Deafness in the Arab world: a general investigation, with applications to Lebanon*

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Introduction

As a student of both linguistics and Arabic studies, I am always intrigued by the ways in which the two fields intersect. There is, of course, the study of the Arabic language, with its extensive history and unique assortment of remarkable linguistic phenomena. There is also much to be said about Arabic’s relationship with Islam, and the fact that the language and the religion have influenced each other profoundly. The Arabic language — both its standard form and its many regional dialects — has indeed been the subject of much linguistic scholarship in past decades. What seems to be scarce in the literature, however, is extensive study of deafness and the deaf communities that reside in regions of the world where Arabic is spoken. The goal of the present paper is to begin to fill this gap by looking into the situation surrounding deafness, deaf community, and sign languages in the Arab world generally, before focusing more narrowly on how these ideas might play out and inform policy in the country of Lebanon. Lebanon is a relatively educated and politically stable Arab nation, and structures are currently in place there that deal positively with issues of sign languages, deaf rights, and deaf education. This makes the country a suitable entry point for this sort of scholarly investigation.

To begin, I extensively cover the practical considerations regarding deafness in the Arab world as a whole. This includes mention of consanguinity, the sign languages used throughout the region, and the present state of deaf education there. Following this is an examination of relevant ethical concerns, particularly those surrounding the relationship between consanguinity, deafness, and culture. I then examine literature about the historically overlooked linguistic significance of sign languages, as well as the sociolinguistic and sociological characteristics of the communities they serve. Finally, I enter a discussion about Lebanon, and consider how themes and patterns from throughout the Arab world might inform a concrete understanding
about the deaf situation in this particular country. Along with this, I have sought to highlight policy efforts that are leading to positive developments for Lebanon’s deaf population, and what continued work could be done in this regard.

Ultimately, this investigation seeks to adequately characterize deafness in the Arab world, and how what is being done in Lebanon might provide a useful model for addressing similar issues in other Arab countries. The Arab world, though composed of 22 different nations, nonetheless experiences a considerable degree of linguistic, religious, and cultural unity. As such, effective practices in one Arab nation might model potential solutions for others.

Deafness across the Arab world

Consanguinity: The main cause

Consanguinity, literally “blood relation,” is the property of being recently descended from the same ancestor as another person. The term is typically used when referring to marriages and the subsequent reproduction that occurs between members of the same family line. Such marriages are called “consanguineous marriages” or “endogamous marriages,” and they are common practice among regions of the Arab world. The Middle East, of which the countries of the Arab world are a subset, has quite a diverse population. However, communities of people in this region from similar ethnic backgrounds and family lines have historically been demographically isolated despite their geographic proximity, and remain so today (Al-Fityani and Padden, 2010). The preservation of these family lines has led to a high incidence of genetic similarity among the people of these communities. Many people are born and live their lives in these communities, and they select or receive spouses from among their closely-related
neighbors. Qatar, for example, has one of the highest consanguinity rates in the world (54%), which involves intermarriage between very close family members — 34.8% of marriages there occur between first cousins (Bener et. al, 2005, p. 328).

Of course, marrying consanguinely is not always simply a matter of convenience in the Arab world; there is often cultural, social, and/or economic importance associated with the continuation of a certain bloodline. Hamamy and Bittles (2009, p. 32) list several advantages associated with consanguineous marriage which include:

- The assurance of knowing one’s spouse prior to marriage.
- Simplified premarital negotiations.
- Greater social compatibility of the bride with her husband’s family.
- Maintenance of the integrity of family land which may otherwise be divided by inheritance.
- The assurance of strengthening family ties.

It is presumably for reasons like these that Qatar and its geographical neighbors have such high rates of consanguinity. Likely because of this consanguinity, however, Qatar also has one of the highest rates of infant hearing loss/deafness in the world (Storbeck, 2012).

It is widely thought that consanguinity is a leading genetic cause of deafness. Denoyelle et al. (1997) classify “prelingual non-syndromic deafness” as “the most frequent hereditary sensory defect” (p. 2173). In the vast majority (over 80%) of cases, the mode of transmission of this deafness is autosomal recessive. This means that two copies (one from each parent) of an abnormal gene must be present for a disease or trait to be passed on to the child (MedlinePlus Medical Encyclopedia, 2016). It is thus likely that, in a consanguineous marriage, both parents may pass on to their child a deafness-causing autosomal recessive gene inherited from a common ancestor. Although consanguinity is not required for deafness to be inherited, consanguinity on the part of the parents “greatly increases the chance” that the trait will be passed on to the child.
(Zakzouk, 2002, p. 811). When a trait is *recessive*, it means that the gene associated with it may be present in a person even if the trait itself is not. Thus, a child can inherit deafness, or at least the gene associated with it, even if his parents are not themselves deaf. Due to the high prevalence of consanguinity, there is a higher incidence of deafness in many Arab countries than is often seen in parts of the West. Worldwide, about 1 to 3 in 1000 infants is born with hearing loss, but this figure rises to higher levels in regions of the Arab world. In Palestine, for example, the frequency of infant deafness is up to 70% higher than the global average, with even higher rates present in some villages (Al-Fityani and Padden, 2010).

*Arab sign languages*

Because of consanguineous reproduction, deafness in Arab communities tends to be hereditary rather than a result of an isolated disease or mutation. Al-Fityani and Padden (2010) point out that this fact stimulates the development and usage of sign languages, in ways that might not occur in communities where deafness is rarer and more often accompanied by larger health issues. In one respect, hereditary deafness results in there being a higher proportion of deaf individuals distributed throughout the community, so signing is not restricted to deaf people (p. 6). In another respect, again because of the hereditary nature of this deafness, the sign languages that deaf Arabs use tend to survive throughout family generations (ibid). A deaf Arab child may learn the local sign language in the home, and have it reinforced by both deaf and hearing interlocutors in his community. In communities where deafness is less frequent and not sustained across generations, the survival of a sign language is more dependent on whether or not deaf people have access to “organizations or institutions” designed specifically for them (ibid). These might include deaf clubs that are separate from the greater hearing community, or robust
policies that recognize sign languages and deafness in education. This is not to say that deaf institutions are unimportant in the Arab world; in fact, the lack of them often impacts deaf Arab communities negatively. It remains true, though, that Arab sign languages have emerged and been sustained outside of the confines of these sorts of institutions. These kinds of sign languages are generally termed “village sign languages,” and the phenomenon of their emergence across the globe is well-researched (Zeshan and De Vos, 2012 is particularly comprehensive). Among the village sign languages used in Arab regions, Al-Sayyid Bedouin Sign Language and Algerian Jewish Sign Language (both now used among Arabs living in Israel) have in particular been studied (ibid).

Village sign languages differ from national sign languages, which tend to have more formal and widespread recognition. One of the most well-known national Arab sign languages is Levantine Sign Language, which is used primarily in Jordan and Lebanon. Other national sign languages are present in Egypt, Saudi Arabia, Kuwait, and Libya, several of which have borrowings from American and European sign languages (Abdel-Fattah, 2005, p. 213). There have been efforts to create a centralized, standardized Arabic Sign Language. This would serve to mirror spoken Arabic, which has both a standard, formal counterpart (Modern Standard Arabic) and an abundance of region-specific dialects. Indeed, a somewhat standard version of Levantine Sign Language is used during some satellite Al Jazeera newscasts (Al-Fityani and Padden, 2010). Also, the Council of Arab Ministers of Social Affairs (CAMSA) has compiled a dictionary using vocabulary from Egyptian Sign Language and Saudi Sign Language (ibid), as part of the cataloguing and standardization process. Efforts to make standardized Arab Sign Language a used reality, however, have been largely unsuccessful. Deaf Arab individuals have trouble understanding a standardized language that they did not grow up using. Additionally,
imposing a standard where there already exist many different naturally-formed sign languages has a colonial sense about it (ibid).

**Deaf education**

An abundance of firmly-established natural sign languages provides more opportunities for deaf people to learn them from birth (Al-Fityani and Padden, 2010), but it does not guarantee that this will be the case all the time. According to the *Encyclopedia of Arabic Language and Linguistics* (2009), the first few years of many deaf Arab children’s lives are often spent in a “communicative vacuum” where hearing parents don’t learn the local sign language and rely instead on home sign. The term *home sign* generally describes a mixture of pointing and other gestures that hearing family members come up with to communicate with their deaf child. Home sign tends to have lexical and structural features similar to early child speech, but it is rarely complex and developed enough to comprise a true natural language (Goldin-Meadow et al., 1984), and its makeshift nature makes it particular to each family rather than a system used throughout the community.

The mid- to late-20th century saw the emergence of deaf schools in several Arab countries. They were often results of efforts by Christian organizations working in those regions. To this day, several deaf schools (and similar schools that focus on addressing the needs of functionally diverse people) remain offshoots of Christian churches or districts. It appears that before these schools were established, there was no significant presence of deaf education in the Arab world, at least on an institutional level.

Table 1. Several prominent deaf schools in Arab countries
(all information retrieved from official websites)
<table>
<thead>
<tr>
<th>Location</th>
<th>School</th>
<th>Year established</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baabda, Lebanon</td>
<td>The Lebanese School for the Blind and Deaf</td>
<td>1957</td>
</tr>
<tr>
<td>Salt, Jordan</td>
<td>Holy Land Institute for the Deaf</td>
<td>1964</td>
</tr>
<tr>
<td>Sharjah, United Arab Emirates</td>
<td>Al-Amal School for the Deaf</td>
<td>1979</td>
</tr>
<tr>
<td>Cairo, Egypt</td>
<td>The Deaf Unit</td>
<td>1982</td>
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The Holy Land Institute for the Deaf is notable for its initiatives to address the needs of children with speech disabilities, as well as deafblind children, in addition to traditional deaf education (official website, 2017). Even still, deaf education in other places in the Arab world tends to be oral and focuses on lipreading with a few supporting signs (Encyclopedia, Vol. 4, p. 224). Oral deaf education tends to be far less effective than education based on sign language, because of the inherent difficulty of reading lips. It is generally agreed that those who regularly use lipreading are only able to grasp an average of 30% of verbal speech (Kolb, 2013), and are left make their best effort to fill in the remaining gaps. This makes even ordinary, day-to-day conversation between deaf and hearing individuals difficult, let alone grasping and retaining information presented by teachers and classmates.

"Without good methods and with very little communication between children and teachers," continues the Encyclopedia, "...most of the relatively small number of deaf people who attended school are functionally illiterate" (Vol.4, p. 224). Some of this is due to the omnipresent disparity between written Modern Standard Arabic and spoken dialects. The words that deaf students can write are often from the local dialects of the regions they inhabit, not words that are usually found in books or other media. Most Arab countries lack secondary or post-secondary institutions suitable for the deaf, and many deaf people end up working in
manual trades like carpentry, car mechanics, or needlework, without the opportunity to succeed further (Vol. 4, p. 224). A few students in Jordan have attended university, but only recently, and this is not feasible in most other Arab countries due to the lack of trained interpreters (ibid).

We can thus see that although the Arab world does contain a few examples of effective deaf education, the situation as a whole can still impede the abilities of deaf Arabs to participate in society fully, especially with regard to interpersonal communication and employment.

**Ethical concerns, and their implications**

*Medical, cultural, and religious tensions*

What happens when a widely-accepted cultural practice conflicts with what is deemed to be in people’s best interests medically? Do governments or medical professionals have any responsibility to inform families about medical risks, and find ways to reduce them without infringing on cultural sensibilities? These are relevant questions to ask when considering the prevalence of consanguinity in the Arab world.

I imagine that if such a situation occurred in modern America, the acceptable answer to the second question would be a clear, emphatic *yes*. America is (at least in theory) a nation that places great value on both scientific medical knowledge and cultural preservation. In a case where a conflict between the two is readily apparent, a nationwide discussion would occur, with each of its participants seeking to find the best possible solution. An example of something like this was the Christian Science controversy of the 1980s. Several high-profile cases occurred where Christian Scientists, a fringe religious group who believe solely in the power of prayer for physical healing and eschew medical professionals and institutions, were implicated in the deaths
of several severely ill children. The parents of these children, who adhered strongly to Christian Scientist doctrine, refused to allow medical intervention and instead relied on Christian Scientist principles and practitioners for healing. The conditions of their children’s health became increasingly more critical, and after a prolonged lack of treatment, they died. This outraged the American public, and the general consensus was that in no circumstances should children be denied life-saving medical treatment, regardless of the religious beliefs of the parents.

The courts agreed. Prosecutors of the time cited cases that considered the promise of religious freedom in conjunction with the “inalienable right” to life found in the Constitution and the Declaration of Independence. The U.S. Supreme Court’s decision in one of these cases, *Prince v. Massachusetts*, held that

> parents may be free to become martyrs themselves. But it does not follow they are free, in identical [religious] circumstances, to make martyrs of their children before they have reached the age of full and legal discretion when they can make that choice for themselves.

In other words, the government will not and should not inhibit an adult’s free exercise of religion, even if it ends up bringing harm to that adult. However, when that adult’s religious expression blatantly places his or her child in harm’s way, authorities (and some would say common sense) have an obligation to prioritize the child’s safety over the adult’s autonomy. This is the position that most courts took in the Christian Science case, and several parents were sent to prison on charges of involuntary manslaughter, felony child abuse, and/or child endangerment (*The New York Times, 1990*).

Admittedly, the Christian Science controversy was fairly cut-and-dry. Virtually nobody spoke up in support of the group. In fact, one of the group’s former adherents formed a campaign against its practices, and several prosecutors who were initially sympathetic to the sect said that ethical concerns forced them to reconsider (*The New York Times, 1990*).
A more complex, though readily available, example of the culture-medicine tension is the current American discourse on abortion, which has been going on now for decades (Smith and Son, 2013). To varying degrees, people who deal with the issue are trying to balance valid moral and religious concerns about the conception and treatment of life with the equally valid medical and ethical concerns of women and families who find themselves in undesirable situations. Although much vitriol and antagonism is undoubtedly present, one might give those involved the benefit of the doubt and hope that they seek, at some higher level, an all-around appropriate end.

The situation in the Arab world regarding deafness, though analogous to the above examples, has notable differences and deals more directly with questions of public health and medical ethics. Consanguineous marriages remain a prominent cultural tradition, even though they are scientifically verified to be a likely cause of deafness in children. In addition to marriage customs, other societal values may also play into Arab attitudes toward public health in this regard. One such value is the importance of collective as opposed to individual identity, especially in the context of the family (Abdel-Wahab, 2014, p. 26). In contrast to the individualistic attitudes that allow for the wide-ranging American discourse on abortion, collectivist aspects of Arab identity may not facilitate an environment that would inspire similar engagement with the issue of deafness. None of this, of course, is to suggest that individualism is in any way superior to collectivism, or vice versa. I am seeking here to simply contextualize observations about Arab values by comparing them with values the American reader is likely familiar with. In this way, I hope that the nature of these values is outlined in a clear way that is free of value judgments.

*Counseling and the role of authorities*
In addition to the absence of a significant public health discourse, I hypothesize that Arab government officials and medical professionals do not generally take an informative approach in talking to the public when dealing with the issue of consanguinity-related deafness. (For context, those in charge in America often take the opposite approach; examples of this can be seen in the way public attitudes about smoking, drunk driving, drug use, and other such issues have been influenced to change.) This is for likely one of two reasons. Either

- Arab authorities do not see the situation as medically problematic, and thus don’t talk about it, or
- they recognize the health risks and deafness issues surrounding consanguinity, but see cultural practice and societal tradition as the stronger force at play.

In any case, it would appear that dealing with the medical roots of deafness and investigating its preventability is not the highest priority for governmental and medical authorities in the Arab world. I suspect that this may be part of the reason why deafness rates in the region have not decreased, and why efforts to deal with deafness focus on accommodating and sustaining the present genetic condition, rather than on education and prevention.

Genetic counseling is a method by which medical professionals might encourage education about (and prevention of) the risks associated with consanguinity. The term genetic counseling can be defined as “a communication process of providing individuals and families with information on the nature, inheritance and implications of genetic disorders, including recurrence risks, to help them make informed medical and personal decisions” (Sharkia et al., 2015, p. 370). Considering the literature on the use of genetic counseling in the Arab world, however, indications arise that seem to immediately contradict my hypothesis. In a survey of 414 pregnant Arab Israeli women, less than half of them reported using genetic counseling services before or during pregnancy. Despite this, however, “most of the pregnant women...had [a] good knowledge level concerning general genetics and the risk factors associated with genetic
diseases” (p. 374). Perhaps, then, it is not the medical community that prioritizes cultural practice over informing the public about genetic health concerns. Instead, maybe the public themselves prioritize cultural practice over heeding the admonitions of the medical community.¹

As it turns out, however, this situation may not be the norm. Sharkia et al.’s study was conducted in the Northern Triangle region of Israel, whose population comprises about 19% of the Arabs who live in Israel (p. 371). Two towns in this region, Baqa el-Gharbia and Kafr Qara, are known in particular for their relatively well-educated populations. Israel’s first-ever Arab college to be located in an Arab town is in Baqa el-Gharbia, and Kafr Qara has the highest proportion of physicians relative to population size, as well as a high rate of master’s degree holders. The pregnant women surveyed in the 2015 study had an average of about 12 years of education (p. 372), and were presumably literate. Socio-demographic factors such as education level and level of knowledge about genetics and genetic counseling were thus not factors that significantly influenced the women’s decision regarding said counseling (Table 3, p. 373; p. 374). Instead, many of the women “declared that religiosity was the main factor for rejection of the utilization of the genetic counseling service” (p. 374). In the case of these Arab Israelis, then, it appears that resistance to acting preventatively toward genetic risks was not due to the absence of information or education.

Contrast the situation in the urban, educated Northern Triangle with that in other parts of the Arab world. Consanguineous marriages, and thus the prevalence of genetic malfunctions that include deafness, remain higher in rural areas than in urban areas (Zakzouk 2002, p. 814). Also, a study in Qatar found a strong correlation between childhood deafness and the illiteracy of one

¹ If this is the case, it would not be unique; the Amish in America might present an analogous situation. Like many Arab populations, the Amish regularly intermarry and preserve consanguineous communities. They also, however, have immediate access to American medical knowledge, and it is doubtful that they are completely ignorant about the risks of such behavior. The Amish are not the subject of my study, but McKusick et al. (1964) describe many of the characteristics that deem that population similarly interesting with regard to consanguinity.
or both parents (Bener et al., 2005). Information about genetics, genetic counseling, and the risks surrounding consanguinity are less available in poorer rural areas than in places like the Northern Triangle. Even if information was made available in writing, though, it would remain inaccessible to many due to the high rates of illiteracy among the families that would benefit most from such information.

One would think, then, that simply providing rural illiterate communities with accessible education about literacy, genetics, and risks would reduce the amount of consanguinity (and thus the rate of deafness) considerably, or at least incline individuals to seek genetic counseling before deciding to accept the risks. The situation in the Northern Triangle of Israel, however, indicates that this may not be the case. The level of literacy, education, and genetic awareness is higher in that region than in most others, and genetic counseling is readily available, yet people opt not to use it and consanguinity there remains on par with other regions of the Arab world. The common factor between the educated and non-educated scenarios appears to be the role of religion and, more broadly, social and cultural forces. The urban Arab Israeli women surveyed reported that religiosity was the primary factor that influenced them not to seek genetic counseling services. Higher rates of religiosity in rural areas are hardly surprising (consider Chalfant and Heller, 1991), and further decrease the likelihood that the people there would take serious action if given medical admonitions.

The practice of consanguineous marriage also remains heavily tied to the sociocultural sensibilities of the regions in which it occurs, perhaps so much so that serious, large-scale reconsideration of customs for the sake of public health is simply impossible at the moment. Consider an example of one Arab family that, though rural, was able to participate in a genetic
counseling session. Two parents, themselves first cousins, were considering marrying their
daughter to her double first cousin.\(^2\)

The mother was dubious about the appropriateness of the marriage because she
understood the risk for birth defects cited by the counselor. But the father was more eager
to proceed with the marriage because he did not want to upset his relatives or possibly
stigmatize his daughter in a community with minimal genetic literacy. (Hamamy and
Bittles, 2008)

The parents’ decision-making was being influenced twofold: not only were they affected by the
implications of low knowledge and literacy regarding genetics, but they also were at risk of
stigmatization should they decide to deviate from familial customs. Even in such a case — where
individuals opt to utilize genetic counseling — consanguineous reproduction and genetic issues
may still occur.

The study containing this example does not specify whether this particular marriage
ultimately occurred or not. However, the authors do mention personal observations they made in
Jordan of consanguineous couples that carried the sickle-cell gene. They state that “the decisions
of carrier couples following premarital screening... were equally divided between not
proceeding with the marriage and each partner subsequently marrying a non-carrier, or deciding
to continue with the planned marriage on the implicit understanding that prenatal diagnosis
might be possible” (p. 34). It thus appears that a segment of Arab families do heed genetic
counseling advice and take significant steps toward prevention, but an equally large (if not
larger) segment of families do not.

To return to the question at the beginning of this section: It can be argued that medical
professionals in consanguineous communities have a responsibility to inform their communities
about the genetic risks associated with consanguineous reproduction. Contrary to my initial

\(^2\) When a pair of brothers marries a pair of sisters, their children are double first cousins. They share both sets of grandparents.
hypothesis, however, it does not appear to be the case that Arab medical authorities are circumventing this responsibility, and it seems that genetic counseling is regularly available — even in some rural communities. Instead, consanguinity remains prevalent largely due to cultural and religious factors. Social pressure and the force of the surrounding culture can influence decision-making considerably (as in the example above). Religious standards, particularly Islamic principles which can complicate perspectives about what is proper and to be expected from medical counselors (Albar, 1999), may also play a role in how Arab couples decide what advice to heed.

In short, the consanguinity situation in the Arab world is complex and shaped by numerous factors. We will see in a later section how these and other issues relate more narrowly to an understanding of deafness in Lebanon. What follows now, though, is a section covering the linguistic, sociolinguistic, and cultural aspects of deafness itself.

**Deafness, as conceptualized broadly in the U.S.**

On a broad scale, attitudes toward deafness have undergone significant changes over the course of the past several decades. Whereas widespread opinion was once to view deafness solely as a pathology and sign languages as less authentic than spoken ones, it has become increasingly appropriate to take more nuanced approaches when looking at people and communities associated with the presence of hearing loss. The corpus of research in this field in the United States evinces these shifts; there is a profound contrast between the prevailing linguistic, psychological, and anthropological attitudes of “then” and “now.” Relatively recent (since around the 1970s) scholarship by Americans and others has contributed greatly to more complex and sensitive approaches to understanding the varied implications of deafness. While
these attitudes may have developed at the hands of American researchers, their application is by no means limited to the United States. Insights gained over the past few decades can inform a fair understanding about the linguistic and social aspects of any deaf community worldwide. It is for this reason that we will look at the development of what we know today about deafness and sign languages, much of which proliferated in the United States, before going forward to see how this awareness might inform a similar understanding of deafness in Lebanon.

The linguistic authenticity of sign languages

The idea that sign languages are natural and authentic modes of communication — just like Arabic or English or Korean — is widely accepted among those in today’s academic community. However, until the late 20th century, attitudes toward sign languages, even among eminent linguists and scholars, were not at all like the ones today’s academics take for granted. Leonard Bloomfield, a very prominent linguist of the early 20th century whose work on structural linguistics predated the influence of Noam Chomsky, lumped sign languages together with other emotive practices in the general category of “gestures.” As he states in his highly influential book *Language* (1933):

Some communities have a *gesture language* which upon occasion they use instead of speech. Such gesture languages have been observed among the lower-class Neapolitans, ...among the Indians of our western plains (where tribes of different language met in commerce and war), and among groups of deaf-mutes. It seems certain that these gesture languages are merely developments of ordinary gestures and that any and all complicated or not immediately intelligible gestures are based on the conventions of ordinary speech.... [G]esture has so long played a secondary role under the dominance of language that it has lost all traces of independent character (p. 39).

Despite being on the cutting edge of his generation’s understanding of language and linguistics, Bloomfield dismissed the group of “gestures” that included sign languages as, at best, “merely
derivatives of language” (p. 144). His criticisms are perhaps understandable to a degree. The above quote suggests that he did not notice the systematic grammatical patterns present in sign languages (and that underlie all languages), so it makes sense that he would not give sign languages any sort of special attention. This approach may have, in fact, been informed by the structuralist framework through which he viewed language as a whole. Bloomfield pioneered the structuralist approach to linguistics, which focused primarily on relatively surface-level relationships and contrasts between items in a linguistic system. These sorts of contrasts might vary from language to language, making it difficult to generalize the theory across languages in a satisfying way. This approach did not account for the possibility that there might be deeper-level organizational elements that transcend most differences between human languages. This is the viewpoint of the more modern theory of generative grammar put forward by Chomsky, which went further to suggest that the knowledge of this fundamental linguistic organization is innate in the mind of every human. Languages, when utilized, are therefore outward expressions of this innate knowledge, and can be embodied by signs as well as verbally. The theory of generative grammar began to overtake Bloomfield’s view in prominence during the 1950s and remains a dominant theory today. Seeing none of the similarities between verbal and sign languages that all modern theories of grammar tell us exist, Bloomfield understandably had no reason to classify sign languages as genuine human languages.

It does not appear, however, that the lack of systematicity Bloomfield perceived was the only reason why he viewed sign languages as inferior. When mentioning sign languages, he grouped them together with the actions of people who were marginalized, disadvantaged, or in some other way abnormal. In his words, gestures belonged to “lower class” groups like some Neapolitans, or minority populations like Native Americans. Native Americans have a
particularly oppression-laden history in the United States, and attitudes toward them during Bloomfield’s time were by no means all positive. Bloomfield viewed the communication system of “deaf-mutes” the same way he viewed the actions of other somewhat disdained populations, so it’s likely that he saw deaf people in general as having a similar status. As mentioned above, this was consistent with the general consensus of the time.

Another prominent academic, Northwestern University psychologist Helmer Myklebust, wrote extensively during the 1960s about deaf child education, learning disabilities, and auditory disorders in general. Despite all this, however, he also saw sign languages as inferior to their spoken counterparts. His 1964 text *The Psychology of Deafness*, which deals at length with matters of deafness and its developmental implications, strongly promotes speech as ideal and speechreading (a term which has supplanted the earlier term lip-reading, since the articulation of body parts other than strictly the lips is involved) as a far better way than signing for the deaf to learn to communicate.

While the sign language has advantages for some deaf people, it cannot be considered comparable to a verbal symbol system... Therefore, although speechreading has limitations as compared to auditory language, we must assume that it is the most suitable receptive language system when deafness is present (p. 235).

He reinforces this later in the book by listing the traits he believes have contributed to sign languages’ inferiority:

The manual sign language used by the deaf is an Ideographic language.... It is more pictorial, less symbolic.... Ideographic language systems, in comparison with verbal symbol systems, lack precision, subtlety, and flexibility. It is likely that man cannot achieve his ultimate potential through an Ideographic language.... The manual sign language must be viewed as inferior to the verbal as a language (pp. 241-242; qtd. in Fox, 2007)

In Myklebust’s view, sign languages are not simply subpar to spoken ones with regard to their structure or complexity. He goes so far as to posit that sign languages are incredibly deficient —
so much so that they may literally stifle their users’ ability to be fully human. While this may perhaps be an extreme way to phrase the idea, the general sentiment behind it was widely accepted during the first half of the 20th century. It was so prevalent, in fact, that it seeped into the mentalities of some deaf people. Padden and Humphries (1990) mention a 1950 editorial written by a prominent deaf lecturer, who described sign language — his very own mode of communication! — as a grammarless system governed solely by “custom” (p. 60). The illegitimacy of sign languages seemed to be an inescapable notion.

However, the mid-1960s, when The Psychology of Deafness was published, also appeared to be when opinion started to shift. This was largely due to the publication of William Stokoe’s linguistic analysis (1960), which linguists quickly reacted to positively, even though psychologists accepted it a bit more slowly. Two years after the publication of Myklebust’s book, psychologist Hans Furth gave his take on deaf communication in Thinking Without Language (1966). Although much of the book echoes perspectives similar to those of Bloomfield and Myklebust, one passage seems to acknowledge the existence of natural, expressive communication between members of deaf communities:

It is not surprising that the deaf themselves are somewhat resentful toward the society that constantly tells them they should not live and communicate as they do, but should learn the speech of society and mix freely with the hearing. They feel instinctively that without sign language most of them would indeed be unable to communicate anything but the most primitive and obvious needs. There would be no possibility of forming a meaningful community based purely on verbal exchanges. It is therefore in the deaf community that the deaf person finds opportunity for social, emotional, and intellectual development and fulfillment (p. 16).

Here, Furth begins to push back against the idea that sign languages are deficient, and that deaf people who use them are missing out on the complexity that verbal language has to offer. He does share in the prevailing view of the time to a degree (the title Thinking Without Language
itself alludes to this), but he is nonetheless aware that sign languages are considered legitimate and decidedly language-like in the minds of those who use them. In addition to this, Furth makes an early reference to the existence of deaf communities. He acknowledges that sign languages are often the most effective means for communication and expression within deaf communities, and that they have the same meaningful characteristics as communities of hearing people. It appears that Furth’s viewpoint was on the right track, in terms of acknowledging the authenticity of both sign languages and deaf communities.

Deafness in identity and community

Communities, in a general sense, tend to be comprised of people who share a particular identity or set of common characteristics. Deafness is one of these characteristics, and is today considered a factor that contributes to identity and forms community. Deafness is at the core of many deaf people’s sense of self; this is a notion which, although created by the absence of hearing, is decidedly distinct from it. The term deafness is often considered by hearing people to solely refer to the pathological aspect (namely the absence or diminished presence of hearing), while the identity aspect is left unknown. The identity aspect is particularly salient for individuals with prelingual deafness who are raised by and/or around other deaf people. Prelingual deafness is defined as “deafness that occurs prior to the individual’s acquisition of a first language and includes deafness at birth through three years” (Senghas and Monaghan, 2002). These individuals often grow up with deafness present at all stages of life, forming their identities around it, and developing a sense of self that can be referred to as capitalized Deafness. For this reason, it is possible for someone without prelingual deafness (i.e., someone who lost his hearing after the age of three but was raised predominantly around hearing people) to be deaf but
not Deaf. Even this term has shifted slightly in recent years. Currently, *Deaf* often describes anyone deaf, prelingual or not, for whom a sign language is their most frequent and preferred means of communication.

Capitalized Deafness, as mentioned above, is distinct from the physical reality of deafness. It is a characteristic that can affect people's lives in similar ways, and it is in cases where it does so that communities can form. Although the capitalization convention can help with clarity during fine-grained sociological discussions, from here forward I will opt to solely use lowercase *deafness* for the sake of consistency. In doing this, I am following many others who no longer use the D/deaf distinction, in recognition of the fact that the line can be quite blurred.

Deaf communities are authentic and full-fledged communities, held together largely by the idea that deafness is an ethnic identity. Robert E. Johnson, an anthropologist and Professor Emeritus of linguistics from Gallaudet university, describes deaf communities in *The Deaf Way* (1994, pp. 102-103) as groups of people who experience deafness jointly as an *ethnicity*. Ethnic identity in this context, according to Johnson, "involves two essential features": paternity and patrimony (p. 103). Paternity is the requirement that, to be considered an ethnically deaf member of a deaf community, one must have the biological trait of diminished hearing. Patrimony, a more sociological term,

recognizes the fact that, within the groupings created by deaf people, customary patterns of behavior and shared sets of values develop. In order to be considered a member of the deaf ethnic group, a person, in addition to meeting the requirement of having diminished hearing, must also accept to some extent the values of the community and act according to the norms of behavior for the group (p. 103).

Those who identify with deafness in terms of both paternity and patrimony are thus considered ethnically deaf, and are most often the individuals that exist at the core of deaf communities.
This idea of deafness as a core element of identity and ethnicity is not true for the deaf solely because they have the physical characteristic of deafness. In addition, individuals in deaf communities are consciously aware of the impact deafness has on their identity and place in the world. They actively pursue ways to engage with and solidify deafness as a core element of identity. Elsewhere in *The Deaf Way*, researcher Breda Carty (who is herself deaf) identifies three characteristics of deaf identity:

1. Embracing deafness as an essential, characteristic part of oneself,
2. recognizing and participating in Deaf culture, particularly through Sign Language, and
3. interpreting the surrounding world in a way that is compatible with one’s experience as a deaf person (p. 41).

Carty’s characteristics of deaf identity are remarkably similar to those one might use to describe those in a different, more conventionally “ethnic” sort of ethnic group — such as a group of people who share a line of common ancestry. A personal example may help to make this point clear. My ethnic identity as an African American is described perfectly by the characteristics Carty lays out, omitting the sign language element:

1. I accept African American-ness as an essential part of myself.
2. I recognize and participate in African American culture, particularly through certain religious, familial, and dialectal traditions.
3. I interpret the surrounding world in a way that is compatible with my experience as an African American person, especially with regard to the historical context of being a person of African descent living in the United States.

These sorts of characteristics, combined with the sets of values, behavioral norms, and other such aspects of “culture” that Johnson mentions, rightly apply to those in deaf communities as much as they do to those with ethnic identities like mine. Importantly, none of this is to say that any ethnic group is monolithic, or that deafness cannot intersect with any number of other identities or ethnicities. Instead, drawing parallels like this helps to show that deafness as an identity is
clearly instrumental in the development of deaf communities, and that these communities are as important and authentic as the ones hearing people often occupy.

Since most deaf communities exist as minorities in predominantly hearing societies, certain aspects of community and culture receive greater emphasis than their counterparts in other types of ethnic communities might. One of these is language. The physical reality of deafness — diminished hearing — requires deaf people to communicate in a way different from the verbal and sound-centered mode of speech most often used by those who can hear. As such, essentially all deaf communities have adopted the use of sign languages for interpersonal communication. We have already seen that sign languages are full-fledged, authentic languages; they are complete linguistic systems that facilitate the meaningful exchange of information and can capture the full range of signers’ emotional complexity.

Sign languages have the added property of being very closely tied to deaf identity, so much so that the use of sign language is often a requirement for membership in a deaf community. As such, sign language tends to be tightly bound to the structure and integrity of a deaf community, perhaps more intimately than spoken languages are to many hearing communities. Padden (1980) highlights the truth of this in an American context, noting that, for deaf people, “[American Sign Language] serves as a viable means of displaying one of their unique characteristics” (Readings, 347). An understanding of this need not be limited to the deaf in America, however. Deafness has the same impact on hearing ability regardless of geographical location, and in all cases necessitates the same sort non-phonocentric communication system. The use of sign language, then, is as elemental to deaf identity and community as deafness itself is.
Deaf populations in regions where the hearing majority doesn’t acknowledge this, then, are in some respects unable to make their importance known. This is particularly true in cases where the deaf have been denied education and literacy, so that they have no direct means of communication with the hearing majority. When such a substantial element of what makes deaf identity legitimate and human is overlooked, deaf people are less likely to be treated as fully human and see themselves as such (as was the case early last century). This is especially true if the deaf already lack the resources to maintain sustainable self-contained communities. I suspect that these issues are to some degree present in Lebanon, and it is to matters of this country that we now move.

The case of Lebanon

Lebanon is situated in the Arab world’s Levant region, meaning it is in close proximity to the other Arab countries of Jordan, Iraq, Palestine, and Syria. In the midst of the political and military tensions that too often seem to characterize this part of the world, Lebanon tends to remain relatively stable. It is ethnically and religiously diverse, and English and French are widely spoken there in addition to Arabic.

One study, which surveyed a representative sample of Lebanese schoolchildren, found that about 5% of them experienced some degree of hearing loss (Mikaelian and Barsoumian, 1971). This figure is quite high compared to those of countries in other regions. For example, the rate of hearing loss among newborns and young children in North America is about 0.6%, or 1 to 6 per 1000 (Cunningham et al., 2003; Kushalnagar et al., 2010). Even considering nations with less-than-ideal health care, where hereditary deafness tends to occur with greater frequency, the
Lebanon figure remains high. Infants in Nigeria are born deaf at a rate of 28 per 1000, or 2.8% (Olusanya et al., 2008) — barely more than half of Lebanon’s 5%.

A large segment (22.5%) of the children examined expressed what many consider mild hearing loss; the quietest sounds they could hear were those between 25 and 35 decibels. Additionally, 9% of them expressed more severe hearing loss, with sounds of more than 35 decibels being the quietest they could hear, and 8% expressed unilateral (single ear) hearing loss of more than 70 decibels. Thus, it is possible that up to 17% of these children, or 0.85% of Lebanese schoolchildren as a whole, experienced complete or near-complete deafness. When compared with an estimated 0.2-0.4% of Americans classified as “functionally deaf” (Mitchell, 2005), the magnitude of this proportion becomes more apparent.

However, it is important to note that the causes of hearing loss listed in this study are largely external, and appear to be mostly influenced by sickness or injury rather than genetics. 256 children were tested, and only 19 of them expressed hearing loss while having an otherwise healthy eardrum. The rest of the children had complications like inflammation, infection, or wax buildup that affected their hearing. It is thus possible that consanguinity and heredity are less significant causes of deafness in Lebanon than they are in other Arab countries.

Consanguinity in Lebanon

Indeed, the rate of consanguinity in Lebanon is somewhat low in relation to rates in other parts of the Arab world. Barbour and Salameh (2009) record that the prevalence of consanguineous marriages averages 35.5% among the general Lebanese population, and because the rate among Arabs spanning the Middle East ranges from 30-50% (p. 514), this is toward the low end of the spectrum. This might be due to religious differences. The authors found the rate
of consanguinity among Lebanese Muslims to be as much as 2.2 times higher than that of Christians (p. 513). This makes sense, considering that the two religions differ in the types of marriages they allow. Orthodox Christianity categorically prohibits consanguineous marriages, and the Roman Catholic Church allows them only with special permission. Protestant denominations in Lebanon permit consanguinity, but the Orthodox and Catholic traditions comprise a majority of the Lebanese Christian population. Islam, by contrast, only forbids uncle-niece unions; other forms of consanguinity are permitted (p. 506). In addition, many of the social and economic benefits associated with marrying consanguineously are rooted in Islamic culture and customs. Lebanon is quite diverse religiously, and has the highest Christian population of any nation in the Arab world at 40.5% (Central Intelligence Agency, The World Factbook, 2017).

Because consanguinity is the primary genetic cause of deafness, and a large segment of the Lebanese population is discouraged from marrying consanguineously for religious reasons, it would be safe to assume that the rate of hereditary deafness is lower in Lebanon than it might be in the rest of the Arab world. This is not to say, however, that deafness is a minor concern in Lebanon, or that the deaf there are exempt from societal issues related to their status.

**Deafness and disability in Lebanon**

Like in many places, deafness is primarily considered in Lebanon to be a pathology, and is often lumped together with mental illness, blindness, and other conditions considered to be disabilities. Therefore, when investigating Lebanese attitudes toward deafness, one must inevitably get into the details of attitudes toward disabilities more generally. In Lebanon, as in
most other Arab countries, disabilities tend to be seen as burdensome, and the people who experience them as lost causes.

Nagata (2008) performed a study in Lebanon and Jordan, investigating the prevalence of these very attitudes. The study included a questionnaire in which people were asked to report their attitudes toward people with certain types of disabilities. The respondents were asked in sequence about people who were intellectually disabled, mentally ill, physically disabled, deaf, and blind. On a scale of 0 to 144, where higher numbers indicate more positive attitudes, Nagata found that the Lebanese people she surveyed had an average attitude value toward deafness of 84.65 (p. 69). This was in fact the lowest value among those of all the disabilities. Along with her statistical findings, Nagata also includes the words of an anonymous disability activist from the region, who describes these sorts of attitudes as nothing new:

> Arab societies always treated certain categories of disabled persons as a negligible quantity, treating them as though it was the end of the road. Disability in Arab culture has traditionally been seen as something shameful, an ordeal to be endured by the family (p. 69).

This is the traditional Arab attitude toward people with disabilities, and the negativity of it seems to be most prevalent in Lebanon when directed toward deaf individuals.

**Sign language in Lebanon**

Although negative attitudes make the deafness situation in Lebanon seem less than promising, the sign language of the region might serve as a ray of hope. Levantine Sign Language, the sign language used among many deaf communities in Lebanon and Jordan, can bring a sense of cohesion to deaf populations in these countries. The language is recognized to a degree by media and academia. Because of this, even if negative attitudes toward deafness in general might abound, the deaf in Lebanon can speak to each other and form community without
fear of the same sorts of prejudices applied to their language. Sign language is, of course, foundational to the success of deaf communities.

Additionally, Levantine Sign Language is lexically similar to other nearby sign languages, including those of Kuwait, Libya, and Palestine. This overlap might mean that there is the potential for mutual understanding between the deaf communities in Lebanon and those in other Arab countries.

Positive advancements

Deafness, both in the wider Arab world and in Lebanon specifically, has a myriad of causes and implications. We have looked at length at these, with particular attention paid to the more problematic aspects and challenges that surround deafness. I would like to end on a more positive note, highlighting recent and current efforts in Lebanon that benefit the deaf community.

Lebanon’s Law 220/2000

Law 220/2000, issued in May 2000, is a comprehensive disability rights law passed by the Lebanese government. It includes several progressive provisions for the rights of disabled people, a group which in this context includes the deaf. These provisions include recognition that disabled adults have the right to employment and benefits, and that disabled children have the right to adequate education. According to a UNESCO study, the law “also stresses the right to participation, moving away from the previous charity-based model of exclusion to a rights-based inclusive approach to disability issues” (Kabbara, 2013). Deaf individuals, as part of the group of disabled people, are therefore legally recognized as fully human. One of the primary goals of the
law is to prompt employers and other institutional forces to treat them as valuable members of the non-deaf communities they exist in.

*Learning Center for the Deaf (LCD)*

The Learning Center for the Deaf is a non-profit NGO located in Baabda, Lebanon. LCD’s self-described goal is to “promote, facilitate, and empower deaf men and women through education throughout Lebanon” (official website). The organization has worked in conjunction with Law 220/2000 since its founding in 2002, implementing several programs and initiatives that serve the needs of the Lebanese deaf community. These include:

- Early intervention programs, aimed at identifying deafness in early childhood and training families to respond appropriately
- A fully-functional deaf high school, which equips students with the academic skills necessary to pass the comprehensive government exam and proceed to university
- Initiatives to raise positive awareness of the deaf in the hearing community, such as media interviews, national campaigns, and activities in hearing kindergarten classrooms
- Language therapy for deaf individuals who desire proficiency in the spoken language
- Levantine Sign Language classes for hearing students

*Final thoughts*

Possible future research might look more closely at Lebanese attitudes toward deaf individuals, and whether organizations and laws like these have had a noticeable impact on them. Ideally, initiatives like those at LCD and laws like 220/2000 have in some way influenced the general Lebanese public to have a more inclusive perspective on deaf communities, giving the deaf a chance to more fully experience equality. If this is the case, then what Lebanon has done with regard to education, language recognition, and policy might appropriately model similar
advancements that would benefit other Arab countries. At any rate, deafness in the Arab world is a complex topic that touches on many different aspects of health, language, and culture, and Lebanon is a useful example of how these factors converge.