MAM	lajor	Research	ı Paper
-----	-------	----------	---------

Issues in Deafness:

An Analysis of the Existing Literature Pertaining to Issues of the Cultural-Linguistic Definition of Deaf Culture.

Lorelle Polano

Dr. Colin Mooers, supervisor

A Major Research Paper submitted in partial fulfillment of the requirements for the degree of Master of Arts.

Joint Graduate Programme in Communication and Culture York University and Ryerson University Toronto, Ontario, Canada

2002 04 25

Ask yourself, "What would it be like to be deaf?" When hearing people are asked to consider deafness, they most likely try to imagine themselves in a world of silence. As a first-year undergraduate, I was part of a discussion with several of my friends in which we were asked to decide, given only the options of being deaf or being blind, which we found to be the lesser tragedy. I announced that given only those two fates, I would choose blindness for myself. To never hearing music, the voices of my loved ones, to be deprived of the ability to speak, to carry on a simple discussion as we were having then, was simply unbearable to me. Such a decision was made based on my limited capacity to conceive and imagine such an existence as a world of silence.

It is people such as this, who little consider deafness and only then in the intermittent moments when it is absolutely necessary, who are bestowed the power to enact policy and decide practice for the deaf. It is not in fact the deaf themselves who, though infinitely better suited to understand and interpret their own experiences and needs into policy and practice, are permitted to do so. As will be explained throughout this essay, there are specific reasons for the position of deaf people in Western society which manifest themselves politically, economically, and culturally.

Deafness is conceived as a disability by the majority of people in Western society. In fact, most people would be baffled by the suggestion that deafness is not a disability. I recently listened to a BBC Radio 2 programme that discussed a recent case involving a same-sex, American couple who had purposefully set out to have a deaf child. The programme did not

Issues In Deafness - Lorelle Polano - Page 1

go into the scientific specifics of how this was accomplished; it focussed on the ethical issues raised by such a decision, and medical consent. Whether specific genes were determined or manipulated purposefully as in the scenario of a designer baby, or whether the fertilization of multiple eggs was found to yield an egg or several which carried congenital deafness, or whether some other scientific scenario played out was not for the listening audience to know. A hearing representative of the British Deaf Association discussed the issue with the Radio 2 host. She neither pursued the issue of the homosexual union of the couple, nor did she provide adequate condemnation for the desire to have a deaf child for those listeners who responded to the discussion. These listeners were outraged and sickened that a person should wish to have a disabled child and manipulate the circumstances to ensure such disability. It seemed that most of the listeners who responded likened the scenario to that of a parent purposefully injuring and disabling their child.

This particular case is extreme and demands moral and ethical debate surrounding parental and child rights, medical ethics and of course morality. None of these potent and volatile issues do I wish to pursue here. I wish only to use this one example to illustrate how disability is so wholly abhorred in Western society, and deafness is no exception. These values dictate that someone *wanting* to bring a deaf child into this world is a morally condemnable offence. What would shock and confuse most people to learn is that there are many deaf people who do not consider themselves disabled in the least. These people, as I will attempt to explain in this essay, are part of a community, a cultural and ethnic community, political acceptance of which would challenge the centres of Western cultural norms.

That those people who experience the <code>IdisabilityI</code> do not consider deafness a disabling condition, challenges our notions of common sense. Our common sense dictates that the lack of sensory system in the body is a deficit. If one cannot hear, then it stands to reason that one is lacking in normal functioning of the body, therefore one is left with a deficient sensory picture of the world. But if our common sense notions of deafness are contradicted by the very people who *are* deaf, then these people are either deluding themselves (as medical professionals would have us and them believe) or perhaps our account of fact and reality are the product of deeply ingrained constructions. Is it possible then to consider an alternative conception of deafness?

The popularity of postmodernist and poststructuralist arguments for the ephemeral nature of reality, bound together by culturally determined constructions, has led to dangerous dismissals of the historically and politically located circumstances of many oppressed peoples. According to the systems theory of political economy, the deconstruction of reality to its incremental units distorts our perceptions of the systems of power (Babe). An impotent picture of the elements that combine to create reality is what we are left with. Literary theorist and critic of postmodernism, Terry Eagleton has been critical of postmodernist conceptions of cultural theory. He warns of that the current theoretical trend, to reposition everything as a matter of culture, detracts from the efficacy of critical theory, even the very nature of critical thought. Eagleton writes, "to claim that we are entirely cultural creatures absolutizes culture with one hand while relativizing the world with the other" (95). Such reductionism can

invalidate theories of oppression and emancipation that rely upon constancy of meaning and identification of centres of power.

In light of this danger, it appears foolish to pursue theoretic devices such as Constructs in order to illustrate the cultural dimension of deafness and the political oppression of deaf people. It is not my intention here to argue that deafness is little more than a cultural variation, or cultural phenomena. Instead, what deserves consideration are the political powers that come to bear on the culture of the Deaf, how these powers dictate who is granted access to political voice and who is denied self-determination. Is the truth that which is espoused by scientific, medical exploration and experimentation, is truth the lived experience? The contentions of the professional medical community are taken, at large, as fact. However, the reliance on expert scientific opinions to interpret phenomena, even in matters of scientific uncertainty, has been shown to be problematic in events where quite the contradictory truth was discovered scientifically after assertions were made: the Earth is not flat and the Sun does not revolve around the Earth. Blood does not simply slosh around in the veins needing to be released by regular blood-letting. Objects which are heavier do not fall faster than those which are lighter. Despite the common sense logic of these now defunct assumptions, they have all been proven incorrect. Perhaps the common sense assumption that a deaf person, one who lacks the ability to hear, is deficient in her ability to function and communicate, is also incorrect.

This essay will consider that there are two opposing constructions of deafness. These constructions are mutually exclusive; validation of one necessarily negates validity of the other.

Issues In Deafness - Lorelle Polano - Page 4

The dominant construction defines deafness pathologically, as a condition of auditory deficit. Within this construction, deafness is considered a handicap, its victims disabled and in need of treatment, therapy, and assistance. This disability model of deafness "leads naturally to efforts to try to remediate the deficit" (Reagan 241). This however, is not how the Deaf cultural community considers itself. The capitalization of the "D" in Deaf denotes that the Deaf community views itself, and wishes to be perceived by the dominant hearing community, as a self-reliant, cultural and linguistic minority group, complete with its own natural language, Sign Language, and viable culture. Manual languages include such officially recognised sign systems as American Sign Language (ASL) which is used in North America and other parts of the world, British Sign Language (BSL), and French Sign Language (Langue des Signes Français, LSF) used in France. Sign systems that are used exclusively within a family or small group of people are referred to as [Homesign] (Lane). The Deaf community do not consider themselves to have a communicative impairment in need of treatment, therapy, or assistance.

That these two constructions would negate the validity of the other is the cause of much political tension between the medical community and the Deaf community. The construction of deafness as an auditory deficit is so accepted by society that is has become naturalized, indeed it is common sense to consider deafness a disability. This theory is based on the logic that without the capacity to hear, deaf people are unable to acquire language in the normal way. It is language that allows the human to form abstract thought, the ability to consider temporality and spatiality, as notions of morality. Manual languages have been dismissed by

critics as being unable to facilitate abstract ideas and therefore are neither to be recognised as languages and should be discouraged from use. With no capacity for language acquisition in the 'normal' way, the deaf are left to the paternalistic care of professionals. These professionals are part of the "troubled persons industry," a term Harlan Lane (*Constructions*; *Mask*) uses to describe the lucrative industry that medically quantifies, individualizes, and oppresses the culturally Deaf; it is entirely dependent on disability constructions.

However, there has been a burgeoning acceptance and support of a cultural-linguistic definition of Deafness since William Stokoe began his linguistic research on ASL in the 1960s. His work paved the way for research into the cultural phenomena surrounding this shared language. However, growing academic support in the social sciences has done little to influence the positions of the medical community and the policy-makers of Western society. The political implications of a cultural-linguistic definition would significantly affect the economic health of the sizable industry that has developed to treat deafness as a disability.

There are Deaf communities throughout the world, each with its own Sign Language and cultural values. Sweden became the first country to recognise Swedish Sign Language as the first language of their Deaf people in 1981 (Erting xxv). It is important to note, however that not all people who are deaf consider themselves a part of the Deaf community. Harlan Lane makes the distinction in his book, The Mask of Benevolence: Disabling the Deaf Community, between those people who are culturally Deaf and those who are not. He writes,

Most Americans who have impaired hearing are not members of the American deaf community. They were acculturated to hearing society, their first language was a spoken one, and they became hard of hearing or deaf in the course of their

lives. This book is not about them; it is about people who grow up deaf, acculturated to the manual language and society of the deaf community (xvi).

In this sense, an analysis of the politics of deafness does not seek to deny the medical needs of the deaf and hard of hearing. I will focus on those deaf people who do consider themselves members of Deaf culture, as it is they who experience political oppression as a result of their desire to be recognised culturally. This analysis seeks to "disclose the operation of power in places in which the familiar social, administrative, and political discourses tend to disguise or naturalize it" (Wrigley 8). In analysing the discourse on Deaf culture, both Deaf and hearing theorists hypothesize about the political and cultural issues central to Deaf communities. By locating the construction of deafness as an infirmity, and the development of the community culturally, historically and politically, we can come to understand better the cultural claims of Deaf communities today.

The popularity of emancipatory theoretical perspectives in recent years has provided a conceptual platform on which to build a more Deaf-centred picture of what it means to be deaf. Owen Wrigley, author of The Politics of Deafness, contends that "deafness is less about audiology than it is about epistemology" (1). He relates research into Deaf culture to ideas of otherness and difference. Classic approaches, he continues, subscribe to "an ethnography of the dominant gaze" (2). Wrigley urges theorists to move away from these classic approaches and relocate perspective toward the margins. It is from here, in the newly defined centres, that Wrigley wishes to explore the politics of deafness. The frames of meaning used in late modernity are hermeneutically anchored "in the surveillance of bodies. As the site for naming

distinctions, the body is a recurrent theme in studies of otherness and difference. Deafness is about a body surveilled" (Wrigley 3).

In hearing society, deafness is stigmatized. Erving Goffman identifies three kinds of stigma: physical, characterological, and tribal. Lane suggests that all three categories are applied to deaf people. "We tend to impute many stigmas when we find a single one. ...Physically they [deaf people] are judged defective; this is commonly taken to give rise to undesirable character traits, such as concreteness of thought and impulsive behavior" (*Mask* 7). Carol Padden and Tom Humphries explain the stigma of ASL, in that articulateness is prized in American society while gesturing is not. Lane further explains that "because language and intellect are so linked in our representations of people (we are surprised to hear a towering intellect expressed – unless by deliberate intent – in a Southern drawl or in ungrammatical sentences), deafness seems a defect of intellect" (*Mask* 8).

It is this alleged infirmity of the mind that allows the paternalism of modern medical systems in Western society to relegate deaf people neatly into the category of disabled. The primary function of the medical professional is to diagnose illness and subsequently administer to the infirmity. In short, identification of an ailment necessitates the search for the cure. What is unacceptable under these circumstances is that Deaf people insist there is nothing wrong with them when we can give them so many reasons why there is. Those individuals who are labelled as disabled are expected to act as such and conform to our representations of them.

The medicalization of the deaf community is marked by a long history of struggle between deaf people and the hearing people who profess to serve them, for the right to defend a problem and the locate it within one social domain rather than another – to construe it as a problem of medicine, education, rehabilitation, religion, politics – is won by struggle (Lane: *Mask* 25).

The nature of illness is determined socially. Paul Abberley posits that disability is a social construction, founded in physiology. Indeed,

the social origin of impairment ... does not deny the significance of germs, genes and trauma, but rather points out that their effects are only ever apparent in a real social and historical context, whose nature is determined by a complex interaction of material and non-material factors (12).

Deafness has been constructed as a disability just as disability itself has been constructed socially. Such a construct does not deny the physical characteristics or aberrations that constitute the construction, but it should be understood that the historical and social realities of a given culture facilitate constructions in so much as they necessitate their distinction from the lonormal. The workings of a society are enabled by a set of historical, social and material circumstances. Physical aberrations that interfere with these workings are seen as a deficit, and therefore a ldisability.

Illnesses are socially constructed. The construction is constrained certainly by physiology; it is also constrained by the ecology of the culture in which the illness occurs and by nature of medical discourse and medical institutions in that culture (Lane: *Mask* 209).

Harvard psychiatrist Nancy Waxler posits that "illness labels are created in social negotiations," (387) because what one society considers a disease, another may not. "If a physical condition is widespread enough in a community and does not interfere substantially with the community achieving its goals, it will be seen as an illness only by outsiders with a different cultural frame of reference" (Lane: *Mask* 210). These culturally conceived constructs implicate political and social oppression for those individuals labelled as \[\frac{1}{2} \] disabled \[\frac{1}{2} \] (Polano:

Issues). "For disabled people the body is the site of oppression, both in form, and in what is done with it" (Abberley 14).

The conscription of social labelling may appear to delve into that theoretical space of which Eagleton warns. The postmodernist world of intertextuality and the denial of absolutes may appear to engulf the idea of a culturally created notion of disability. However, it this negotiation of cultural agreement that allows the idea of disability and its social welfare systems to operate legitimately. One cannot deny that an auditory deficit exists. What is in question here is the disabling nature of such a deficit. However, these constructs become cultural absolutes, naturalized into the everyday of common sense.

It is easy to assign new meanings to items or phenomena when stripped of their context. Sign language and Deaf culture exist harmoniously as any other natural language and culture as an adaptation to the physical, historical and political circumstances of that society. Without contextuality, indeed without perspective from within the culture itself, the validity of that culture is easily denied, as was the case for so many non-European cultures upon their 'discovery' by Western society. Lane has likened the experiences of the Deaf to those of colonized African cultures. The attribution of negative (if nonetheless conflicting) characteristics to African natives by their European colonizers is evident in the literature of the time as well as the lingering stereotypes now naturalized into Western culture. By superimposing the familiar world of white European cultures onto the unfamiliar world of black African cultures, the defective perception of paternalism is made to appear legitimate.

Colonialism is the standard, as it were, against which other forms of cultural oppression can be scaled, involving as it did the physical subjugation of a

disempowered people, the imposition of alien language and mores, and the regulation of education in behalf of the colonizer's goals (Lane: *Mask* 31).

The colonizers, the hearing others, have assumed the role of

the protectors, guides, leaders, role-models, and intermediaries for disabled individuals who, like children, are often assumed to be helpless, dependent, asexual, economically unproductive, physically limited, emotionally immature, and acceptable only when they are unobtrusive (Hahn 130).

Abberley draws similar parallels within the theoretical framework of racial and sexual oppression in his formation of a social theory of disability. He explains, that the existing sociology of disability "is both theoretically backward and a hindrance rather than a help to disabled people. ... [It] reproduces in the study of disability parallel deficiencies to those found in what is now seen by many as racist and sexist sociology" (6). However, Wrigley warns that the dominance over and oppression of the Deaf are more complex than the exploitive relationship between colonialists and natives. Whereas,

Colonialism is usually depicted as a cultural hangover incurred while squandering the bounty gained from heroic voyages of discovery and the attendant exploitation of native populations. As with Western domination of other foreign 'discoveries,' the relation of Hearing to Deaf cultures has primarily been that of a pastoral colonialism so long naturalized as to have faded into the consensual 'normal' (7).

This paternalistic colonization is manifested in the audist's failure to understand the structure and values of the Deaf. Hahn charges that "paternalism enables the dominant elements of a society to express profound and sincere sympathy for the members of a minority group," (130). It is of course, perfectly natural from the viewpoint of hearing society to consider the deaf person as disabled, and thus in need of medical and social support. The incursion of medicine into every aspect of human nature and physiology to include everything from contraception,

fertility, pregnancy, childbirth, child development, hyperactivity in children, reading difficulty, learning problems, drug addiction, criminality, child abuse, and physical disability to exercise, hygiene, sleeplessness, diet, breast and nose size, wrinkles, baldness, obesity, shortness and cultural Deafness is a social phenomenon that Ivan Illich calls "the medicalization of life" (8).

Who does this medicalization serve? Does it best serve those individuals who must undergo treatment as a result of the identification of their illness? Or is the real benefactor the medical professional who stands to gain both capital and renown from the treatment of the illness? Paternalism is self-serving. It is a self-righteous enterprise designed to provide protection for economic interests and from the need for change. The oppressive nature of a paternalistic medical system is evident in the stratified structure of society itself. The influence of the professional over the patient can create instances of powerlessness, described as "an individual's perception of self as not having the cognitive competence, psychological skills, instrumental resources, and/or environmental support systems needed to successfully influence his or her environment" (Schlesinger: *Effect* 4). The professional has the power to prescribe treatment, sometimes at the expense of a patient's self-determination, other times at the expense of the patient's best interests. Freire identifies prescription as a basic element of oppression:

Every prescription represents the imposition of one man's choice upon another, transforming the consciousness of the man prescribed to into one that conforms with the prescriber's consciousness. Thus the behavior of oppressed is a prescribed behavior, following as it does the guidelines of the oppressor" (31).

It is the economic gain to be had from the pathological model of deafness that has allowed it to develop into a professionally legitimate infrastructure: the troubled persons industry. This industry encompasses the great many professional and trained people that are needed to aid disabled persons in their admittance into hearing society, including administrators of schools and training programs, experts in counselling and rehabilitation, teachers, interpreters, audiologists, speech therapists, otologists, psychologists, psychiatrists, librarians, researchers, social workers, and hearing aid specialists as well as the facilities they command, the clinics, operating rooms, laboratories, classrooms, offices and shops (Lane: *Constructions* 172). The troubled persons industry stands only to lose from acceptance of the cultural-linguistic model of Deafness that the Deaf community and its supporters seek to promote.

What is necessary in an industry based on the oppression and colonization of its clients, is the exclusion of deaf people from employment in that industry. In many countries, including the U.S. and Canada, one must be a certified teacher to be permitted to teach deaf children. But deaf people are not admitted into the teaching industry because they are deemed unable to teach hearing children (Padden & Humphries). The institutionalization of discrimination incorporates this intolerance into the system by making it policy and therefore difficult to combat. The body of knowledge that has been built on the disability model of deafness is supported by an infrastructure of professionals and published materials. This body of knowledge is the basis by which professionals receive their training and therefore credentials. These credentials are the means by which professionals establish the respect of their peers and clients, and the authority to secure funding for further study. This body of knowledge legitimizes the work of these professionals, placing them securely within the legal and social

norms of society (Lane: *Constructions*). The oppressive potential of a legitimate and respected medical field is evident. In fact, the largest and most influential organisation for the deaf and hard of hearing in Canada is the 'Canadian *Hearing* Association'. The implications served by the inclusion of 'hearing' in its name, guarantee the good will of this organisation is founded on the Oralist agenda, and funded by the political infrastructure that maintains Oralism.

Recent legislations enacted in Western nations have sought to provide political representation and access for disabled peoples such as the 1991 Americans with Disability Act. These laws are ratified in order to protect the interests of disabled citizens and guarantee them access to such rights as political representation and education. Allegiances with the disabled community could provide the means to political gains difficult for the Deaf community to achieve on its own. However, to embrace a disability identity in order to make political gains is to "endorse the very principle of oppression the community has so long struggled to overthrow; it is to undermine the community's efforts in behalf of some its most cherished goals, such as bilingual and bicultural education" (Lane: Mask 22). Whereas disability legislation works to open the doors of the public schools to students with special needs, it also works to deprive deaf children of the kind of education and educators that they need.

Recognition of deafness as a disability has been documented throughout history.

However, medicalization of deafness in arose during modernity, the era when public reverence for modern scientific methodology in medicine took hold. Deaf communities existed long before their appreciation in academic circles. In the nineteenth century, institutions of learning for the deaf were built in both Europe and North America. It was within the walls of these

schools that Deaf culture was fostered. The community developed within the conditions of a shared language and shared experience. However, it was the hearing administrators of these schools who caused the kinds of political and social oppression which Deaf people currently experience. In 1853, Dr. Prosper Ménière, resident physician of the Paris school for deaf children wrote:

The deaf believe they are our equals in all respects. We should be generous and not destroy that illusion. But whatever they believe, deafness is an infirmity and we should repair it whether the person who has it is disturbed by it or not (in Lane: *Mask* 212).

With this statement, Ménière captures the audist medical view that enforcement of a 'cure' is necessary despite the wishes of those very people is it purported to affect. Ménière succeeded Dr. Jean-Marc Itard in his position at the school, but not before Itard inflicted a great many extravagant medical procedures upon the culturally deaf children in his care, procedures to which Wrigley refers as "medically legitimated voyages of discovery in search of the missing Word" (15). As Lane describes, Itard was first inspired by the recent discovery of an Italian surgeon that a frog's leg would contract if touched by charged metal. Thinking perhaps that the paralysis of the hearing organ to be similar in some way to the paralysis of a limb, he applied electricity to the ears of some students. He tried placing leeches on the children's necks in the hope that local bleeding would help. He pierced the ear drums of six students. The procedure was painful and proved fruitless and Itard desisted, but not before one child died. Before his death, the child's ears discharged some foreign matter and it was reported he regained some hearing and with it some speech. This led Itard to believe the cause of hearing loss was due to blockage rather than paralysis.

Next, he inserted a probe into the Eutrachian tube into the ears of one hundred and twenty students. It was rumoured that the postmaster of Versailles had cured his own hearing loss by such a procedure, thereby "flushing out the lymphatic excrement" (Corone 41). Two dozen of the students escaped the procedure because they could not be subdued. Nothing was achieved. Itard's next attempt involved a secret brew which he dispensed a few drops a day for two weeks into the ears of every student who was not congenitally deaf. When this did not work, he put some students on a regime of daily purgatives. However, one of his more alarming measures was his treatment of the ears with a bandage soaked in blistering agent. The skin would dissolve, ooze with puss and cause the child excruciating pain. When the ear scabbed, Itard would reapply the bandage and reopen the wound. He would next apply caustic soda to the skin behind the ear. Other students were treated with a white-hot metal button behind the ear. Others still were struck with a hammer just behind the ear in order to fracture their skull. Itard tried threading string through a child's neck with a seton needle causing "a suppurating wound that supposedly allowed feculent humours to dry up" (Lane: Mask 213). None of these treatments were to any avail. Itard concluded that "medicine does not work on the dead, and as far as I am concerned the ear is dead in the deaf-mute. There is nothing for science to do about it" (Esquiros 412).

Itard and his successor were championed in there opinions by other hearing instructors of the time. The Congress of Milan in 1880 brought together fifty-four delegates to discuss the welfare of the deaf and the blind. It was at the Congress that []Oralism[] was proclaimed to be the only acceptable method of education for the Deaf. It was oral instruction that was to bring

deaf people back into the fold of society. Sign Language was regarded to be incapable of articulating abstract and precise thought. It was determined to be an inadequate means of communion with God, and deficient in promoting the development of the soul (Erting xxiii). The president of the Congress, Italian priest Giulio Tarra, an enemy of Sign Language preached to his delegates of its evils:

Oral speech is the sole power that can rekindle the light God breathed into man when, giving him a soul in a corporeal body, he gave him also a means of understanding, of conceiving, and of expressing himself ... While, on the one hand, mimic signs are not sufficient to express the fullness of thought, on the other they enhance and glorify fantasy and all the faculties of the sense of imagination. ... The fantastic language of signs exalts the senses and foments the passions, whereas speech elevates the mind much more naturally, with calm, prudence and truth (Lane: *Mask* 114).

By demonizing sign language as well as claiming the act of signing visibly set the Deaf apart from society, the campaign for Oralism began its hold in deaf education.

The majority of teachers in schools for the deaf at this time were deaf themselves and communicated with their students by Sign Language. With the pronouncements of Milan, these teachers suddenly became unqualified. Teachers who used Sign Language were forced into retirement because they were unable to acquire oral language within a year or even two, just as an Anglophone cannot learn French to a level adequate of instruction in that same amount of time. The increase in the number of schools for the deaf in Europe and North America created a gap in the number of people trained in manual languages and the number of teaching positions that needed filling. More and more teachers were employed who had little, if any, connections to the Deaf community.

In the midst of the Congress of Milan, a protest against pure Oralism was initiated by

Edward Miner Gallaudet, president of Gallaudet University (then known as the National Deaf-Mute College), a college for the Deaf in the United States. His argument, in support of instruction in ASL as the best means of educating deaf students, was dismissed by the Congress. Gallaudet addressed the Congress of Milan with a speech in stanch support of representation for the culturally Deaf who were excluded from the proceedings. The Congress claimed that non-oral deaf could not participate in the proceedings because they were not able to follow the instructions (Lane: *Mask* 119). Gallaudet was a proponent of the combined system of teaching the deaf. This combined system was to include ASL in the classroom and training in speech after class for those who could benefit. Students who had no exposure to spoken language before losing their hearing (such as the congenitally deaf and early deafened children) were unlikely candidates for acquiring skills in lip-reading and speech (Padden 84).

Alexander Graham Bell, however, was in fierce opposition of the use of Sign Language. He campaigned vigorously for Oralism and assimilation of the Deaf into public education. The son of a distinguished elocutionist and a hard of hearing mother, husband of a late-deafened woman, Bell supported the Eugenics movement of the time. Eugenics was concerned with improving the human condition through selective breading. He served on the Breeders' Association section on Eugenics "to emphasize the value of superior blood and the menace to society of inferior blood" (Bell: *Race Suicide* 339). Bell sopposition to the intermarriage of deaf persons, and to the segregation of the Deaf in residential schools, are documented extensively in his Memoirs upon the Formation of a Deaf Variety of the Human Race. He warned that residential schools encouraged the Deaf community to intermarry and

reproduce. He wrote, "It is to be feared that the intermarriage of such persons would be attended by calamitous results to their offspring." Bell did not support legislation preventing deaf adults from marrying as he foresaw this as encouraging children born out of wedlock. Instead, he saw speech as the key to the deaf person's success. However, in a 1912 Breeders' Association report, Bell's section on Eugenics calls for the "socially unfit" classes of people, including deaf and blind people, to "be eliminated from the human stock" (3). Model Eugenics law, therefore, called for the sterilization of these classes, including the feebleminded, insane, criminalistic, "including the delinquent and wayward," epileptic, inebriate, diseased, blind, deaf, deformed, and dependent people, including orphans, ne'er-do-wells, the homeless, tramps, and paupers" (American Genetic Association, Eugenics Section). By 1940, thirty American states had such sterilization laws (Lane: Mask 216). And while it is shocking to note that physicians were actively involved in the Eugenics movement, it stands to demonstrate the cultural and historical relativity of what is defined as illness and deficiency.

Despite Bell's crusade to abolish ASL, and the prohibition of Sign Languages from use in the classroom in the wake of the Congress of Milan, the playgrounds and dormitories were the places where Sign Language was learned and flourished. The Deaf taught each other; adults and older students taught the young, and Deaf parents taught Deaf children. A "latent function" of residential school education was to serve as a "viable milieu for enculturation" (Emerton 139). The residential schools for the Deaf based on the asylum model were built in the 1800s. These schools were set on large tracts of land enclosed by a wall; they were "island

communities." Most often found in the middle of the state, a single school would serve an entire state or a large region of a state (Padden: *Cultural* 82).

Although the movement in the 1970s to mainstream the education of students with special needs pointed the finger at residential and asylum model schools as discriminatory and segregationist, residential schools housed and taught the Deaf for over a century and served as an integral part of their group identify. Deaf adults often identify the city of their school, and not their city of birth, when asked where they are from. However, in 1975, a law was enacted in the U.S. that allowed for disabled children to be taught in public schools. A movement towards deinstitutionalization saw the admittance of deaf students into mainstream public education. Public Law 94-142 opened public schools to disabled students by guaranteeing all handicapped children the right to free and appropriate education within "the least restrictive environment" (Commission on Education of the Deaf). The enrolment in residential schools witnessed a significant decline: a ten percent decrease in enrolment between 1970 and 1978, and twenty-two percent fewer deaf students attended residential schools between 1979 and 1985 (Schildroth, Public Residential Schools 82). During this same time, enrolment of deaf children in local public schools increased by sixteen percent (Schildroth, Recent Changes 65).

Deinstitutionalization was supposed to provide a means toward more normal lifestyles as well as services within the community for those who needed them. Custodial institutions were costly and tended to house more mentally and physically handicapped children than needed to be there. One of the motivations for deinstitutionalization was cost containment. It

is far less expensive to provide special services such as a resource room and a special itinerant teacher within the public school setting than to provide specialized education in a residential setting. As well as being costly, these institutions came with negative aspects. They fostered dependency and restricted freedom with no evidence of benefit (Lane: *Mask*). However, residential schools for the deaf, while suffering disadvantages of their own, propagated the cultural soil in which Deaf culture grew and Sign Language was acquired. Even though manual languages were forbidden in the classroom, the school was still a signing community, a place to acquire self-respect as a Deaf person (Lane: *Mask* 137).

The decentralization of Deaf cultural acquisition and growth from the residential schools demonstrated a need for "less physical and more psychic" boundaries of Deaf culture which brought about a desire for recognition of the cultural nature of the Deaf community (Padden & Humphries 183). However, Carrol Padden also points toward other social factors that precipitated a move toward the cultural-linguistic model. The Civil Rights Movement in1960s America brought with it a shift in the socio-economic status of marginalized people. Emerged from this social upheaval, came a North American Deaf middleclass. Until this time, the majority of deaf people were employed in solitary, blue-collar occupations such as shoe repair, upholstery, printing, and assembly line work. Deaf people had also worked as teachers and dormitory supervisors at residential schools before their positions were made redundant by the Oralist movement. These teaching positions had not held the prestige of professional teaching positions, few qualifications were required and they were paid accordingly. Padden

explains that the working-class standard within the Deaf community was so established, that it was not uncommon for deaf teachers to moonlight.

An increase in socio-economic status brought with it an increase in consumerism. A desire for the trappings of 'middleclass America,' the acquisition of status items such as televisions and telephones lent status to Deaf homes. The Deaf middleclass pushed for closed captioning of television programmes and telephone relay services in order to gain further access to the cultural artefacts of North American society. Padden notes that the turn toward private pursuits can be seen as a cause for a decline in "interest in the traditional group activities," such as Deaf clubs as threatening political and physical solidarity (85). But she also sees new social tensions rising within the Deaf community at that time. With these middleclass cultural items, came a diminished occurrence of the traditional face-to-face communications of the Deaf community. The consumption of television and the novelty of conducting business by telephone, according to Padden, caused a decline in the participation in Deaf clubs. Without these physical terms to define the community, a new definition of 'group cohesiveness' became necessary. A cultural-linguistic model could serve this need.

The adoption of the cultural model of Deafness triggered an awareness of the social implications of the medicalized self. Rejection of the pathological model was facilitated by a cultural awareness. A cultural frame is based on equality, "that all languages and cultures are equal because they are adaptations to the conditions of life" (Padden 85). A medical model is predicated on deficiency and failure, replacement and repair, a devaluation of what is by focusing on what is not. The past may be written as a history of ignorance, failures, and the

redemption of heroic medical discoveries. But the cultural model affirms the past as the source of Deaf culture, a resource for the present.

Amidst this new social awareness of Deaf culture both within and outside the community, there arose scientific interest in the structure of American Sign Language. William Stokoe, professor of English at Gallaudet University, published "Sign Language Structure" in 1960. He declared ASL to be "a language with a structure analogous in complexity and richness to the structure of spoken language yet essentially independent of them" (Erting xxiv). And although Stokoe was ridiculed by his colleagues, he pursued his work in Sign Language and with the aide of the national Science Foundation, the American Council of Learned Societies, and Gallaudet University. Together with two Deaf colleagues, he published the first dictionary of any Sign Language based on linguistic principles. A Dictionary of American Sign Language on Linguistic Principles, by William Stokoe, Dorothy Casterine, and Carl Cronenberg, was published in 1976. This new found interest in the linguistic principles of Sign Language developed into multi-disciplined interest in the cognitive development of deaf children and the factors affecting this development. By the 1980s the academic study of Deaf culture in universities was world wide (Erting).

Until Stokoe's seminal work in the field, Sign Language had, for the most part, been condemned by the hearing majority and those 'expert' educators of the deaf. The above testimony of Father Tarra at the Congress of Milan is indicative of attitudes toward Sign Language. Tarra had claimed that, "signs are not sufficient to express the fullness of thought" (in Lane: *Mask* 113). Psychologist Judith Greene, nearly a full century later echoes Tarra's

position on "the crudity of sign language" (39). In her 1975 book about thought and language she alleged, "Even deaf and dumb humans who rely on sign languages find it cumbersome to make complicated abstract statements because of a lack of subtle grammatical inflections" (39). These expert opinions, exhibit the prejudice and ill-informed opinions about Sign Language that 'science' held for over one hundred years. These misgivings of Sign Language were perpetuated by the egocentrism of a hearing-verbal scientific community.

Owen Wrigley points to epistemological righteousness as the reason the experts clung to scientific insistence rather than pursue proof of Sign Language's so-called failings.

Linguists, until Stokoe's research rocked the proverbial boat, had been searching for the site of language not in the source, but within its verbal expression. What Wrigley (17) refers to as "the conflation of language with speech (and vice versa)," disqualified Sign Language from linguistic analysis. He explains this predisposition of scientific inquiry in terms of modernity,

As rapid shifts in intellectual disciplines have accompanied as well as partially driven the emergence of modernity, new theories of language that mirror our view of the universe and that view's new interpretive physics have been required. Languages that do not rely on a serial and sequential presentation of data, as all spoken languages do, question cherished epistemologies (17).

The inability to understand Sign Language in its own nonlinear terms is the cause of misunderstanding its linguistic principles. A shift in perspective from the two-dimensionality of temporally based verbal language to the three-dimensionality of spatially based manual language is necessary to break those assumptions that the Sign Language lexicon is void of prepositions, verbs and modifiers thereby constricting its range to the denotation of concrete items capable of encoding as iconic gesture. Sign Language has been recognised by Linguists

as a "visual-gestural language processing the same kinds of grammatical properties as any other language" (Tucker 366). But in order to understand how gesture can convey the range of human thought, an appreciation for its grammatical structure is needed.

Stokoe's research began at the site of epistemological incongruence. Investigations into the source of language "have been looking in the product for what they should have sought in the producers" he contended (*Look* 426). These investigations supported a theory of a structure within the human brain that provided the infant with a universal grammar to facilitate language acquisition in whatever language that child was born into. The difficulty with 'the language organ', as this mechanism was called, was that as an invisible and cognitive structure within a relatively unmapped human brain, its location and nature was unknown. Therefore, when this theory of language acquisition was presented with the dilemma of language appropriation in children born profoundly deaf, the matter was rejected (Stokoe: *Look*). The standard theory, it was argued, "applies to the normal and cannot be concerned with pathology" (Stokoe: *Look* 429). Hence, the processes of language acquisition in the deaf were dismissed as unworthy of consideration within Linguistic theory, despite the Oralist insistence that they acquire spoken and written language.

Stokoe writes.

Those who investigated speech, the organs producing it, the anatomy and function of the sense that heard it, and the areas of the brain involved with it, were announcing with new discoveries about how language worked, as they thought, when their valuable discoveries were in fact about speech (*Look* 427).

And so it was that Stokoe began his research into the site and source of human language. The language of gesture was where he began. "Sign language is not taken to be the antithesis but

is presented as the antecedent of spoken languages" (Stokoe: *Look* 429). Gesture, he contended, specifically complex gesture (and not that which accompanies speech and is therefore subordinate to speech), is the intermediary stage to speech.

To illustrate his theory, Stokoe cites Thomas Sebeok, "language evolved as an adaptation, whereas speech developed out of language as a derivative 'exaption'" (in Models 10). Sebeok's research leads him to conclude that communication is facilitated by cognitive modelling. Language with its grammar, possessed by only one species, is a secondary modelling device and that human culture is a tertiary modelling device. The primary modelling device is a "mute verbal modelling system," present in the earliest of our evolutionary ancestors *Homo habilis*. This primal cognitive structure in humans serves as the communication enabling structure, rather than any invisible universal grammar mechanism. This primal modelling device facilitates language through gesture because modelling, representing, and communicating create connections in the brain, allowing for language and shared culture (Stokoe: *Models* 10).

Thus it should be easier to construct a theory of gesture turning into language, complete with duality of patterning and syntactic structures, and hence into spoken language, than to find spoken language springing full grown from a species but one step removed from the higher apes (Stokoe: *Look* 432).

Areas of Linguistic theory have supported the notion that elements of language, namely "language tokens," (Stokoe: *Look*) can only be completely arbitrary. Stokoe disputes this arbitrariness and supports modelling theory by describing his observations of human behaviour and interaction. Infants use meaningful gesture to communicate for months before they begin to use the parental language, whether it be spoken or signed.

An object in sight but out of reach may still be reached for, but an unbiased observer can see that the infant is anticipating its capture: The child's reaching, pointing hand assumes the shape it would have if the object were within it. Infants also represent events within the nursery. Long before "Daddy gone" and similar observations emerge as an infant's early two-word utterances, a shift in gaze and a pointing, moving finger or hand have been visibly expressing the idea (Stokoe: *Models* 11).

Research into the acquisition of language within the individual has been met, in part, by the study of "the gestural communication of deaf individuals who do not learn a spoken language and who are not exposed to a signed language" (Morford 165). Typically, 'Homesign' "emerges only in situations where there is not sufficient language stimulation in an individual's environment to permit typical language development" (Morford 165). Such circumstances are rare and cannot be generated by experimental design. However, these cases may provide the means by which the capacity for language generation, acquisition, and processing can be better understood.

In Jill Morford's review of the research on Homesigns, she distinguishes Homesigns from both recognised Sign Languages and from the spontaneous nonverbal gestures of speech. Homesigns are restricted in scope to one generation, usually the lifespan of the deaf individual. Because Homesigns are used only by the deaf individuals' immediate social groups, their family and friends, usually only the deaf individuals embraces it as their primary language. Hence, Homesigns may be precluded from becoming as complex as Sign Language. Homesign systems also differ from the gestures that are often referred to as the nonverbal elements of speech. These spontaneous gestures are subordinate to the processes and the meanings of what is said.

A significant feature of Homesign that is not as prevalent in Sign Language is the retention of iconicity in signs. Iconicity, or the degree to which a sign captures the visual characteristics of the referent, is introduced to the sign during creation. Just as the infant's hand assumes the shape it would have if an object were within it as a means of modelling that object for itself, the Homesigner's hand(s) assumes the shape or gestures in a way that resembles the object or action that is meant to be conveyed. Homesigns are divided into two elements. 'Deictic gestures' make reference by pointing to some feature of the present environment, or to the space in which absent entities once stood (such as a person/thing who has departed). 'Descriptive gestures' are pantomimic. They are concrete imitations of visual concepts (Tervoort 440). The retention of iconicity in Homesign enables the user to be understood by individuals who are unfamiliar with the system as well as by those who are familiar. Because the non-deaf users of Homesign do not adopt the system as their primary mode of communication, the comprehension of signs is better facilitated by maintaining their semblance to the item of denotation (Polano: Oppression).

Iconicity is not retained in signs to the same degree in Sign Languages. Research indicates that whereas iconicity aids in the recall and processing of signs for the hearing or secondary users of Homesign, it does not offer these same benefits for native signers. Frishberg's research on arbitrariness and iconicity has shown that ASL has lost much of its iconicity over the past 100 years. Increased arbitrariness is an adaptive means of promoting ease of articulation and perception. Arbitrariness, then, can be seen to increase from a highly iconic means of communicating to the less iconic nature of Sign Language to the outwardly

entirely arbitrary nature of verbal language. The supposed spontaneously arbitrary representation of thought as sound and symbol inherent in the epistemology of late Modernity is the model by which Sign Language has been measured. But a progression of symbolism that finds its origin in iconic and primal gesture, indeed the 'antecedent' of spoken language, is a far more likely evolution of language than an immaculate conception theory of complex spoken language. Given the millions of years that spoken language has had to evolve and adapt, what changes in the iconicity of Sign Language can we expect over time? And how have evolutionary processes have been hindered already by the Oralist agenda?

The criticism that Sign Language is a base form of communication, capable only of concrete expression, lacking the finesse and potential for abstraction that spoken languages possess, is founded in a failure of the hearing person to transmute to the Deaf centre. In an understanding of communication bound by serial delivery, the information "deploy[ed] spatiality in visual based grammar and syntax ... are unavailable to sound-based languages" (Wrigley 10). The temporal and spatial aspects of nonverbal language differ considerably from verbal languages bound by sequential ordering. Verbal language is delineated by the sequential, linear fields of temporal space. Speech is created by the vibration of the voice box causing the neighbouring molecules to collide in a reaction wave which travels through a medium until it finds a human ear. This sequence of action is dependent on the order of events. In the case of written language, a measure of surface directs the script, be it left to right, right to left or top to bottom. All that happens within that measure is sequential, dictating our method for modelling and thus understanding reality. When the simultaneous conveyance of

subject, predicate and their modifiers, intrinsic in the three-dimensional syntactic structure of Sign Language, are regarded by an individual from a two-dimensional frame of reference, the individual tries to perceive each element sequentially. Because some elements are missed in this process, the individual is led to believe they are absent, that the language is primitive.

Far from being primitive however, Sign Language is simply the adaptive linguistic phenomena of a world that is primarily visual (Stokoe: *Models* 11). The syntactic structure of Sign Language makes use of the three-dimensional space in front of the signer, as well as facial expression and body movement. Stokoe identifies four basic elements of Sign Language:

• Places or 'tabs': different from each other but recognisable as the position where a sign begins

- · Designators or 'dez', the configuration of the hand or hands which make the sign;
- · The action itself; and

or acts or ends:

• The orientation: the direction of movement or the direction of face to indicate actor and acted upon (Stokoe: *Study*372,373).

In written language there are rules that restrict the combination of letters or sounds. In English there are rules about the number of consonants that can combine to form a sound without vowels. If three consonants begin a word, the first consonant must be an 'S' (i.e. "spring"). In French, a vowel sound is not permitted to follow another. This rule takes precedent over other grammatical rules such as the needs for noun articles to indicate gender (i.e. de l'eau). Similarly, there are rules that restrict the simultaneous combinations of these four elements for the same reasons that verbal language restricts the allowable sequences of vowels and

consonants: for simplicity of execution and perception (Lane: Mask 14).

In an earlier paper, I attempted to explain how the four elements of Sign Language utilize spatial reasoning to indicate actor, action and acted-upon within a sign (Polano). I believe it is an effective explanation and include it here:

Temporal reasoning of verbal language relies on word order, linear syntax, to convey the same information. Actors and acted-upons are defined according to their arrangement around the verb. Therefore, in Sign Language the information that 'A' acts on 'B' is conveyed by the incorporation of physical movement of hand configuration 'A' in the spatial direction of hand configuration 'B'. In English, 'A' acts on 'B' is conveyed by the linear or temporal position of 'A' (be it written or spoken) before the verb 'to act', conjugated in the singular present tense, to define it as the actor, followed by 'B', whose position defines it is as the 'acted upon' (Stokoe: Study; Lane: Mask). Without the necessity for temporal syntax in Sign Language, word order is then available to serve other purposes such as importance of information. "Thus, it is common for an ASL sentence to put the topic first and then the comment, as in the sentence with two signs: GIVE-HIM-THE-BOOK, I-DON'T-WANT-TO" (Lane: Mask 15). Modifiers of verb and noun, such as adverbs and adjectives in English, are conveyed by changes and repetitions in, or relaxation of movement. Changes in the shape of a sign can signify tense. Single complex signs can convey complicated meanings such as PREACH-TO-SELECTED-ONES-AT-DIFFERENT-TIMES by imposing specific movements on sets of verbs (Lane: Mask 15, Stokoe: Study).

We can see how this language is adaptive to the conditions of the deaf environment as well as how Deaf culture is reflected in the language. Culture revolves around a language core. If language is the secondary modelling system and culture is the tertiary modelling system, then language shapes culture. The transmission of culture is facilitated through language. The members of our culture impart to us their knowledge of the world through a shared language. This enculturation starts within the family. We first come to know the social mores of our culture from our parents. Deaf children of hearing parents, however, cannot learn Deaf culture

from their parents. The segregation of deaf school children from one another and from their culture by the infrastructure of society is the exercise of oppression by the dominant hearing culture.

Lane has identified five stages of audist-enforced assimilation (*Mask 132*–135). The eradication of a culture is an extreme form of oppression. Culture unites its members in a shared language and experience. Segregation breaks down those shared experiences and Assimilation erases the culture. He begins with 'Oralism.' The removal of Sign Language from the classrooms of deaf children has been significantly detrimental to the social competence of generations of deaf people. Unable to communicate properly with their peers, families and educators, a lack of life and social skills as well as behavioural problems have developed, making it difficult for these deaf adults to find gainful employment or develop relationships within the Deaf community and beyond.

The next stage Lane identifies is the establishment of day schools for the deaf in the U.S. At these schools, classes were conducted in spoken English. Children lived at home in a majority-language environment. This segregation from one another was imposed with the hope that deaf children would learn English rather than ASL and consequently be able to form relationships with and marry a hearing person. A.G. Bell's recommendations for the purging of hearing impairment from the human condition may have been adopted by educational policy, but despite these obstacles, ASL remained resilient. Deaf adults did enter the Deaf community and they did marry other deaf people whom they met within that community. Endogamous marriage patterns are prevalent among the deaf. "An estimated nine out of ten members of the

American deaf community marry other members of their cultural group" (Padden & Humphries, 68). The shared experiences of culture, education and relationship to the greater hearing society create bonds between the Deaf.

English dominance (or French dominance, or German dominance, etc. as nationality dictated) was reinforced by manual sign codes for spoken language, finger-spelling, lip-reading, written language, speech and speech accompanied by signs. Manual sign codes for English (MCEs) superimpose English grammatical structure onto the signs of American Sign Language by creating new signs such as modifiers for verbs and prepositions. These superfluous signs fail to recognise the inherent grammatical structure of ASL (Erting xxv). In the U.S., 'total communication' programmes are theoretically designed so that teachers employ all the available methods of communication (including those listed above and such things as pantomime, drawing, etc.) in their lessons. Unfortunately, in practice, 'total communication' usually means teachers sign the occasional word while speaking, usually because they are familiar only with the occasional ASL sign for that word. This practice equates to 'shouting' these words, and though it may create the illusion of making sense, it typically presents a disjointed string signs

(Padden & Humphries). The deaf child is confused as to what is being said about those few words being signed. Lane alleges, "This is another indication that education is not the preoccupation of the classrooms for deaf children; English is" (Mask 134).

Mainstreaming is the fourth stage of forced assimilation. An estimated sixty thousand deaf school children in the U.S. now attend local public schools with hearing children, nearly

Britain and other parts of Europe despite the disaster that met similar attempts at large scale mainstreaming in France and Germany in the nineteenth century. Public Law 94-142 was enacted to facilitate the education of [disabled] students with such assistance as was deemed necessary through a process that resulted in an Individualized Education Plan (IEP) (Erting xxv). However, "where people with disabilities cherish independence, culturally Deaf people cherish interdependence" (Lane: *Constructions* 180). What was meant to provide [lequality] to deaf children, in turn has served to isolate them.

Freire's model of the forms of oppression based on pedagogy and language deals with the forms and kinds of knowledge that are based in language. Language includes not only literacy and the use of language, but all types of knowledge that is based in language such as written materials, etc. Pedagogy goes beyond the classroom. It can exist between any teacher and pupil and as such a teacher is anyone who attempts to transfer knowledge to a person perceived to be without knowledge. Because knowledge is traditionally based in language, access to this knowledge is limited without some form of conversational or written language. This "banking" concept of education, in which the teacher deposits information into the student, has been associated by Freire to the oppressors' belief that the oppressed represents "the pathology of a healthy society" (60).

The education and rehabilitation of deaf people can be seen to follow Freire's model.

Deafness has been considered a pathological state by hearing society, a communicative impairment caused by a deficiency of language acquisition. The forced instillation of spoken

and written language, criticizes Freire, implies the learner knows or retains nothing of value and so must be filled with ideas by the teacher. In a traditional oppressive situation, such as the education of natives or illiterate peasants, the learner is shaped to meet the needs of the social system. They are given just enough information to be useful to the oppressors, but not enough to be independent of them or critical. In the case of the medicalized deaf, independence and autonomy of the Deaf community would cripple the troubled persons industry and deprive the educational policies in place of their legitimacy.

The average American sixteen-year-old deaf student reads at the same level as an eight-year-old hearing child. The same results were found in sixteen-year-old deaf British students (Lane: *Mask*). Despite an education based heavily in oral methodology, deaf students are unable to read at a competent level. A level of competence in a verbal language equal to that of an eight-year-old child does not facilitate independence. The abolishment of Sign Languages from classrooms and the imposition of spoken language on deaf children, Lane contends, "is the single most important cause of the limited educational achievements of modern deaf men and women" (*Mask* 113). Deaf children receive an education delivered almost exclusively orally. The tragedy however, is not that deaf children cannot speak, lip-read, or read written language; the tragedy is that they are unable to learn from this education. Only two deaf children in a hundred go on to post secondary education (Lane: *Mask* 161). The ability to think critically about their existence is denied them by the oppressive mandates of education and medicine.

Patients subject to the prescriptive power of medicine have little autonomy when it

comes to matters of their cognitive competence. A deaf child's academic path, and therefore potential, is decided by the medical, psychiatric and parental decisions that are based on the "psychology of the deaf" and its instruments of measurement (Lane 50). The diagnosis of and prescriptive measures for deaf children are dependent on the psychological tests designed by hearing professionals for hearing clients. Misconceptions about the cognitive capacities of deaf children are contributed to and perpetuated by inappropriate measures. These misconceptions are self-perpetuating as they are used as a basis for instituting policy and procedure.

Numerous psychometric tests are administered to deaf children in order to measure such things as personality, IQ and mental health. The problem with these tests is two-fold. First, the tests are designed for hearing children by hearing professionals. Second, because of the design, these tests are administered orally. Deaf test-takers are confused as to what is expected of them. Only about fifteen percent of the professional people who serve deaf clients focused on deafness in their education (Lane: *Constructions*). The great majority of examiners have no knowledge of Sign Language and are dismayed at to how to convey what needs to be done without dropping any hints on how to do it. Some examiners resort to pantomime, an unreliable method of conveying test instructions. The scores of deaf students who receive instruction in pantomime vary widely depending on how well the instructions have been explained. Measured IQ scores can vary as much as thirty points (Lane 51). Personality tests, such as the Thematic Apperception Test (TAT) and the Rorschach are often misunderstood by the deaf client. These individuals simply describe what they see instead of creating a story

based on the picture as the instructions require (Lane 51). Despite the obvious distortion of results gathered from testing deaf clients, results are still recorded and published.

The conundrum in administering these tests is this: if the procedures and language of the test are translated so that the deaf person may understand, then test results cannot be compared to statistics gathered from hearing subjects and therefore cannot be used to evaluate their client. The assurance of reliability is maintained despite the invalidity of tests administered in English or another oral language. Often, the deaf client not only does not understand the instructions but fails to understand the content as well. Publication of results perpetuates stereotypes and fails to meet the educational needs of deaf children through misdiagnosis.

Deaf children are often mistakenly determined to be learning disabled (Lane: *Mask* 52). And to add further complication for these misclassified students, they are also frequently diagnosed as being emotionally disturbed (Lane 57). Hilde Schlesinger published a study of deaf school children in which she concluded that "when compared with their hearing peers, [deaf school age children] have five times as much emotional disturbance" (*Deafness* 106). Schlesinger cites her own study, conducted fifteen years earlier, in which teacher ratings were used as the basis of assessment. Teachers and counsellors at of deaf children in California were asked to rate their students as one of three choices: "severely emotionally disturbed and have been or should be referred for psychiatric help"; or "not severely disturbed but whose behaviour necessitates a disproportionate share of the teacher's time, or requires other special attention"; or neither.

Prescribed choices, such as these, may bias teachers against their students. If research is being done in the area of emotional disturbance and behavioural problems of deaf children, it is possible for the teacher to draw associations between these negative traits and their students when the teacher is called upon to report on emotional disturbance. In the experiment called "Pygmalion in the classroom" (in Brown 174), teachers were told untruthfully that certain random students in their class were ready to bloom intellectually. Later, when these teachers rated their students, those same children were rated superior to their classmates in traits such as cooperativeness and adjustment. The suggestion that deaf children may have emotional/behavioural problems may bias their evaluation. Frequently, emotional disturbance is over-reported because it is associated with classroom disturbance. As a 1977 study of teacher ratings concluded, "Disturbed' to the teacher means 'disturbing to the classroom situation'" (Goulder & Trybus 21).

But often these tests are used to determine the correct path the deaf child's education will take. In the U.S., all of a child's tests sores are included in their IEP. Deaf children who perform well on these tests are admitted to public schools because they are deemed more capable of succeeding in an oral environment. Deaf children in hearing schools often attend special needs or remedial classes. Foucault wrote of power that it not only exudes and oppresses, but that it indeed determines reality. The IEP is supposed to predict what a child can become, and of course it does so by dictating what kind of education the child will receive. Deaf children who score low on tests may be placed in institutions such as residential schools under the auspices of mental deficit. But far worse is the misdiagnosis that leads to wrongful

institutionalization as mentally retarded or mentally ill. One American deaf woman was placed in an institution for the mentally retarded for fifty-seven years. She had been brought there by foster parents when she was eighteen-years-old. Staff reported her IQ test score as 34 when she was tested upon admittance. When a superior court judge ordered her release at age seventy-five, her IQ test score was near normal. Although she knew ASL, she was unable to communicate with other residents or staff (Lane: *Mask*).

A dimension of self-preservation lies behind the motivation to publish medical and academic research of dubious validity. Publication justifies research funding for and by universities. A demand is placed on tenured university staff to publish their research in order to secure grants from various subsidizing agencies whose existence, in turn is justified by a perception of benefit to society. This is not to say that research is not at all conducted for the betterment of the human condition. However, the procedural bureaucracy of public and academic funding agencies must support the economic viability of research as well. The deaf fall victim to the need to legitimize the troubled persons industry.

If the manifest intent of the troubled persons industry is to assimilate by rehabilitating the patient towards the 'normal', then Lane's fifth and final stage of assimilation is the realization of that intent. Dubbed "Oralism's 'Final Solution'" by the <u>British Deaf News</u> (in Lane: *Mask* 135), Cochlear implant surgery is pedaled as the 'cure' for deafness by the medical industry. A major invasive surgical operation is necessary to implant the cochlear prosthesis. The operation lasts about three and a half hours under general anaesthesia. The procedure is described by Lane:

A broad crescent-shaped incision is made behind the operated ear, and a skin

Issues In Deafness - Lorelle Polano - Page 39

flap is elevated. A piece of temporalis muscle is removed. A depression is drilled in the skull and reamed to make a seat for the internal electrical coil of the cochlear implant. A section of the mastoid bone is removed to expose the inner ear. Observing the procedure under a microscope, the surgeon pierces the membrane. A wire some 25 millimeters long is pushed through the opening. ...The wire seeks its own path as it moves around and up the ... cochlea. ...the inner ear is often ripped apart as the electrode weaves its way, crushing cells and perforating membranes; if there was any residual hearing in the ear, it is almost certainly destroyed. The auditory nerve itself is unlikely to be damaged, however, and the implant stimulates the auditory nerve directly. The internal coil is then sutured into place. Finally, the skin is sewn back over the coil (Lane: *Mask* 3),

The external equipment necessary to operate the implant are more numerous and visible than a hearing aid.

The child wears, first, an earpiece that resembles a hearing aid; it contains a microphone that picks up sound. There are two wires running from the earpiece; one ends in a transmitter that contains a small magnet, which holds it in place over the coil the surgeon implanted under the skin behind the ear. The second wire hangs loosely down to chest or waist level, where it connects with the third external part – an electronic circuit in a box about the size of a pack of cigarettes. This speech processor, strapped to the child's chest, or placed on a belt or in a pocket with older children (Lane: *Mask* 218).

When the electrodes on the coil receive pulses from the transmitter, an electromagnetic field is emitted to stimulate auditory nerve cells which relay this information to the brain in much the same manner as the ear of a hearing person. But it is a mistake to believe the sounds generated by the implant allow patients to hear as well as they did before deafening. There is enough of a discrepancy between the sounds heard via the implant and those that are heard with the natural ear that many formerly hearing adult implant recipients have difficulty interpreting these sounds (Owens 44). Research indicates that cochlear implants cannot assist a child in acquiring spoken language unless that child has a prior knowledge of spoken language that

only one in ten child-candidates possess (Reagan 246). There must be some basis for the recognition of sounds as, "Prelingually deafened children do not have the auditory memory of spoken language to help them interpret the electrical signal of the cochlear implant" (Fryauf-Bertschy, et al. 752). This however has not discouraged the industry from trying to sell to the other ninety percent.

Implantation, which runs the risk of side effect as any invasive surgery does, is not a cure for deafness. Implant Surgeons from the University of Pittsburgh School of Medicine state, "It is important to stress to the parents that their child will continue to be severely hearing-impaired" (Horn, et al 85). Investigators at Indiana University tested the ability of implanted children to understand common phrases (Miyamoto et al). They concluded that "children with multi-channel cochlear implants continued to have limited auditory speech perception abilities and required hearing-impaired rehabilitative services" (46). The risks associated with cochlear implant surgery include those related in general with anaesthesia and surgery. The possible complications specific to the implant include pain, infection, drainage or slow healing of the wound; displacement or misplacement of the electrode; damage to the facial nerve (Kveton). All these not to mention the still unknown effects of induced electromagnetic fields on the brain (Lane: Mask). Instances of complications vary depending on the study ranging from one in thirty cases to as high as one in six children developing adverse reactions and complications (Kveton; FDA).

So why the push to perform possibly dangerous surgery on children who may receive little or no benefit from implantation? Lane responds, "it is doubtful that the cochlear-implant

industry would survive, certainly not flourish, if it sold its services and equipment only to the core clientele for the disability construction" (*Constructions* 176). Why the willingness of parents to subject their child to this surgery? The portrait painted by many of the professions associated with the disability construction of deafness is that of the desperate plight of the deaf child. Parents, eager to have their child exist and prosper as any <code>Inormal</code> child, put their trust in a medical community that claims to have the <code>Icure</code> for such disabilities. Cochlear implants really are seen to be a cure-all for the social stigma attached to disability as well as for the auditory disability.

John Leo, editorialist for the <u>U.S. News & World Report</u>, expressed his intolerance for opponents of cochlear implants in his March, 2002 article, "Deaf to good sense." The Academy Award-nominated <u>Sound and Fury</u> documents the controversy surrounding cochlear implants. Dismayed by the documentary, Leo charges that the anti-cochlear implant attitude is unsound. He writes, "the plain fact is that the parents are preventing a cure for deafness for ideological reasons. An upside-down logic is at work here ... [a] mind-boggling resistance to change," supported by the "intellectual elites" (43). He quotes fellow columnist Cathy Young who indicts these academics, "the celebration of difference and pluralism has brought modern Western culture to the brink of lunacy" (43). In particular, Leo points the finger at Harlan Lane's book, <u>The Mask of Benevolence</u>. The book, for which Lane received a MacArthur Foundation "genius" award of \$325,000 US, proves, writes Leo, "that if you wish to become a MacArthur version of a genius, bizarre multicultural ideas are always quite helpful" (43). Leo finishes the article by charging opponents with being unreasonable, a defence assumed by

the Congress of Milan when Edward Miner Gallaudet questioned why deaf people themselves were not permitted to participate in the proceedings.

Disability activism, alas, has given itself over to identity politics. As the late critic Christopher Lasch wrote, the politics of group identity is therapeutic in origin and functions like a group of dogmatic religions 'in which rival minorities take shelter behind a set of beliefs impervious to rational discussion.' Like rational discussion about cochlear implants, for example (Leo 43).

Critics of implant technology do not wish to deny adults, or children who are old enough to consent, access to the technology. There are certainly cases where people who have opted for cochlear implant surgery are content with their decision and the functionality of the device (Woodcock & Miguel). It is the involuntary surgery inflicted on children who may or may not be good candidates for the device that opponents wish to protect. As Andrew House, a pioneering Otosurgeon in the field, announced at the 1990 Symposium on Cochlear Implants in Children in Indianapolis, "Once a child is implanted, he is an implant patient for life." What the hearing critics of Deaf culture fails to recognise, is that while implants have a potential for increasing the hearing ability of deafened people, they also redefine Deafness as an abnormality. Acceptance of Deaf children as normal is what the Deaf community and their supporters hope to achieve. What is feared is not so much the genocide of Deaf persons (since evidence has shown us that, as of yet, cochlear implants cannot offer a cure), rather, it is that prostheses for deaf children, such as cochlear implants, may help perpetuate the idea that deafness can be cured at the expense of the normal development and education of a deaf child. The transmission of culture is important for the survival of that culture. The history, values and language of Deaf culture is transmitted from Deaf parents to Deaf children, and from Deaf children of Deaf parents to Deaf children of hearing parents so that the culture may survive (Lane: *Mask*). Attempts to assimilate the Deaf into hearing society have failed to provide adequate language and social skills.

Sign Language, as the natural language of the Deaf, endows the Deaf with a centre of their own, a Deaf Centre. Within the Deaf community, the Deaf identity is highly valued (Kannapell; Ladd; Lane: *Constructions*; Lane: *Mask*; Padden; Padden & Humphries; Parasnis; Reagan). The Deaf self is positioned as the norm relative to others. The English gloss of the sign in ASL used by the Deaf Community to refer to itself is DEAF-WORLD (Johnson & Erting). Someone who is A-LITTLE HARD-OF-HEARING is someone who does not hear well at all. Because the norm is Deafness, A-LITTLE is a slight departure from that norm. VERY HARD-OF-HEARING is someone who can hear quite well, and HEARING is the opposite end of the pole (Padden & Humphries). However, the term DEAF-WORLD is predictive about behaviour and cultural loyalties, but not hearing ability. Deaf identity is based on cultural affiliation, not deafness. The VERY HARD-OF-HEARING are further from the Deaf centre because their mode of communication and their cultural affiliations are those of the hearing community (Lane: *Constructions*).

Politically, disabled people have had little spotlight. With the possible exception of the controversy surrounding cochlear implants, Deaf cultural issues receive scarce attention in the mainstream media, and few portrayals of positive Deaf images (Alker, Silver). Within the community itself, however, Deaf leaders espouse many Deaf-affirming messages and increase the political cohesion of the community. British Deaf leader Paddy Ladd campaigns for "the

recognition of our right to exist as a linguistic minority group. ...Labelling us as disabled demonstrates a failure to understand that we are not disabled in any way within our own Community" (14). American Deaf scholar, Tom Humphries, promotes the normalization of Deafness. "There_is no room within the culture of Deaf people for an ideology that all Deaf people are deficient. It simply does not compute. There is no 'handicap' to overcome..." (Humphries 14). And American Deaf leader M.J. Bienvenu asks,

Who benefits when we attempt to work in coalition with disability groups? ...How can we fight for official recognition of ASL and allow ourselves as 'communication disordered' at the same time? ...We are proud of our language, culture and heritage. Disabled we are not! (Bienvenu 13).

I. Jordan King, president of Gallaudet University, concludes, "Deaf people can do anything except hear" (in Erting xxv). The obstacle for the Deaf voice is moving the cultural-linguistic message beyond the boundaries of the Deaf community. Deaf people have rarely been allowed to address audiences comprised of hearing professionals, and while preaching to the converted may bolster solidarity, it does little to spread the word.

Constructions of disability, based in physiology and its interaction with the social and physical environment, vary with the trends in given culture and can be located historically and politically within that culture. The disability construction of deafness in Western society has created the political and social circumstances of oppression for deaf people. This construction is supported and maintained by an economic and social infrastructure dedicated to the assistance of [Itroubled-persons[]], a paternalistic system of societal values devoted to the alleviation of physical and psychological deficiencies, and an education system dedicated to accessibility and standardization for equality in education. The suppression of Deaf language

and culture has been adopted into the national education policies of Western nations in an effort to assimilate the Deaf to the majority, hearing culture. Rather than facilitating entry to hearing society, this forced assimilation has resulted in the isolation of deaf children, and the failure to effectively educate deaf children. A focus on rehabilitation of the disability itself has delayed the cognitive development of deaf children and denied them the communicative tools to acquire life skills and reach their potential as a social being. The oral education that is provided does not encourage critical thought about the nature of such an education. The oppression of Deaf culture, similar in its power structure to European and American colonialism, has become so normalized as to be accepted by some deaf people themselves. The history of deafness is written as the history of heroic scientific achievement conquering the ignorance of ages, rather than the historical relevance of Deaf cultural. In fact, so normalized is the disability model of deafness that invasive, potentially harmful and often unnecessary cochlear implant surgery performed on children as young as three years old is encouraged by the medical and scientific authorities.

The best interests of the Deaf community, with the support of the academic community, are to be recognised as a cultural and linguistic minority group, with the same political grievances and rights as any other minority group. The recognition of Sign Language as the native language of Deaf people, and the right to an education in that language are the best means of providing deaf children with the skills necessary to learn. Deaf children should have access to positive role models from the Deaf community, not stigmatized and limited by their inability to hear. Forcing the Deaf to accept a hearing way of life deprives them of the ability

to reach their potential as human beings. Depriving the Deaf people of their culture serves the economic interests of a troubled persons industry, not the interests of the Deaf themselves.

Works Cited

- Abberley, Paul. "The Concept of Oppression and the Development of a Social Theory of Disability." <u>Disability, Handicap & Society</u> 2.1 (1987): 5-19.
- Alker, Doug. "Misconceptions of Deaf Culture in the Media and the Arts." <u>The Deaf Way:</u>

 Perspectives from the International Conference on Deaf Culture, 1988. Eds. Carol J.

 Erting, Robert C. Johnson, Dorothy L. Smith, Bruce D. Snider. Washington, DC:

 Gallaudet UP, 1994. 723-725.
- American Genetics Association, Eugenics Section. <u>American Sterilization Laws: Preliminary</u>

 Report of the Committee of the Eugenics Section of the American Breeders Association

 to Study and to Report on the Best Practical Means for Cutting Off the Defective Germ

 Plasm in the Human Population. London: Eugenics Education Society, 1912.
- Babe, Robert. "Systems Theory as it Applies to Critical Theories of Political Economy."

 University of Windsor Colloquium Series in Communication Studies. January, 2000.
- Bell, Alexander Graham. "Fallacies Concerning the Deaf." <u>American Annals of the Deaf</u> 29 (1884): 32-69.
- ---. "Is Race Suicide Possible?" Journal of Heredity 11 (1920): 339-41.
- ---. Memoirs upon the Formation of a Deaf Variety of the Human Race. Washington DC:

 National Academy of Science, 1883.
- Bienvenu, M.J. "Disability." The Bicultural Center News 13 (1989): 13.
- Brown, Robert. Social Psychology, 2nd Ed. New York: Free Press, 1986.

- Corone, A. "Contribution à l'histoire de la sonde d'Itard." <u>Histoire de la Médecine</u> 10 (1960): 41-42. Eagleton, Terry. <u>The Idea of Culture</u>. Oxford UK: Blackwell, 2000.
- Education for All Handicapped Children Act. Public Law 94-142. Washington DC: United States of America Federal Government, 1975.
- Emerton, R. Greg. "Marginality, Biculturalism, and Social Identity of Deaf People." <u>Cultural</u> and <u>Language Diversity and the Deaf Experience</u>. Ed. Ila Parasnis. Cambridge:

 Cambridge UP, 1996. 136-145.
- Erting, Carol. "Introduction." The Deaf Way: Perspectives from the International Conference on Deaf Culture, 1988. Eds. Carol J. Erting, Robert C. Johnson, Dorothy L. Smith, Bruce D. Snider. Washington, DC: Gallaudet UP, 1994. xxiii-xxxi.
- Esquiros, A. "Les Sourds-Muets." <u>Paris au XIX siècle Vol. 2</u>. Paris: Imprimerie Unis, 1847. 391-492.
- Food and Drug Administration (FDA). "Summary of Safety and Effectiveness Data,

 Pre-Market Approval Application P890027." Washinton, DC: United States of

 America Federal Government. June 27, 1990.
- Frishberg, N. "Arbitrariness and Iconicity: Historical Change in American Sign Language."

 Language 51 (1975): 696-719.
- Fryauf-Bertschy, H., R.S. Tyler, D.M.R. Kelsay, B.J. Gantz, & G.G. Woodworth. "Cochlear Implant Use by Prelingually Deafened Children: The Influences of Age at Implant and Length of Device Use." <u>Journal of Speech, Language & Hearing Research</u> 40 (1997): 183-199.

- Greene, Judith. Thinking and Language. New York: Methuen, 1975.
- Goffman, Irving. Stigma: Notes on the Management of Spoiled Identity. Englewood Cliffs, NJ, 1963.
- Hahn, H. "Public Support for Rehabilitation Programs: The Analysis of U.S. Disability Policy." <u>Disability</u>, <u>Handicap & Society</u> 1/2 (1986): 121-137.
- Horn, R.M., R.J. Nozza, and J.N. Dolitsky. "Audiological and Medical Considerations for Children with Cochlear Implants." <u>American Annals of the Deaf</u> 136 (1991): 82-86.
- Houdin, A. Illich, Ivan. Medical Nemisis. New York: Patheon, 1976.
- House, Andrew. "Cochlear Implants in Children: Past and Present Perspectives." Third

 Symposium on Cochlear Implants in Children. Indianapolis, IN: Indiana University

 School of Medicine. January, 1990.
- Humphries, Tom. "Deaf Culture and Cultures." <u>Multicultural Issues in Deafness</u>. Eds. K.M. Christensen and G.L. Delgado. White Plains, NY: Longman, 1993.
- Johnson, Robert, and Carol Erting. "Ethnicity and Socialization in a Classroom for Deaf Children." The Sociolinguistics of the Deaf Community. Ed. C. Lucas. New York: Academic Press, 1989. 41-84.
- Kannapell, Barbara. "Deaf Identity: An American Perspective." The Deaf Way: Perspectives

 from the International Conference on Deaf Culture, 1988. Eds. Carol J. Erting, Robert
 C. Johnson, Dorothy L. Smith, Bruce D. Snider. Washington, DC: Gallaudet UP, 1994.
 49-54.
- Kveton, J. "The Status of Cochlear Implantation in Children. Surgery Subcommittee on

- Cochlear Implants, American Academy of Otolarngology, Head and Neck Surgery."

 <u>Journal of Pediatrics</u> 118 (1991): 1-7.
- Ladd, Paddy. "Deaf Culture: Finding it and Nurturing it." The Deaf Way: Perspectives from the International Conference on Deaf Culture, 1988. Eds. Carol J. Erting, Robert C. Johnson, Dorothy L. Smith, Bruce D. Snider. Washington, DC: Gallaudet UP, 1994. 5-15.
- Lane, Harlan. "Constructions of Deafness." Disability and Society 10.2 (1995): 171-189.
- ---. The Mask of Benevolence: Disabling the Deaf Community. New York: Alfred A. Knopf, 1992.
- Miyamoto, R.T., M.J. Osberger, A.M. Robbins, and W.A. Myers. "Comparison of Speech Perception Abilities in Deaf Children with Hearing Aids or Cochlear Implants."

 Otolaryngology, Head and Neck Surgery 104 (1991): 42-46.
- Morford, Jill. "Insights to Language from the Study of Gesture: A Review of Research on the Gestural Communication of Non-Signing Deaf People." <u>Language & Communication</u> 16.2 (1996): 165-178.
- Owens, Eric. "Present Status of Adults with Cochlear Implants." <u>Cochlear Implants in Young</u>

 <u>Deaf Children</u>. Eds. E. Owens and D. Kessler. Boston, MA: Little, Brown, 1989. 25-52.
- Padden, Carol. "From the Cultural to the Bicultural: The Modern Deaf Community." <u>Cultural</u> and <u>Language Diversity and the Deaf Experience</u>. Ed. Ila Parasnis. Cambridge:

 Cambridge UP, 1996. 80-98.
- Padden, Carol and Tom Humphries. Deaf in America: Voices From A Culture. Cambridge,

- MA, USA: Harvard UP, 1990.
- Parasnis, Ila. "On Interpreting the Deaf Experience within the Context of Cultural and Language Diversity." <u>Cultural and Language Diversity and the Deaf Experience</u>. Ed. Ila Parasnis. Cambridge: Cambridge UP, 1996. 3-19.
- Polano, Lorelle. "Issues in Deaf Culture." Ryerson University. January, 2002.
- ---. "The Oppression of Language: An Analysis of the Suppression of Sign Language as the Oppression of Deaf Culture." Ryerson University. April, 2002.
- Schildroth, A. "Public Residential Schools for Deaf Students in the United States, 1970-1978."

 <u>American Annals of the Deaf</u> 125 (1980): 80-91.
- ---. "Recent Changes in the Educational Placement of Deaf Students." <u>American Annals of the Deaf 133 (1988)</u>: 61-76.
- Schlesinger, Hilde. "Deafness, Mental Health, and Language." <u>Education of the Hearing-Impaired Child</u>. Eds. F. Powell, T. Finitzo-Hieber, S. Friel-Patti, D. Henderson. San Diego, CA: College-Hill. 103-119.
- ---. "Effect of Powerlessness on Dialogue and Development: Disability, Poverty and the

 Human Condition." <u>Psychological Interventions with Seriously Disabled Persons</u>. Ed.

 Katherine Heller. New York: Grune and Stratton, 1986.
- Silver, Ann. "How Does Hollywood See Us, and How Do We See Hollywood?" The Deaf

 Way: Perspectives from the International Conference on Deaf Culture, 1988. Eds.

 Carol J. Erting, Robert C. Johnson, Dorothy L. Smith, Bruce D. Snider. Washington,

 DC: Gallaudet UP, 1994. 731-735.

- Stokoe, William C. "Models, Signs and Universal Rules." <u>Sign Language Studies</u> 2.1 (2001): 10-16.
- ---. "Sign Language Structure: An Outline of the Visual Communication System of the American Deaf." Studies in Linguistics: Occasional Papers 8 (1960).
- ---. "The Study and Use of Sign Language." Sign Language Studies 10 (1976): 1-36.
- ---. "Where We Should Look for Language?" Sign Language Studies 51(1986): 171-181.
- Stokoe, William C., Dorothy Casterline, and Carl Cronenberg. <u>A Dictionary of American Sign</u>
 language on Linguistic Principles. Silver Spring, MD: Linstok Press, 1976.
- Tervoort, B.T. "Esoteric Symbolism in the Communication Behavior of Young Deaf Children." <u>American Annals of the Deaf</u> 106 (1961): 436-480.
- Tucker, James. "The Impact of ASL Research on the American Deaf Community." <u>The Deaf Way: Perspectives from the International Conference on Deaf Culture, 1988</u>. Eds.

 Carol J. Erting, Robert C. Johnson, Dorothy L. Smith, Bruce D. Snider. Washington, DC: Gallaudet UP, 1994. 365-368.
- Waxler, Nancy. "The Social Labelling Perspective on Illness and Medical Practice." The Relevance of Social Science for Medicine. Eds. L. Eisenberg and A. Kleinmen.

 Dordrect, Netherlands: Reidel, 1981, 283-306.
- Woodcock, Kathryn, and Aguayo Miguel. <u>Deafened People: Adjustment and Support.</u> Toronto: University of Toronto Press, 2000.
- Wrigley, Owen. Politics of Deafness. Washington DC: Gallaudet U.P., 2001.