "the work will then give results". Among these discouraging features were poor facilities, low pay for teachers and "the large and miscellaneous classes" (1915: 100).

A survey of black schools for the deaf finally appeared in the *Annals*, (see Settles 1940) much later than the period under consideration here. That survey reported that of sixteen segregated schools or departments for black deaf children, eleven were *still* entirely manual. While other schools throughout the south joined northern schools in pushing deaf people to "rise" (as they saw it) "to full humanity" by abjuring sign language, this was apparently not considered as significant a need for deaf people of African descent as oral education. Because of the continued use of sign language in the classroom, however, the ironic result of this policy of discrimination may have been that southern deaf African-Americans, in spite of the chronic underfunding of the schools, received a better education than most deaf white students.

The provision of oral or manual education according to race may not have prevailed to the same degree in the North, but the evidence is harder to find and more circumstantial, since there were no separate schools for blacks there. Thomas Flowers had been a student in the oral program at the Pennsylvania School for the Deaf from 1886 to 1895 where, as he later wrote, the teachers "saw beyond this dusky skin of mine, into my very soul". Since, in 1908, he wrote that he had been the first black student to graduate from the Pennsylvania Institution and the first deaf student to graduate from Howard University, he does not, however, appear to have been a typical case. 13

When, at the 1914 convention, the superintendent from North Carolina averred that "North Carolina was the first state in establishing institutions for the colored race, although other states are falling into line", Philip Gillett (superintendent of the Illinois school) immediately rose to protest: "Illinois has had an institution for colored deaf-mutes for over thirty years" (see entry, Discussion, 1882: 105-106). With heavy sarcasm he added that this institution was in fact the same one that white students attended. Black students, he was proud to say, "have always attended on precisely the same basis and have the same advantages that the whites have had". Unfortunately, Gillett quickly added, "it is unnecessary to discuss that question here". He and the convention moved on to other topics (see entry Discussion, 1882: 105-106).

On the other hand, the Clarke Institution in Northampton, Massachusetts, the pre-eminent oral school in the country, makes no mention in its annual reports of accepting black pupils or training black teachers during this period, and, in 1908, it appears to have affirmed a policy of excluding blacks. During that year, an African-American woman made inquiries about entering the Clarke School training program for teachers. The principal of the school, Caroline Yale, wrote to Mrs. Alexander Graham Bell, who had inquired on the young woman's behalf, to express doubts about accepting the student. The Clarke School had "never had an application for a colored student in our Normal department before", she wrote, and she doubted "whether with the large number of southern teachers which we have this could be done". She was "certain that some of our southern girls would violently object" and worried that "we should very likely lose some or all of them" (Yale 1908).

This limited and circumstantial evidence is far from conclusive. In any case, before the great migration of African-Americans to the north after the First World war, there were relatively few black people living in the northern states. Given the low incidence of deafness marking a percentage of the total population, few black children would have attended northern schools for the deaf. The Washington D.C. school for the deaf, however, had eight or nine black students out of a total of sixty students in 1886. According to Gallaudet,

[I]n the sleeping apartments and at the table they are separated in deference to the caste prejudice, which still continues in our country to a certain extent, but in the classes they come together (see Gordon 1892: 12).

Gallaudet gave no indication, however, of whether they were generally taught by the same methods or followed the same course of study.

# The Construction of Evolutionary Progress

Race was not the only issue involved in the hierarchical construction of evolutionary progress. As a linguistic atavism, sign language was portrayed not only as a throwback to 'savagery' and 'barbarism', but, worse yet, as a return to the world of the beast. One of the intended effects of evolutionary theory, after all, was to change the way that people answered the question, "What is it that separates us from the animals?" Animals have always been the "ultimate other" for human beings. Throughout history, people have defined themselves in relation to them. Every culture keeps available a large stock of answers to the question of what makes humans unique: for example, humans possess reason, histories and cultures; they can feel pain and suffer; they have self-consciousness and consciences; they use tools and alter their environment(s). One could compile a very long list of such attempts (and they are intriguingly persistent attempts) definitively to distinguish humanity from every other species of creature (see Thomas 1983; Midgely 1978; Turner 1980 and Singer 1975: 192-222).

What separates us from the animals?' is a question of rich potential for the student of human culture. Much of how a people define themselves, their sense of individual and cultural identity, can be found in their answers to this most basic of questions -- what Thomas Huxley called the "question of questions for mankind" (cited in Roberts 1988: 51). For the manualists of the early to mid-nineteenth century, the possession of an immortal soul was the pre-eminent characteristic that distinguished humans from all other species. Contained within the concept of the soul were other, subsidiary signs of human uniqueness; faculties such as language, morality and reason, which humans had and animals did not. These, however, were conceived to be secondary to (and existing merely as a result of) the human soul.

The manualist teacher Luzerne Rae, for example, in 1853, described thoughts and feelings as the "spiritual children of the spirit", meaning that they were manifestations of spirit and therefore, spiritual themselves (1853:

157-58). Language, on the other hand, was the "sensible form" of the spiritual. That is, it made the spiritual accessible to the senses and was the material expression of the higher, non-material realm. Language, then, whether in its aural or visual form, did not take place within spirit, but was merely the outward means of communication between spiritual beings who existed perforce in a physical state. It was only the embodiment of thoughts and feelings into language that could "enable them to pass through the senses". Language was physical (Rae called it "the body of thought") and therefore secondary and derivative. Spirit was primary and original (1853: 157-58).

#### a. Language

Language was conceived to be an important characteristic of humanity, but it did not *define* humanity. It was merely the visible expression of the invisible essence within. In 1850, the manualist Harvey Peet allowed that "language is one of the surest tests of humanity", but hastened to add that "language" was by no means the equivalent of "speech". Deaf education had been rarely attempted in the past, he explained, because until recently, "the power of speech seemed the only difference between reasoning beings and animals devoid of reason" (1855: 19; also see Peet 1850: 107). While spoken and gestural languages were undeniably different

[I]n material, in structure, in the sense which they address, and in the mode of internal consciousness, [nevertheless the] man whose language is a language of gestures...is still, not less than his brother who possesses speech, undeniably a man. ... Another prerogative that distinguishes man from the most sagacious of the mere animal creation...yet higher than language...is religion (Peet 1855: 9 and 20-44).

While language was of great importance, it remained secondary — and 'religion' for him consisted pre-eminently in the knowledge of a Creator and of the immortal soul within.

The foremost task of the Reverend Collins Stone, a manualist teacher at the Hartford school, was "imparting to the deaf and dumb a knowledge of the soul". He accomplished this, he explained, by calling the attention of his students to the ways in which they differed from the things and creatures around them: "there is something in the child which they do not find in trees, animals, or anything else". This wonderful 'something' is not his body, or any

part of it". Within this 'something' resided intelligence, imagination, the ability to use language, and the moral sense. It conferred immortality. Once the pupils understood that it is "this that 'thinks and feels' and makes us differ from the animals and things about us", they are then "prepared to be told that the power that manifests itself in these different ways is called the soul". Without that knowledge, the uninstructed deaf person was reduced "to the level of mere animal life", capable only of "mere animal enjoyment" (Stone 1848: 137-141). This definition of education was widely shared by the teachers of Stone's generation.

Woodruff lamented that without education, the deaf person was "looked upon, by many, as well-nigh a soulless being, having nothing in common with humanity but his physical organization, and even that imperfect" (1848: 195). With an education made possible by the use of sign language, Henry Camp wrote, deaf people could be "raised from their degraded condition -- a condition but little superior to that of the brute creation -- and restored to human brotherhood" (Camp 1848: 214-215). For J.A. Ayres, the "right development of moral and religious character is the most important part of all education". With the use of sign language

[T]he deaf-mute is restored to his position in the human family, from which his great loss had well nigh excluded him, and is enabled to hold communion with man and with God (Ayres 1848: 223).

Coming to know God was the greatest aim of education, and one could not know God without first knowing about the soul. If deaf people were not

[L]ed to conceive of a thinking agent within them, distinct from their corporeal existence", [then they could] form no correct conception of God, who is spirit (Peet, I.L. 1851: 212).

The historian, Paul Boller, among many others, has written of the "shattering effect" that evolutionary theory had on "traditional religious thought about ... the uniqueness of man" (Boller 1850: 212). While traditional religious beliefs about the place and nature of humankind were certainly challenged and altered, the belief in the uniqueness of the human continued unabated. Explanations for that uniqueness were adjusted to meet new realities, and by

the late nineteenth century the most common explanation for why humans were fundamentally different from other animals was no longer that they possessed a soul, but that they possessed articulate speech (or alternatively, intelligence, of which speech was both the crowning achievement and necessary concomitant). As Thomas Huxley, the great defender of Darwin's theory, wrote,

[R]everence for the nobility of manhood will not be lessened by the knowledge, that Man is...one with the brutes, for he alone possesses the marvelous endowment of intelligible and rational speech (Huxley 1906: 104).

The belief that speech is the crucial attribute that separates humans from the animals is by no means associated exclusively with evolutionary thought. The idea was hardly new — it goes back at least to ancient Greece, and can be found throughout the nineteenth century in European and American literature. However, during the first half of the nineteenth century in America, the possession of a soul became the predominant expression of fundamental difference between humans and animals. During the latter half of the century the emphasis shifted to the possession of speech.

# b. The Concept of Soul

Part of the reason for this shift was the argument, made by Darwin in *The Descent of Man*, that the faculties that earlier had been placed under the higher and unifying concept of the soul (which were explained by the existence of the soul and had appeared clearly to separate humans from the animal kingdom), were in fact present in less developed form in other animals. Abilities that had previously been regarded as unambiguously human were instead explained as more highly evolved forms of abilities that had first appeared at earlier stages of evolution. The idea of a soul, Darwin (and others) argued, was no longer necessary to explain them (Darwin 1896: 65-96).

The soul was not, at any rate, easily adapted to an evolutionary explanation of the human past. To speak of the possession of a soul as the characteristic that separated the human from the animal and at the same time to speak of humans developing from animals was problematic at best. At what point did humans acquire souls? Did immortal souls evolve like other

attributes, or had they been specially created at some point and infused into creatures previously not human?

The concept of a soul certainly can be, and has been, by many religious thinkers reconciled with evolutionary theory. However, in the same way that the "argument from design" — that is, the theory that the adaptation of living things to their environment was evidence of a designing intelligence — was rendered unnecessary and marginalized by evolutionary theory (though of course it could not be disproved), so was the soul made unnecessary as an explanation for human capabilities.

In addition, evolutionary theory was but one aspect of a general movement toward scientific naturalism in public discourse. In both scientific and public discourse, the soul as an explanation for human nature diminished rapidly in importance. As nineteenth century American Christians had been used to speaking of the term, the soul was neither convenient to think of as a product of evolution, nor was it amenable to scientific description. For a thorough discussion of this change, see Roberts (1988: 176-179 and 205-207); Carter (1971: 85-107); Moore (1979: 232-33, 266-67 and 336-37); Pearson (1916: 4-23) and Oldroyd (1980: 250-252). Speech, on the other hand, was both.

# Focus on Speech

Huxley wrote that an important part of the explanation for the "intellectual chasm between the Ape and the Man" involved the senses and muscles necessary for the "prehension and production of articulate speech".

[P]ossession of articulate speech is the grand distinctive character of man [and a] man born dumb [he continued] would be capable of few higher intellectual manifestations than an Orang or a Chimpanzee, if he were confined to the society of dumb associates (Huxley 1906: 95-96).

Sociologists such as Cooley agreed that the "achievement of speech is commonly and properly regarded as the distinctive trait of man, as the gate by which he emerged from his pre-human state" (Cooley 1909: 70 and see also Giddings 1916[1898]: 238-241). Books designed for highschools and academies echoed the point: "animals have a variety of natural cries. Speech belongs to man alone" (Overton 1908[1891]: 298). Educators of the deaf also began to

allude to this reformation of human uniqueness.

An oral teacher at the Pennsylvania School entered into her monthly report the observation that despite the difficulties of oral training, speech was "one of the distinguishing characteristics between man and the lower order of animals -- we think it is worth the labor costs" (Garrett 1882). The founder of Chicago's McCowen Oral School for Young Deaf Children thought that learning to speak was "the highest act of human evolution" and wrote about the lack of speech as a condition from which deaf children could "gradually rise" (McCowan 1907: 258-259). One of the founders in 1867 of the Clarke Institution wrote that "the faculty of speech more than the faculty of reason, puts mankind at a distance from the lower animals" (Dudley 1884: 7). He elsewhere suggests that deaf people who used sign language felt themselves to be less than human. When he visited a school in which sign language was used, the children looked at him

[W]ith a downcast pensive look which seemed to say, 'Oh, you have come to see the unfortunate; you have come to see young creatures human in shape, but only half human in attributes; you have come here much as you would go to a menagerie to see something peculiar and strange' (Dudley 1882: 7).

He contrasted the demeanor of these children with that of a young girl he had met who had recently learned to speak by remarking on her radiant face and "the beaming eye [which] showed a consciousness of elevation in the scale of being. It was a real elevation" (1882: 7).

Not only was speech the mark of the human, but sign language was increasingly the mark of the brute. Pettingill (a teacher at the Pennsylvania School for the Deaf) in 1873 found it necessary to defend sign language against charges that it was nothing more than "a set of monkey-like grimaces and antics" (1873: 4). A manualist teacher at the Kendall School, Sarah Porter, complained twenty years later that the common charge against the use of sign language -- "You look like monkeys when you make signs" -- would be "hardly worth noticing except for its...incessant repetition" (Porter 1894: 171). A teacher from Scotland wrote to the *American Annals*, saying that it was wrong to "impress [deaf people] with the thought that it is apish to talk on the fingers" (Dodds 1899: 124). But, there were many who agreed with an oralist educator who was of the opinion that "these signs can no more be

called a language than the different movements of a dog's tail and ears which indicate his feelings" (Wright 1897: 337-338. Also see Gallaudet, E. M. 1881).

# **Expression and Emotion**

The work of Charles Bell, author of *The Anatomy and Philosophy of Expression* (1885[1806]) and foremost authority of his time on the physical expression of emotions, rested on the premise that humans had been created with specific muscles intended for the sole purpose of expressing emotional states. The ability to reveal the emotions through expression, he believed, was a gift from the Creator, a natural channel for human souls to communicate with one another unimpeded by artificial convention(s). It was, as Thomas H. Gallaudet phrased the idea, "the transparent beaming forth of the soul" (1848 80, and see also Richards 1987: 230-234). In 1848, the manualist educator, Charles Turner, could claim that

[T]he aspect of the brute may be wild and ferocious ... or mild and peaceful ... but neither in the fury of the one, nor the docility of the other, do we see anything more than natural instinct, modified by external circumstances (1848: 77)

His readers would not have been perplexed or surprised by his belief that "man alone possesses the distinctive faculty of expression". Only the human being possessed a soul, and facial expressions were "the purposes of the soul...impressed upon the countenance". His observation, therefore, that facial expression was an indispensable concomitant to sign language, and that sign language owed "its main force and beauty to the accompanying power of expression" was intended, and would be understood, as high praise (Turner 1848: 77). T. H. Gallaudet agreed, marveling that

[T]he Creator furnished us [with] an eye and countenance, as variable in their expressions as are all the internal workings of the soul (Gallaudet 1848: 81).

The expressions of the face, as a means of communicating feelings and thoughts, were seen as both distinctly human and wonderfully eloquent. Instructors of this generation, for example, delighted in telling of sign masters who could recount Biblical tales using facial expression alone so skillfully that

their deaf audiences could identify the stories (Turner 1848: 77-78 and also Lane 1984: 174-175).

Darwin's Expression of the Emotions in Man and Animals, however signaled that important changes in attitudes toward facial expression were underway. In his frame of reference, expression was not a God-given gift nor a mark of humanity nor the outward expression of the unique workings of the human soul. Darwin criticized previous works on the subject, arguing that those who, like Bell, tried to "draw as broad a distinction between man and the lower animals" as possible by claiming that emotional expression was unique to humanity, did so out of the mistaken assumption that humans "came into existence in their present condition". Instead, he insisted, human shared many expressions in common with animals, he argued, and the origins of human expression were to be found in their animal ancestors. Indeed, the similarities between humans and other animals in this regard was itself additional evidence that humans "once existed in a much lower and animal-like condition" (Darwin 1872: 10). In short, facial expression was no longer distinctly human, but, like gesture, a mere vestige of our animal past.

It was not long before popular writers were commenting on the "special facility" that apes have for "the more lowly forms of making one's self understood" — that is, the use of "gesture-language" and "facial muscles as a means of expression" (Jastrow 1886: 555-556). Teachers of the deaf expressed the change in attitude as well. An anonymous letter to the *Annals*, signed 'A Disgusted Pedagogue' criticized the use of sign language in the schools because it caused teachers to "grimace and gesticulate and jump" (Anon. 1873: 263).

A manualist teacher complained of oralists who ridiculed signers for their "monkey-like grimaces" (Pettingill 1873: 4). This was not an entirely new concern, but it carried different connotations for the oralist generation than it had for the manualists. The manualist teacher complained of the "tendency to grimace in the natural language of the deaf and dumb". His concern was that such uncouth expression (as he called it) was "ungraceful" (Woodruff 1849: 193); that it would "betoken ill-breeding and offend against good taste". There was, however, an "inherent beauty in the language of signs which cannot but be favorable to the development of pleasing expression" if correct

was provided (1849: 195-96).

Facial expression and gestures both were spoken of as the "rudimentary and lower parts of language" as opposed to speech, which was "the higher and finer part" (Howe, et al 1866: liii-liv). Deaf people were advised to avoid "indulging in the horrible grimaces some of them do" lest they be accused of "making a monkey" of themselves (Unsigned 1890: 91). A writer in *Science* used a somewhat different metaphor, writing of students at a school for the deaf as

[I]nmates making faces, throwing their hands and arms up and down. ... The effect is as if a sane man were suddenly put amidst a crowd of lunatics (Engelsman 1890: 220).

Given the theory of the time that insanity was a kind of reversion to an earlier stage of evolution, the metaphor may well be related to the comparisons with animals (Gilman 1988: 129-132). Darwin indicated that exaggerated expression was characteristic of insanity (cited in Gilman 1988: 131). He may also have subscribed to the theory that insanity was a reversion to a more primitive state of evolution. "The loss of control" of facial expression, according to Gilman, "would be the absence of civilized standards of behavior and a return to earlier modes of uncontrolled expression" (1988: 129-132).

The belief that gestures preceded speech in human history, then, took on radically different meanings once evolution became the dominant way of understanding the past. For the manualists, the ability to use sign language had been — no less than the power of speech — an ability contained within the soul. It was a gift that the "God of Nature and of Providence has kindly furnished" so that deaf people might come to know that they possessed a soul and were thereby human (Gallaudet, T. H. 1848: 86).

Hearing people also benefited from the use of gesture. Thomas H. Gallaudet asked, "why did the Creator grant to humans the wonderful ability to communicate with face and gesture?" if not "to supply the deficiencies of our oral intercourse, and to perfect the communion of one soul with another" (1848: 80).

For the oralist generation, however, sign language came to be in itself a

sub-human characteristic. What had been the solution to the problem of deafness became the problem. By the turn of the century, it was "the grand aim of every teacher of the deaf to put his pupils in possession of the spoken language of their country" (Hull 1898: 190). Speech had become the "greatest of all objects" as Alexander Graham Bell expressed it. To "ask the value of speech", he believed, "is like asking the value of life" (1884: 178). The value of speech was, for the oralists, akin to the value of being human. To be human was to speak. To sign was to step downward in the scale of being and become a 'savage'.

In that formulation — an unfortunate by-product of evolutionary theory — lies much of the reason for the decline of manualism and the rise of oralism at the end of the nineteenth century.

Douglas C. Baynton Visiting Assistant Professor History and American Sign Language The University of Iowa

#### NOTES:

<sup>&</sup>lt;sup>1</sup> Within forty years there would be twenty residential schools in the United States; by the turn of the century, more than fifty (*Annals*: 46-47). The first two successful oral schools were both founded in 1867: the New York Institution for the Improved Instruction of Deaf Mutes, and the Clarke Institution for Deaf-Mutes, and the Clarke Institution for Deaf-Mutes in Northampton, Massachusetts. On the early schools for the deaf, see Van Cleve and Crouch (1989: 29-59); Lane (1984: 206-251), and Valentine (1991: 355-375).

<sup>&</sup>lt;sup>2</sup>For an overview of the oralist movement, see Van Cleve and Crouch (1989: 106-141); Lane (1984: 339-414), and Winefield (1987).

<sup>&</sup>lt;sup>3</sup> See Hall (1956: 9) for a brief description of a battle between the Iowa Association of the Deaf and the Iowa School for the Deaf in the 1950s over this issue. See also Van Cleve (1984: 195-220) and Van Cleve and Crouch (1989: 128-141).

<sup>&</sup>lt;sup>4</sup> Ellegard's exhaustive review of the British popular press shows that the basic idea of evolution was accepted in Britain by 1870.

<sup>&</sup>lt;sup>5</sup> The literature is vast, but see Gilman (1988) on images of illness; Russett (1976) and Roberts (1988) on sin as reversion; Gould (1981) on criminology, and Levine (1971: 94), who wrote, "social Darwinism was not so much a conservative doctrine as a universal doctrine. The analogy found a home in America with amazing speed and ubiquity". However, in the light

of Bowler's recent work (1988), Levine's statement should be amended to say that it was *social* evolutionism, not Darwinism per se, that became ubiquitous.

- $^{7}$  See Pettingill (1873: 9) and Valade (1873: 31). Also see Wilkinson (1881: 167-168); Peet (1855: 10); Robinson (1890: 216), and Covell (1870: 133-136). Gallaudet claimed that sign language was "the mother language of mankind" (n.d.: 17) which statement is quoted in Winzer (1981: 118).
- <sup>8</sup> Sacks (1989: 75) notes Tylor's knowledge of sign language and friendships with deaf people. Also see the work of early sociologist Cooley (1909: 67), who thought it "probable that artificial gesture language was well organized before speech had made much headway".
- $^9$  See Mallery (1880a: 1-3 and 6). For the sources of Mallery's views, (1882: 69). See also Tylor (1878: 77-78).
- <sup>10</sup> For other accounts of such visits, see Anonymous (1874: 48-49); Wilkinson (1881: 171) and Mallery (1882: 75).
- <sup>11</sup> See Robinson (1890: 216) and T.H. Gallaudet (1847: 59).
- <sup>12</sup> See entries under 'Tabular Statement...' in reference list for 1920 and 1921. The figures are taken from the 1919 report because Texas and Maryland did not submit reports in 1920.
- <sup>13</sup> Flowers's draft of an essay entitled *Life After Graduation* is undated and unsigned, but the body of the letter identifies it as his, written in 1908. His school file identifies him as "partially deaf", and "able to hear loud tones from those he is accustomed to hear speak", thus there would have been no question about his suitability for an oral education.

<sup>&</sup>lt;sup>6</sup> This section of my account of Condillac relies upon Stam (1976: 45-52).

#### **BIBLIOGRAPHY**

# Anonymous (Annals)

- 1873. A Disgusted Pedagogue. The Perversity of Deaf-Mutism. *American Annals of the Deaf*, 18, October.
- 1874. Institution Items: Pennsylvania Institution. American Annals of the Deaf, 19, January.
- 1882. Institution Items. American Annals of the Deaf, 27, April.
- 1898. Tabular Statement of Schools for the Deaf, 1897-98. American Annals of the Deaf, 43, January.
- 1920. Statistics of Speech Teaching in American Schools for the Deaf. *Volta Review*, 22, June.

# Ayres, J.A.

1848. An Inquiry Into the extent to Which the Misfortune of Deafness May be Alleviated. *American Annals of the Deaf*, 1, April.

## Bell, Alexander G.

- 1884. Proceedings of the Fifth National Conference of Principals and Superintendents of Institutions for Deaf-Mutes. St. Paul, Minnesota.
- 1899. Address of the President. Association Review, 1, October. [N.B. The Association Review was the official journal of the American Association to Promote the teaching of Speech to the Deaf. The journal was renamed Volta Review in 1910].

#### Bell Charles.

1886[1842]. The Anatomy and Philosophy of Expression as Connected with the Arts. 7th ed. revised. London: Bell and Sons.

## Bingham, Katherine T.

1900. All Along the Line. Association Review, 2, February.

#### Boller, Paul.

1970[1850]. The New Science. In *The Gilded Age: A Reappraisal*. H. W. Morgan (Ed.), Syracuse, Syracuse University Press.

# Bowler, Peter J.

- 1988. The Non-Darwinian Revolution: Reinterpreting a Historical Myth. Baltimore: Johns Hopkins University Press.
- 1989. Evolution: The History of an Idea. Berkeley: University of California Press.

# Camp, Henry

1848. Claims of the Deaf and Dumb Upon Public Sympathy and Aid. American Annals of the Deaf, 1, July.

D. Baynton 167

# Carter, Paul A.

1971. The Spritiual Crisis of the Gilded Age. DeKalb, Illinois: Northern Illinois University Press.

# Cooley, Charles H.

1909. Social Organization: A Study of the Larger Mind. New York: Scribner.

# Condillac, Etienne Bonnot de

1971[1746]. Essay on the Origin of Human Knowledge. Gainesville, Florida: Scholars Facsimilies and Reprints.

1986[1775]. Grammaire. Stuttgart-Bad Cannstatt: Frommann-Holzberg.

# Covell, J.C.

1870. The Nobility, Dignity and Antiquity of the Sign Language. Proceedings of the Seventh Convention of American Instructors of the Deaf, Indianapolis.

## Crouter, A.L.E.

n.d. Pamphlet: 'The Development of Speech in the Deaf Child'. Gallaudet Archives, Box PSD: 'Dr. Crouter's Speeches'. Reprinted from the Transactions of the American Laryngological, Rhinological and Otological Society, 1910.

## Darwin, Charles

1965[1872]. The Expression of the Emotions in Man and Animals. Chicago: University of Chicago Press.

1981[1871]. The Descent of Man and Selection in Relation to Sex. Princeton: Princeton University Press.

## Diamond, A.S.

1959. The History and Origin of Language. New York: Philosophical Society. **Discussion.** 

1882. Proceedings of the Tenth Convention of American Instructors of the Deaf, Jacksonville, Illinois.

## Dodds, R.W.

1899. The Practical Benefits of Methods Compared. American Annals of the Deaf, 44, February.

## Dudley, Lewis J.

- 1882. Address of Mr. Dudley in 1880. Fifteenth Annual Report of the Clarke Institution for Deaf-Mutes. Northampton, Mass.
- 1884. Report of the Corporation. Seventeenth Annual Report of the Clarke Institution for Deaf-Mutes, Northampton, Massachusetts.

# Ellegard, Alvar

1990[1958]. Darwin and the General Reader: The Reception of Darwin's Theory of Evolution in the British Periodical Press, 1859-1892. Chicago: University of Chicago Press.

# Engelsman, B.

1890. Deaf Mutes and Their Instruction. Science, 16, October.

#### Farnell, Brenda

1995. Do You See What I Mean? Plains Indian Sign Talk and the Embodiment of Action. Austin: University of Texas Press (with CD-Rom).

# Fay, Edward Allen

1893. Histories of American Schools for the Deaf, 1817-1893. Washington D.C.: The Volta Bureau.

# Fay, Edward Allen

1915. Progress of Speech-Teaching in the United States. *American Annals of the Deaf*, 60, January.

## Fischer, Renate

1993. Language of Action. In Looking Back: A Reader on the History of Deaf Communities and Their Sign Languages. Fischer, R. and Harlan Lane, (Eds.), Hamburg: Signum.

# Flowers, Thomas

- 1915. Education of the Colored Deaf. Proceedings of the Twentieth Convention of American Instructors of the Deaf, 1914, Washington D.C.
- n.d. Life after Graduation. (Draft). Gallaudet University Archives, Box: PSD; Misc.; AGB; Thos. Flowers, letters.

## Fox, Thomas F.

1897. Speech and Gestures. American Annals of the Deaf, 42, November.

## Gallaudet, Edward M.

- 1881. How Shall the Deaf Be Educated? *International Review*, December. Reprinted in Gordon, J.C. (Ed.), 1892: 101.
- n.d Speech for the Deaf: Essays Written for the Milan International Congress on the Education of the Deaf, Milan, Italy, September (publisher's name not available). [N.B.: Copy located in the Volta Bureau Archives, Washington D.C., and cited in Winzer 1981].

#### Gallaudet, Thomas H.

- 1847. On the Natural Language of Signs--I. American Annals of the Deaf, 1, October.
- 1848. On the Natural Language of Signs--II. American Annals of the Deaf, 1, January.

D. Baynton 169

## Garrett, Emma

1883. Report of the Teacher in Charge; Branch for Oral Instruction [Pennsylvania Institution for the Deaf and Dumb], January 1. Gallaudet Archives, Box: PSD Sundry Reports, Communications, etc., dating prior to 1890.

# Giddings, Franklin H.

1916[1898]. The Elements of Sociology. New York: Macmillan.

# Gilman, Sander L.

1988. Disease and Representation: Images of Illness from Madness to Aids. Ithaca, N.Y.: Cornell University Press.

# Gordon, Joseph C.

1899. Dr. Gordon's Report. Association Review, 1, December.

# Gordon, Joseph C. (Ed.)

1892. Education of Deaf Children: Evidence of Edward Miner Gallaudet and Alexander Graham Bell Presented to the Royal Commission of the United Kingdom. Washington D.C.: The Volta Bureau.

# Gould, Stephen J.

1981. The Mismeasure of Man. New York: W.W. Norton.

# Greene, John C.

1981. Science, Ideology, and World View. Berkeley: University of California Press.

#### Hall, W. Earl

1956. To Speak or Not to Speak: That is the Question Behind the Bitter Deaf-Teaching Battle. *The Iowan 4*, February/March.

## Hewes, Gordon W.

1973. Primate Communication and the Gestural Origin of Language. Current Anthropology, 14, February-April.

## Hofstadter, Richard

1955. Social Darwinism in American Thought. Boston: Beacon Press.

## Howe, Samuel Gridley, et al.

1866. Second Annual Report of the board of State Charities, Boston.

# Hoxie, Frederick E.

1989. A Final Promise: The Campaign to Assimilate the Indians. Lincoln: University of Nebraska Press.

#### Hubbard, Gardiner G.

1868. [A Summary of the] Proceedings of the American [Social] Science Association. *National Deaf Mute Gazette*, 2, January.

# Hull, Susanna E.

- 1877. Do Persons Born Deaf Differ Mentally From Others Who Have the Power of Hearing? *American Annals of the Deaf*, 22, October.
- 1898. The Psychological Method of Teaching Language. American Annals of the Deaf, 43, April.

# Huxley, Thomas

1906. Man's Place in Nature. London: Macmillan.

# Kirkhuff, J.D.

1892. Superiority of the Oral Method. Silent Educator, 3, January.

# Jastrow, Joseph

1886. The Evolution of Language. Science, 7, June.

#### Lane, Harlan

1984. When the Mind Hears: A History of the Deaf. New York: Random House.

# Levine, Daniel

1971. Jane Addams and the Liberal Tradition. Madison: University of Wisconsin Press.

# Mallery, Garrick

- 1880a. The Sign Language of the North American Indians. *American Annals of the Deaf*, 25, January.
- 1880b. Introduction to the Study of Sign Language Among the North American Indians as Illustrating the Gesture Speech of Mankind. Washington D.C.: Bureau of Indian Affairs. Reprinted in Sebeok and Umiker-Sebeok 1978 (Vol. 1): 1-76.
- 1882. The Gesture Speech of Man. American Annals of the Deaf, 27, April.

#### McCowan, Mary

1907. How Best to Secure Intelligent Speech for Deaf Children. *Association Review*, 9, February - April.

# Midgely, Mary

1978. Beast and Man: The Roots of Human Nature. Ithaca, New York: Cornell University Press.

## Moore, James R.

1979. The Post-Darwinian Controversies: A Study of the Protestant Struggle to come to Terms with Darwin in Great Britain and America, 1870-1900. Cambridge, U.K.: Cambridge University Press.

# Oldroyd, D.R.

1980. Darwinian Impacts: An Introduction to the Darwinian Revolution. Milton Keynes, England: Open University Press.

D. Baynton 171

# Overton, Frank

1908[1891]. Applied Physiology: Including the Effects of Alcohol and Narcotics, Advanced Grade. New York: Macmillan.

#### Pearson, Norman

1916. The Soul and Its Story: A Sketch. London: Arnold.

# Peet, Harvey P.

- 1850. On the Origin and Early History of the Art of Instructing the Deaf and Dumb. Proceedings of the First Convention of American Instructors of the Deaf, New York.
- 1855. Notions of the Deaf and Dumb Before Instruction. *American Annals of the Deaf*, 8, October.
- 1868. Preliminary Remarks--Signs versus Articulation. *National Deaf Mute Gazette*, 2, February.

# Peet, Isaac Lewis

- 1851. Moral State of the Deaf and Dumb Previous to Education, and the Means and Results of Religious Influence Among Them. *American Annals of the Deaf*, 3, July.
- 1890. The Relation of the Sign Language to the Education of the Deaf. Silent Educator, 1, January.

# Pettingill, Benjamin D.

1873. The Sign-Language. American Annals of the Deaf, 18, January.

# Porter, Sarah Harvey

1894. The Suppression of Signs by Force. American Annals of the Deaf, 39, June.

# Rae, Luzerne

1853. The Philosophical basis of Language. Proceedings of the Third Convention of American Instructors of the Deaf, Colombus, Ohio.

# Richards, Robert J.

1987. Darwin and the Emergence of Evolutionary Theories of Mind and Behavior. Chicago: University of Chicago Press.

## Roberts, Jon H.

1988. Darwinism and the Divine in America: Protestant Intellectuals and Organic Evolution, 1859-1900. Madison: University of Wisconsin Press.

## Robinson, Warren

1890. Something About the Sign Language. The Silent Educator, 1.

## Russett, Cynthia E.

1976. Darwin in America: The Intellectual Response. San Francisco: W.H. Freeman and Co.

# Sacks, Oliver

1989. Seeing Voices: A Journey Into the World of the Deaf. Berkeley: University of California Press.

# Sebeok, T. and Jean Umiker-Sebeok (Eds.)

1978. Aboriginal Sign Languages of the Americas and Australia. Vols. I & II. New York: Plenum Press.

#### Settles, Dr.

1940. Normal Training for Colored Teachers. American Annals of the Deaf, 85, March.

# Singer, Peter.

1975. Animal Liberation: A New Ethics for our Treatment of Animals. New York: Avon Books.

## Sommerfelt, Alf

1954. The Origin of Language: Theories and Hypotheses. *Journal of World History*, 1, April.

# Stam, James H.

1976. Inquiries Into the Origin of Language: The Fate of a Question. New York: Harper and Row.

## Stone, Collins

1848. On the Religious State and Instruction of the Deaf and Dumb.

American Annals of the Deaf, 1, April.

**Tabular Statement** of American Schools for the Deaf October 20, 1919.

American Annals of the Deaf, 65, January, 1920.

Tabular Statement of American Schools for the Deaf October 20, 1920.

American Annals of the Deaf, 66, January, 1921.

## Thomas, Keith

1983. Man and the Natural World. New York: Pantheon Books.

## Turner, Charles P.

1848. Expression. American Annals of the Deaf, 1, January.

## Turner, James P.

1980. Reckoning With the Beast: Animals, Pain, and Humanity in the Victorian Mind. Baltimore, Maryland: Johns Hopkins University Press.

#### Tyler, John M.

1899. The Teacher and the State. Association Review, 1, October.

## Tylor, Edward B.

1878 [1865]. Researches Into the Early History of Mankind. [3rd Ed.], New York: Henry Holt.

D. Baynton 173

# **Unsigned Excerpt**

1890. Vulgarity in Signing [from The Kentucky Mute]. Silent Educator, 1, January.

#### Valade, Remi

1873. The Sign Language in Primitive Times. American Annals of the Deaf, 18, January.

# Valentine, Phyllis Klein

1991. A Nineteenth Century Experiment in Education for the Handicapped: The American Asylum for the Deaf and Dumb. New England Quarterly 64: 355-375

# Van Cleve, John

1984. Nebraska's Oral Law of 1911 and the Deaf Community. Nebraska History, 65.

# Van Cleve, John V. and Barry Crouch

1989. A Place of Their Own: Creating the Deaf Community in America. Washington D.C.: Gallaudet University Press.

# Whitney, William D.

1876. The Life and Growth of Language: An Outline of Linguistic Science. New York: Appleton and Co.

# Wilkinson, Warring

1881. The Development of Speech and of the Sign-Language. American Annals of the Deaf, 26, January.

## Winefield, Richard

1987. Never the Twain Shall Meet: Bell, Gallaudet, and the Communications Debate. Washington D.C.:Gallaudet.

# Winzer, Margaret

1981. An Examination of Some Selected Factors That Affected the Education and Socialization of the Deaf of Ontario, 1870-1900. Ph.D. Dissertation, Canada: University of Toronto.

# Woodruff, Lucius H.

1849. Grace of Expression. American Annals of the Deaf, 2, July.

# Wright, John D.

1897. Speech and Speech-Reading for the Deaf. Century Magazine, January.

# Yale, Caroline 1908. Letter to Mrs. Alexander Graham Bell. In

1908. Letter to Mrs. Alexander Graham Bell. In files stored in the President's office, box labeled, 'Dr. and Mrs. Alexander Graham Bell', Clarke School for the Deaf, Northampton, Massachusetts, May 19.