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Deafness as Disability: Countering Aspects of the Medical View

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Abstract: This article argues that deafness as disability from a medical view does not rest on the scientific aspect of medicine. Rather there are ideological biases and prejudices that are masked under the medical view of deafness as disability. The article reveals these and counters them.

Key words: Deafness, disability, political philosophy, Audism, Ableism, deaf studies.

Deafness is a condition that is considered prima facie a disability. A harmful one. Deafness is perceived to have far fetching negative effects (Cho Lieu 2004, 524-30). Thus "hearing loss may impair cognitive and language development that can hamper the education and communication abilities in developing children" (Leifer 2015, 527). Such a detrimental effect requires a swift and effective response, which in the modern state means medical, bureaucratic, educational, rehabilitative and vocational applications toward preventing and treating the disability of deafness.

The medical aspects of prevention and treatment of deafness as harmful disability are pervasively omnipresent in every deaf person's life. Not only throughout the deaf person's life, but also preceding it via genetic screening: "a procedure where diseases such as deafness can be screened in or out prior to the implementation of an embryo in a woman" (Goggin et al. 2005, 99). The medical view that justifies such pervasiveness is questioned here; it will be argued that such a view is based on ideology, instead of science. More specifically, it is argued that this medical view of deafness is based on a particular ideological view of the human body, one that is founded upon a naturalistic argument of the human body. From this point of view it can be understood why deafness is seen as a medical disability.

Simply put, the naturalistic argument claims that deafness is a disability since it is unnatural. The natural being is a hearing human being. This conclusion of the natural hearing human is based on mapping of the physical makeup of the human body. Mapping the body induces that it natively possesses a hearing ability; naturally there is a sense of hearing in the human body. The hearing sense consists of hearing organs. These hearing organs are facilitated toward the ability to hear. From the pinna through the eardrum and onward the inner ear and the cochlear and so forth, the main function of these universally-existing parts in the human body is to hear. Such form and formation indicates that hearing is natural to the human being. For as a sentient being, the human being experiences the external world through the senses; therefore, the sense of hearing is established as a core sense that belongs to the essence that defines what is the human being: a *hearing being.*

Using physical evidence, the naturalistic argument of deafness as disability posits that since to hear is the natural form of being human, being able to hear is the *desirable* mode of being. Concluding ought from is, the opposite condition – the lack of hearing – is therefore the resultant antonym. The logical outcome from this view is that deafness is a flaw in the human form. Hence, being deaf is being unnatural and deafness is a defect of the natural human body.

Framed as a defect in the human form, deafness is then spatially located. A physical defect, deafness is located in one or more parts of the body that comprise the sense of hearing. Hearing impairment, the popular term used by professionals, is positioned in the physiological organs that channel traveling sounds which the brain interprets (Seikel et al. 2010, 514-15). The systematic aggregation of data on the location and effects of the various hearing impairments is the onset of the medicalization of the naturalistic view of deafness as disability. The medical argument continues to do what the naturalistic view of deafness as disability did, but adds another layer of meaning. While the naturalistic view enforces the idea of the natural vis-à-vis the unnatural, the medical supplements to this view the addition of health. Deafness is then unnatural and unhealthy.

Such view reflects, however, the way hearing persons evaluate deafness: "Science and literacy education have, by and large, rhetorically constructed deafness (primarily in the lower case sense of 'disability' and 'pathology' and sometimes, although rarely, in the uppercase sense of 'culture'). What is odd is that science and literacy education have interpreted and constructed without much attention to, communication with, or regard for d/Deaf persons themselves; they have tended not to listen, not to lend their ears, to those they are speaking for and about" (Brueggemann 1999, 6). Ignoring what deafness is to those who are deaf puts the question of natural and healthy in doubt. Research "that will improve the understanding of the epidemiology of hearing impairment worldwide can inform public health policy and is critical to the development of effective preventive interventions and should therefore be a global health priority" (Curhan et al. 2016, 49) makes sense not as an altruistic concern for the health of the deaf person, but rather as a measure catering to the vision of the natural and healthy hearing person everywhere – the happy person. *The good life is a hearing one* is the underlying motif and motive that runs deep through the medical view of deafness as disability. The bias of ignoring the deaf is the tip of the shadow casted upon the scientific cogency of the medical argument. Thus, countering the medical claim of deafness as disability is based on the assertion that the medical argument promotes the beliefs and biases of its proponents instead of disinterested conclusions from evidence. In other words, the medical argument of deafness as disability is not a conclusion of scientific endeavor divorced from interposition, but, rather a partisan outcome pertinent to the medical and social ideology of its proponents. It is argued to be partisan for two reasons.

The first reason is a philosophical one. The medical argument assumes a *certain* human body. This imagined natural body is claimed to be the universal or normal body, but it is neither universal nor normal. It is a particular body: "To understand the disabled

body, one must return to the concept of the norm, the normal body [...] A common assumption would be that some concept of the norm must have always existed. After all, people seem to have an inherent desire to compare themselves to others. But the idea of the norm is less a condition of human nature than it is a feature of a certain kind of society" (Davis 2013, 1). In the case of deafness it is certain and particular in being a *hearing* body. As such, deafness is indeed a feature of the abnormal human body; only if we accept the conclusion to be derivative from the inference that the universal and normal body is *exclusively* a hearing one. Such conclusion is unfounded.

After all, this universal, normal hearing body the medical view imagines, is the product of many inspirations. Among which is the godly creation of Adam, the perfect body da Vincian's Vitruvian man elicited, the statistical median body or some sort of algorithm of a biophysical makeup – ancient or modern. The earliest modern account of this imagined universal body discusses it in the context of art: "Baltasar Castiglione (writing as Count Lodovico) constructs the body of the courtier by explaining what is should *not* be like. The courtier 'should be neither too small nor too big, since either of these two conditions causes a certain contemptuous wonder and men built in this way are stared at as if they were monsters [...] So I wish our courtier to be well built, with finely proportioned members'" (Ravescroft 2006, 30). Designating the desirable body is thus persistently apparent in modern thought. The earlier historical question of origins is besides the point here, as it does not affect the core issue of concern, which is the modern status of deafness. The crux of the matter is then that the medical argument of deafness as disability employs a particular bar for all humans, in which deafness is subpar. But it does so under the pretense that such bar is unquestionably and truthfully universal. This idea of standardization of the body, as the philosophical reason can be summarized, is relying on the assumption that a human physical standard exists. Furthermore, even if such standardization is viable, it is an instrument of comparison in which proponents of the medical argument have chosen a specific human standard that excludes deafness among other variations.

Choosing a particular standard suggests that standards exist as we wish them, and can be raised or lowered as seen fit. This is one fundamental concern for the claim of objectivity or validity of universality that the medical view espouses. However, the central problem here is not the dubious use of some standard for the claim of universality, but, rather the use of the standard for exclusion. That is, instead of using the standard as a scientific instrument to merely describe empirical evidence, the standard is being used as a political tool promoting exclusion. This casts doubt on the justification for pervasiveness of medical applications, among others, upon deafness.

While the causes of belief in a human standard are too broad for this article, the least that can be said is that an epistemological certainty is a major cause. Be it religious, economic, psychological, social or political (Hakak et al. 2010). Hence, some turn to a godly standard as humans are meant to be in its image; some turn to mathematics and statistics to quantify and measure humans as the "political arithmetic" (McCormick et

al. 2009, 259-85) attempted; and others have taken to evolutionary psychology in order to explain why humans need to form a classification of the external world (Murphy et al. 2000, 62-92). Whatever is the source for the quest of standardization, the need for quantification of humans is a matter of social fact. Yet in the case of the medical argument of deafness as disability the quest for standardization as applied to deafness is both unnecessary and erroneous.

It is unnecessary since classification does not require hierarchical standardization; categories can be differentiated without creating hierarchy. In certain areas hierarchy in classification is necessary: "Most of the researches on hierarchical classification show that the hierarchical methods are superior to the flat methods which have no hierarchy between categories in text classification" (Yoon et al. 2005, 616). What is good for texts does not apply for people, at least from an egalitarian view. It is argued that hierarchy might be ingrained in us: "Given the universality ranking systems, it is exceedingly strange that so many contemporary social scientists deny their validity. Indeed, many regard hierarchy as an anomaly. They insist that it is not a fundamental aspect of our humanity. Far from our being hierarchical animals, they regard us as innately egalitarian. Consequently, where inequalities in status exist, they attribute these to corrupting elements. Either self-seeking individuals are distorting social relationships for their own benefit or superfluous social institutions are interfering with normal human impulses" (Fein 2002, 2). Thus, "moralizing" medicine toward an egalitarian position is perhaps the wrong argument to make?

Human hierarchies might be a fact of social life, but there are two points to consider. First, a political order, namely democracy, is presumed to be the one relevant to the discussion. Democracy gained legitimacy and support through its promise to ensure that people will enjoy freedom, security and equality. The political arrangement of democracy is exactly the one under which people no longer have to recourse to violence and other forms of self-preserving means in order to battle discriminatory hierarchies. Structural or circular mobility, for example (Beeghley 2007, 121) are more accessible than any other large-scale existing political order, such as the Chinese claim for "*xiaokang* society" (a prosperous society) in the CCP-party controlled state (Yingjie 2016, 7). Even when the democratic ideal is far from being achieved: "We are taught that democracy provides a positive way for power to be exercised. But our everyday experiences, and other things we learn, lead us to believe that this ideal norm of power rarely functions in real life" (Ewen 1998, 104). Even then, battling prejudice and discrimination is a commitment that runs deep through democracy's values, with and without the international commitment expressed in treaties such as the Convention on the Rights of Persons with Disabilities (United Nations, 2008).

The second point is that medicine itself adopted an egalitarian approach in its ethical commitments with or without democracy. "And I will use regimens for the benefit of the ill in accordance with my ability and my judgment, but from (what is) to their harm or injustice I will keep (them) [...] Into as many houses as I may enter, I will go for the benefit of the ill, while being far from all voluntary and destructive injustice [...] " (Miles 2004,

xiii-xiv). These words from the Hippocratic Oath express the ethical commitment of medical practice that continue to reverberate in modern medical ethics. Thus the WMA international code of medical ethics reads that a physician shall "always exercise his/her independent professional judgment and maintain the highest standards of professional conduct" and shall "not allow his/her judgment to be influenced by personal profit or unfair discrimination" (World Medical Association, 1949).

It is argued then that the hierarchical order of hearing and deafness is violating this medical and ethical commitment. For the hierarchical order means political ranking and prioritizing one category as superior over the other. In other words, differentiating between the profoundly deaf and the diverse hearing levels, does not require stratification of who is better and who is worst. Instead there should be recognition of needs. Otherwise, there is no value-ranking necessity arising from classification; it arises only when we attach to the classification a *political necessity*. Judging forms of being – such as deafness – to be baneful requires a set of values that are external of the classification to facilitate the separation between the valued from the ones we don't value. External values such as those present in the thorny subject of sex selection: "sex selection may reinforce stereotypes and place males and females into a preferred order of birth; this would unbalance power relationships between genders" (Reich 1995a, 1654). This is then the point why medical ethics should be exercised – to prevent medical "paternalism" toward the deaf among others (Honderich 1995, 544). For if medical ethics "sought to understand how human beings should act and what kind of life is best for people," (Reich 1995b, 720) then medical assessment of such life should not commence in error.

Error is the second reason. The reason hierarchical application of classification of hearing is erroneous is because it is founded upon an ontological fallacy of being. The ontological fallacy can be separated into a several fallacies in the constellation of this argument. The known ontological fallacy is the one associated with the ontological argument furthered by Anselm, who argues that since something exists in our minds and language, it must also exists in reality (Davis et al. 2004, 159-160). In our context, in relation to disabilities and deafness the fallacy of ontological being is an amalgam of aspects of several fallacies: (a) ontological fallacy, (b) the fallacy of appeal to tradition, (c) the The Bandwagon Fallacy, (d) the fallacy of appealing to nature, (e) the Argumentum ad Baculum, (f) the fallacy of the Pollyana principle, and the (g) Procrustean fallacy. In respect to the lettered fallacies the medical argument of deafness as disability promotes the following arguments under the claim that since a certain body exists – a hearing one – it denotes a moral, social and political superiority because (a) it exists, (b) it "always" existed, (c) it is of the absolute majority of existing bodies, (d) it is natural, (e) it is the more powerful mode of being, (f) it is what everyone desires for, (g) it is the standard. All of these are reasons for discriminating, but none of them is justified.

The countering of such arguments is that: (a) There can be no justification that a certain body exists, the hearing body, as existence can not lend it any more legitimacy per se than the fact that the deaf body exists as well. That a certain body exists can provide

some insight on what a body should be, but it does not justify negating other bodies, definitely not by arguing by existence. To the contrary: existence – life – is a justification to appreciate metaphysical temporality. Respect diversity through dignity: "impairment is not to be regarded as a deficit or as a factor that can be detrimental to human dignity" (Degener 2017, 40). (b) The hearing body did not always exist, for the human is a recent phenomenon, and even if it did this premise does not warrant an obligation for its future existence, as such it is impossible. Until human cloning is available, it is impossible to guarantee physical similarity, which is in fact not what is aimed at, but, rather similar behavior. For the claim is not toward having the same exact ears or hearing, but, instead, of being able to replicate the same communicational behavior. Thus the "insignificance of intergroup variations in genetic endowment" (Cartwright 2000, 23) as the standard social science model of human nature has been known. (c) Be it tyranny of the majority or overwhelming consensus, it does not justify negating others, especially when the human right of the deaf to pursue life and happiness in their way is present "to prevent dominant groups from violating fundamental human rights" (Wojciechowski 2014, 63). (d) Beyond arguing that whatever that exists is natural (Crumley II 2009) or that the general idea of natural form of being is non existent having instead "different cultural choices from a huge range of options," (Harari 2011, 53) or that the particular idea of the natural excluding the disabled is a myth: "Lacanian discourse allows seeing the first misrecognition – the purported stability of the self – as a myth and encourages us to disrupt this social mythology [...] the myth of the 'natural/able body' and its converse" (Goodley 2011, 135). (e) This reduces the capability of a person to hearing, whereas "an individual's capabilities are best understood as a 'joint product of her internal endowments, her external resources, and the social and physical environment in which she lives'" (Riddle 2014, 66). Oversimplifying hearing to be the primary qualification of capability is a fundamental error, as the case of the bi-lingual community on Martha's vineyard has shown that the Deaf lacked no capacity if and when social environment was inclusive and not excluding (Groce 1985). (f) However passionate is the desire, it is no more a valid desire as the racist desires its own perpetuation: "Whiteness puts itself in the very place of being" (Seshadri-Crooks 2000, 43) and thus hearing puts itself in the very place of being. The desire of the hearing to impinge their own image is no justification for negating the essence and choice of others. (g) Before and after the audiological hearing ISO 7029 standard, which defines "threshold of hearing by air conduction as a function of age and gender for ontologically normal persons" (Cremes and Smith 2002, 61) the belief that the body has a standard has different meanings. Sometimes it is the average "model humans assuming numerical values for mass, height, etc. of a 'standard human'" (Herman 2016, 17). Sometimes it is the practical as a "realistic standard that is not 'ideal' but is 'acceptable'" (Hoeger et al. 2016, 157). But it is also the perfect: "A body may grow to the standard of its species, perfect of its kind" (Blood 1860, 31). For all its varieties, the hearing body as standard is politicization of the body by distinguishing itself: for the normal body "in effect create the concept of

the disabled body" (Davis 2017, 4). There is no standard, only imagined silhouettes of stereotypes. This is then the error: medicalizing stereotypes (Bell, 1984, 169).

Those stereotypes are the reason deafness and sign language face claims for annihilation, which are the conclusion of the application of hierarchical valuation upon the general classification of hearing. Here is one blatant example: "The only cochlear implant surgeon in this province says deafness is a disability which is being eradicated in Newfoundland and Labrador. Dr. Tony Batten, an ear, nose and throat surgeon, who has helped many hearing impaired and deaf people get their hearing back, says the technology available now, as well as at-birth screening for every child is resulting in incredibly low rates of deafness. One of the results of such advances though may be the closure of the Newfoundland School for the Deaf on Topsail Road in St. John's. 'We don't have any children now going to the school for the deaf', Batten says, explaining that children who are born deaf have a good chance at hearing if they get an implant early in life. 'The school for the deaf is being phased out', he says. 'Children (with implants) they get better incomes when they graduate, they get higher levels of learning, they integrate into society'. So sign language is a dying language. It's only for the older people who are beyond the cochlear implant years now. 'It's interesting because it's a dying culture and it's kind of part of our past now'" (Morrisey 2009). This is not eugenics resurrected, but the politicized rhetoric and stereotypes wrapped in medical objectivity raise serious doubts on the integrity of the medical view's subscribers (Lane et al. 2001). Once again, not for the first or last time: the science of craniometry was one such screwy and clear example, in which the superiority of Caucasians was supposed to be evident in the measurement of brain volume compared with other races (Gould 1996).

Medicalized stereotypes are used by those who seek to impinge their own image on others. Others who differ from the standard-makers' vision of what is the proper form of being human. Desiring to impose a godly vision – "Let us make man in our image, in our likeness [...]" written in Genesis – one is left to wonder when the shift occurred. From god being the physician, "I am thy Physician" (Watson 2001, 39) through physicians deriving authority from god (Katz 2002, 8), toward physicians playing god (Verhey 2012, 134). Hence conceiving health as a political requisite defines who is the unhealthy and the question of political ranking becomes an acute one. All the more acute since it is argued here that from a scientific point of view identifying those who are unhealthy has no inherent political value: "Neutrality, in short, was to provide protection against those wanting to pass off political opinion as established science" (Proctor 1991, 150). The kind of protection is the purpose of the concept of privacy of medical records, a practical aspect. To protect from prejudice based on your health: "Disclosure of sensitive medical information [...] can cause embarrassment, acute distress, or social stigmatization" (Humber et al. 2001, 8). The kind of politicization medical professionalism is meant to counter (Crellin 2005, 75-85).

Medical classification provides the legitimacy for political selection. Consider the example of fibromyalgia. Since it is a phenomena that does not have scientific verification,

the decision to recognize those who endure the syndrome as disabled or not is not medical. However, in order to be treated requires medical classification. Note the irony as one study notes: "The recognition of fibromyalgia can lead to effective treatment with significant improvement in functioning. Unfortunately, because of the chronic nature of the pain condition and associated counterproductive behaviors and disability, patients and physicians may rapidly become frustrated with each other and abandon the pursuit of adequate diagnosis and treatment" (Acton 2012, 83). So for a long time medicine refused to recognize the plight of those who suffer from fibromyalgia, as doctors refused to recognize the condition of fibromyalgia itself as existing and is merely in the person's mind (Goldenberg 2002, 21). The pressure from the patients prevailed, however. Fibromyalgia is now recognized, although recognition is often political not medical. As one physician put it: "At least everyone pretty much agrees the pain is real now?" (Scott 2015, 166).

This illuminates the political underpinnings of the socio-political processes which people with various conditions undergo. Political considerations and interests such as budgeting, electoral gains, religious, social beliefs and fantasies determine how the political recognition of some conditions goes toward being awarded certain benefits and privileges, while other conditions are awarded with none. The claim for the scientific validity is the heart of medical scientific objectivity: "the physio-pathology-based classifications of diseases are not conventions of labelling [sic.] based on subjective decisions but they are the results of the discovery of real properties concerning the alterations of biological entities and events" (Azzone 1998, 49). Yet this science of medicine is not pure. And this can be seen with the variations of disagreements. Sometime the variation is in the medical classification and sometimes it is a matter of political systems; that is, sometimes there is a "universal" disagreement regarding a condition, and sometimes there is "local" disagreement that changes from one country to the other. Learning disabilities is an example of the former: "As reading researcher Marion Monroe observed in 1932, psychology and education had two primary explanations for children who did not learn under typical instructional circumstances. They were 'either lazy or stupid'" (Danforth 2009, 3). Contact dermatitis at the workplace is an example of the latter: "In many cases an occupational cause is suspected and proven after careful diagnostic procedures. There then arise a number of questions that are handled in different ways in the different European countries [...] In the years to come it will probably be necessary to create more uniform joint legislation in this area, so as to avoid socially unjust decisions" (Rycroft et al. 2001, 997).

The science of medicine is fluctuating and evolving, which is what to expect from any scientific discipline. So there is insolence taken to the way deafness and other disabilities are marked and treated with cocksureness. The apparition that disabilities are measured and are scientifically ascertained in accordance to the needs of the disability or the disabled is no less a fiction than they are part of the general political games people take part in, like poverty, education and so on. Thus disability benefits were awarded based on political considerations, as this US soldiers example demonstrates: "The 1873 Consolidation Act revised pension legislation, basing payment on the degree of disability rather than on

service rank". This change, however, did not come about because of betterment of science and medicine, but due to politics. "The act came about because the laws had become so complex and conflicting, leading to the need for codification" (McGeary et al. 2007, 96).

The politics of medicine do not discredit medicine. Scientific improvement and success are constantly bettering people's lives. However, the reverse is untrue. Medicine is not perfect. Thus, as part of the dialogue with the science of medicine, if the goal of achieving neutrality is possible, is a philosophical argument that is indeed still under process. However, that the field of medicine claimed to be such is a different point: "The rise of Positivism in academia [...] demanded that scholars strip their observations of personal bias with the goal of absolute objectivity [...] it is difficult to characterize the new medical rhetoric as devoid of the same long-established institutional bias against people with disabilities. In their attempt to construct a value-free vocabulary, they created one that was also, at the least, compassion-free" (Davis 2017, 15). Masking rhetoric as neutral, however, does not mask the motives.

The experience of the deaf and the disabled is that divergence from the so-called healthy ideal is undesirable and renders who is the invalid person. That's where the imperfection of medicine and its politicization are revealed. Beliefs regarding the legitimacy of the normal beget Ableism: the idea that able-bodied (healthy) persons are preferable and superior to those who are considered non-abled (the disabled) (Campbell 2009, 3-16). As noted above the experience of ableism from a medical perspective is one that included sterilization (Albrecht et al. 2001, 498) as well as other medically proscribing practices aimed at the deaf among other classes of those termed as diseased beings (Greenwald 2007, 136-52).

As the medical imagination asserts that the normal, healthy and desirable body is a hearing one, deafness is oppositely defined as abnormal, sick and illegitimate mode of being. It is further argued here that such a position must be ruled out by principle. That is, its political validity is argued to be unacceptable. No dehumanization should ensue from a medical outlook. Especially since the medical position lends so much scientific weight to political protagonists. This way German doctors and the German public accepted the sterilization and "mercy-killing" of various disabled persons (Lifton 1986). Thus, no deaf person should be reduced to being a mere defective hearing being. In other words, the scientific-philosophical rationale of desiring to investigate, compare, classify, and rank humans is unjustified in embittering the lives of the subjects it explores. There is no acceptable political justification in a democracy for a means promoting greater human knowledge to become a political end in itself, promoting poorer quality of human lives: "The practice of scientific research and the use of knowledge from that research should always aim at the welfare of humankind, including the reduction of poverty, be respectful of the dignity and rights of human beings, and of the global environment, and take fully into account our responsibility towards present and future generations. There should be a new commitment to these important principles by all parties concerned" (UNESCO, 1949). This is then the first theoretical or principled claim of the error argument.

The second claim of the principled error argument is that it violates bio-political neutrality. A claim based on the principle of neutrality, medicine is committed to as a scientific approach. "Physicians tend to see themselves as bioscientists. Their self-image as practitioners reflects a view of medicine as a discipline that has adopted not only the rationality of the scientific method but the concomitant values of the scientist, namely, objectivity and neutrality [...] Although the scientific values of rationality, objectivity, and neutrality may be difficult to achieve in practice, nevertheless they retain their force as the basis for assessing the quality of clinical work. Further, these values are used to justify the particular ways in which clinical work is done" (Mishler et al. 1981, 15-16).

So whereas the first objection to deafness as disability is on grounds of violation of a moral and philosophical principle of equality medicine is committed to, the second one claims for a political partiality violating the scientific principle of impartiality. The first violation allows for the method of discriminatory practice to materialize on paramount scale; the second violation validates the discriminatory practice by masking its biased view as impartial. The argument of bio-political neutrality is based on two premises. The first is that the study of the human biophysical makeup is improper since it is carried in a fragmented way. That this study is historical (e.g., evolutionary changes), current (e.g., public health) futuristic (e.g., genetic), social (e.g., public budget) and political (e.g. gendered) can be counted among the main aspects. And so care must be taken as to the verity of the research and the integrity of the researchers. Something that is amiss, not only within the framework of deafness or disabilities but also in other ways: "According to the Institute of Medicine, every cell in our bodies has a sex, which means men and women are different at a cellular level. That also means that diseases, treatments, and chemicals might affect the sexes differently. And yet there's a long and storied tradition of ignoring gender when it comes to health research" (Westervelt 2015). Lest it be said that it is only a matter of informational aggregation and is therefore a technical issue, direct actions are directly associated with scientific ignorance: "Spermicides were distributed by population experts who often failed to notice the sex/gender of their 'targets'" (Lowy 2014, 107). The results of such actions have repercussions that affect people's lives and can not be discounted as mere technicalities or as insignificant data.

From the deaf point of view there are many aspects that can be skewed toward legitimization of discriminatory practice against deafness. Actions against the deaf under medical pretense are past, present and futuristic. Hence, from a futuristic view the abortion of deaf fetuses is already a desirable goal: "According to a survey conducted by Delhi's Sir Ganga Ram hospital, a majority of would-be parents would opt for an abortion if knew they are going to have a hearing-impaired child. The study was published in a recent issue of American Journal of Medical Genetics. The research-based study was conducted for four years – 2005 to 2009 – on at least 51 families with a history of congenital hearing loss. 'Around 93 per cent of the couples expressed high interest in prenatal diagnosis, while 73 per cent considered termination if the foetus was affected' Dr Ishwar C. Verma, chairman, department of genetics, Sir Ganga Ram hospital, said" (Neetu 2013). The

practice of genetic prevention is readily available: "The science of genetics has gotten so sophisticated so quickly that it can be used to not only treat serious diseases but prevent thousands of them well before pregnancy even begins. Diseases that have stalked families for generations – like breast cancer – are being literally stopped in their tracks. Scientists can do that by creating and testing embryos in a lab, then implanting into a mother's womb only the ones which appear healthy. While the whole field is loaded with controversy, those who are worried about passing on defective and potentially dangerous genes see the opportunity to breed out disease" (O'Donnell 2014). Bridging between the desire of those who see deafness as a harmful disability and the preventive genetics is the next logical step and the future – or the lack of it – of deafness.

In light of this view, in which deafness should be eradicated and the deaf fetus prevented from materializing, there is a strong case for the argument that a certain view of a human biophysical makeup as the *preferred* one is blatantly a bio-political one and serves not science but, rather, politics. In other words, claiming that a certain form or organ should fulfill a certain function in a particular way and in accordance with certain social expectations is a political argument that promotes a parochial and interested vision of what it means to be human: an ableist view.

The coccyx and the vermiform appendix are examples of latent or hidden biophysical features that demonstrate such political manipulation of the concept of the body and its role in furthering ideologies and interests – without relation to ableism. The coccyx is utilized in arguments on evolution: "The tailbone derived its name because some people believe it is a 'leftover' part from human evolution, though the notion that the tailbone serves no purpose is wrong" (Comfort 2013). Whereas the appendix is used in arguments on veganism: "Compare the carnivore digestive system to the herbivore digestive system and to the human digestive system. Here is the unmistakable answer to whether humans are herbivore, carnivore, or omnivore" (Rex 2014).

Reference to these organs is made in particular not only because they have little if any relevance to deafness and disabilities, but also because it has no effect on human flourishing. In other words, the biological purposes of these physiological parts are of no relevance to our general makeup as humans in contemporary times. However, they carry profound political importance in supporting or opposing beliefs and practices among their protagonists. That is, whether one thinks the coccyx proves we have evolved or not, can affect one's religious beliefs and religious attachment, for example. And whether one believes the appendix is a proof of vegetarian past or carnivore one, can affect the dietary choices people make for themselves and their families. On a moral level, the arguments on the meaning of the tailbone and the appendix can determine whether one is going to hell or not or is secularly morally right or wrong; as evolution might contradict religious choices and eating animals might prove to be against our "ancestral heritage", for example. However, scientifically and medically, whether the tailbone and the appendix signify anything on our history as carnivores or herbivores and our relation to some aping

relatives, has no political meaning. Science is bio-neutral toward the two regardless of the heated and passionate debate they elicit in embittered battles people wage.

Hair is an example of salient or manifest physical feature with political ramifications: from White-supremacy skinheads, through toupee-wielding politicians, to big afros or dreadlocks. Its size, color, shape, form and location are far more important politically than any biophysical relevance the human hair carries per se. "As part of our modes of appearance in the everyday world, the ways we shape and style hair may be seen as both individual expressions of the self and as embodiments of society's norms, conventions and expectations" (Kobena 1987, 34). Take baldness or hairiness for example. Science is bio-neutral toward having hair or the lack of it anywhere on the body. Even though the status of whether one is bald or has a certain type of hair carries a sociopolitical weight. For it is a social fact that distribution and placement of hair on the head, face or body is valuable in the search for mating partners: "It is generally observed that a person's hair-style and clothing attracts the most, particularly females by males. The important factors which have been included in the grooming factor are hair-style – short hair; long hair and particular hair style [...]" (Husain 1993, 28). Whatever the social preferences for hair, styled or not, this does not serve as justification for medically preferring one hair condition over the other.

In practice, however, physicians pick a condition: "Indeed, some physicians cite the negative psychological correlates of baldness as the justification for medical treatment of hair loss. Emanuel Marritt, a hair restoration surgeon, sees this as his medical responsibility [...] The exaggerated significance Marritt attaches to hair loss treatment reflects his awareness that as a surgeon he performs procedures more risky and invasive than what a dermatologist does when prescribing Propecia, but the viewpoint he expresses is an increasingly common one: hair loss is a serious problem worthy of medical intervention" (Conrad 2007, 40). And such medical intervention is "localized" not only in its appearance but also in its care: "There is no set standard of care which is universally applicable or acceptable. One of the yardsticks useful in this regard is the standards established by a professional body of similarly qualified aesthetic surgeons in a country or region" (Venkatarm 2016, 423). So in practice physicians engage in the politics of the human form.

While political causes render problems and solutions around hair, be it people straightening their hair, cutting, removing, coloring, or shaping it in various forms, science and medicine have an inherent commitment toward neutrality. So are physicians meddling with the politics of hair, in this instance, running afoul? In other words, the neutrality commitment is breached by physicians who appropriate and promote preferences for certain hair – with or without the mediation of the treatment targets' choice? The question of physicians as salespersons is still open in some places, as they are being paid to promote medicines (Brodwin 2015). But the consequences of having physicians declare baldness an unhealthy and a defect in humans are the result of politicization of the human physique, which goes beyond providing service and encroaches on playing god.

This is then the counter-claim to the socio-medical argument of deafness as disability: it is bias against deafness – marking deafness as a human defect on the grounds of political conviction, not science.

What would a non-political view of deafness be? An example of a non-biased view of deafness should start with a neutral view of the human hearing system. It is argued that audition is purposeless without speech, for it is the only sensory system that has no other function: "The auditory system is the only system that has no other function besides communication. One might argue that our distant ancestors were more interested in the sounds that supported survival than those that arose from society, but nonetheless audition (the process associated with hearing) is an essential element of verbal communication" (Seikel et al. 2010, 447). In other words, hearing in general is a sense that allows the human to engage with sounds of the surrounding environment as well the internal one (e.g., borborygmic sounds), but is argued to exclusively geared toward particular behavior: verbal communication – speech.

However, speech is processed through an evolved structure which has functions that predate and are primary over speech: "The bodily components of the speech production apparatus are hundreds of millions of years old, and therefore none of them initially evolved for speech purposes" (Macneilage 2008, 7-8). That is, breathing and consuming food take precedence over speech, which renders speech an auxiliary of the oro-facial anatomy. Hence, from a bio-neutral scientific perspective, both audition and speech are qualities that have evolved that provided humans verbal communication *some* of the time in history. So from a "tradition" aspect, these newcomers should be cautiously and closely supervised; you never know what these physical tweens are up to. Humor aside, there were and are other forms of communication. Neglecting or negating the other biophysical modes of communication is therefore a political step that corresponds with parochial views and beliefs regarding what the human body should *be*, instead of the disinterested observation of what the human body *is*.

Furthermore, the diversity of the biophysical system is disregarded and bio-neutrality is violated as audition, in this instance, is being propagated in an over-simplified view to be an ever-present presence. That is, the view that verbal communication was and will always be part of our essence as humans is lacking scientific credence. Take cybernetics for example. For all we know, cybernetics may usher communication into a non-verbal age: "it should be pointed out that in real life both the encoding and decoding of nonverbal communication are dynamic processes with continuous feedback and readjustments between the communicants. It is only very recently that our experimental paradigms have begun to take this cybernetic dimensions of nonverbal communication into consideration" (Siegman et al. 1987, 17). This was written before the Baja Beach Club's members in Barcelona paid money in order to be implanted with a chip that "allows them to bypass lengthy club queues" (Michael et al. 2014, xix), a paralyzed man moved his arm with the help of "two tiny recording chips implanted in his motor cortex and another 36 electrodes embedded in his right arm" (Mullin 2017). Not to mention that

the cochlear implant itself is cybernetics per excellence: "cochlear implants give rise to an 'artificial' sense of hearing which is inferior to natural hearing but yet sufficient for social functioning" (Tzafestasa 2017, 426). So keeping neutrality or an open mind is at least what one should expect from those who "*must* incorporate conceptions of the 'good' and 'ideal' doctor" (Cruess et al., 2016, 229).

Thus elevating speech and hearing to the status of superiority and even sacredness is quite disturbing. When religious fables tell us that the voice is holly, as with god talking through the burning bush, we take it as miracle, which means this is exception to the general rule. And this interpretation remains to this very day, in which believers note that holy voice is carried in "unusual circumstances: how God spoke in some undeniably supernatural way" (Tirabassi, 2009, 73). This applies to other experiences outside of Western framework, such as when natives recount experience of sound as sacred so we can appreciate it as a unique cultural revelation. "When he was about four years old, Black Elk began to hear voices [...] The next year, after his grandfather had given him a gift of bow and arrows, Black Elk was riding horseback alongside a creek in the forest, when he saw a kingbird sitting in a tree. He was about to shoot the bird, when it spoke to him. 'Listen! A voice is calling you!' Then I looked up at the clouds, and two men were coming there, headfirst like arrows slanting down; and as they came, they sang a sacred song [...] 'Behold, a sacred voice is calling you. All over the sky a sacred voice is calling'" (Moon 2010, 29). But for the laymen sound is instrumental. For the lot of humanity there is nothing sacred in the voice or sound; humans attach such meaning to what they please to be worthy of veneration. That is the central point the countering-argument to the socio-medical one argues. Narrating the voice as sacred does not signify anything more than the value of the voice in certain human culture; it is the narrative and no more. But validating this narrative by scientific means is to allow the desire for a certain narrative to regulate diverse realities under one Audist conscription. Audism is the view that deafness is inferior to hearing: "discriminatory treatment of deaf individuals through history had no name until 1975 when Tom Humphries coined the term *Audism,* based on the Latin *audire,* meaning to 'hear'. In his original article, Humphries defined Audism as 'the notion that one is superior based on one's ability to hear or behave in the manner of one who hears'" (Bauman 2008, 13).

The Audist narrative ultimately provides the justifications to particular definitions of what being human is and is supposed to be, as discussed above. But it also creates what is arguably a false dichotomy. What is disputed is also the opposition of deafness to hearing. Wrongly and narrowly perceived as deafness, it should be considered that deafness is not the opposite of hearing, but, rather juxtaposed next to it on the continuum of sound. Perhaps because the poverty of thought has aligned deafness with diverse forms of soundless being, deafness has become a catchall phrase. After all, there is an essential difference between an organism that has a hearing organ that relies on temporal hearing (Oxenham 2013), an organism that has a frequency hearing (Au et al. 2000, 55), and an organism that does not have a hearing organ at all (Bailey 1987, 266).

Deaf persons are able to process sound in some form as the hearing organs generally exist in the absolute majority of deaf persons. Since sound sensed by humans is reliant on vibrations and thus the lack of sound is not possible unless one has no hearing organs. So any person, even deaf, with the otolith organs, for example, will experience some dimension of sound. So if science distinguishes the four grades of microtia (external ear deformities), of which anotia is the term indicating the fourth grade in which the absence of the entire ear is diagnosed, why positing deafness in dichotomous opposition to and of hearing is a consensus?

There seems to be no good reason that some changes are documented and differentiated when they correspond to the notion of deafness as a disorder, but carelessly groups under deafness a whole range of variegation in conceiving sound. Additional vocabulary to describe the more intricate conditions of hearing and its opposite such as the terms svanahless (Sanskrit) or sonarless (Latin), can denote the various physical conditions with deafness being additional (Collin et al, 2003, 3-39). Compare with typlosis, amblyopia and amaurosis in relation to vision and blindness.

However, there is at least one reason to group deafness under blanket terms and espouse uniform policies toward the deaf. It makes it easier to define and regulate a political reality – through political over-generalization. Just as with cultural uniformity, political over-generalization is utilized toward regulating a "part of a political culture which all citizens may be expected to share" (Habermas 2015, 313-25). Thus, deafness conceived as antithetical, profane and harmful is easier to demarcate: "deliberately creating a deaf child counts as a moral harm, because it so dramatically curtails the child's right to an open future [...] Davis maintains that selecting for deafness similarly violate a child's right to an open future" (Fahmy 2011, 129). If we view deafness as threat, being the opposite of the open-future of the hearing child, *then* we can regulate and administer deafness as a universal harm: "Many deaf people do not realize the risks of marriage with another deaf person. They seek medical advice only after one, or even two, deaf children have been born. They should be better informed but best of all is to integrate the deaf as far as possible in normal hearing society. This will reduce the change of intermarriage and is additional advantage of early auditory training of deaf children and of the auditory approach in all their training and management" (Fry et al. 1970, 91).

Revealing these prejudices, particular ones toward deafness, and general ones toward other disabilities and differences, should reframe the way medical applications are evaluated. The ethical integrity of the current and past medical practice toward the prevention and treatment of the human variety is in question in general, and in particular in relation to deafness. To the Deaf the good life and happiness is too often nongermane to the medical rationale; *au contraire* to the very purpose of medicine and its relevance to human life.

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