UNIVERSITY OF CALIFORNIA, SAN DIEGO

Literacies, Mobilities and Agencies of Deaf Youth in Turkey: Constraints and Opportunities in the 21st Century

A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy

in

Communication

by

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Chair

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List of Acronyms

(ASP) The Turkish Ministry of Family and Social Policies

(BTK) Information and Communication Technologies Authority

(CODA) Children of Deaf Adults

(CISS) International Committee of Sports for the Deaf

(EYH) The General Directorate of People with Disabilities and the Elderly

(MEB) The Turkish Ministry of Education

(TID) Turkish Sign Language

(TIDTD) Turkish National Association of Sign Language Interpreters

(TIESF) Turkish Sports Federation of the Deaf

(TÖSF) Turkish Sports Federation for the Handicapped

(UDI) The Turkish Ministry of Transportation, Maritime Affairs and Communications

(WFDWC) World Federation of the Deaf World Congress

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Abstract of the Dissertation

Literacies, Mobilities and Agencies of Deaf Youth in Turkey:
Constraints and Opportunities in the 21st Century

By

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Doctor of Philosophy in Communication

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Professor Carol A. Padden, Chair

This dissertation is a critical investigation of the literacies, mobilities and agencies of deaf youth in Turkey, where social life is increasingly mediated by digital technologies. It is an experiment on using more holistic frameworks of literacy and social navigation, towards a comprehensive social study of deaf people and their situated agencies in everyday life. The main purpose of this investigation is to understand the individual and social factors that inform the extent to which a young deaf person can access and actively participate in social life in contemporary Turkey, both online and offline. This work draws on theories and research from a range of fields, including and not limited to Deaf Studies, Literacy Studies, Mobility Studies, and Communication. The current research takes on a mixed methods ethnography, which has both quantitative and qualitative

properties. Findings in this dissertation come from four kinds of data with deaf youth in Turkey: (1) language measures in Turkish and Turkish Sign Language that looks at both comprehension and production; (2) in-depth interviews on topics ranging from demographic information to language, communicative, technology and social practices; (3) a focus group meeting on employment; and (4) a virtual ethnography of linguistic and communicative practices of a Turkish deaf youth on Facebook.

This dissertation work shows that the reading skills of Turkish deaf youth in Turkish are very limited, and their productive skills in written Turkish need even greater attention. It also reveals opportunities for deaf people's agencies in Turkey, which arise from youthful exploration of new technologies and social media, as well as constraints that fundamentally stem from problems in deaf education and existing divides in society based on factors like gender, income and urbanization. Finally, it suggests transliteracy as a critical skill in the empowerment of deaf youth in Turkey, in both the deaf community's relations with the state and with other deaf and hearing populations.

Introduction

This dissertation is a critical investigation of the literacies, mobilities and agencies of deaf youth in Turkey, where social life is increasingly mediated by digital technologies. The main purpose of this investigation is to understand the individual and social factors that inform the extent to which a young deaf person can access and actively participate in social life in contemporary Turkey, both online and offline. This work draws on theories and research from a range of fields, including and not limited to Deaf Studies, Literacy Studies, Mobility Studies, and Communication. In doing so, it also aims to contribute to each of these fields, both by putting them in conversation with each other, and by interacting with them from a non-Western perspective, situated in complex subject positionalities in Turkey.

I chose to work with deaf youth for several reasons. First, young adults are often the early adopters of new communication media and technologies, seamlessly integrating new technologies into their social practice. Youth is a period of experimentation where available social artifacts, including language, are manipulated with both child-like creativity and adult-like skills, towards innovative aspirations (Buckingham, 2008). The practices of youth are often the indicators of future habits of the population at large, especially when it comes to the integration of new material artifacts into everyday social practices. An important line of study is concerned with how emerging media practices contribute to young individuals' access to knowledge and its production, as well as creating alternative paths to civic participation (Ito, 2010; Gallucci, n.d.). Online social media is said to provide a foundation for "networked publics" allowing youth to expand and refashion their peer-spaces, where participation becomes an essential

activity for their negotiation of identities and production of communities (Boyd, 2008). What is under studied is the diverse set of skills and motivations required for their active participation in these networked publics. High school students are relatively more independent and are able to engage in a wider set of activities with older peers outside of school, giving us an opportunity to view the influence of both school and community settings on lives of deaf youth. Young deaf adults are their older peers, who no longer have the institutional structure in their daily lives and are forming their social patterns in a hearing society.

My initial study on this topic was carried out in 2011, and was aimed at understanding the changing media practices and mobilities of young Deaf adults in Turkey. Consisting of semi-structured interviews with 8 students at two vocational high schools for the deaf in Istanbul and Ankara, the pilot study focused on their use and acquisition of language, as well as their social and media practices. It was the findings of this study that made me realize the centrality of "literacy" in their adoption of communication technologies, and the obstacles that it was raised for deaf people in the practices of everyday life. That is why in my dissertation literacy became one of the primary areas of investigation, looking at both Turkish and Turkish Sign Language (TID).

The current research takes on a mixed methods ethnography, using both quantitative and qualitative approaches. Findings in this dissertation come from four kinds of data with deaf youth in Turkey: (1) language measures in Turkish and Turkish Sign Language that looks at both comprehension and production, (2) in-depth interviews on topics ranging from demographic information to language, communicative,

technology and social practices, (3) a focus group meeting on deaf youth and employment, and (4) a virtual ethnography of linguistic and communicative practices of Turkish deaf youth on Facebook.

My involvement with the Turkish deaf community goes back 15 years, when I first began working on the documentation of TID as part of a research project as a college student. In the past 15 years, I have had various interactions with both community members and deaf rights organizations, in the context of a range of academic, governmental and social events. My conversational fluency in TID has allowed me to conduct dissertation research on my own, which has had its advantages and disadvantages. I am a hearing Turkish woman from a middle-class family. I spent the first 24 years of my life in Istanbul, and attended private schools most of my life. I also grew up in a strictly secular household. In that sense, this dissertation work that unfolded at a time when Turkey has been going through its own transformations under an Islamic government, was also an important part of my process in learning to talk about religion in non-threatening ways.

Among the many conditions of late modernity that shape social practices around new technologies is the tension between modernization and traditional values of governance embodied in local political dynamics. Turkey is an exceptional place to study how social policies and cultural practices interact with global and regional discourse, due to its unique geopolitical positioning (Keyman, 2011). Turkey has historically modeled and inclined towards Europe in terms of socioeconomic and developmental policies, yet it is located in and proximal to the Middle East with respect to cultural traditions and contemporary practices of governance. Especially in the past five years, Turkey's

national policies and practices regarding media and access to information reveal tensions between the global developmental push towards becoming an information society and the government's increasingly restrictive and controlling attitudes in terms of the flow of and access to information in the country. In addition to this tension, there are also significant regional differences within Turkey with respect to culture, ethnic make-up, levels of urbanization, access to state services and technological infrastructure. This research project with deaf youth from different parts of Turkey thus allows us to study a variety of situated experiences in relation to global trends of late modernity.

Becoming an information society has been on Turkey's agenda since the turn of the century. The "eTransformation Turkey Project" was launched in 2003, aiming to improve infrastructure and to spread the use of information and communication technologies across the public and private sector (DPT, n.a.). In 2010, "Fatih Project" was launched by the Ministry of Education, with the goal of providing laptops, projectors, and Internet infrastructure to 620,000 classrooms by 2013 (Fatih, n.a.). These are just a few examples that illustrate a much more widely adopted tendency to presume progress through technology alone, to the point where it is almost fetishized, especially since the Industrial Revolution (Harvey, 2003; Haraway, 1991). In the case of Turkey, the roots of this tendency can also be traced back to the industrialization and modernization ideals of the Republic that were on the rise beginning in the 1950s, as well as Turkey's transition to a neoliberal development model in the 1980s, which increased the importing of new goods, technologies, and know-how to the country (Onis, 2004). Furthermore, the materiality of new technology as the face of progress, has been used and manipulated by the ruling parties as evidence of their development-related accomplishments in their

political campaigns and thus, for power. In the meantime, however, currently there are more than 60,715 websites that the Ministry of Telecommunication and Communication (TIB) has blocked in Turkey, for having 'inappropriate content' (EngelliWeb)[1]. Among these websites are social media platforms where the production and sharing of alternative views and information are encouraged. One important example is YouTube, which was blocked in Turkey for approximately two and a half years until 2010. This push for technological advancement, combined with such drastic measures of Internet and media censorship taken by the government to control the circulation of content identified as threatening or declared inappropriate, clearly reveals an important tension between the two conflicting goals in Turkey: modernization and conservative governance for absolute power.

In Turkey, more than half of the population still does not use the Internet on a regular basis. Internet use is highest among the 16-24 year-old group at 59.4%, and 73% of all users are younger than 34 years-old (ISS, 2010; IAB, 2011). According to both reports, Internet use seems to be significantly higher among the more educated in Turkey, and in urban areas compared to rural. None of these studies, however, seems to have included people with disabilities in their sample groups.

In the past decade, the majority of educational funding and investments in Turkey, including deaf education, has gone towards new technology implementation. What we have witnessed as 'educational reform' has mainly been remodeling the appearance of the classrooms, with the assumption that technology can remedy most of the problems in the

1 To view the most up to date number and list of websites that are currently blocked by the Turkish Government, please follow this link: http://engelliweb.com/

education system. The truth, however, is that such new technology is either left unused or does not improve the learning environment, due to the lack of professional training, support, and resources for teachers (Pillai, 1999; Karaca et al., 2013). It is often forgotten that technology is simply a tool and not necessarily the solution to the most critical problems in education. While it is true that new communication and information technologies (ICTs) are at the heart of modern life, research also shows that (1) technology ownership does not necessarily mean having access to all its social uses, and (2) digital divides often mimic and follow existing social divides in a society. Thus, we need to first better understand the critical factors that allow for and limit one's value added use of these new technologies in the educational setting as well as in everyday life. As evident in literature on Deaf Education and Deaf Studies, as well as my fieldwork with deaf youth in Turkey, literacy appears to be one of the most critical factors informing deaf people's ability to participate in society.

Adding to the restrictive measures hindering individuals' access to information and its production, the language barrier is another hurdle for deaf people in Turkey. This language barrier starts at home with their hearing non-signer parents, continues at school with their hearing non-signer teachers, and persists later in life with all aspects of phonocentric and textual social life. Little has changed since July 2005, when the government passed a bill within the Disabilities Act, recognizing Turkish Sign Language (TID) and enforcing its use within state institutions. To this day, teachers of the deaf still do not get training in TID, and thus are not able to use it for communication or for instruction at deaf schools. This results in deaf students in Turkey going through their years in school without fully understanding their teachers or the majority of course

content. At these institutions, the communicative and instructional standards are very poor, while expectations of deaf students are significantly lower than their hearing peers. This results in deaf students completing their degrees without the necessary skills and knowledge required in adult life. One of those critical skills that allow one to functionally navigate social life is textual literacy in the dominant spoken and written language: Turkish.

There are serious problems with Turkey's education system, and more so with special and deaf education. A secondary analysis of the 2002 Turkey Disability Survey shows that illiteracy is three times higher among the population with disabilities (36.3%), compared to the national population at large (12.9%) (Tufan & Arun, 2006). According to the same report, the illiteracy rate among the deaf and hard of hearing population is 37%, slightly higher than those of the blind and those with physical disabilities, 35% and 28.5% respectively. However, this survey likely under-represents the actual illiteracy levels of the deaf population. It is important to note here that to date, there is no standardized or widely accepted test to measure Turkish literacy. The literacy rates from this survey come from either self-reports or reports of 'able' members of the household, responding to a question that collapses literacy and education levels in one category. In this study, it is assumed that access to primary education and above is an indicator of having literacy, but this is not necessarily the case for deaf children, as it will be discussed in detail in the next section.

My study with deaf youth in Turkey reveals that the majority of deaf individuals who have gone through the education system still lack sufficient basic Turkish literacy skills to be able to participate in everyday social life, textually. This is likely an outcome

of both growing up deprived of an accessible rich language environment at home and the lack of means of communication means with their teachers. As the teachers and administrators of deaf schools confirm, their expectations from deaf students are low and the resources for training teachers of the deaf are limited. Unless parents make an extra effort, their children are likely to graduate from both primary and secondary education as functionally illiterate in Turkish. However, with the ubiquity of smart and mobile technologies and high bandwidth Internet, especially in the urban setting, other types of literacies (i.e. digital, media, visual) emerge as critical and are worth exploring in their multiplicity in understanding social dynamics. Especially in the case of deaf people, video-based communication and information technologies and social media have been creating new forms of authorship that need to be studied more thoroughly.

Mobilities of deaf youth in Turkey are also mediated by a collection of bodies, tools, systems, and ideologies that are prevalent in contemporary Turkish society. Using Urry's (2000) mobilities paradigm that has been central in the young field of Mobility Studies, my work addresses the diversely mediated mobilities of Turkish deaf youth in online and offline spaces.

In Chapter 1, I compare the social significance of the ability to read and write in three different settings: Early Modern to Modern Europe, Late Ottoman Empire, and Early Republic to Modern Turkey. I use this discussion to situate the emergence of both European and Ottoman schools for the deaf, within the governing and religious authorities in these societies. This historical overview is followed by a conceptual overview and disambiguation terminology regarding literacy, starting from reading and writing to new literacies, multiliteracies and transliteracies, that run parallel with the

academic milieu. These terms will be used throughout the dissertation.

In Chapter 2, I situate deaf people in Turkey and cover a brief history and status of Turkish Sign Language (TID). In doing this, I begin with the deaf population and provide some background on the demographics of this population, along with some medical and social factors that inform these demographics. In the next section I look at deaf education in Turkey, while also explaining its role in deaf children's acquisition of TID. I end this section with a summary of problems that are central in Turkish deaf education today. The history and status of TID follows, with its legal underpinnings, along with its resources, teaching, and interpreting. This chapter ends with a section on state services and initiatives for deaf people in Turkey.

In Chapter 3, I share my findings on the literacies of deaf youth in Turkey, based on a battery of literacy measures for Turkish and TID, and the in-depth interviews that I have conducted addressing the language background of the participants along with subjective language reports, communication and media practices among other things. Before I do that however, I situate this study in earlier work in the field, concerning the literacy abilities of deaf people. In this chapter I provide both qualitative and quantitative measures on the literacy skills and practices of 33 young deaf individuals in Istanbul, Turkey, in two age groups: high school students (18 participants) and young adults (15 participants). This is also where I discuss their vernacular literacy practices around communication technologies and gaming, along with sponsors and gateways to literacy.

In Chapter 4, I address the patterns of social navigation that deaf youth in Turkey practice and experience, including those created by technologies of transportation and communication, as well as others that are regulated through institutions and recurring

sports and dance events, at the local, national and international level. In exploring and detailing these mobilities, I use Urry's (2000) mobilities paradigm as an analytical framework, which differentiates between four different modes of travel that are experienced by people: corporeal, imaginative, communicative and virtual. Here, I also discuss the relation of these mobilities to the social networks of deaf youth, and their likelihood of being sustained depending on several factors.

Chapter 5 is where I interpret the literacies and mobilities of deaf youth that I discuss in earlier chapters, towards a better understanding of the scope of young deaf people and their agencies in Turkey. Starting with the relationship between deaf people's access to empowerment via the performativity of sign language (theatrical and linguistic), this chapter brings us to the initial visibility of TID in the Modern Turkish public sphere and its uptake in popular culture mainly through television. Then I discuss the contemporary agencies of deaf youth, particularly with respect to employment opportunities and other state services. A brief description of the kinds of agencies that are afforded by sports and online games follows. The last section of this chapter addresses new practices of TID-based authorship that are afforded by social media, particularly Facebook. In this last section, I discuss these self-authored TID videos in terms of content, language choice, international sign language contact, and gender.

Finally, the Conclusion chapter brings all of these together with a brief summary of highlights of findings along with a critical discussion of key themes in the dissertation.

Chapter 1: A Historical Account of Literacies and Agency

1.1. Introduction

Etymology, as the archeology of words, allows us to trace connections in the logic of cognitive organization and social practice across cultural and material landscapes. Tracing the word "technology" takes us to the compound *tekhnologia* in Greek, which brings the concepts *techno-* (art, skill, craft, method, system) and *logos* (word, speech, discourse, reason) together, originally referring to grammar.[2] That is to say, language is one of the most basic and oldest forms of technology and social artifact. Language is a technology for both cognitive organization and social interaction. Being skilled in a language allows us to give meaning to the organization of social life that we are a part of, as well as extending our perceptions and intentions further across time and space. In that sense, as the nature of social interaction changes or becomes more complexly mediated by technologies beyond our bodies, so do the kinds of communicative skills, or literacies, required from individuals to navigate and participate effectively in their sociotechnical landscapes. This is a critical perspective to bring to research and theories investigating the relationship between deaf people and literacy, such that literacy is understood in its multiplicity, as practice, and in constant flux. It is only when we push beyond the limitations of traditional models of literacy and explore deaf people's literacy practices as lived in their diversity that we can fully understand what it takes for a deaf individual to be literate within diverse and shifting sociotechnical landscapes.

2 The use of the term technology as "science of the mechanical and industrial arts" only dates back to late 19th century, likely parallel with the Industrial Revolution. (Online Etymology Dictionary, n.d.)

The terms "technology" and "literacy" both have a deictic quality to them (Leu et al., 2013). This means that the artifacts and skills that these terms point to are relative to the sociohistorical moment that they are being used, as well as to particular communities of practice. Technology refers to social artifacts, tools that are designed as solutions to particular social problems, primarily with the intentions of increasing our agencies in everyday life.[3] Each technology/tool assumes a set of users equipped with a particular set of knowledge, skills and intentions. These assumptions are constantly modified as the technology itself evolves and is repurposed along with the sociocultural ecosystem that it is a part of. The artifacts that we consider as technology today may over time become so prevalent that they are seamlessly integrated into social life (i.e. the pencil, the banknote) or they can become obsolete (i.e., the floppy disk, VHS or audio cassettes, or a language that has become extinct). That is why we sometimes also see a distinction made between high technology (new and advanced electronic/digital technologies) and low technology (older and more mechanical technologies). Likewise, what it means to be "literate" in such shifting sociotechnical landscapes is a constant negotiation of knowledge, skills and attitudes. This applies to vernacular literacies of deaf people that are also in flux.

This chapter is a historical, developmental and theoretical investigation of literacies, with respect to the practice of authority and technological innovation. There are two main questions that guide this chapter: *(1) How is authority tied to the regulation of literacy practices? (2) What does literacy mean?* I begin the chapter with a historical overview of the social and political implications of literacy, focusing on reading and writing as separate activities. I situate literacy practices in the governmental and religious

3 This relationship will be discussed in more detail in Chapter 5.

contexts of Europe, the Ottoman Empire, the Early Turkish Republic and contemporary Turkish society respectively. Then, I move on to elaborate on what is meant by the term literacy, starting from the singular traditional view, to the more recent pluralistic understanding of the term through new wave Literacy Studies. In the first part of this section, I also cover the fundamentals of the acquisition of literacy considering second language learners and deaf people in particular, which will subsequently be developed in Chapter 3. Then, I address the new wave of Literacy Studies, where notions like literacy practices or multiliteracies are introduced and foregrounded. In the sections to follow, I explain and disambiguate these terms around new literacies that have been discussed in literature to date, under three categories*: modality, medium* and *domain*. Finally, I bring everything together in the last section, where I consider the relationship between these diverse literacies that are utilized in the practice of everyday life. Here, I introduce a relatively new term, 'transliteracy', as a skill that is increasingly valued in modern social life, referring to the flexibility and ease in the timely utilization of multiple literacies.

1.2. The Social and Political Implications of Reading versus Writing

Language is one of the most basic means to practice human agency (Anzaldua, 1987; Austin, 1975; Brandt, 2009; Chartier, 1989; Lakoff, 1990; Street, 1984). Materialized in language are hierarchies of attention, cues for human action, structures of social order, solutions to social problems, and opportunities for social change. Materialized in linguistic exchange is human agency claimed, imposed, negotiated, contested, or denied. And each new technology that further mediates linguistic expression, documentation and exchange affords new ways of knowing, relating, doing and being in

the world. The main question that guides this section is as follows: *What does it mean to be a community of readers versus a community of writers with respect to potentials for agency?*

Looking at the evolution of mass literacy in the Western world after the printing press, Brandt (2009) notes that while *mass reading* can often be traced back to religious and state institutions that ultimately aim for social control, the imperative for *mass writing* rose later with industrialization, mainly in conjunction with artisanship and commerce. She describes how the surplus of readers created through mass education and religious indoctrination by the nineteenth century, eventually led to a consumer market of recreational readers that then required a community of writers. Here, several things are worth mentioning about Early Modern Europe (roughly 1500-1800): (1) the spread of literacy has shaped human agency in both the private and the public spheres, (2) the content of mass literacy has moved from the religious to the secular domain, (3) the practice of silent reading created a new private sphere, particularly for women, while (4) reading out loud and writing has traditionally been practiced by men, in public (Chartier, 1989; Manguel, 1996).

The origins of deaf education in Europe can be traced back to Christianity, rising from the narratives of salvation and the spiritual redemption of deaf people, who were perceived as lost souls in society. Unable to "hear" the word of God, it was believed that deaf people should be educated to at least "read" these words in writing. This may as well be how "fingerspelling" emerged, first as an intermediary representation of letters used by Spanish monks in the 16th century, and then further developed by Abbé de l'Épée, a wealthy French priest who also founded the first school for the deaf in Paris, so that the

word of God could now be embodied in its articulation (Padden, 2003).

By the end of the 20th century, the further commodification of knowledge not only created a push for the development of information and communication technologies, it also gave rise to a surplus of writing (Brandt, ibid). And now with the spread of computer and Internet technologies, Brandt claims that the act of writing and opportunities for authorship are at an unprecedented peak. More importantly, both historically and in terms of current practices, writing has more closely tied to economic wellbeing and social status than reading. Writing has to have more transactional value, especially in the workplace. Finally, she points to emerging forms of citizenship, where social participation increasingly requires practices of writing, leading to reading becoming more of a supporting act.

Coming back to the region where modern Turkey was founded, we need to consider a long history of Ottoman rule and Islamic traditions. Daily practices of reading and writing were situated within Ottoman bureaucracy and the practice of Islam. Reading, in the Ottoman and Islamic context, primarily referred to an oral tradition of memorizing and reciting Qur'anic[4] texts in Arabic, as a religious practice. Writing, on the other hand, refers both to the copying of Qur'an by hand and religious calligraphy, as well as to secular bureaucratic scribal practices, like record keeping and correspondence (which primarily took place in Ottoman Turkish using the Arabic writing system). In both the religious and the secular contexts, writing for masses was carried out by highly trained elites in the Ottoman era, who become skilled in a range of scribal styles, each having

4 The word "Qur'an" itself literally means "book, reading, recitation", coming from the Arabic word qara'a, which means "to recite; to read (aloud)". The traditional word used for coffeehouse in Turkish is "kıraathane", which is a combination of the same root and the word "hane" meaning house.

their own "visual strategies of information keeping", beyond textual representation (Osborn, 2008). It was within this highly developed tradition of writing that the Ottoman authorities gradually adopted the printing press almost four centuries after its spread in Europe, initially employing mass writing for purposes of better governance, not necessarily for religious texts.

It was not until after the mid-19th century that significant educational reforms were made under Ottoman rule. The teaching of writing was emphasized, and the education of girls was encouraged (Demirtaş, 2005; Sönmez, 2013). Fortna (2012) also states the occupational advantages of becoming active writers for Ottoman people, as well as the emergence of pro-literacy narratives in children's books published in that era. He also gives the example of the late Ottoman writer Ahmed Midhat Efendi, as a pivotal figure in the professionalization of writing in the Empire, and who has made a great socioeconomic leap through the writing of 150 books (novels and short stories) in his lifetime. Findley (1989) writes:

> *[Ahmed Midhat] published books since 1870, a major goal always being to make Europe known to the Ottomans. His earlier books had been "mental journeys" based on reading, however, while this thousand-page travel narrative recounted a "real journey". Not a journey to an unknown country by one who had no idea what to do there, his European tour was a "transition from the imaginary to the real". Although it is ironic that the route from his imagined Europe to the "real" one led to such alteritist representations as the orientalist congress and world exhibition, Ahmed Midhat in effect parried the irony by approaching Europe with the same expectations Europeans had of finding their prior representations borne out when they traveled to the "real Orient". (Findley, 1989, p.22)*

The mid-to-late Ottoman era was a period of modernization with European influence. Primarily led by scholars educated in France, both deaf and hearing, the first

school for the deaf was founded in Istanbul toward the end of the 19th century [5] by Pascal Pekmezian, who was an Armenian Ottoman graduate of the Paris School for the Deaf. In fact, it is rather ironic that although founded within the premises of the Islamic Ottoman Empire, as yet another symbol of Abdulhamid II's power and authority, the bulk of the money came from Pekmezian's tour in Europe to raise funds from the Christian elite (including Pope Leo III), for the salvation of deaf people in Constantinople (Deringil, 2002; Silent Worker, 1895).

> *Mr. Pekmezian has lived in France some thirty years; and has visited the most of the Institutions for the Deaf and Blind in the principal cities of Europe. He is a well-read and remarkably intelligent man, is able to converse in French, Italian, Russian, English and Armenian quite fluently...To try to raise money in Turkey would simply be waste of time; for what can the people of Turkey know about the education of a class of people that they have always considered as just something above the animals and fit only for the burdensome labour...Mr. Pekmezian is therefore making a tour through Europe and the United States for the purpose of raising funds to enable him to found a school for the Deaf and Dumb at Constantinople...has received donations and encouragement from His Holiness Pope Leo III...he concludes "You know, sir, that I work for some thousand poor unfortunate people, who know not Christ, and to whom I am endeavouring to bring salvation. I shall be happy to die when I see with mine own the Institution for which I have struggled two long years opened.* Silent Worker, 1895, Vol 8(3), p12

There are several important points to be made here with respect to literacy practices and authority in the Ottoman context: (1) in both the religious and the secular sense, those who had control over the content and form of writing (be it handwriting, calligraphy or print) were those in power; (2) the language of writing imagines

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5 For a brief summary of the history of deaf education and use of sign language in late Ottoman and early Turkish republic, see İlkbaşaran & Taşçı (2012). Sezai Balcı's (2014) book Disability and Disability Education in the Ottoman State: The school for the deaf mute and blind, (Original title: Osmanlı Devleti'nde Engelliler ve Engelli Eğitimi – Sağır Dilsiz ve Körler Mektebi) provides a more thorough historical analysis of deafness and deaf education in the Ottoman period. Other sources include Batır (2008), Gök (1939), and Miles (2000, 2009).

communities of practice and is often symbolic of domains of knowledge and authority; (3) education and language reforms were means of practicing power and hegemony; (4) writing appears to be largely a male activity, at least until late 19th century, while women were either consumers of scripts in the domestic sphere or teachers in rare occasions; and (5) while we can talk about mass reading under Ottoman rule, writing appears to be practiced only by a few highly trained elites until late in the 19th century[6].

This is why control over the form and content of writing was such an integral part of the empowerment and nation building process of Modern Turkey after the foundation of the Republic in 1923 (Mardin, 1961). The alphabet reform of 1928, when the government decreed adopting the Latin alphabet as the national writing system, was among a series of reforms that the founder of the Republic, Mustafa Kemal Atatürk, made across a range of political, social and institutional domains (i.e., the secularization of education, the switch to the Gregorian calendar). Up until that point, Arabic script, central to Islamic culture, was used in writing the spoken form of Ottoman Turkish, along with the addition of some Persian letters (Ertürk, 2011). It is important to note, that the consideration of the Latin alphabet began as early as late 19th century during the Tanzimat reform era of the Ottoman Empire, parallelled by increased exchange with the Western world. By early 20th century, the Latin alphabet was already being used among

6 Turkey's modernization process and its links to literacy is a vast and intricate topic that cannot be addressed fully within the scope of this dissertation. Şerif Mardin and Eric-Jean Zurcher have both written extensively on Turkey's Modernization process. Similarly, Bejamin C. Fortna's (2012) Learning to Read in the Late Ottoman and Early Turkish Republic is an important analysis of the role of reading in the construction of modernity. Ahmet Hamdi Tanpınar's The History of 19th Century Turkish Literature (Original title: 19. Asır Türk Edebiyatı Tarihi), is a seminal text on literature in late Ottoman Empire. SelçukAkşin Somel (2005, 2010), on the other hand, has a great body of work on the history of literacy and education in the Ottoman Civilization. Finally, Nergis Ertürk's 2011 book, Grammatology and Literary Modernity in Turkey, traces the history of Turkish language reform from the mid-nineteenth to the mid-twentieth century, providing a critical analysis of the process with an emphasis on control over communication.

the European influenced educated elite, in both their exchanges (letters and telegraph) and a few publications (journals) (Tongul, 2004). Designed as a more transparent writing system that could better reflect the prevalent spoken language of the time, particularly the vowel system, this reform was originally intended to increase the very low literacy rates in the population. However, the alphabet reform also had more symbolic connotations. In one way, this reform was a symbolic gesture to cut ties with the Ottoman and Islamic past that was materialized in the Arabic alphabet. Switching to the Latin alphabet was also symbolic of Modern secular Turkey's founding principles, direction, future interactions and intended affiliations with the Western world, both socially and economically. Writing, both by using the Latin alphabet and by authoring new secular and nationalist educational texts and curricula, was an integral tool in creating the new narrative for Modern Turkey. Captured in the Latin alphabet, these new texts, and the emphasis on writing were: (1) the claiming of a new Turkish national identity that is aligned with the ideals of Western Enlightenment; (2) the tools for equal access to and authorship in new domains of knowledge; (3) the mechanism through which new generations of citizens could be created as an imagined community; and (4) the future mobilities of this imagined model Turkish citizen, in the corporeal, material, imaginative, and communicative sense. Until the past decade, these have been the guiding principles of Modern Turkey.

In the 21st century, Turkey has been going through yet another transformation in both education and literacy practices, this time reflecting the re-emphasis of Islamic culture and ties with the Middle East. This ideological transformation that is initiated by the Islamic government led by the Justice Party, AKP (Turkish: Adalet ve Kalkınma Partisi) is taking place roughly at three levels: (1) at the governmental level through

major changes in the mandatory education system; (2) at the broadcasting level through the regulation of mass media; and (3) via increased number of Qur'an courses opened across the country through the Offices of Mufti, the highest rank official institution concerning Islam in Turkey. The new education reform of 2012, also referred to as "4+4+4", requires mandatory religious (Islamic) instruction in 4th grade, and offering Arabic as a second language starting also in 4th grade. Since the new primary school age is also set to five years-old with this law, mandatory religious instruction now begins at the age of nine. In addition, this new system allows for parents to send their children to Imam Hatip High Schools that are now re-opened (after a ban in 1997, during what was referred as a postmodern coup), where the students get six additional hours of mandatory Islamic education (two hours Qur'an instruction, two hours on the life of the prophet Mohammed, and two hours on Fundamentals of Religion), in addition to four hours of Arabic instruction in a week[7]. Boys and girls also study separately at these schools. The new law also reduces the previously 8-year period of mandatory secular education to only 4 years.

One of the major critiques of this new system that emphasizes religious education, has been the potential disadvantages that girls, children with disabilities and children from lower socioeconomic status will face. Given the conservative makeup of Turkish society, this legal change makes it possible for parents to send their daughters to Islamic schools as early as 10 years old, when they are not old enough to make the decision themselves. As one of the leading social psychologists in Turkey, Çiğdem Kağıtçıbaşı,

7 See the link for a full breakdown of weekly schedule at İmam Hatip High Schools: http://www.imamhatipokullari.org/ortaokul-ve-lise-ders-cizelgeleri.html

points out in her interview, children acquire the necessary analytical and critical skills only around 12 years of age, and before then religious information is likely to be interpreted as dogmas or prohibitions (Atalay, 2014). With this fundamental shift in education, along with changes in many other domains of life, it comes as no surprise that the government has also created a new discourse of "Old Turkey vs. New Turkey" in the past year, through which earlier Westernization of the Republic is heavily criticized and the emergence of a new authentic Turkish image is supported through reconnecting with Islamic values and ideals[8]. Overall, compared with previous state interventions on literacy and education, in this New Turkey we see: (1) the claiming of a new Islamic Turkish identity that is parallel with Middle Eastern and Ottoman notions of education and progress as described above; (2) Islamic values, knowledge and literacies being emphasized over new skills and literacies required from 21st century citizens (i.e., critical thinking, information literacy); (3) the mechanism through which new generations of citizens could be created as an imagined Muslim community; and (4) the future mobilities of this model Islamic Turkish citizen, primarily interacting with the Islamic world and scholarship.

What is important to take away here is that a governing body's regulation of literary practices is often tied strongly to the practice of power and control, as well as reflecting their political ideals. Likewise, the empowerment of a linguistic or cultural community often requires gaining access to educational and linguistic rights, making the literacies that are of value to the group meaningful and valuable to the society at large. In

8 http://www.zaman.com.tr/pazar_akpnin-yeni-turkiyesi-aslinda-jon-turkiye_2221300.html

Chapter 5, I come back to this relationship between language and authority, with respect to deaf people's relationship to power via the legitimization and performance of sign language in the educational and public spheres.

1.3. Traditional views of literacy and its acquisition

The term literacy is typically used to refer to the ability to comprehend and produce written text. However, as we expand our understanding of the word "text", we broaden the range of forms and modalities where acts of reading (comprehension) and writing (production) can take place. As we will explore further in this section, symbolic manipulation towards meaning can be achieved using a range of modalities, articulators and technologies afforded by the bodily and the material environment combined. Literacy practices and the choice of symbols used in communication are thus situated and negotiated processes, informed by individual, material and social factors.

In its broadest sense, literacy suggests a kind of "know-how" that consists of the ability to make meaning out of symbolic technologies that are shared across a group of people, as well as the ability to skillfully manipulate and compose meaningful units out of these technologies, such that others can also understand. Literacy is procedural knowledge that consists of knowing how to decode, comprehend and produce a particular set of symbols towards meaning and social purpose. Such agreed upon and technologically mediated symbolic communication, is central to the human social condition, particularly modern life. Advanced literacy of any kind requires the comprehension of not only the literal meaning of immediate symbolic representations, but also of the inferences and intentions implied by them. Such critical literacy also

entails the consideration of the social context in which a particular symbolic exchange is taking place in this interpretation, as well as its evaluation in relation to relevant world knowledge, relating both to the content and the author(s).[9]

The term literacy, both in its everyday use and as traditionally used in the educational context, often suggests the ability to read and write visual-textual character representations of spoken language systems. In order to disambiguate from other kinds of literacies, this specific type of literacy has been referred to as ***alphabetic literacy, print literacy, textual literacy,*** or ***linguistic literacy*** across literature in the field (Goody, 1977; Olson, 1994; Ong, 1982). Each of these terms comes with its own set of assumptions and limitations with respect to how language or writing systems are conceptualized: Not all writing systems are *alphabetic* (as in the case of Mandarin Chinese that instead has a logographic system), writing does not need to be in *print* form (it can be as simple as writing on sand with our toes), *text* can have much broader implications than character representations of language (including the body or an urban landscape) (de Certeau, 1984), and most of these terms don't have a place for *languages* that do not have a standard writing system (such as spoken languages of oral cultures like Pirahã or in the case of sign languages[10]). Due to these issues, among the terminology offered, I will be

9 For a critical discussion of the relationship between authorship and agency, see Chapter 5.

10 In fact, the need to create a writing system that is based on sign language is not a new concept. Sign language researchers have long played with the idea and came up with various notation systems for sign language phonology (e.g. Stokoe Notation, the Hamburg Sign Language Notation System (HamNoSys), SignWriting), primarily to code sign language for further linguistic analysis. What is unique about Robert Arnolds' (2011) ASL writing system Si5s is that it is developed by Deaf people for the everyday use of Deaf people. It is a two dimensional cultural artifact to represent, document and exchange their visio-spatial language more accurately. Designed originally based on ASL, Arnolds' intention is for Si5s to be adapted to other national sign languages in the long run. However, although there are workshops to promote the use of Sign Writing and Si5s, neither one of them appeared to be used in everyday exchanges among Deaf people. This is likely due to the prevalence of video based documentation and communication technologies that allow for the capturing of sign language as is.

using *linguistic literacy* from now on, in order to refer to the comprehension and production abilities in language systems and their second level representations, like writing systems. This includes both the decoding, comprehension and production abilities in a language, spoken or signed, as well as in its writing system if any. When referring only to the skills in the writing system, for the lack of a better term, I will use the term *textual linguistic literacy*.

Written forms of language are second level symbolic systems that allow for knowledge and ideas to be materialized as portable objects that can exist and circulate in society, independent of their authors. That is why conversational language skills and world knowledge are critical factors in learning how to read and write. Before acquiring a written language system, one must have the awareness and knowledge of a language, its social purpose, as well as the appropriate skills to use it socially. Likewise, no first language can be acquired fully through only being exposed to its written form, without its appropriate conversational context and practice. Written texts are situated and meaningful in relation to particular sociocultural practices and artifacts. For written language to be acquired and to be used in a meaningful manner, it needs to be anchored in one's existing cognitive schemas about the world and the social function of language, as well as the practice of everyday life. These cognitive schemas are constructed and constantly modified as an outcome of social interaction and conversational exchange.

Just like any other material artifact, elements of a language can be seen as public objects that are created, borrowed and continuously reinterpreted in the complexity of the moment that they are uttered (Bakhtin, 1986). Language is a dynamic archive through which the past, the present and the future confront and configure one another. Without

having access to such archive and to its co-production in immediate social interaction (conversational language skills), it is not possible to successfully comprehend and manipulate its second level abstraction (written language skills).

Understanding of the social function of the written word is a key step in a child's early literacy acquisition. There are many studies investigating the developmental and social aspects of literacy and print awareness. One of the important findings of this set of literature is the critical role that caretakers play in raising the child's awareness and acquisition of the formal, semantic and pragmatic dimensions of print. It has been long known that linguistic input, when grounded in the child's immediate focus of attention, better facilitates language acquisition (Tomasello, 1988). It is thus important for caretakers to have successful strategies for getting their child's attention and maintaining joint attention around an object. Just like with any other object that is central to an interaction, caretakers' ability to create and maintain a triadic joint attention with their child around books or other forms of print in daily life is key at this initial phase of print awareness (Dunham & Moore, 1995). With hearing children, joint attention can be sustained through the auditory channel while the adult and child interact with the book visually. With deaf children, however, joint attention requires other strategies, since both the linguistic and object-oriented interactions must take place in the visual modality. The main takeaways can be summarized as follows: (1) children benefit from exposure to print-rich environments starting a very early age (Robins & Webster, 1999); (2) Deaf caretakers seem to use a wider range of attention getting and child directed signing strategies to facilitate joint attention at early ages (Maestas y Moores, 1980; Spencer, Bodner-Johnson & Gutfreund, 1992; Swisher, 2000); (3) deaf children with Deaf/signer

parents acquire better visual attention skills and sooner than those with hearing/non-signer parents (Chasin & Harris, 2008); and (4) by around the age of 2, deaf-of-deaf children show a more controlled and coordinated use of their gaze to facilitate joint attention in reading (Lieberman et al., 2014; Richmond-Welty & Siple, 1999).[11]

This picture gets more complicated when having to learn how to read and write in a language that is different from the language that one knows how to use conversationally. Working with second-language learners, mainly hearing immigrant children, Cummins (1979) has developed his *Linguistic Interdependence Theory* (LIT) that has been widely used in bilingual education since. According to LIT, there are underlying cognitive skills and linguistic proficiencies acquired in one's native language (L1), which can provide the basis for and be transferred to their second language (L2). That is why, when children are native users of a language other than the one used at school, work needs to be put into bringing in their L1 proficiencies into their L2, as well as developing their L2 conversationally prior to higher level literacy instruction in that language. Cummins's (1978) work also shows that bilingual children perform higher on metalinguistic awareness than monolingual children, which is aligned with Vygotsky's (1962) observations on the cognitive benefits of the ability to express similar thoughts in different languages and that "bilingualism can promote awareness of linguistic operations" (p.148).

Cummins (1979; 1981) emphasizes the critical role that *Basic Interpersonal Conversational Skills* (BICS) plays in children's acquisition of *Cognitive Academic*

11 A more detailed review of this literature on deaf children, joint attention and early literacy can be found in Lieberman, Hatrak and Mayberry (2013) and in Swanwick & Watson (2005).

Language Proficiency (CALP) at school. By BICS, Cummins refers to the conversational fluency that a typical 4-5 year old would bring to school in their native language. Then, the rule-governed aspects of language and discrete language skills like phonological awareness, grammar, spelling and other writing conventions related to literacy can be introduced, building off of BICS. Pre-school early literacy environment of a child and parental involvement in bringing awareness to these conventions, plays a critical role in the foundation of such discrete language skills, since the sooner these concepts are introduced the better[12]. Once this foundation is established, higher-level language that makes up CALP can be introduced at school and through print, such as low frequency words, domain specific concepts or alternative speech genres. In this model, it is important to remember that each stage is a prerequisite for the next, and that instruction cannot jump to CALP without securing the basis for BICS and discrete language skills. While decoding written text is the easiest of all, it does not mean full comprehension. Cummins also claims that children seem to need about 5-7 years of formal instruction to go through the later stages in order to master those more meta-linguistic and academic skills.

Another important critique of Cummins is that often the rules of a language are taught out of context. Since many grammatical forms are in fact driven by particular conversational domains and situations, students are more likely to master these forms if they are provided the opportunity to engage with the language in such contexts. On a similar line, Ravid & Tolchinsky (2002) argue that literacy acquisition is a part of what is

12 Dr Jim Cummins explains the differences between BICS and CALP. on Vimeo. (n.d.). Retrieved May 8, 2014, from http://vimeo.com/56112120

called "later language development", and that *"one significant aspect of later language development is the ability to recruit different morpho-syntactic structures and to use them flexibly for diverse communicative purposes"* (p. 418). According to Berman (2000), this also includes being skilled in recognizing, comprehending and using a range of discourse genres, as well as "syntactically denser structures and creating hierarchically organized texts" (Ravid & Tolchinsky, 2002, p. 418). More on academic research concerning this relationship between language and literacy, as it relates to deaf people, will be introduced and discussed in the next section of this chapter.

1.4. New Wave of Literacy Studies: Multiliteracies and Literacy Practices

> *To take explicit written prose as the model of a language, knowledge, and intelligence has narrowed the conception of all three, downgrading the general functions of ordinary language and common sense knowledge* (Olson, 1977, p.75)

From structuralism to post-structuralism, this simplified treatment of literacy as solely signifying reading and writing of linguistic text has received many critiques, increasingly so with the rapidly shifting sociotechnical environment since the 1990s. The move has primarily been from an autonomous model of the individual, achieved through linguistic mediation and competence, to one that assumes a more fluid and complex construction of self and thought, mediated through prevalent social structures, discourse and practice (Bakhtin, 1986; Foucault, 1980; Purcell-Gates, 2007).

This brings us to a critical shift in the academic study of literacy: from one that focuses on competence and evaluation of skills in the reading and writing of the dominant official language in a given society, to one that acknowledges and explores the diversity in literacy practices outside the classroom, mainly through individual literacy narratives.

The seeds of this shift through the 1990s can be found in earlier foundational work from the 1980s, such as Scribner & Cole's (1981) *Psychology of Literacy*, Heath's (1983) *Ways With Words: Language, Life and Work in Communities and Classrooms*, Street's (1984) *Literacy in Theory and Practice*, and Graff's (1987) *The Labyrinth of Literacy*. While in the past, the academic investigation of literacy took place mainly within the fields of Education, Psychology and Psycholinguistics, following the work of Heath and Street we see this topic attracting a wider disciplinary interest, including perspectives from Sociology, Anthropology, Sociolinguistics and Communication.

With the inclusion of new disciplines came new theoretical frameworks and research methods. This new wave of Literacy Studies scholars also brought with them alternative theoretical frameworks on social practice and activity, such as Bourdieu's (1990) theory of practice and habitus, Callon & Latour's (1992) Actor-Network-Theory, or variations of Engeström's Activity Theory (Cole & Engeström, 1993). Ethnographic studies concerning literacy have especially been on a rise since, which are aimed at identifying the *sponsors*, *gateways* and *networks* of literacy from the narratives of particular communities (Brandt, 1998; Selfe & Hawisher, 2004). As Barton & Papen (2010) acknowledge in the first chapter of their book *Anthropology of Writing*, this shift began in two separate lines of research on literacy that are only recently in conversation: *"the Anthropology of Writing, developed largely in France, and the (New) Literacy Studies, originating mainly in Britain, North America and other English speaking countries."* (p.3).

Street (1984) was one of the first to provide a detailed argument of how the construct of literacy is in fact multidimensional and ideological, being situated in the

larger sociopolitical context of a given community. His study of literacy practices in an Iranian village revealed that the supposedly "'illiterate" members of the community were in fact engaging with a range of literacies such as market, religious, and school-based literacies. Street's model of literacy not only argues that there are multiple kinds of literacy, but that these literacies often have a hierarchical distribution in a given cultural realm, allowing for varying degrees of access to power and material well-being. Such multiplicity in the understanding of literacy suggests diversity in everyday textual-linguistic literacy practices (Barton & Hamilton, 1998; Purcell-Gates, 2007), as well as challenging how textual-linguistic literacy is overemphasized and other types of literacies are overlooked (Graff, 1995). While the significance of this theoretical move in terms of agency will be discussed extensively in Chapter 5, it is important to note here that this move has led to a more complex and critical understanding of power and agency with respect to everyday practices of literacy and the nature of mediation.

Barton and Hamilton's (1998) study of everyday reading and writing practices in a small community of Lancaster follows this tradition of ethnographic studies on literacy (Barton & Papen, 2010; Heath, 1983; Taylorr & Dorsey-Gaines, 1988). In their study, the authors use the terms "local literacies" or "vernacular literacies", to refer to particular ways in which a community engages with textual representation on a daily basis. This challenges dominant conceptions of literacy as framed by educational institutions and argues for an understanding of literacy as situated – both with respect to the individual and the social context. I find their use of the term "vernacular literacies" useful and it is my intention with this dissertation to trace and describe the vernacular literacies of deaf youth in Turkey, later in chapter 3.

Another key aspect of later work on literacy is the consideration of multimedia, multimodality, and multiliteracy. The New London Group's (NLG) [13] (1996) "*multiliteracies*" approach to literacy pedagogy follows this trend as well as Cummins (1978), such that the development of linguistic competence and awareness calls for engagement with related cultural context and practices. The NLG's model acknowledges the linguistic and cultural diversity in modern social life. They make two important points: (1) diverse communication environments (i.e., private, educational, civic and professional) call for a diverse set of textual genres and literacy combinations, and (2) understanding this multiplicity of textual genres and discourses in this era requires the consideration of the affordances that information and multimedia technologies create. One of their primary concerns is uncovering the learning conditions and linguistic prerequisites towards full social participation and citizenship, which again ties into agency.

In fact, the term "multiliteracies" have been used in different ways and is one that is worth clarifying. Being multiliterate can refer to being skilled in different forms of literacies, which could be as simple as being literate in the writing forms of multiple spoken languages. On the other hand, scholars have also referred to certain superordinate forms of literacy as multiliteracies in and of themselves, such as *technology literacy, information literacy* or *visual literacy*. That is to say, in as much as visual literacy requires being skilled in a collection of sub-literacies within the visual realm (i.e.,

13 New London Group consists of ten authors from the United Kingdom, Australia and United States: Courtney Cazden, Bill Cope, Norman Fairclough, Jim Gee, Mary Kalantzis, Gunther Kress, Allan Luke, Carmen Luke, Sarah Michaels and Martin Nakata.

textual/linguistic literacy, graphicacy, numeracy), it can be considered as a form of multiliteracy in and of itself (Tyner, 1998).

Tyner (1998) points out that concepts like *media literacy* or *visual literacy* have been around as early as late 1970s among literacy scholars, who have been exploring novel affordances of electronic media on literacy practices (Johnson, 1977; Olson, 1977). Forty years later, as our lives are becoming even more complexly mediated by technologies of communication, and information exchange taking place across a range of modalities around the world, the literacies required to use (comprehend & produce) them to effectively navigate social life are also becoming more complex.

Tyner suggests that although not much acknowledged, the idea of multiliteracy seems to be greatly informed by Gardner's "multiple intelligences" (Gardner, 1993), a concept that highlights the diversity in individuals' preferred learning modalities. The problem with the implementation of this model, according to Tyner, was that teachers have often used it as a diagnostic tool to categorize their students by learner type, while in fact the key is to encourage and provide a multimodal and multidimensional learning environment.

Tyner continues with the observation that new terminology around multiliteracies (i.e., visual, media, technology, information, cultural, network) has mostly consisted of reactionary attempts to deal with the anxiety of shifting social needs created by altered or increased technological mediation. Each term has a different focus, fighting a different battle. However, there is quite a lot of overlap in their definitions and stated outcomes, as we will see in the following sections. These terms have often been used interchangeably with one another. What seem to be underlying these literacies, however, are three things:

technological skills, problem-solving skills and critical thinking skills. What differs among them, on the other hand, is their descriptive and prescriptive emphasis, which is largely informed by the fields in which they emerge and are widely used. In the following sections, I will be elaborating on a range of literacies/multiliteracies that I have grouped under three main themes: modality, medium, and domain.

1.4.1 On the Modality of Literacy: The Primacy of the Visual

One important dimension of literacy practice has to do with its "modality". In this section, I will be focusing primarily on literacy practices in the visual(-gestural) modality, both because this is the modality of primary access and interest to deaf people, but also because the primary mode of literacy practices in this era is visual, - which creates an interesting tension with the traditionally inherent phonocentrism in human civilizations until this point (Bauman, 2008; Derrida, 1976).

A decade into the 21st century, it is evident that the bulk of information and communication exchange is taking place in the visual realm. We are not only bombarded with visual information on a daily basis, both physically and virtually, but the majority of us also prefer to use the visual modality to communicate (from face-to-face to texting, Twitter, Facebook, Skype, and FaceTime). This is true especially for young people who are early adopters of emerging technologies. The new generation of information, communication and entertainment technologies favors the visual modality, recently also tapping into the tactile and kinesthetic modalities for interaction (like touch screen mobile technologies and gaming environments that use gesture recognition technologies). While there are some basic cognitive and technical skills that allow us to participate in

communication that takes place in the visual modality, not all of these skills are transferable to novel conditions. Thus, we constantly need to acquire new skills in order to keep up with shifting social, cultural, technical and political landscapes that inform our visual realm. And it is important here to remind the reader that one of the main goals of this dissertation is to investigate the current role of textual-linguistic literacy in deaf people's navigation of social life, which contains far more visual artifacts in this era than merely the textual-linguistic. I will come back to this point in chapter 3, where I discuss the findings of my research. For now, let's take a closer look at the relationship between image and text with respect to literacy, as well as some of the skills that are required to navigate this visual realm.

Coined by John Debes from Kodak Corporation, the original definition of **Visual Literacy** refers to *"a group of vision-competencies a human being can develop by seeing and at the same time having and integrating other sensory experiences*" (Debes, 1969, p.27). So even in its initial iteration, the definition of visual literacy not only acknowledges non-linguistic visual literacies, but is also positioned with respect to other sensory modalities of relating to the world. However, Debes' definition has been criticized by some like Levie (1978), for putting the emphasis on the sensory modality instead of the symbolic modality (Avgerinou & Erikson, 1997). Like other kinds of literacy, visual literacy is concerned with effective comprehension and production of socially agreed upon visual codes, and not merely the processing of visual stimuli. Later definitions of visual literacy treat it more as a combination of critical skills, in order to effectively interpret, negotiate, and make meaning from information exchanged in the form of images and symbols, be it still or moving. It is also important to note that the

definition of this term is still a contested one, informed by disciplinary standpoints, especially those of Cultural Studies, Visual Arts, Communication, Education, and Design.

Visual literacy also encompasses textual-linguistic literacy, perhaps with the exception of Braille. The visual communicative realm of modern life is such that images and texts often co-exist and circulate relationally in social life. Coined by Kristeva in her 1967 essay that follows Bakhtin, and suggesting the relational nature of texts and discourse, **intertextuality** is a key concept to bring up and discuss while trying to understand the nature of visual literacy:[14]"Any text is constructed as a mosaic of quotations: any text is the absorption and transformation of another. The notion of intertextuality replaces that of intersubjectivity, and poetic language is read as at least double." (Kristeva 1980 [1967]: p.66) Simply put, intertextuality means that texts are relationally meaningful and mediated through one another during practices of reading and writing. This points to the cross-referential qualities of texts. While the initial use of the term is much narrower to suggest the relationality of written scripts towards meaning, its later adaptations are more inclusive of the visual realm such that the interpretation of images and texts are considered more holistically (Barthes, 1977; Hall, 1981). Here is how intertextuality adds to our understanding of visual literacy: (1) Visual literacy requires the ability to interpret and compose textual and non-textual visual objects; (2) both as standalone and in creative juxtapositions that are socially situated; (3) with the awareness that each object/iteration embodies a rich set of referential nodes to other

14 See Lara-Rallo's "Pictures Worth a Thousand Words: Metaphorical Images of Textual Interdependence" for more on Kristeva and intertextuality.

concepts and material objects; this also (4) highlights the importance of cultural and domain specific knowledge, as well as inferential comprehension in this process. In this sense, we see that visual literacy is very much linked to cultural literacy.

Since both the form and the style of these symbolic visual artifacts circulating in social life are heavily culturally coded, **cultural literacy**, meaning the ability to interpret and act within cultural codes, symbols, behaviors is an important set of knowledge and skills for one's accuracy in the meaning making process during social interaction. Also many, especially those living in urban settings, either grow up and participate within multiple cultures or are exposed to them as they practice different types of mobility (corporeal, physical, communicative and virtual) (Urry, 2007).[15] Be it the culture(s) of self, or those of others, the more an individual is versed in a range of material-semantic systems, the more that person has access to resources and has mobility within complexly coded social worlds. This is why having **multicultural literacy** seems to be of increasing value to the late modern human agent.

With the abundance of information circulating with great speed in our everyday lives, we also see an increase in the adoption of technologies of data visualization, mapping and infographics. While traditionally these tools have been designed for purposes of governmentality by making its land and citizens legible to the ruling elite of a state, for which Scott's (1998) "Seeing like a State" is a great description, over time these tools have brought more clarity and power to a range of scientific disciplines, professional fields, mass media and everyday communication among laypersons. Perhaps

15 Urry's Mobilities paradigm will be discussed in more detail as it relates to literacy in the next chapter, along with Blommaert's views on the sociolinguistics of globalization.

we can describe the three main phases in the evolution of the production and consumption patterns of these visual technologies as follows: (1) produced by a few experts for the consumption of a few ruling elite [as in the case of 19th century urban maps]; then (2) produced by a few experts for the consumption (and persuasion/manipulation) of masses through mass media [as in the case of news media and marketing]; (3) and finally produced by masses for the consumption of masses [as in the case of publically available digital tools that can turn any big or small data into graphics]. This is not to say, however, that the earlier patterns have vanished, but rather that all three patterns are present in this era.[16] More and more of these visual tools are repurposed such that they aim to make masses of data/information legible, digestible and accessible by and for non-expert individuals. In that sense, ***graphicacy***, which refers to "the ability to understand, use, or generate graphic images (as maps and diagrams)"[17], becomes an integral part of visual literacy for the 21st century citizen. However, graphicacy and visual literacy in its broader sense, does not seem to be accounted for sufficiently in most education systems still, although it seems to be one of the most efficient tools to grapple and simplify information that we are surrounded with, which would otherwise be overwhelming (Avgerinou & Erikson, 1997; McCall, 2011). [18]

An understudied area of literacy concerning modality has to do with the haptics of reading and writing, referring to literacy as an embodied experience, emphasizing the sense of touch. In other words, this is the study of literacy as both material and as situated

16 This pattern is in fact a part of a larger shift in authorship and civic participation that has been taking place since the digital turn, which will be discussed in more detail in chapter 5.
17 http://www.merriam-webster.com/dictionary/graphicacy
18 https://www.youtube.com/watch?v=7ZvsZtUfQQs

in the body. Since most of our writing is now done using digital devices, our corporeal relationship to writing, as in the actual object-body interactions between writing devices and individuals are also shifting. Mangen & Velay's (2010) chapter on the haptics of writing points to the difference in relations between the perceptual (visual/kinesthetic) and the motor skills (hand movement and object manipulation) that are involved in writing digitally using the keyboard, compared to handwriting using a pen/pencil. The two not only create quite different bodily relations to objects and space that ask for particular motor skills, but could also suggest different pathways in the brain in the act of writing. Following a similar line of thought, the haptics of sign language production is yet another significantly understudied area of research, limited only to a few recent studies on proprioception while producing sign language (Emmorey, K., Gertsberg, N., Korpics, F., & Wright, C. E., 2008; Emmorey, Korpics & Petrino, 2009) or those focused on haptic communication as in the case of tactile-signing used by deaf-blind individuals (Collins & Petrino, 1998; Petronio & Dively, 2006). Especially as new generation information, communication, and entertainment devices are looking for new ways to exploit the potential of haptic experiences in interaction, future studies concerning deaf people's embodied experience of using sign language to interact with the world is also needed, in order for new generation technologies to respond to and incorporate deaf sensibilities in their design. In fact, there are many labs and collaborations around the world, including our very own at UCSD, that are currently working with new entertainment devices (i.e., Kinect, Leap, Motion sensing gloves) to explore different aspect of sign language as well as potentials for designing future interactive experiences for deaf people.

Putting all of these together, we can say that the current emphasis on multiliteracies ultimately brings with it an interest in the **multimodality** of literacies, such that social participation and meaning making are multimodal processes to begin with (Kalantzis, Cope & Cloonan, 2010). For deaf people, this suggests the need to further explore the relationships between the literacies that are accessible and inaccessible to them, as well as documenting and promoting vernacular literacies of deaf communities such as those concerning the visual-gestural modality, for a more complete representation of human social experience.

1.4.2. On the Medium of Literacy: Technological Mediation

Another dimension that informs practices of reading and writing is the "medium/media" in which symbolic communication takes place. Accepting that the body with a range of articulators (i.e., hands, mouth, face) is in fact the primary medium through which communication takes place, in this section I would like to instead focus on the secondary artifacts that mediate human communication. From cave paintings to Sumerian cuneiform tablets, from ink to the printing press, the medium of symbolic visual communication, as well as the technological artifacts surrounding these systems (such as writing devices) have often varied and changed across time and space. This diversity and change is informed by sociocultural, political and material conditions, as well as individual factors that create particular juxtapositions with these conditions. In that sense, while the problem of "new" media in acquiring literacy is nothing new, it is the actual material objects and the skill sets that are required to interact with these objects for social navigation and participation that are in flux.

In current uses of the word *media*, it is important to differentiate between terms that circulate in our everyday lexicon such as *mass media, new media, digital media, and social media*. *Mass media* refers to technologies and their corresponding organizations that communicate to large groups of people, including but not limited to: the newspaper, radio, television, film, and the Internet. Among these technologies, television, radio and newspapers are considered *old media,* predating modern digital media. While the conduit model of communication is often used to describe transmission of mass media in its traditional sense, as vessels through which information is transmitted to audiences, the metaphor is difficult to apply to the Internet because of the interactivity it provides. *Digital media* can be contrasted with *analog media*, the former of which refers to electronic systems where the data is stored and transmitted in digital form. For the most part *new media* can be used interchangeably with digital media, as opposed to analogic forms.

Lev Manovich's *The Language of New Media* (2001) reviews these terms and how they differ from one another. Manovich asks a simple question: "what is new with new media?" Contrasting with the invention of printing press and photography, he claims that the computer media revolution affects all stages of communication, at the level of "acquisition, manipulation, storage, and distribution", and it affects all types of media: "text, still images, moving images, sound, and spatial constructions" *(49)*.[19] New media then offers novel patterns of producing and engaging with information, as well as new

19 Manovich lists five aspects of new media that are novel: (1) numerical representation of data in digital form, (2) modularity and the fractal structure of information such that elements can be re-assembled in numerous objects, (3) automation that allows for production using templates and algorithms, (4) variability such that infinitely many versions of a media object can co-exist at a given time, (5) transcoding, where the computer layer and the cultural layer become a composite that continuously inform one another.

ways of relating across media in time and space. Finally, *social media* is a subset of new media, which refers to Internet-based technologies that allow for the exchange of audio-visual content among users, and are aimed towards social interaction.[20] *Social media* allows consumers to become producers and in this way, supports democratization of information and knowledge. It also allows for a higher degree of interactivity among users.

In the 21st century, the majority of images, sounds and texts that we are exposed to circulate through the digital realm, requiring a particular set of skills and knowledge that have to do with the navigation of digital and virtual environments. That is why, especially following the spread of personal computers, the term visual literacy began to be challenged and at times replaced by other types of literacies, each highlighting a particular set of skills and knowledge that are now required to interact with our new visual social realm. Harnad (1991) refers to digital technologies as the fourth revolution in the production of knowledge, following language, writing and print (Warschauer, 2009). Just like the printing press once altered the ways in which information could be materialized and distributed in societies, digital technologies create new affordances in the nature, production, distribution, and consumption of cultural knowledge.

Digital literacy poses itself in contrast to the analog, print or mechanical, referring to personal, technological, and intellectual skills that are needed to live in a digital world. Part of digital literacy has to do with technical skills, which refers both to knowing how to find, set-up and operate hardware (like computers, routers, webcam,

20 The choice of the terms 'new' and 'social' can be misleading, considering that newness is a relative notion with respect to time and media cannot necessarily be a-social. However, these are the terms used in literature that refer to the technologies mentioned above, and thus will be adopted for the rest of the paper.

smart phones, tablets, etc.) and software (like Facebook, Skype, Twitter, Gmail, Photoshop, etc.) that mediate participation in this digital world. **Technology literacy,** or alternatively referred to as **Information and Communication Technology (ICT) literacy**, is the totality of these skills, combined with problem solving skills and knowing what to use when. Another term that is often used interchangeably with digital literacy is **media literacy**, which means the successful navigation of and critical engagement with a range of information and communication technologies**.** While the line between these terms is often blurred, media literacy seems more inclusive such that it suggests the combination of visual, digital, and information literacies. However, the choice of terminology seems to be coming from more disciplinary perspectives than proposing fine nuances among these terms, as we will see in the next section.

1.4.3. On the Function and Content of Literacy

So why do we identify such a diverse set of literacies to begin with? Literacies matter because individuals need to be equipped in order to successfully navigate, participate in, and take full advantage of modern social life. In this section, we will thus be looking at some "umbrella" literacies, or superordinate categories concerning the acquisition, interpretation and production of knowledge and information. These foundational literacies underlie one's ability to actively participate in social life, so that more specific literacies can be acquired and used upon need.

The first of these umbrella terms is **functional literacy**, traditionally referring to textual-linguistic literacy and numeracy combined. Numeracy consists of ones knowledge of the prevalent number system, as well as the ability to execute basic mathematical equations needed in social exchange. This is a slightly more expanded version of the

traditional understanding of literacy, as simply reading and writing. While other literacies build on these two foundational literacies, the two alone are no longer sufficient in order to be competent citizens of the world in the 21st century (Leu et al, 2013; OECD, 2012). Like the term literacy, the constituents of functional literacy are also sociohistorically situated. The kinds of literacies that are required to functionally navigate social life depend on many parameters, such as who the person is, where they live, what kinds of tools are available to them, what the pragmatic context is, or the goals are. That is why we can argue, aligned with NLG's Multiliteracies paradigm, that adult functional literacy should suggest the totality of such critical socially situated literacies required for a particular individual.

Here we can talk about **domain-specific literacies**, each applying to the knowledge and skills to find, access, and participate in systems around a particular area of social life by making use of domain specific language and technologies. Some examples to domain-specific literacies can be health literacy, sport literacy, sexual literacy, moral literacy, ecological literacy, or scientific literacy (Graff, 1995, p.321). As we participate in different domains of life and communities of practice, including professionalization in a certain occupation or field, we are expected to acquire skills and knowledge that are unique and central to these areas. Such domain-specific literacies have become increasingly important in adult life.

Along the same line, The Organisation for Economic Co-operation and Development's (OECD) (2012) recent document highlights "**problem solving in technology-rich environments**" (PS-TRE) as a critical adult skill to have in modern life, in addition to (textual-linguistic) literacy and numeracy skills. Their *Programme for the*

International Assessment of Adult Competencies (PIAAC), currently implemented in 25 countries across Europe, Asia and the Americas, defines this skill as "using digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks" (OECD, 2012, p.47). As also can be seen from this definition, problem solving in a technologically mediated world requires a combination of skills in the cognitive, technical and social domains. Of this collection of skills, technology literacy and digital literacy have more to do with the medium, as introduced in the previous section. The other two critical and related competencies are information literacy and network literacy, which I will be discussing next.

Another related umbrella term is **information literacy,** referring to one's ability to find, retrieve, critically evaluate and use information (Baker, 2010). A more specific definition of information literacy is "knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner."[21] Being a motivated life-long learner, keeping up with new information, being able to find and critically evaluate the validity of its sources and how they are connected, and participating in the production of knowledge through authorship on a range of modalities and platforms, are all required skills from functional members of the age of network societies (Castells, 2004). The totality of these skills is what is generally referred to by information literacy. In fact, as early as 1990, The American Library Association claimed that:

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21 Chartered Institute of Library and Information Professionals: http://www.cilip.org.uk/cilip/advocacy-awards-and-projects/advocacy-and-campaigns/information-literacy

> [I]nformation literate people are those who have learned how to learn. They know how to learn because they know how information is organized, how to find information and how to use information in such a way that others can learn from them. They are people prepared for lifelong learning, because they can always find the information needed for any task or decision at hand. (ALA, 1990, p.1)

The terms digital literacy, media literacy and information literacy have quite a lot in common and the distinctions between them often are blurred. To address this ambiguity, Lee & So (2014) have explored the relationship between media literacy and information literacy by doing a content analysis of the occurrence and use of these two terms in the Web of Science database from 1956 to 2012. The authors conclude that the two reflect two complementary lines of research from diverse academic traditions that they propose should instead be in conversation and drawn together. While media literacy appears in fields like Media Studies, Cultural Studies or Communication and is concerned with "*media content, media industry, and social effects"*, information literacy has its origins in Library Science that instead looks at *"information storage, processing, and use"* (Lee & So, ibid, p.144). Their suggestion is aligned with UNESCO's (2013) recent collapsing of the two into **Media and Information Literacies**[22], such that a broader range of related competencies can be supported by related organizations.

Yet another umbrella literacy is **Network Literacy**, as in the ability to "identify, access, and use electronic information from the network" (McClure, 1994). Network literacy is the combined set of skills and knowledge concerned with how networks function and how information flows, especially in the digital World Wide Web. It entails a conceptual understanding of network structure, but also the technical skills to connect

22 Media and Information Literacy for Knowledge Societies, International Conference on Media and Information Literacy for Knowledge Societies (Moscow, Russian Federation, 24–28 June, 2012): http://www.ifapcom.ru/files/News/Images/2013/mil_eng_web.pdf

to and navigate in these networks in order to achieve particular desired goals. As framed earlier, we can say that network literacy is a subset of information literacy. It is the due to the fact that we now live in increasingly networked information societies that understanding the nature of, as well as being able to access, navigate and manipulate these networks become key instruments for agency (Castells, 2004). While one aspect of network literacy has to do with information, another dimension is the skills and capabilities related to online social networks. Network literacy is not only a requirement of modern life, but also is a form of social resource, identified through the term "network capital" (Urry, 2007).

1.5. Literacies, Multiliteracy and Transliteracies

While the previous section aims to clarify a range of terminology with regards to literacies, here I would like to discuss how they all build on each other in the practice of everyday life. I would like to propose the following question: *To what extent does linguistic-textual literacy remain a prerequisite for other forms of modern literacies and deaf people's active participation in contemporary social life?* Although my emphasis on linguistic-textual literacy continues, this initial inquiry has since evolved into a broader interest in understanding the hierarchical relations between different types of literacies. What I mean by hierarchy here is not necessarily a ranking of values that favors one type over the other, however, but rather one that is descriptive of the types of skills and knowledge required within and transferable across these literacies. I care about this description, not only to better make sense of current literacy and social practices of deaf youth in Turkey, but also to come up with a visual map and model in order to better

understand the critical skills that intersect multiple literacies that are relevant in becoming active members of their societies.

Scholars have suggested several theoretical models to portray how literacies interact with one another. While some of these models have been more extensive and inclusive, others only focused only on the relation among a limited set of literacies. As I illustrated in the previous section, part of the difficulty in mapping the relationship between these terms comes from the fact that similar concerns and ideas on literacy have emerged simultaneously across disciplines, leading to terminology with significantly overlapping components. The difficulty of a thorough map/model also comes from the challenge of trying to put multiple disciplinary perspectives and narratives in conversation, in order to make them mutually intelligible and useful for one another.

As we have seen, one typical strategy has been to identify an umbrella literacy that encompasses others, as in the case of information literacy or media literacy. Since what constitutes 'media' constantly shifts and that 'information' is ever growing, at a given time, place, body and context they both refer to a collection of technical and cognitive skills as well as knowledge. In that sense these terms are inclusive and flexible enough to deal with the ongoing flux in the tools and skills that constitute modern life. Those who see being an active participant in the cycle of knowledge production as the most fundamental and necessary human quality, primarily emphasize information literacy over others. From this perspective, information literacy is conceptualized as the intersection and combination of all other literacies (i.e., textual, visual, media, cultural, digital, network). While Figure 1.1a tries to make sense of Information Literacy with respect to other types of literacies, Figure 1.1b is more of a break down of skills,

literacies and knowledge that constitute Information literacy. These models both suggest that in order for an individual to be information literate, that person is required to be skilled in all of these sub-literacies. They also do not propose a way in which these sub-literacies are related to one another, as in what kind of skills are shared across, such that they could be transferable from one type of literacy to another.

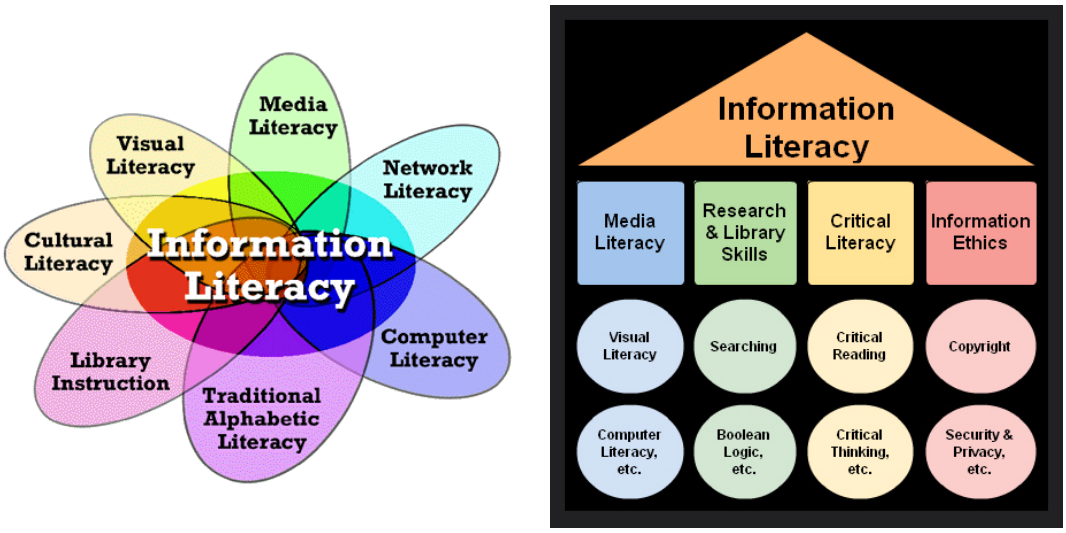


Figure 1.1. a) Interactions of Multiple Literacies[23] b) Information Literacy Umbrella [24]

Another strategy has been to come up with categories under which different literacies can be grouped, instead of making one more central than others. This is similar to what I have done in the previous section, by grouping literacies under the themes of modality, medium, and function. I find this strategy useful in giving different literacies enough space to be discussed in detail, however it clearly has its limitations when these categories are used as the structure of a visual taxonomy of literacies. One such visual taxonomy of literacies is the one that has been developed by a reference librarian named Lane Wilkinson, as can be seen below in Figure 1.2.

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23 http://librarynext.wordpress.com/category/information-literacy/
24 https://www.flickr.com/photos/danahlongley/4472897115

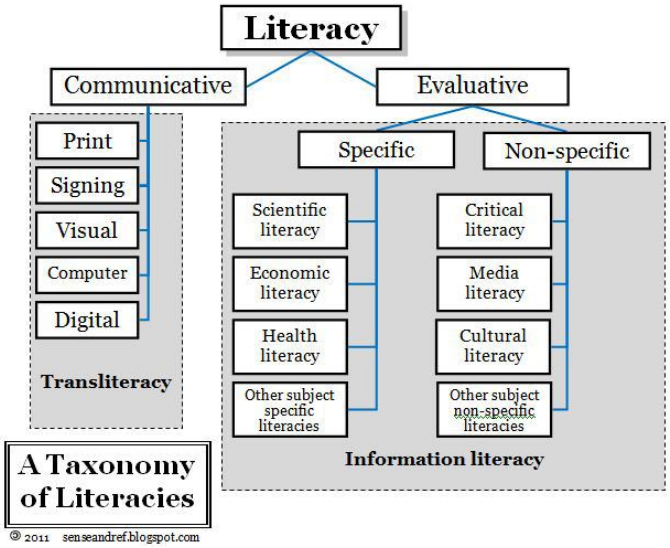


Figure 1.2. "A Taxonomy of Literacies" (Image taken from Lane Wilkinson's personal blog Sense and Reference: a philosophical library blog.[25])

Like many, including me, this taxonomy came out of Wilkinson's frustration with an ever-growing plethora of terms concerning literacy. In trying to organize them all in a meaningful way, Wilkinson first divides literacies into two pragmatic categories, namely **communicative** and **evaluative**, and then further differentiates between **medium specific**, **subject specific** and **non-specific literacies**. While it has its limitations, as I will be addressing next, so far this is the most thoughtful and inclusive visual taxonomy of literacies that I have come across, bringing together the traditional and contemporary conceptualizations of literacy. I am particularly interested in this taxonomy, however, because it tries to situate the newly emerging term "transliteracy" that I find very useful with respect to my research questions, with respect to discourse on other literacies.

Transliteracy is only a decade old concept that came out of a multidisciplinary project concerned with the intersection of reading and digital technologies, directed by

25 Source: http://senseandreference.wordpress.com/2011/09/19/reorganizing-literacy/

Alan Liu from the University of California (UC), Santa Barbara[26]. The project soon became a larger multi-campus UC research group, concerned with the critical study of online reading. Since the Future of Creative Technologies Conference in 2005, however, we also see the development and dissemination of the of the more inclusive term "transliteracy", mainly by Sue Thomas and her colleagues at the Institute of Creative Technology at De Montfort University. Thomas defines transliteracy as "the ability to read, write and interact across a range of platforms, tools and media from signing and orality through handwriting, print, TV, radio and films, to digital social networks."[27] This is, in fact, very similar to how I imagine functional literacy to be in the 21st century, such that the key skills are acquiring and weaving in a range of relevant literacies together to navigate social life effectively. In its emphasis on the innovative ways of moving across media and modes of creation, transliteracy acknowledges both the multimodality of communication and the collaborative aspect of authorship (ITFT, 2007).[28] While multiliteracy refers to being skilled in multiple forms of literacy, transliteracy is the skill of juggling and successfully drawing from multiple literacies depending on the situation. According to Thomas, transliteracy is a move toward "a unifying ecology of not just media, but of all literacies relevant to reading, writing, interaction and culture".[29] I also find the idea of media ecology critical here in interpreting literacies as situated practices, a concept that goes back to McLuhan (1964) and was further developed by Neil Postman in 1968.

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26 http://journals.uic.edu/ojs/index.php/fm/article/view/2060/1908

27 http://suethomasnet.wordpress.com/transliteracy/

28 Through such distributed and participatory nature of knowledge production, transliteracy challenges traditional views on authorship and agency will be discussed in more detail in Chapter 5.

In his taxonomy, Wilkinson was particularly concerned with two competing terms that are especially popular among librarians: transliteracy and information literacy. Wilkinson tries to make peace between the two sides, by illustrating that the two are complementary to one another and that they are both required by 21st century learners. As much as I agree with this approach, Wilkinson seems to interpret the two concepts as if they are mutually exclusive from one another. When we look at the comments to Wilkinson's blog entry, we see that many agree on Wilkinson's interpretation of "transliteracy" is oversimplified, and that it in fact encompasses literacies beyond those that are simply medium-specific. However, this may as well be due to the fact that "transliteracy" is a term in the making, with relatively unclear and inconsistent descriptions of what it actually is.

Overall, Wilkinson's taxonomy is still too static and categorical. It is based on a pragmatic separation followed by a semantic one, which may be a useful grouping strategy in making sense of these umbrella terms. However, this model still fails to acknowledge potential hierarchies in the acquisition of literacies that fall under the same category, if any. How are the skills and knowledge acquired from one type of literacy relate to and inform another type of literacy? Moreover, it separates "communicative" literacies (print, speech, signing, visual, computer, digital) from "evaluative" literacies and thus information literacy, which I find very problematic. How can information be conceptualized as disconnected from communication? Finally, it is not clear what the distinctions are that separate subject non-specific literacies and communicative strategies in this model. Why is visual literacy a form of communicative literacy and not an

evaluative non-subject-specific literacy, for instance? Or why is Media literacy listed as Evaluative and not Communicative for that matter?

In order to overcome these problems, I have been working on a 3-D model of literacies, where I borrow the intersectional qualities of some earlier visual models on information literacy, combined with Wilkinson's categorical and hierarchical approach. This is a working model that I hope to improve as this dissertation evolves. As shown in Figure 1.3 below, the three axes represent the key elements of literacy: (x-axis) the modality of literacy [visual, audio, kinesthetic, etc.], (y-axis) the medium, or technology/tool of literacy [the body, voice, ink, mobile phone, etc.] and (z-axis) the subject domain of literacy [food, health, science, politics, etc.]. At a given time, all literacies interact and intersect in this three dimensional platform, while the constituents of each axis varies across place and time. At a given social interaction, literacy practices within this three dimensional space are constrained by both the affordances that are created by particular corporeal-technological-cognitive juxtapositions, as well as the social, cultural and political dynamics.

According to this model, domain specific literacies are conceptualized to have their bases in the x-z plane and reaching up on the y axis, depending on what particular medium that discourse on this particular domain is taking place. Since the axes do not represent a linear continuum however, and are categorical, we can expect to see gaps between volumes on the y-axis. Likewise, medium-specific literacies can be conceptualized to have their bases in the x-y plane, reaching out to different social domains on the z-axis. Since the categories identified are often intersecting, however, we can expect more curves than straight edges in the areas and shapes identified as literacies.

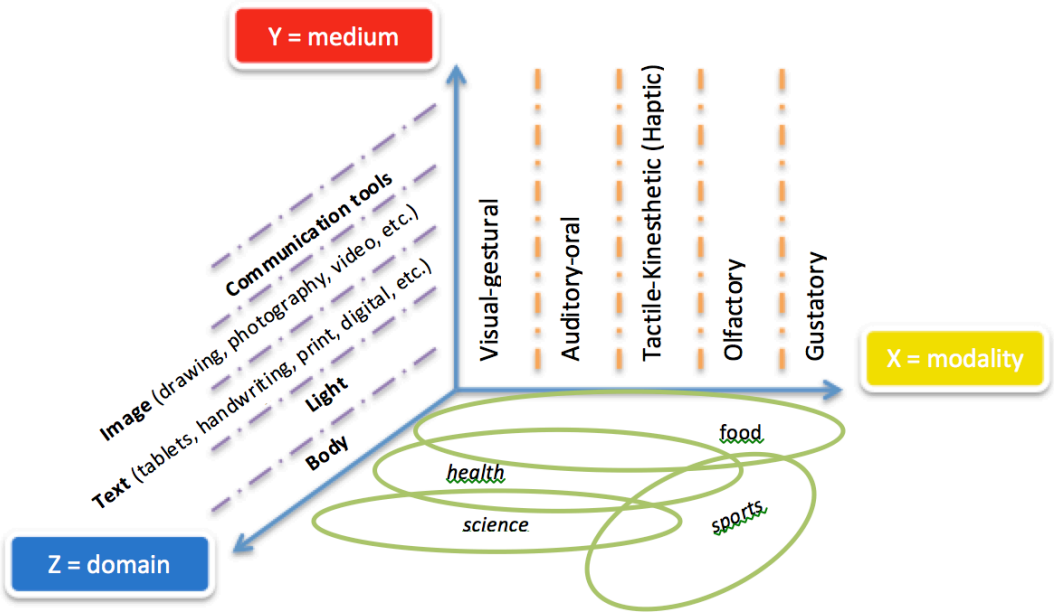


Figure 1.3. A 3D Model of Literacies (under development)

This 3D model can be representative of relevant intersectional literacies for an individual or society at a given time. Particular communities or groups of people can be constrained in the literacies they can access/practice in diverse ways. They can be (1) constrained by modality, due to body-medium incompatibilities; (2) constrained by medium, due to divides in technological infrastructure or socioeconomic status; and (3) constrained by domain, due to relevant activity spaces and knowledge areas. Literacy practices, on the other hand, would be the movement of individuals within this 3D space (access, navigation, and comprehension), as well as their ability to participate in the stretching of this space further (authorship and production).

1.6. Conclusion

This chapter has two goals: (1) providing a historical overview of the significance of reading and writing practices that are situated in the cultural, religious and governing

dynamics of Europe and the region marked by Modern Turkey, and (2) elaborating on the changing conceptualization and academic study of literacy, from a traditional view of competence in reading and writing, to a more expansive one concerning multiliteracies and transliteracies, which also includes narratives reflecting on the acquisition of these competencies. I find both goals essential for a sociohistorically informed reading of the current literacy practices of deaf youth in Turkey and their implications.

I understand language as at once a dynamic material archive of individual and social encounters, a tool to extend knowledge and intentions further in time and space, and a governing device. Literacy, on the other hand, is the ability to make sense of shared symbolic technologies, as well as the capacity to creatively manipulate these technologies towards shared meaning. In that sense, in as much as the sociotechnical landscape and the shared symbolic systems are always in flux, the term "literacy" will have different connotations and functions across time, space, and communities.

In the first part of this chapter, I show how from Early Modern Europe to Late Ottoman Empire and Modern Turkey, everyday literacy practices of a community intersect in unique ways with dominant social structures, the culture and value systems of the people, and the political body. Despite obvious differences between the cultural makeup of European and Turkish societies and their authority figures (secular and religious), I believe that this historical comparison has reveals some features that are shared across civilizations: (1) the control over the form, the language, and the content of writing is one of the most powerful means to control masses, (2) religion is a strong force in encouraging mass literacy, but particularly mass reading, (3) religious and bureaucratic governance typically favor communities of readers in order to sustain and reproduce

existing power dynamics, (4) the recitation and reproduction of dogmatic texts subjugate individuals and support existing social structures, while creative authorship can be the first means to challenge these structures for social change, (5) reading and writing both have different consequences for agency when practiced in the private versus the public sphere, and (6) public authorship is a gendered practice in many societies, such that in the early stages of a newly spreading communication medium or practice, male authorship appears to dominate the public sphere.

Returning to the goals of the dissertation, I am more interested in deaf people's practices of authorship than their readership, and in the conceptual framework through which we can interpret prevalent and emerging literacy practices of deaf youth in Turkey. Moreover, I argue that the potential for foregrounding of Turkish Sign Language in the Turkish public sphere has political and social implications for the future empowerment of deaf people in Turkey. Similarly, it is interesting to see that emerging forms of online authorship that are currently practiced by young deaf people in Turkey, how they reveal similar gender dynamics in authorship among young hearing people in Turkey, reflecting tensions between tradition and modern impulses.

The second part of the chapter is aimed at disambiguating terminology for literacy that has been used in a range of fields, primarily Literacy Studies and Communication. I do this both through a historical framework on the evolution of academic fields and their changing interests in literacy, and also through a conceptual framework which organizes literacy terminology under three categories: modality, medium and domain/function of literacy. Under "modality", I discuss the terms *visual literacy, graphicacy, cultural literacy, intertextuality* and *multimodality*. Under "medium", I cover popular terminology

around media (mass media, new media, digital media and social media), as well as new literacies that are related to such media (digital literacy, technological literacy, media literacy). Finally, the last category is concerned with the domain and function of literacy revealing some shifting umbrella terms like *functional literacy* and *information literacy*, or others like *problem-solving skills* and *network literacy*. Most of this terminology will come up throughout the dissertation, so it was important to make these parallels and distinctions for future reference. The main points from this section are as follows: as technologies of communication evolve, they create new affordances for individuals and groups, which leads to different modes of relating to one another and the emphasize shifts to different tools and social spaces where this communicative exchange takes place. New tools and modes of relating to one another provide new opportunities for knowledge production.

The last section is an attempt to understand the conceptual hierarchy between some of these terms and to come up with a visual schema to better understand these relationships. The primary reason in having this schema is to see whether or not linguistic-textual literacy are still a prerequisite in the acquisition of new literacies. My survey of academic and non-academic literature resulted in a variety of visual schemas of literacy hierarchies, however they all seemed to have limitations. This is why I created my own schema, in order to visualize how these multiple literacies could be related to one another. Finally, I end this section with a discussion of transliteracy, in that it refers to one's ability to reflectively and successfully draw from a range of literacies depending on the requirements of the situation and towards particular social goals. This, I believe is the new face of functional literacy in the 21st century.

Chapter 2: Situating Deaf People In Turkey And Turkish Sign Language

2.1. Introduction

Before I begin to elaborate on the main findings of my dissertation research in the next three chapters, I would like to provide an overview of the demographic, linguistic, educational and social facts of deaf people in Turkey, with an emphasis on those who use Turkish Sign Language (TID)[30]. The main questions that I address in this chapter are the following:

- *What are the demographics of the deaf population in Turkey?*
- *What is the current state of and future challenges of deaf education in Turkey?*
- *What is the history and current status of Turkish Sign Language?*
- *What are some recent State initiatives aimed at deaf people in Turkey?*

In addressing these questions, I will be relying on a review of the literature in related fields, my ethnographic work with the Turkish deaf community, my in-depth interviews with deaf youth and adults, my personal communications with Deaf people and CODAs from Turkey –some of which took place in social media, and, finally, the research that I have conducted on the scope of latest state services concerning deaf people.

I begin this chapter with a description of the current situation of deaf schools in Turkey, as well as trends in the training of the teachers working at these institutions. Then, I move on to Turkish Sign Language history and status, and provide information on its past, documentation, research, instruction, interpretation and legislation.

30 More detailed versions of some of the content in this chapter can be found in my previously published work (İlkbasaran, 2012, 2013; İlkbasaran & Tasci, 2012), and more recent work to be published (Kubus, Ilkbasaran & Gilchrist, Forthcoming).

This brings us to other state initiatives of the past decade concerning deaf people's access to social and civic life. In this section I look at employment and access to communication in particular. In this section I outline the gender divide and the digital divide in the Turkish society at large.

Throughout this chapter and later in the dissertation, I use acronyms that refer to state institutions, rights organizations and other related NGOs. A full list of these acronyms can be found at the beginning of this dissertation. A partial list is the following: *Information and Communication Technologies Authority* (BTK), under the *Ministry of Transportation, Maritime Affairs and Communications (UDI), Ministry of Education (MEB), the General Directorate of People with Disabilities and the Elderly* (EYH), under *the Ministry of Family and Social Policies (ASP).*

2.2. Deaf Population in Turkey

There are conflicting reports on the size of the deaf and hard of hearing population in Turkey. Much of the research on this population has been conducted by either governmental institutions concerned with disability or by medical institutions for the purpose of providing health services – mainly audiology, neurology, and genetics. The conventional terminology for deafness related issues in each professional field and the categories they provide is likely to have shaped the characteristics of their reports.

The Turkey Disability Survey of 2002, conducted by the Prime Ministry, indicates that there were 250,000 people with 'hearing disability' as of 2002, which makes up nearly 0.37 percent of the general Turkish population (Demir & Aysoy, 2002). According to the same report, almost 70 percent of these individuals lost their hearing

later in life because of accident, illness, medical, or other reasons, while the remaining 30 percent are congenitally deaf. Given this percentage of prevalence and the national population as reported by the 2013 census, there should be about 284,000 deaf people in Turkey. Overall, most individuals with hearing impairment in Turkey are either between the ages of 10-39 years, or older than 70 years, with the prevalence being higher among men.

An interesting finding of this survey is the regional distribution of deaf individuals in Turkey. According to the survey, the prevalence of deafness is lowest in the Eastern Anatolia (0.31%) and the Mediterranean regions (0.34%), and increases significantly in the Black Sea region (0.45%). The high incidence of deafness in the Black Sea region is parallel with populations categorized as "disabled" at large. However, regions with lower prevalence vary across disability categories, which indicates that there are different factors affecting disability in different regions. I revisit this point in the next section, but it is important to note that it is possible for deafness to be underreported in rural areas. This survey uses reports of family members rather than medical reports, so the numbers obtained can be misleading and unreliable with respect to actual prevalence.

When we look at research from the medical field, we get a relatively higher number of deaf people in Turkey. A recent study of newborn screening indicates a 2 in 1,000 incidence of congenital deafness in Turkey (Genç, 2005a). Considering that in developed countries with better healthcare the identification of deafness approximately doubles by the age of language acquisition, it can reasonably be estimated that 0.5-0.6 percent of the Turkish population is deaf (Morton & Nance, 2006; Tekin & Arici, 2007). This alternative estimate raises the total number of deaf people in Turkey to between

380,000 to 450,000. Still, this estimate is significantly lower than the numbers articulated by Deaf rights organizations in the country, which is 2.5 to 3 million.

Neonatal screening for hearing impairment is becoming common practice at public hospitals in Turkey (Genç, 2005b). Parallel with European and North American medical practices, there is also a radical growth in the number of children getting cochlear implants, with more children being fitted with implants at ages younger than two years. Currently, there are thirty-two hospitals in thirteen cities across Turkey that provide cochlear implants (Koklear Implant, n.d.). The cost of this operation is roughly the equivalent of 15,000 USD, and is funded by the Turkish Social Security Institution (Turkish: Soysal Güvenlik Kurumu [SGK]) if the parents are willing to wait for the surgery. Children from higher SES families who can pay for the surgery, on the other hand, can receive their implants shortly after diagnosis. Children with implants often spend the first years of their lives getting speech and hearing therapy at medical centers funded by the Ministry of Education, and then they are mainstreamed in public schools. My interactions with parents of children with implants have confirmed that they are often strongly discouraged by audiologists from using gesture or sign with their children. Several school administrators have told me that while a few of these students acquire sufficient functional hearing to succeed in mainstream programs, most do not, and later transfer to schools for the deaf and hard of hearing. This pattern of surgery followed by speech training without sign language exposure unfortunately creates a significant population of deaf children who lack a full-fledged language from an early age and a stable set of interlocutor peers (Humphries et al., 2012).

As is the case in developed parts of the world, the prevalence of non-genetic

deafness in Turkey decreased with increased access to health care, elimination of maternal rubella, and widespread vaccination for spinal meningitis. As a result, congenital deafness, of which an estimated 60% of such cases are genetic (Tekin & Arıcı, 2007) is becoming a significant determinant of future geographies of deafness and sign language, both in Turkey and in other parts of the world. Looking at the genetic epidemiology of deafness in Turkey, an important social factor appears to be consanguineous marriage patterns, or marriage between close relatives. Consanguineous marriage occurs at a rate of 21.1% in Turkey (Basaran, 1988; Tunçbilek & Koç, 1994; Öztürk et al., 2004). This is very high when compared to less than 4% in continental America, Western Europe, Russia, China and Australia. It mirrors a similar trend in North Africa, the Middle East and Southwest Asia with the prevalence rates ranging between 20-50% (Bittles & Black, 2010). According to Tunçbilek & Koç, the rate of consanguineous marriages in Turkey drops to 12.8% in Western Anatolia, increases to 20.8% in Central Southern Anatolia, and to 30.8% in Eastern Anatolia. Reasons for these differences in rate relate to patterns of marriage preferences and cultural practices tied to maintaining ownership of land and other socioeconomic factors.

We do not have enough research on the factors that inform marriage patterns of deaf people across Turkey. Tekin and Arıcı's (2007) study of genetic epidemiology concerning deafness suggests two different patterns: 1) consanguineous marriages among hearing people increase in both magnitude and proximity as we go towards Eastern Turkey, and 2) marriage between deaf people rises as we go towards the West. Tekin and Arıcı tie that to the longer history of deaf schools in Western parts of Turkey and the prevalence of sign language, such that assortative mating based on linguistic homogamy

could have been an inevitable consequence. A further cross-regional investigation of the actual patterns of and the motives behind this phenomenon across several deaf populations in Turkey is likely to reveal important socio-cultural dynamics that are in effect for these communities, as well as a geographical distribution of potential native sign language users in the country.

2.3. Deaf Education in Turkey

Since typically more than 90% of deaf children are born to hearing parents who do not know sign language, these children often spend the first few years of their lives with little or no access to a full-fledged language (Padden, 2000). For the majority of deaf children with hearing parents in the Western world, deaf schools provide the initial opportunity to meet and regularly spend time with deaf peers. Deaf schools are often where deaf children have their initial exposure to sign language, and for many this happens past the critical period for language acquisition (Mayberry, 2007). These issues will be discussed in more detail in the next section, however they are important to keep in mind to understand of deaf education in Turkey.

Deaf and hard of hearing children in Turkey are initially evaluated at one of the Counseling and Research Centers (Rehberlik ve Araştırma Merkezleri-RAM) across the country and then placed either at a deaf school or a regular school for mainstreaming (also called "inclusion"). Currently, there are only two preschool programs provided for deaf children in Turkey; the first one by TIV (Turkiye Isitme ve Konusma Rehabilitasyon Vakfi) – that aims to provide bilingual education to deaf children between ages 0-6 (http://www.tiv.org.tr/) and the other one is Dosteller Özel Eğitim İşitme Engelliler

Anaokulu (http://www.dostelleranaokulu.meb.k12.tr/). Lack of a specialized bilingual (Turkish & TID) preschool curriculum is one of the most critical obstacles for deaf individuals in Turkey, which impacts acquisition of linguistic and cognitive skills in early childhood and perhaps throughout their lives.

The latest statistics on deaf schools in Turkey identify a total of 62 schools for the deaf and hard of hearing, serving 5,482 students at 44 elementary and 18 Special Education Vocational High Schools (MEB, 2014). However, this number accounts for only 10% of the presumed national deaf population of school age, a rate consistent with a 2006 United Nations report on children with disabilities in developing countries (Demir & Aysoy, 2002). In Figure 2.1, we see the distribution of these schools across Turkey for the 2005-2006 school year, as well as the number of students that are served per city for those serving 100 or more students. It is important to note that Turkey has seen an overall decline in the number of schools for the deaf in the past decade, as well as the number of deaf students enrolled in these schools, especially at the elementary level. This decline is likely due to the fact that more deaf children are mainstreamed either because they get cochlear implants or because their parents seek better standards in education than is currently provided at schools for the deaf.

Most deaf children in Turkey are exposed to Turkish Sign Language late, when they begin primary education at six or seven, upon meeting their older and more competent peers. The majority of my participants say that it took them a couple of years to be able to fully understand and produce the sign language variant used at their school. They claim that there is lexical variation in TID, across grades, institutions, and cities, but not to the extent that it hinders communication across schools. For some deaf children in

rural areas or born to parents with lower education and income, schooling can be delayed for several more years, consequently some of these children were not as skilled in TID even as young adults.

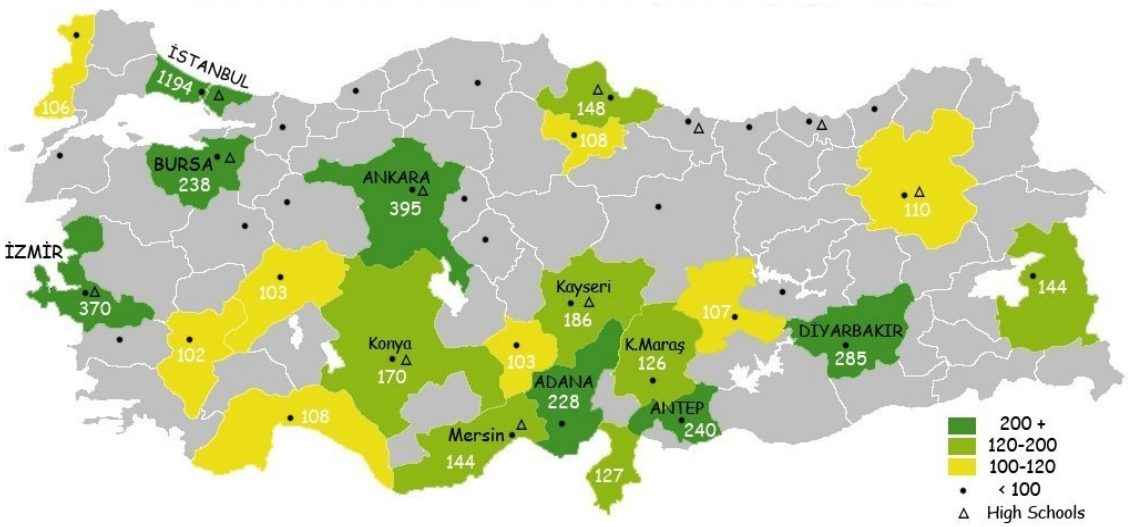


Figure 2.1. Distribution of deaf students in deaf elementary schools by city (2005-2006)

Since 2005, elementary schools for the deaf increasingly require their classroom teachers to be specialized in teaching deaf children. Currently there are only three universities in Turkey that offer four-year bachelor degree programs in Teaching for Deaf Education: Anadolu University (Eskişehir), Karadeniz Technical University (Trabzon) and Ondokuz Mayıs University (Samsun) (ÖSYM Tercih Kılavuzu, 2013). Although the program in Anadolu University in Eskisehir is the only one of the three that traditionally discourages the use of sign language in instruction, but the other two programs in Samsun and Trabzon have not offered any training in sign language until this year, mostly due to the lack of professional and instructional materials in TID. As a consequence, new teachers from any of these training programs typically arrive at deaf schools with no sign

language skills to communicate with deaf students, let alone to teach academic content using sign language. Teachers covering subject courses in primary and high schools do not typically have training in either deaf or special education. So, when a new teacher arrives at a deaf school, they are at a loss to communicate with their students, and older deaf kids teach them signs. Since the official recognition of TID in 2005, we find experienced teachers holding weekly sign language classes after school for their colleagues. However, a majority of these teachers still do not become skilled enough in TID to be able to use it as a means of instruction, resulting in classes where deaf students have minimal access to the content being taught, including basic literacy instruction. As we will see in the next section, with new legislation, TID is now officially mandatory at these bachelor degree programs in Teaching for Deaf Education, starting in the 2014-2015 school year.

Overall, the main problems with deaf education in Turkey are: (1) the very low schooling and literacy rates, (2) the lack of bilingual preschool curriculum and institutions for deaf children, (3) the asymmetry in the gender representation of the deaf in educational institutions, favoring male students, especially at the high school level (MEB, 2005; Essex, 2005; Batır, 2008), (4) the lack of professional training for specialized teachers and interpreters, (5) the use of outdated curriculum and lack of educational materials in TID, (6) and the even more limited (0.5%) access to higher education (i.e., college and university) among severe to profoundly deaf students (Kemaloglu, 2010).

2.4. History and Status of Turkish Sign Language

The national sign language that deaf people in Turkey use is Turkish Sign Language (TID). We can trace the origins of TID and the modern Turkish Deaf community at least back to the *Yıldız School for the Deaf and Blind* that was founded in İstanbul in 1889, during the reign of Abdulhamit II in late Ottoman Empire. Unfortunately, instruction at this institution was too often disrupted and modified due to the changes of ministers and directors at this school, as well as the lack of funding during the decline of the empire. With around 20 students in its early years, this school was relocated almost 10 times, finally closing in 1926. Students were then sent to the İzmir School for the Deaf, which was founded in 1906 (Haydar, 1925; Ergin, 1977; Yıldırım, 1997). Sign Language was supported and taught not only at the Yıldız school (de Grati, 1989; Miles, 2009), but also at the private deaf school that was founded by one of its alumni, Süleyman Gök's, in 1944 (Gök, 1940; Zeshan, 2002). In the 1950s, we saw the effects of oralism in Turkish deaf education, leading to the banning of sign language schools for the deaf in 1951. A similar ban of sign language by the Ministry of Education (MEB) is mentioned among the community for 1982 as well[31], however, official documentation for either ban has not yet been discovered by any scholar in the field to date. To the contrary, a retired teacher of the deaf that I interviewed for another project, who taught at the revived Yıldız School in the 1980s, states not knowing anything about the ban, and mentions teachers using sign language in instruction to the best of their ability.

31 Personal communication with a Turkish CODA from Ankara, Köksal Aydoğdu, on January 15, 2014.

Three main forces have shaped and continue to shape the status and politics of sign language in Turkey for the past decade: (1) improved technological infrastructure and ease of travel allowing the Turkish Deaf community to participate in Euro-American international Deaf organizations, (2) increasing interest among deaf and hearing Turkish linguists on Turkish Sign Language (TID), and (3) legal changes that are required of Turkey involving language policies and disability rights in its consideration to become a full member of the European Union. On March 30, 2007, Turkey also signed *the United Nations Convention on the Rights of People with Disabilities* (UNCRPD) along with 81 other states, which officially took effect in the country on October 28, 2009[32]. These dates mark a series of responsibilities that the Turkish State has promised to assume as a commitment to modernization. Items 3b and 3c of Article 21[33] clearly declare that the State Parties should take appropriate measures in:

> "(b) Facilitating the learning of sign language and the promotion of the linguistic identity of the deaf community;
>
> (c) Ensuring that the education of persons, and in particular children, who are blind, deaf or deafblind, is delivered in the most appropriate languages and modes and means of communication for the individual, and in environments which maximize academic and social development."

In July 2005, the Turkish government passed a bill within the Disabilities Act, recognizing Turkish Sign Language (TID) and enforcing its documentation and use within state institutions.[34] Founded in 2005 and led by the Turkish Language Institute

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32 This information was announced on the July 14, 2009 dated Official Gazzette with the reference number 27288

33 http://www.un.org/disabilities/convention/conventionfull.shtml

34 The original text for this law (No. 5278) that was published on the Official Gazette with the title "Özürlüler ve Bazı Kanun ve Kanun Hükmünde Kararnamelerde Değişiklik Yapılması hakkında Kanun" can be accessed here:

(TDK), Turkish Sign Language Science Council (TIDBO) was the official national organization commissioned by the government to conduct nation-wide research for the purpose of: developing a TID dictionary, studying the linguistic aspects of TID, and developing bilingual educational materials. Several meetings and additional legislations followed the 2005 bill, the latest one being in 2012. However not much progress has since been made by TIDBO on the documentation of TID due to frequent reorganization, bureaucracy and lack of professional specialization and ability within the Council.

Scientifically produced comprehensive dictionaries and other instructional materials of TID are limited in number and scope. The first known resource on TID dates back to 1995, the "Sign Language Guide for Adults" printed by the Turkish Ministry of Education, based on research that began as recently as 1983. This guide was updated in 2012 by the same institution, this time titled "Dictionary of Turkish Sign Language". However, a description of the research and methodology behind these two dictionaries are not reported along with the roughly 2,000 signs photographed in each dictionary. In addition to these resources produced by the state, there are two online video resources on TID, both of which were side products of academic research conducted at Universities. The first one of these is the "TID Word List" that was produced as an outcome of Özyürek's research on the grammar of TID between 2000 and 2004 at Koç University, Department of Psychology (Özyürek, İlkbaşaran & Arık, 2004)[35]. The second one was produced in conjunction with a project on sign language instruction at Boğaziçi

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http://www.resmigazete.gov.tr/main.aspx?home=http://www.resmigazete.gov.tr/eskiler/2005/07/20050707.htm&main=http://www.resmigazete.gov.tr/eskiler/2005/07/20050707.htm

35 Özyürek et al.'s (2005) Turkish Sign Language Word List can be accessed here: http://turkisaretdili.ku.edu.tr/en/wordlist/sozluk.aspx

University's Perceptual Intelligence Laboratory, in the Department of Computer Engineering[36]. There are also a few other TID dictionaries produced by individuals or organizations that are not based on scientific research.[37] One of these is the first domain specific online dictionary of TID: an elaborate TİD dictionary of religion (Islam) produced by the *Republic of Turkey, Presidency of Religious Affairs* (Turkish: Diyanet İşleri Başkanlığı).[38] This website not only includes about 800 videos of religious signs and idioms, but also written descriptions of how each signs should be produced, along with a simple definition of the meaning in Turkish[39]. That being said, currently there is no dictionary of TID that is based on a comprehensive linguistic study conducted across Turkey. The only instructional book on TID is the "Turkish Sign Language –Level 1" book by Dikyuva and Zeshan which was published in 2008.

Unlike many countries in Europe or North America, there are no academic departments or institutions on Turkish Sign Language or TID interpreting in Turkey. This is primarily due to the fact that the academic research on the linguistic properties of TID only began in the 21st century, and the language is not yet fully documented. This has resulted in several waves of TID interpreting certification since 2007, solely based on proficiency evaluations conducted by a special commission that was put together under TIDBO. Finally on November 25, 2010, the Association of Sign Language Interpreters (ASLI) was founded, in collaboration with TSMF, which made it possible for Turkish

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36 The TID Dictionary produced by Boğaziçi University can be accessed here: http://www.cmpe.boun.edu.tr/tid/

37 For a detailed article on sign language planning and the legal status of Turkish Sign Language, see Kubus, Ilkbasaran & Gilchrist (Forthcoming), in Turkish.

38 The TID dictionary of Islam can be accessed here: http://engelsiz.diyanet.gov.tr

39 http://www.diyanet.gov.tr/tr/icerik/diyanet%E2%80%99ten-isitme-engellilere-buyuk-hizmet%E2%80%A6/12674

Sign Language interpreters to collaborate with the World Association for Sign Language Interpreters (WASLI) and European Forum of Sign Language Interpreters (EFSLI). This was a big step in the professionalization of TID, however a two to four year college degree on TID interpreting is yet to be established in Turkey.

Since the bill of 2005, various organizations have independently taken on providing TID courses to hearing people. The leading agency in these courses has been MEB, who has put together a "Sign Language Instructor and Interpreter Education" curriculum, offering TID courses from 120-200 hours[40]. In addition to MEB, various Public Education Centers, HEM (Turkish: Halk Eğitim Merkezleri) that are located all around Turkey (there are nearly 1000 centers in total) also have been offering 120-hour-long TID courses. While some of the individuals giving instruction at HEMs are certified by MEB and appear to be using the same curriculum, many others are self-qualified individuals, using self-produced curriculum and materials. The certificates provided at the end of the HEM courses also qualify the individuals who took the courses to teach or interpret TID. Despite these efforts, there have been fundamental problems in the quality of education and certification for both the interpreting and the teaching of TID. In order to address this problem and to create a standardization in the process, the first nationwide evaluation for TID interpreting was administered in February and March of 2013 under MEB, evaluated by a commission of 7 people (4 members from MEB, 2 young deaf adults who are TID signers and the president of TSMF)[41]. This call resulted in a total of

40 http://hbogm.meb.gov.tr/modulerprogramlar/programlar/kisisel_gelisim/isaretDiliTercumanlik.pdf
41 Personal communication with Hasan Hüseyin Korkmaz, CODA and MEB certified interpreter from Ankara, on November 30, 2014.

950 applicants, among which 87 were successful in the exam and certified as TID interpreters (Sessiztv, 2013).

Despite the slow progress developing scientific research, academic programs and instructional resources on TID, EYH went ahead and passed a bill that makes TID instruction mandatory at academic programs for Teachers of the Deaf as of the 2014-2015 school year, and also an elective class to all higher education institutions[42]. What is promising, however, is that in the fall of 2014, a group of young deaf people who were interested in becoming teachers of TID given a three-week training on the instruction of TID, followed by an exam. There were a total of 22 Deaf people who participated in this training, and a total of 18 people passed the exam for certification. Unlike previous certification of hearing signers or CODAs by various qualified and unqualified institutions, this was the first time Turkish Deaf people were certified to teach their own language, TID. The plan is for this training to be repeated annually, giving more and more Deaf people a chance to be active participants in the teaching and transmission of their own language.

This is a critical step in the empowerment of Deaf people in Turkey, not only with respect to future job opportunities, but in making their involvement in Deaf education possible, as teacher aides or TID instructors, contributing to the language development of new generations of deaf people in Turkey. This is a point that I will revisit and discuss extensively in the Conclusion chapter.

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42 http://www.yok.gov.tr/web/ogrenci/kararlar

2.5. State Initiatives and Deaf people's Access to Services

In addition to the legal measures taken concerning TID, the Turkish government has taken initiatives in two other areas concerning deaf people: employment and access to state services. It is important to remember that these new initiatives were largely an outcome of Turkey's compliance with the UCRPD, as one of the signatories, along with the continued pressure created by TSMF on the government and relevant State agencies (i.e., *MEB, ASP)*. This section will provide an overview of these initiatives, while the extent to which they actually result in actual expansion of deaf people's active participation to social life in Turkey will be discussed in Chapter 5.

2.5.1. Employment

In 2008, the Turkish Labor Law was changed to require that both public and private businesses that employ 50 or more people hire at least 4% of their employers from among people with disabilities[43]. The category applies to individuals with all kinds of disabilities. However deaf people do not appear to be among those preferred by employers, mostly due to communication problems.

The second government initiative with respect to employment has been to establish a national selection and placement exam for public and governmental jobs, to be offered specifically to people with disabilities (disability status 40% or higher), starting 2012. Initially called ÖMSS (Turkish: Özürlü Memur Seçme Sınavı), currently titled EKPSS (Turkish: Engelli Kamu Personeli Seçme Sınavı)[44], this is a written exam for which different disability groups receive different accommodations. In 2012, I worked closely

43 http://www.iskanunu.com/images/dokuman/4857-sayili-is-kanunu-guncel-tam-metin-2012.pdf
[44] This distinction between "özürlü" and "engelli" is an important one, with the former suggesting "handicapped", while the latter refers to "disabled" in Turkish.

with TSMF to produce an accessible version of the information package that ÖSYM released for ÖMSS, the initial version of the EKPSS exam mentioned above. This booklet contained long sentences that took entire paragraphs, which even I, as a well educated native speaker of Turkish, had to re-read several times in order to understand. Before a CODA interpreted the passages to TID, I first rewrote the entire script in plain Turkish, dividing paragraphs into several comprehensible sentences. Only then was the information was clear and accessible for all, including deaf people. As much as we articulated to state officials the need to use "plain Turkish" , this practice is situated in a long tradition of state writing practice in Turkey. It is also symptomatic of a larger problem: excessively convoluted narratives are often falsely equated with intellectual aptness or expert knowledge. This style of writing creates a significant barrier between the state, its intelligentsia and its people. After the first exam in 2012, further adjustments and simplifications have been made to the exam that deaf people take. According to state statistics, in 2014, a total of 2,062 people with "hearing disability" were employed through this exam[45].

The EYH has also been the leading state agency in the hiring of TID interpreters. Following this first wave of certification, EYH proposed to employ the remaining certified interpreters within their agency, in addition to the 24 who were already employed at the time as staff[46]. However, this announcement was annulled soon after, due to the prevalence of unqualified TİD interpreters who were somehow certified in the past couple of years through various organizations. In April 2014, EYH has once again

45 http://www.dpb.gov.tr/tr-tr/istatistikler/engelli-personel-ve-omss-istatistikleri
46 http://www.memurlar.net/haber/440690/

announced a call for hiring 75 new TID interpreters across 72 cities[47], to be selected out of the initial group of 87 interpreters who passed MEB's exam in 2013.

2.5.2.Access to Communication

Since 2011, BTK and ASP have been the two leading state agencies co-organizing the Information without Barriers Symposium, held annually[48], in addition to other events. These events bring many experts and stakeholders like state agencies, NGOs and rights organizations, scholars and individuals with disabilities together to discuss current and future practices to increase access to information for all. In 2012, BTK invited organizations and scholars concerning all disability groups for a meeting on "Disability and Communication". At this meeting, topics of discussion concerning deaf people ranged from Internet accessibility of state agencies, captions on broadcast television and services related to communication. I attended this meeting along with the president of TSMF, and later contributed to the *Communication Without Barriers Report* published online by BTK, with our suggestions for the deaf community.

The government initiative "Removing Barriers in Communication" (Turkish: "İletişimde Engelleri Kaldırıyoruz")[49] project was launched in April 2013, by the UDI, in collaboration with *Turk Telekom*. With this initiative, participating organizations and businesses (clients) are encouraged to apply for an alphanumeric phone number assigned to their land lines, for an annual fee of 250 TL (~113 USD). Then deaf people can send their inquiries and requests as text messages to these numbers, which the organizations or

47 For the full script of the Ministry's call for TID interpreter's, the list of cities, and the application form, please see the link (Turkish): http://www.eyh.gov.tr/duyurular/isaret-dili-tercumani-sinav-i%CC%87lani
48 http://www.engelsizbilisim.org/
49 http://www.iletisimdeengellerikaldiriyoruz.com/
http://www.bthaber.com/engelsiz-mesaj-ile-sessizlik-sese-donusuyor/

the business owners can access through an application in their computers. This is a two-way communication system where the clients can also text deaf customers back. While there does not appear to be a full list of participants available online, the clients range from government organizations, municipalities, health centers, shipping companies and a few private businesses like restaurants. Each new client is identified by a special logo to be displayed on their website or offices: a yellow heptagram with the image of a smiley in a text bubble that is coming out of the receiver of a phone (See Figure 2.2). What is important about this project is how it frames hearing organizations as clients who are responsible for paying for this service that expands their customer volume, while deaf people are framed as a potential consumer group or a new market. This shift of framing from accessibility to business growth is a critical move in the sustainability of future services for deaf people, especially in a neoliberal economy.



Figure 2.2. Images from the "İletişimde Engelleri Kaldırıyoruz" project website. Description: Top left is the project logo, top right is a banner that reads "ONE, MESSAGE, SEND", meaning "Send a message" in Turkish, and the bottom image is a diagram of how the system works.

In the 21st century, Turkey's desire for accession to the European Union has led to a series of reforms and changes in legislation within Turkey. Human rights and linguistic rights were among those of most concern to the deaf community, leading to a public discussion of (1) linguistic rights of deaf people, and (2) sign language policy.

2.6. The Problem of Literacy

The United Nations' Educational, Scientific and Cultural Organization (UNESCO) has been one of the leading organizations in the research and development concerning international literacy for many decades, especially since the International Literacy Institute (ILI) was established in 1994 (Wagner, 2008). In 2003, the UN has declared the Literacy Decade, marking an increased interest in the further exploration, monitoring and evaluation of literacy at an international level.

The problem of literacy in Turkey is threefold: (1) lack of a viable definition of literacy, (2) limitations in the methods used to measure literacy, and (3) social divides within society making certain groups more disadvantaged than others in acquiring literacy. In this section, I address each of these problems in turn. For the latter point, I focus on disability, gender and the digital divide.

According to the Turkish Statistical Institute, TUİK (Turkish: Türkiye İstatistik Kurumu), the illiteracy rate in Turkey as of 2013 is 4%, with 1.3% and 6.6%, for men and women, respectively[50]. These numbers suggest a very high literacy rate with an obvious disparity between men and women. But where do these numbers come from? In Turkey, like many other parts of the world, literacy rates are based on subjective reports given in census surveys. Wagner (2008) states that it is common practice among UNESCO

50 http://www.tuik.gov.tr/PreTablo.do?alt_id=1059

member nations to use the national population census model, and to determine literacy rates by using 5 to 8 years of primary schooling as a proxy variable for a "literate" person, then applying this to individuals 15 years and older to arrive at a rate (p. 654). This is a very problematic assumption, since having attended school does not always mean having acquired enough textual literacy to navigate social life.

A secondary analysis of the 2002 Turkey Disability Survey shows that illiteracy is three times higher among the population with disabilities (36.3%), compared to the population at large (12.9%) for that year (Tufan & Arun, 2006). According to the same report, the illiteracy rate among the deaf and hard of hearing population is 37%, higher than those who are blind and those with physical disabilities, 35% and 28.5% respectively. However, I argue that this study still under represents the actual illiteracy levels of both the Turkish population at large, and the deaf population. The literacy rates from this survey come from either self-reports or reports of 'able' members of the household, responding to a question that collapses literacy and education levels in a single category. In this study, it is assumed that access to primary education and beyond is an indicator of having literacy, but this is not necessarily the case for many, especially deaf people. The existing literature on reading ability among deaf adults in the U.S. and Europe describes deaf people as reading on average at a 4th grade level (Mayberry, del Guidicie, Lieberman, 2011; Traxler, 2000) (I will be returning to a longer discurssion of this literature in the next chapter.s)

My study with Deaf youth in Turkey shows that most of the deaf individuals I interviewed who have managed to complete their education still lack basic Turkish literacy skills and are unable to fully express themselves textually. This is both an

outcome of growing up deprived of an accessible rich language environment at home and the previously mentioned lack of communication with their teachers. As the teachers and administrators of deaf schools confirm, the expectations from deaf students are little and the resources for teachers of the deaf are limited. Unless parents make an extra effort, these children are likely to graduate from both primary and secondary education as functionally illiterate in Turkish.

2.6.1. The Gender Divide

The underschooling of girls has always been a problem in Turkey, leading to many campaigns to encourage and educate parents on this matter. The relative illiteracy of girls dates from the Ottoman period as I mentioned in Chapter 1. Traditionally, the schooling of boys is more encouraged by parents, while girls are either not sent to school or are themselves not motivated to continue their education beyond mandatory schooling. The fact that in rural parts of Turkey, primary education often requires that the student attend boarding school becomes an additional reason for parents to decide against sending girls to school, being worried about their safety. Table 2.1 shows the gender distribution in illiteracy rates from 2008 to 2013, for the population that is 6 years and older (TUIK, 2013). Although there has been a significant increase in the literacy rates of women since 2008, the disparity continues. Not only is illiteracy higher among women than men in Turkey, we see a drastic difference across regions. The 2000 census report shows that the highest rate of illiteracy is in South Eastern and Eastern Anatolia (40% and 34%), and lowest in Marmara and Central Anatolia regions (12% an 15%) (BKSGM, 2008).

For 2011, employment rates among the population 15 years or older is 25.9% for women and 69.2% for men, making Turkey the lowest among all OECD countries in numbers of adults employed at a given time (TUIK, 2014). Similarly, the "neither employed nor in education" (NEET) rate among the 15-29 year olds between 2008-2011, is 35 % for Turkey: 50% for women and 20% for men, respectively (OECD, 2013).

Table 2.1. Turkish Population by Sex and Illiteracy between 2008-2013, based on TUIK (2013) Source: Address Based Population Registration System (ABPRS)

ILLITERACY %	2008	2009	2010	2011	2012	2013
Total	8.2	7.5	6	4.9	4.2	4
Male	3.3	3	2.2	1.7	1.4	1.3
Female	13.1	12.1	9.9	8.1	7	6.6

There have been many campaigns to date, in order to address this gender divide in schooling and literacy. Perhaps the biggest was the UNICEF run "The Girls' Education Campaign" (Turkish: *Haydi Kızlar Okula*) that took place between 2001-2005, aiming to close the gender-gap in primary school enrollments.[51] The Mother–Child Education Foundation, AÇEV (Turkish: Anne Çocuk Eğitim Vakfı) is an NGO that has been concerned with operating functional adult literacy programs tailored particularly for women. These programs view functional literacy as a means to empower women socially and cognitively (Kağıtçıbaşı, Gökşen & Gülgöz, 2005).

2.6.2. The Digital Divide

The *digital divide* refers to groups in a society being disadvantaged both in owning digital technologies, and in knowing how to use them for added social value.

51 More information can be found here on the UNICEF website (http://www.unicef.org/turkey/pr/ge6.html) and the Turkish Ministry of Education website (http://haydikizlarokula.meb.gov.tr/).

Technology itself is often not a democratizing tool, instead it reinforces existing social divides in society. Some of the main factors that influence computer ownership and adoption are gender, urbanization, age, schooling, employment, and ability/disability.

This means that computer-based sociality did not suddenly bring with itself equal access to social life by both sexes. According to TUIK's same report mentioned above, the use of computers among women were significantly less than among men, with roughly 40% to 60 %, respectively. This number drops even more for women, when we look at Internet use. Another important factor that informs digital divide is urbanization, a factor that also accentuates gendered tendencies in the digital divide. That is to say, not only computer use drops from 48% to 22 % from urban to rural areas, but only 14% of women in rural areas have access to computers, compared to 37% of their urban counterparts (Uğuz, 2011). Here, we can consider the intersection of technological infrastructure and the socio cultural makeup.

A third factor that intersects strongly with digital divide is age. Sixteen to twenty-four year-olds have the highest rates of using computers (44.4% for men, 21% for women) and accessing the Internet (38.3% for men and 15.9% for women). Finally, people with disabilities have the least access to computers (5.9%) and the Internet (5.3%) across Turkey.

As Yıldız (2010) points out, especially at a time when the Turkish government is pushing for a social development model that favors the increase in the supply of new technologies and further digitization of state services (i.e., e-government or the Fatih project), it becomes even more important to be aware of the digital divide. While it is commendable to extend services to the digital domain and adorn public and institutional

spaces with new information and communication technologies (ICTs), it must be understood that the technology is merely a tool. Successful modernization requires understanding how new digital technology can be developed while also recognizing the needs and abilities of the more disadvantaged groups in the society.

2.7. Conclusion

This chapter was intended to provide background concerning the deaf population in Turkey: its language, the makeup of its educational institutions and types of services provided by the state. The size of the deaf population in Turkey is a much contested topic, with numbers ranging from a few hundred thousand to a few million, with the true number likely somewhere in the middle. Universal neonatal screening, vaccination for maternal rubella and spinal meningitis, and wider access to health care is becoming commonplace in Turkey, resulting in congenital deafness as the leading cause of deafness in the region. Along with this is a significant rise in cochlear implants. Deaf children younger than two years old, and children from higher income families appear have access to this surgery sooner. Implanted children spend more time in speech and auditory therapy, and many also move between mainstream and deaf schools until they find a good fit for their needs.

The history of deaf schools in Turkey and Turkish Sign Language dates at least back to the late Ottoman Period, to the *Yıldız School for the Deaf and Blind* that was founded in İstanbul in 1889. Sign language was supported and taught at this school providing the basis for deaf education in Turkey (with many interruptions to instruction and relocations), until the 1950s, when oralism became more prevalent resulting from British and German influence. A revival of pro-sign attitudes took place recently in the

21st century, resulting from (1) increased academic interest in TID, (2) Turkey's compliance with standards of the European Union, for its consideration to become a full member, (3) Turkey signing the UNCRPD in 2007, and (4) Turkish deaf people's increased participation in and international contact with Western Deaf communities.

Since the 2005 Disability Law and the signing of UNCRPD in 2007, TID instruction and interpreting has become increasingly used in the 21st century. The new economic value of these skills has led to some rushed attempts in the teaching and interpreting of TID, before thorough research and documentation of the language is made possible and standardized programs are put in place. While this initial period of confusion has resulted in the certification of unqualified teachers and interpreters, MEB and EYH have been working together recently to establish more standardized procedures for TID certification.

With two preschools, 44 elementary schools and 18 Special Education Vocational High Schools for the deaf, the majority of deaf children acquire TİD when they encounter deaf peers at these institutions around the age of 6 or older. Currently, though there is an increased motivation to use TID at schools for the deaf, with a few exceptions, the teachers of the deaf who are employed at these school are not skilled in TID to either communicate effectively with their students, let alone using TID in instruction.

In the 21st century, the Turkish government has taken some additional measures to provide more services to deaf people and to increase their access to social and civic life. Overall, these measures consisted of creating new opportunities for deaf people (along with other people with disabilities) to be employed in the state and private sector, as well as creating new text-based communication opportunities. Both of these initiatives assume

and require a certain level of skills in reading and writing Turkish text, a topic to which I will return in the following chapters.

Finally, there is a problem in the definition and documentation of literacy rates, similar to many other countries that are a part of the UN, such that 5 to 8 years of schooling and subject reports of literacy ability are taken as a proxy for literacy abilities. As we saw earlier in this chapter, there are many obstacles in Turkish deaf education that suggests otherwise, and in the next chapter I discuss findings that suggest a significant overreporting of literacy abilities among deaf and very possibly hearing individuals as well. Added to these obstacles are social divides which disadvantage women, people with disabilities, and individuals of lower socio-economic status to equal access to education and literacy in the traditional sense.

Limited sections of this chapter are reprints of the material that appeared in the book chapter Communicative Practices of Deaf People in Turkey and the Sociolinguistics of Turkish Sign Language in a volume edited by Arik, E., Cambridge Scholarly Press, 2013, as well as translations from a forthcoming book chapter in Turkish, in a volume edited by Arik, E., Koc University Press. The dissertation author was the primary investigator and author of both of these book chapters.

Chapter 3: Literacies of Deaf Youth in Turkey

> *Tomorrow's illiterate will not be the man who can't read; he will be the man who has not learned how to learn.'"* –Alvin Toffler, 1970, p. 271

Beliz is a deaf woman from a deaf family in her early twenties, living in one of the largest cities in Turkey. She has a degree from a public vocational high school and has been unemployed since her graduation several years ago. Currently she is waiting for her results from EKPSS, a nationwide exam for public personnel selection and placement, specifically offered to people with disabilities. She is not too optimistic about her results, since deaf people are quite disadvantaged in this multiple choice written exam, compared to people of other disabilities. Deaf people compete for jobs with blind people or those with motor impairments, who typically have more access to language and education than they do. Nevertheless, Beliz took the exam for the second time, with the hopes that if there were more deaf participants, the state might be willing to adjust the exam process to meet the needs and strengths of the deaf community.

In the past two years, there have been several videos in TID posted on various Facebook pages about the details of this exam. Initially, the Turkish National Association of the Deaf (TNAD) produced videos showing how to take the exam, but lately deaf individuals began making their own videos using their smart phones, and sharing them via Facebook. The application process for the examis difficult to understand because of the bureaucracy involved. The information booklets produced by the state are often written in technical Turkish, making them inaccessible to those who lack advanced textual literacy skills in Turkish. That is why deaf individuals often seek out details of state services and procedures for obtaining these services through community leaders,

either face-to-face or recently, through videos shared in social media. These videos often initiate conversations within the community, both online and face-to-face. [52].

In the summer of 2014, Beliz logged on to the exam website and was puzzled by a payment request that she received. Before proceeding to make the payment, she checked with her contacts in the community. She took a screenshot of her login page from the exam website and shared the image on her Facebook wall. Since Facebook does not yet allow users to directly upload videos as comments, her post initiated a thread that predominantly took place in Turkish among her deaf and hearing contacts who concluded that it must have been a system error. It turned out they were right, and the error message on the website disappeared.

With posts like these, Beliz practices a range of literacies in addition to written Turkish -visual, digital, and informational, to articulate her difficulties navigating public systems, but she has also created an online environment where her individual experience has become a basis for helping other deaf individuals with similar problems in the future. Beliz is not alone in using the affordances of new communication technologies and social media in creative ways to achieve personal and social goals. Use of social media among Turkish deaf people has been on a significant rise in the past year, leading to new multimodal opportunities for interaction.

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52 This convoluted writing style is typical of bureaucratic exchanges in Turkey, and it even applies to documents produced by the Ministry of Education (MEB) or by the national Student Selection and Placement Center (ÖSYM). I have witnessed this first hand, both as a citizen and student growing up in Turkey, as well as recently while supporting TSMF in their interactions with state institutions, as I detailed in Chapter 2.

3.1 Introduction

Academic discourse on deaf people and literacy mostly centers on low reading abilities and its negative social implications. Many of these studies date back to late 1970s in the United States and the United Kingdom, informed to a great extent by traditional Literacy Studies and Education Studies. While reading aptitude is a valuable topic to study so changes in parental awareness and instructional environments can be made, it alone does not give us the full picture of the lived literacy practices or the critical literacies required for deaf people's navigation of 21st century social life.

In Turkey, academic interest in deaf people's language abilities is only roughly a decade old,[53] and to date is limited to a relatively small number of dissertations and articles within the field of Special Education (Burcu, Yılmaz & Üzer, 2012). These studies have been concerned with deaf children's reading abilities and academic achievement (Güldenoğlu, 2012; Karasu, 2001; Miller, Kargın & Güldenoğlu, 2013; Uzuner, İcden, Girgin, Beral , Kırcaali-Iftar, 2005), with a few that explored the benefits of using multimedia and information technologies in deaf education (Demirhan, 2008; Şılbır, 2011). For the most part, these studies parallel with earlier work in the field, in their focus on reading skills in formal educational settings, on their methodological choices, and in their findings of low performance in the reading abilities of deaf pupils.

New generation literacy studies have been responding to the implications of increasing technological mediation in social life. This line of research examines everyday literacy practices, as well as other interdisciplinary work considering the kinds of

53 The full list of publications concerning disability in Turkey can be accessed from the following link: http://www.engelsiz.hacettepe.edu.tr/derleme/03.pdf

literacies that are involved in use of new media. In light of this new line of inquiry, the goal in this chapter is to demonstrate a more pluralistic, situated and pragmatic view of the literacy practices of deaf youth in Turkey.

There are two sets of issues that I will be addressing here. The first is to describe the literacy skills and practices of this population of young deaf men and women in Turkey, more specifically beyond their reading skills in Turkish. This involves looking at language skills across modalities. The second is to critically investigate how young deaf people in Turkey engage with types of literacies and practices required for new media. In particular, I aim to answer the following questions with respect to deaf youth in Turkey:

(1) To what extent does having poor textual-linguistic literacy skills also limit development of literacies around new media?

(2) Do new media literacies offer novel opportunities for overcoming their difficulties with text literacy?

In 2012, I assembled a set of language measures and in-depth interview questions in order to evaluate the range of literacies among deaf youth in Turkey. I collected data from 33 young deaf individuals in two groups: deaf high school students and young deaf adults with high school degrees. Unlike previous work on literacy skills of deaf youth in Turkey, I collected data on their skills in both written Turkish language and Turkish Sign Language (TID), and at multiple levels of complexity: words, sentences, and paragraphs.

My earlier observation and initial prediction was that my results would be parallel with previous reports of low reading abilities, in other words that on average they would perform at 4th grade level across all three linguistic levels for reading, and this would also be reflected in my participants' performance in writing Turkish. While this did turn out to

be true for the most part, by looking at additional linguistic dimensions, I could get a more detailed understanding of their textual-literacy skills and practices. Moreover, a smaller control group of young hearing adults matched on education level revealed a textual-literacy problem in Turkey that is not limited to the deaf population alone.

My second prediction was that limitations in textual-literacy would lead to limitations in other kinds of literacies, in particular digital literacy, media literacy, information literacy and cultural literacy. While this was true to a certain extent, this was not the whole story. In addition, I came across some very interesting technologically mediated strategies that young deaf people in Turkey use to overcome their limitations in textual literacy to improve their social navigation abilities. These strategies will be detailed in the second half of this chapter.

Overall, my findings suggest that deaf youth in Turkey engage with a range of literacies and communicative strategies in their practice of everyday life. While these literacies clearly inform one another, they are also shaped largely through motivations emerging from regular social interactions and collaborations among deaf and hearing youth in Turkey. That is to say, my data is informative not only in terms of how young deaf individuals' literacies inform the extent of their independent living and social participation, but also in terms of the kinds of interdependence among community members that nurture the sharing of literacies in one's social network and informal peer learning. This is a picture where one's literacies become a form of social capital, utilized not only by themselves but also their social networks, especially those with stronger ties. Moreover, it seems like the multimodal affordances of social media create newer practices for textual interaction among deaf people in Turkey, also leading to learning

opportunities. And it is through such informal and multimodal learning environments that individuals can continue to grow and acquire the literacies and abilities that are critical in keeping up with 21st century social life, especially in the urban setting. To what extent these interdependent literacy practices inform the mobilities and agencies of deaf youth in Turkey will be discussed in the next two chapters. First, I will begin with a brief review of literature on deafness and literacy and return to a detailed description and discussion of findings from my dissertation work.

3.2. Deaf People, Language and Literacy

As discussed in Chapter 1, textual/linguistic literacy is one of many interdependent literacies that are increasingly required to navigate contemporary social life (i.e., visual literacy, media literacy, digital literacy, cultural literacy, information literacy). The majority of research and literature on the relationship between literacy and deafness however, focuses on deaf people's ability to read. This may be both because reading ability is a relatively easier construct to operationalize, measure and quantify than writing skills, or perhaps more so because reading skills are perceived as a prerequisite for one's writing abilities (Krashen, 1992).

Recent work in the field highlights that strong conversational language skills (be they in sign language or in an oral language) and world knowledge plays a more critical role in a deaf child's ability to acquire literacy and academic readiness, just like hearing first and second language learners (French, 1999; Chamberlain & Mayberry, 2008; Cummins, 1979, 1981). That is to say, unless the child acquires 1) a language and is able to use it conversationally, 2) a sense of self as a social agent who can conversationally

and functionally interact with the world towards becoming a more competent member of society (Cummins, 1978; 1981), and 3) a basic understanding of how 'writing' is situated in social life, attempts in teaching reading and writing will not have a solid cognitive foundation to build on. This section thus includes a review of literature on literacy and deaf people, a description of profoundly deaf children's typical language environment and development, as well as a brief discussion on how language and script relates to one another.

The typical discourse around deaf children and literacy still follows the earlier traditional model of literacy, focusing on failure and difficulties in achieving grade and age appropriate academic goals. The frequently articulated finding from the United States is that the average reading level among deaf people is 4th grade level, corresponding a 8-9 year olds', with only 10% developing age-appropriate skills (Lou, 1988; Allen, 1986; Furth, 1966; Traxler, 2000; Marschark & Harris, 1996; Gallaudet Research Institute, 2004). As Lederberg, Schick and Spencer (2013) state, similar findings have also been reported for several other languages that differ in orthography and language learning contexts, such as Spanish (Alvarado, Puente & Herrera, 2008), Dutch (Hermans, Ormel, & Knoors, 2010; Wauters et al., 2006) and Chinese (Yang, 2008). Even though there have been many interventions to methods that are used to teach reading to young deaf children in the past four decades, a significant gap between the textual literacy skills of deaf and hearing children seems to persist (Spencer & Marschark, 2010). This has led to many other studies aimed at understanding the critical factors behind the high illiteracy levels deaf people are facing, as well as identifying teaching practices in deaf education that can potentially remedy this literacy gap. This is especially the case for prelingually

deaf individuals, referring to deaf people who were either born deaf or who became deaf prior to being exposed to a full-fledged language.

Traditionally writing systems have been visual-textual representations of spoken language systems[54], which consist of a finite set of characters and a set of rules that limit the ways in which these characters can relate to one another within given semantic or syntactic constraints. For the majority of world languages, this visual mapping is also facilitated by letter-sound correspondences that vary in regularity. That is to say, while a majority of languages like English, French or Turkish are considered *phonographic* with sound-based orthographies, a few others like Chinese use *logographs* that instead have concept/meaning-based orthographies. While there is preliminary work that suggests deaf people potentially benefiting from logographic orthographies (Flaherty & Moran, 2004), this line of research is still inconclusive and requires more studies.

It has been commonly believed that prelingually deaf people's ability to decode the written representation of spoken language could be hindered by their inability to access the prevalent spoken language phonology (Paul et al. 2009; Laybaert, 1993). There is also research indicating that non-auditory channels, such as lip reading or articulating speech, may not be enough to form a fully specified phonological representation either (Kelly & Barac-Cikoja, 2007 for a review). However, the problem with many studies that show phonological coding effects is that as much as they show correlations, they fall short of explaining a causal relation between the two constructs, that phonological awareness of spoken language leads to better reading comprehension

54 Except for the writing systems that are under development for sign languages, as detailed in Chapter 1 (Stokoe Notation, the Hamburg Sign Language Notation System (HamNoSys), SignWriting, Si5S) or for dance notation systems perhaps (Labanotation, DanceWriting).

skills. In fact, Goldin-Meadow and Mayberry (2001) even suggest that for profoundly deaf readers phonological awareness could be derived from achieving excellent reading skills.

As Miller and Clark (2011) point out, the main problem with the phonological coding argument is that there are many deaf skilled readers who do not show phonological awareness, and thus provide counter-evidence. An alternative view suggests that deaf people could instead be using visually-based strategies, such as a visual printed word to concept mapping through their sign language skills (Padden & Ramsey, 2000; Strong & Prinz, 2000; Goldin-Meadow & Mayberry, 2001; Allen et al., 2009). Studies with uniimodal bilinguals (English and ASL, Dutch and SLN) show that while deaf bilinguals seem to be activating signs when processing written words, sign phonology and printed word morphology are important variables that complicate this model (Ormel, Hermaans, Knoors, Hendricks & Verhoeven, 2010; Morford, Wilkinson, Villwock, Piñar & Kroll, 2011). Recent eye-tracking studies with skilled and less-skilled adult deaf readers of French (Bélanger, Baum & Mayberry, 2012) and English (Bélanger, Mayberry & Rayner, 2013), reveal that skilled deaf readers activate only orthographic codes and not phonological codes during visual word recognition and short-term recall. These findings suggest a greater use of orthographic codes during visual word recognition than expected, relative to phonological codes. . This is supported by a study by Harris and Moreno (2004) who found that orthographic awareness was a strong predictor of reading skills in young deaf children.

Since the turn of the century, we see an increased emphasis on deaf people as visual learners with respect to literacy, as well as with the acquisition of many other

subjects and skills concerning daily life. This is to say that deaf people predominantly exploit the visual-spatial modality in the acquisition of language, literacy, and learning (Chamberlain, Morford, & Mayberry, 2000, Kuntze, Golos & Enns, 2014). This, in fact, follows the cultural and identity discourse prevalent within the Deaf community, especially in the Western world, constituting the heart of the empowerment discourse of the community (Lane, Pillard & Hedberg, 2011). This narrative is also illustrated in a range of cultural artifacts produced by Deaf people, such as performance arts, opinion pieces in social media, as well as more recent design interventions like the DeafSpace project (Humphries, 2008; Bauman & Murray, 2010). This tendency among scholars can be seen both in recent neural and behavioral research on deaf people and language, as well as in the focus of research centers concerned with deafness and learning. One obvious example is the NSF funded Science of Learning Center, Visual Language and Visual Learning (VL2) at Gallaudet University, with research partners spread around North America. Research at VL2 is informed by movements like the New London Group (1996) and their emphasis on multiliteracies, the visual affordances of new technologies, as well as the linguistic and cultural benefits of these multimodal environments. Focusing on early language acquisition, research and practice in VL2 aims to uncover both existing social practices around, and innovative uses of new visual technologies for the benefit of deaf learners.

One of the strategies used by teachers of the deaf, as a mediational step between print and sign is fingerspelling (REF). By providing an alternative visual representation of the internal structure of written words, fingerspelling can be an available tool for deaf people in both decoding and memory (Kelly & Barac-Cikoja, 2007). Especially one-

handed fingerspelling found in ASL, for example, allows for the co-articulation of syllables and it can afford a visual-kinesthetic chunking strategy (Wilcox, 1002; Brentari, 1998). Research shows a strong correlation between deaf children's fingerspelling skills and their reading skills in English (Hirsch-Pasek, 1987; Padden & Ramsey, 2000; Humphries & MacDougall, 2000; Alvarado et al., 2008; Emmorey & Petrich, 2011). Training studies show that using co-articulated fingerspelling helps deaf children to learn new words (Haptonstall-Nykaza & Schick, 2007; Hirsch-Pasek, 1987). On a similar line, most deaf and hard of hearing children struggle with the morphosyntactic structure of written languages, which becomes even more important past the 3rd grade level (Gaustad & Kelly, 2004). Again, training studies show that deaf children's knowledge of a written language's derivational and inflectional morphology can be improved, as well as their syntactic awareness such that it results in better spelling and reading comprehension (Nunes, Burman, Evans & Bell., 2010).

We know that deaf children can learn language in the same time frame and with the same milestones as their hearing peers, if they are provided the sufficient and appropriate language input that matches their sensory capacities early in life (Meier, 1991; Petitto, 1994; Lillo-Martin, 1999; Chamberlain, Morford, & Mayberry, 2000). That is because language development and related brain plasticity is time sensitive, such that language exposure in the first 3 to 6 years of life is critical for language development to unfold in a timely manner and in full capacity, despite the modality of the language input (Penfield & Roberts, 1959; Lenneberg, 1967; Newport, 1990; Long, 1990; Mayberry, 2007). In the case of prelingually and profoundly deaf children, such appropriate language input is a natural sign language that has the same linguistic properties as those

found in spoken languages, such as phonemic, morphosyntactic, and pragmatic levels of organization (Stokoe, 1980; Newport & Meier, 1985). However, the ratio of deaf and hard of hearing who have signing deaf parents (DoDP) and are regularly exposed to sign language via deaf adults and peers is only 5 to 10% (Padden, 2000; Mitchell & Karchmer, 2004). The remaining majority who have non-signer hearing parents are often significantly language-delayed and form a more heterogenous group with respect to language skills compared to DoDP children (Hermans, Knoors & Verhoeven, 2010; Maller, Singleton, Supalla, Wix, 1999; Musselman & Akamatsu, 1999; Mayberry & Hatrak, 2013). Nevertheless, both Singleton and Newport's (2004) case study with a deaf child of hearing parents with limited ASL skills, and Senghas and Coppola's (2001) study with deaf children growing up exposed to an emerging pidgin sign language, suggest that frequent exposure to less than perfect signing in natural interactions can also facilitate deaf children to develop more systematic and linguistically complex signing skills [In Lederberg et al., 2013, p.19].

Language development is important to consider for literacy. Chamberlain & Mayberry's (2008) study with skilled and less skilled deaf adult readers shows that sign language proficiency can predict reading ability (see also Chamberlain & Mayberry, 2000; Padden & Ramsey, 2000). This is parallel with literature stating that skills in conversational language and thus potentially having access to a wider range of world knowledge lies at the heart of one's academic readiness, ability to read and write, and learn through text (Collier, 1989; French, 1999; Johnson, Lidell & Erting, 1989; Mahshie, 1995). Profoundly deaf children are especially disadvantaged as potential readers, being born to non-signing hearing parents, they generally do not know any language well

enough by the time literacy instruction begins. So while it is commonly believed that the inability to hear and thus not having access to phonological codes hinders reading proficiency, underlying language abilities seems to be a much stronger predictor of reading than phonological awareness. What about deaf children's learning to write?

> *The development of literacy involves the interdependent learning of conversational language, reading and writing, and related variables, including motivation and social interactions.* (French, 1999, p.25)

According to French (1999), like Cummins, the acquisition of conversational language is a prerequisite of written language. French states that one of the main problems with deaf education in terms of literacy is that it tends to be criteria-centered instead of being student-centered. Regardless of the instructional setting, as in monolingual or bilingual, instruction at deaf schools should be sensitive to the language development level of individual deaf students. Since most deaf children arrive at school lacking some fundamental language, jumping ahead to teach them reading and writing only ends up with a sense of, and focus on, failure for everyone. French refers to Kreshen (1992) in stating that children learn writing more through reading than through writing or direct instruction, since reading provides more rich and comprehensible input with respect to language conventions, spelling and vocabulary.

Research on the writing practices of deaf people is more limited. Most studies again focus on the acquisition of writing abilities (Massone & Baez, 2009), the instruction of writing to deaf students (Strassman & Shirmer, 2012), or the assessment of deaf or hard of hearing student's writing skills and written narratives (Beijerstervelt & Hell, 2009; Isaacson, 1996). However, as this dissertation research also aims to address:

What happens to deaf people's writing practices with new information and communication technologies?

Much of the academic literature on deaf people and technology refers to medical and educational technologies; either assistive devices related to hearing (e.g., hearing aids, cochlear implants) or augmented learning environments using technology-enhanced classrooms (e.g., smart boards, the Internet). A few papers look at the use of Internet and mobile technologies in the distribution and production of "Deaf Spaces" (Valentine & Skelton, 2008; Kusters, 2012).

Fewer studies look at deaf people's everyday use of information and communication technologies and its interaction with literacy. In the United States, Hogg et al.'s (2008) study confirms Zazove et al.'s (2004) findings that e-mail and instant messaging are two of the most popular communication methods among Deaf and hard of hearing individuals. The authors suggest that the pervasive use of digital textual communication among deaf people in the US continues cultural habits established earlier with the use of personal teletypewriting machines (TTYs) dating to 1960s. Power & Power's (2010) web-based study in Australia reports that among the factors impeding a deaf person's benefit from telecommunication technologies were low levels of literacy and lack of technical skills. Moreover, Okuyama & Iwai (2011), comparing text-messaging practices of Deaf children in Japan with their hearing counterparts, emphasize the critical role that literacy plays in shaping the actual uses of text-based communication, beyond having access to the technology alone. Okuyama's (2013) more recent work on the texting habits of US Deaf teens show that they shared many characteristics with their hearing counterparts in their use of shorthand and

unconventional spellings (aka. textisms), while also making use of vernacular strategies such as "glossing" in ASL patterned sentences.

As can be seen, studies concerning technologically mediated communication practices of deaf youth populations have gained some interest in the past few years. However, majority of these studies have looked at interactions between young deaf people's textual-linguistic literacy skills and text-based communication technologies. Although multiliteracy comes up as a term in some of these works, the focus is still on text. New technologies allow for multimodal communication using a range of multimedia, where one modality or literacy does not necessarily need to be more important than others in social navigation. That is exactly why new studies concerning deaf people's acquisition and practice of other types of literacies are also needed, in order to get a fuller picture as to what literacies "do" in everyday life.

3.3. Linguistic Literacies of Deaf People

The more recent approach to the study of literacy is one that values detailed descriptions of literacy narratives and practices over the reporting of written language aptitude evaluations (Barton & Papen, 2010; Street, 2009). While I find these rich descriptions extremely valuable in capturing the socially situated factors that shape one's literacy practices, the role that textual-linguistic aptitude plays in one's ability to navigate diverse social domains still needs to be explored further. In other words, I find the two perspectives complementary and not necessarily in competition. In studies concerned with newer literacies, textual-linguistic literacy is often overlooked, with the assumption that the ability to comprehend and produce written language is a given for people who are

educated in the 21st century. As we will see in this chapter, this is a false assumption: simply going through the education system does not necessarily result in advanced literacy skills for deaf individuals. Likewise, in many parts of the world, including Turkey, reports on literacy rates are based on subjective census reports of reading and writing ability collapsed, instead of actual testing of aptitude. This results in either inflated reports of literacy rates that are based on subjective evaluations during census surveys, or depressing accounts on the low literacy skills of disadvantaged groups that lead to a limited understanding of their actual functional literacy practices (REF). The latter is true, especially in the reporting of deaf people's literacies. That is why I aim here to provide a more accurate portrayal by bringing together the strengths of both the traditional and the more contemporary views on literacy.

First, I begin with a detailed report of the linguistic literacy abilities of deaf youth in Turkey, from a more traditional perspective of literacy that focuses on aptitude in reading and writing. Since literacy skills of deaf people is extremely understudied in Turkey, and mostly limited to processing and comprehension of reading, the findings of this part of the study alone fill a significant gap in literature. If the story were to end here, however, I would simply be replicating a series of studies whose findings converge on many deaf people's failure to pass a 4th grade level in their abilities of reading and writing. Such narrative is one that focuses on lack, without acknowledging how deaf people overcome certain communicative barriers in real life, using a range of vernacular strategies. The aptitude narrative alone is insufficient in understanding the reasons behind deaf people's lower scores in reading and writing, or how these limited abilities are utilized in conjunction with other skills and knowledge in the practice of everyday life.

That is why, in the section to follow, I will bring in particular literacy narratives, to obtain a better sense of the context in which deaf people come to acquire language and textual-linguistic literacy in Turkey. In analyzing these literacy narratives I will also try to identify their sponsors of literacy, following the work of Brandt (1998), as well as of Selfe & Hawisher (2004). Finally, I will discuss the role of gaming in the contemporary literacy practices of Deaf youth in Turkey.

3.4.1. Linguistic literacies of Deaf Youth in Turkey

My first study on this topic was carried out in 2011, aimed at understanding the changing media practices and mobilities of young Deaf adults in Turkey. Participants were 16-20 year old deaf students (4 female and 4 male) from diverse demographic backgrounds, at two vocational high schools for the deaf, one in Istanbul and another in Ankara. I conducted semi-structured interviews on their everyday use of language, social and media practices in relation to their affiliation with various institutions. The interviews followed a script of questions grouped around: demographics, family background, language background, communication at school, after school activities, media practices, and awareness of sign language variation in Turkey. Each interview took approximately an hour in TID. This initial study suggested that literacy is a critical factor in a deaf person's access to and adoption of communication technologies. To explore this further, my dissertation specifically looks at the participants' skills in Turkish and TID in relation to their media and social practices by using a battery of literacy measures along with in depth interviews.

In 2012, I conducted a 10-month-long ethnography with Deaf community members of Istanbul, concerned with the relationship between the literacies and mobilities of deaf people in Turkey. During this period, I also worked closely with 33 young deaf participants in Istanbul: 18 high school students who were 9-12th graders (ages 15-2; 12 female and 6 male) and 15 young adults of (ages 18-41;5 females and 10 males)[55]. I looked at their literacy skills and patterns of movement across various online and offline social spaces, with a focus on their use of new media and communication technologies. Due to the lack of standardized measures for Turkish literacy, as we have seen in the previous chapter, I used a battery of literacy measures that I created for Turkish and TID. These literacy measures were followed by a semi-structured in-depth interview conducted by me in TID, which was an expanded version of the one gathered in the previous study. The length of each session varied from two to four hours, depending on the age group and availability of participants. In addition, I later worked with 7 hearing young adults, who were matched by education level (with high school or equivalent degrees). With this smaller control group (ages 20-46; 6 females and 1 male), I only used my language measures for Turkish, to get a better sense of my tools through an initial comparison with hearing peers for the older group.

The battery of Turkish measures consists of comprehension and production tasks at the word level (*TİFALDİ*, developed by S.K. Berument and A. G. Güven (2010)), the sentence level (9-item comprehension task that I put together using items from a website where elementary teachers share grade specific exams, and the 16-item Sentence

[55] See Appendix for a breakdown of the deaf participant's demographic information and language background.

Comprehension Test developed by P. Miller)[56], and the paragraph level (3rd grade, 4th grade, and adult level Turkish reading comprehension, put together by me, using the same elementary school teachers' website indicated above). The battery of Turkish Sign Language measures consisted of word level (*TİFALDİ* items in TİD) and paragraph level comprehension and production tasks (TİD retelling of paragraphs from the Turkish paragraph task and *ASL Van Story* developed by R. Mayberry, adapted to TİD by a native Deaf signer)[57] (Mayberry & Hatrak, 2013).

3.4.1.1 Comprehension in Turkish and Turkish Sign Language (TID)

One of the literacy measures that I used in my larger study was *TİFALDİ*, a word level picture task designed to measure comprehension and production in spoken Turkish, consisting of lexical items in nine groups that are normed from ages 2 to 12 (Berument & Guven, 2013). Although this language measure is originally designed for children and for spoken language, in my study I used this measure first in written Turkish and then in TİD (produced by a young native deaf signer from Istanbul). For this task that has a total of 104 items, participants are shown either a Turkish written word or a TID sign, depending on the task, and asked to pick the right image that matches the target word by pointing to it. I found this measure appropriate for several reasons: (1) this is a very recently

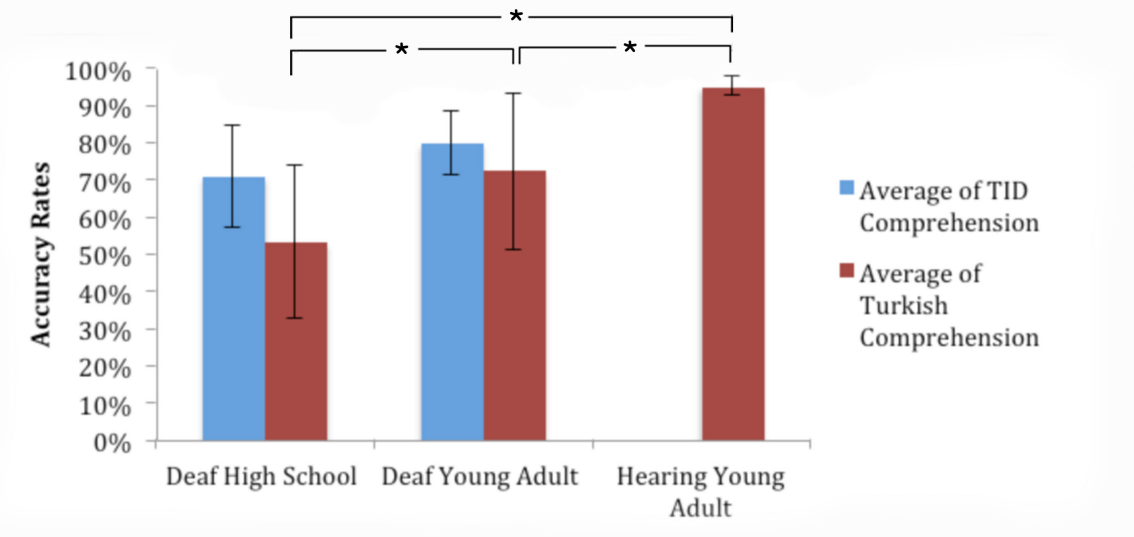
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56 The Sentence Comprehension Test (SCT) was developed by Professor Paul Miller, Faculty of Education, University of Haifa, with the support of SLC on Visual Language and Visual Learning (VL2), NSF Grant # SBE-0541953, within an international reading project executed in collaboration with Tevhide Kargin (Ankara University, TR), Christian Rathmann (Hamburg University, GR), and Peter Hauser (Rochester Institute of Technology, US).

57 This is a 5-minute story in Turkish Sign Language, which follows the "story grammar" in its structure. The model was a Deaf of Deaf woman from Istanbul\ in her mid 30s. The viewing of the narrative is followed by 12 questions directed by the same model as the one in the initial narrative. The participant is asked to view and answer the questions to the camera, as if responding to the model.

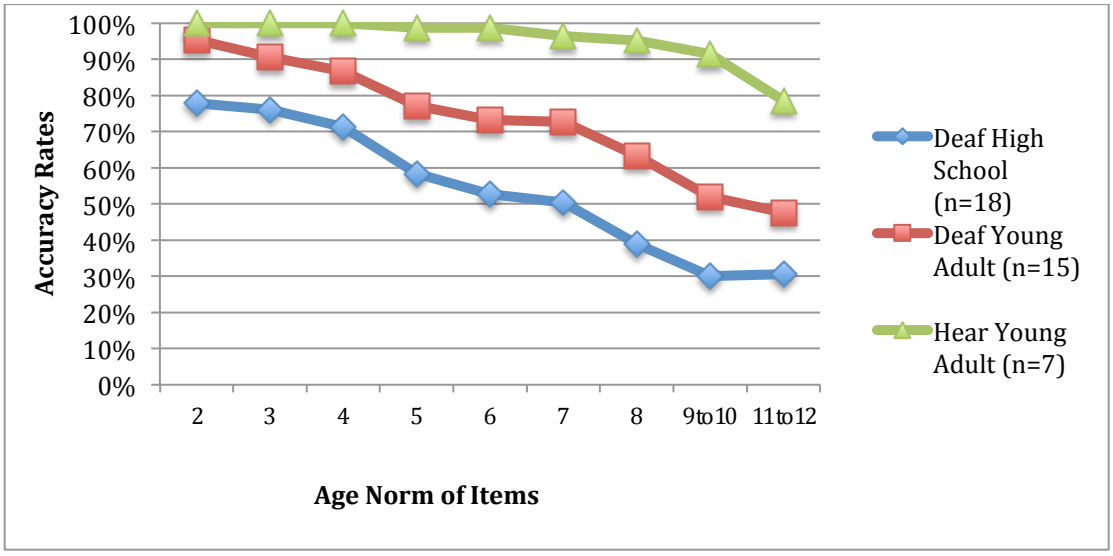
standardized lexical measure that was designed particularly for Turkish with items that are culturally situated in Turkish social life; (2) there was no other available standardized literacy measure developed for written Turkish or TID; and (3) the literature shows deaf adults to read at an average of 4th grade level, which is approximately equivalent to 11 years old (Mayberry, del Guidicie & Lieberman, 2011; Traxler, 2000). Graph 3.1. summarizes the findings for TİD and Turkish written comprehension for all 104 items in more detail, across three groups.

For TID comprehension, the mean accuracy rate was 71% (SD=14%) for the deaf high school group and 80% (SD=8%) for the deaf young adult group. For Turkish comprehension, the mean accuracy rates were 53% (SD=21%) for the deaf high school group, 72% (SD=21%) for the deaf young adult group, and 95% (SD=2%) for the hearing young adult group. Overall, the average for lexical comprehension among all 33 deaf participants was 75% for TİD and 62% for Turkish. A Kruskal-Wallis analysis comparing the Turkish lexical comprehension scores of three groups shows a significance difference ($H= 19.933$, $df=2$, $p<0.001$). Pair-wise comparisons among the groups, using one-tailed Wilcoxon Rank Sum Tests, showed significant differences between (1) deaf high school group and the hearing young adult group ($p < 0.001$), (2) deaf young adult group and the hearing young adult group ($p < 0.001$), and (3) deaf high school group and the deaf young adult group ($p = 0.01$).



Graph 3.1. Distribution of TIFALDI Comprehension Accuracy Rates by Group and Language

Like the *Peabody Picture Vocabulary Task* (PPVT), the TIFALDI varies in the difficulty of lexical items. So, the next step was to see how performance varied across lexical groups of increasing difficulty. Graph 3.2. shows how the comprehension accuracy on the TIFALDI varies depending on the lexical item categories that are normed for different ages. Kruskal-Wallis analyses show a significant drop in accuracy as the lexical items get harder, for all three groups ($p<0.001$). We see a similar drop for a smaller sample of seven hearing individuals also with high school degrees. However, this drop in accuracy begins much sooner (as early as the lexical group normed for 5 year olds) and is more drastic for both deaf groups. In fact, for the deaf high school group, average performance drops to as low as 30% for the lexical group normed for 9 to 10 year olds.



Graph 2.2. TIFALDI Turkish Comprehension Accuracy by Group and Age-Normed Lexical Items

Next, I looked at the same participants' comprehension skills at the sentence level. For this, I used two multiple choice tasks: (1) the 9-item multiple choice sentence comprehension task that focused on identifying basic comparison, similarity, causality, word order and grammatical judgment at the sentence level, and (2) the 16-item Sentence Comprehension Test that looks at the interaction between semantic plausibility and syntactic complexity.

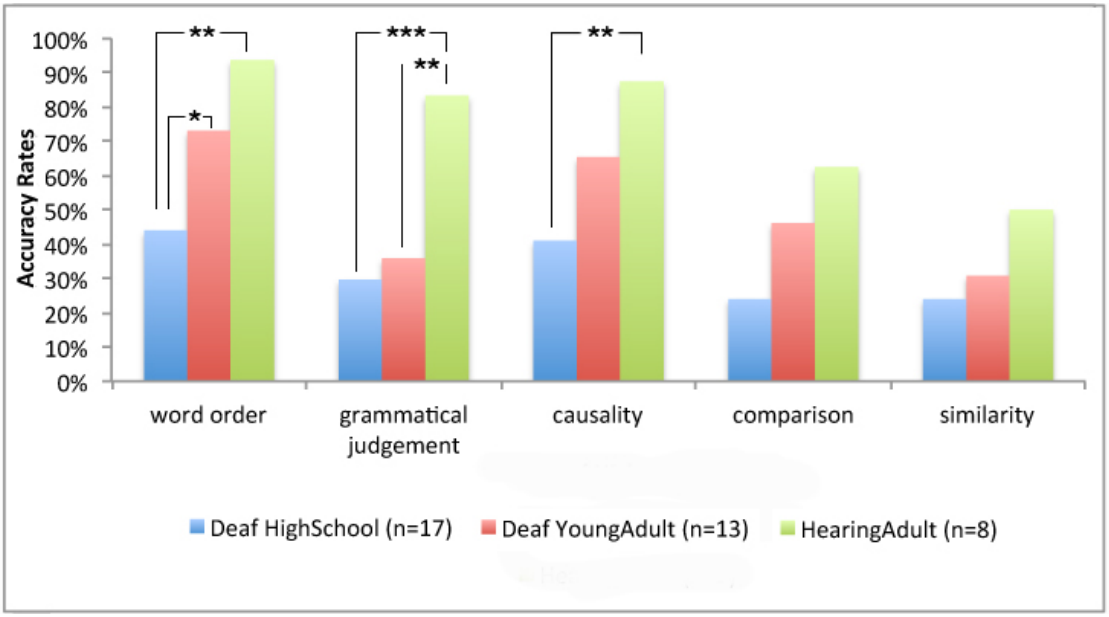
For the 9-item task, participants are asked to pick among 3 options, the sentence that involves a comparison, similarity or causal relationship. The word order task involves putting a randomized sentence into a grammatically correct order, using the three options below, while the grammatical judgment task asks the participant to pick the grammatically correct sentence from among three sentences at a time. Directions for each type of question were as follows: (1) Word Order (2 questions): "*Which order of words listed below would produce a grammatically correct sentence?*", (2) Grammatical Judgment (3 questions): "*Which sentence below does not have a grammatical error?*",

(3) Causality (2 questions): "*Which sentence below includes a causal relationship?*", (4) Comparison (1 question): "*Which sentence below includes a comparison?*", and (5) Similarity (1 question): "*Which sentence below includes a similarity?*". My decision to look more closely at these particular language parameters is informed by the logical assumption that making sense of more complex arguments and textual narratives requires these basic skills, as also highlighted by elementary school Turkish language curricula in Turkey.

The mean total accuracy in this 9-item task was 32% for deaf high school students and 49% for deaf young adults. For the hearing group matched for education level with the deaf high school group, average performance was 78%. Pair-wise comparisons of total accuracy scores among three groups, using one-tailed Wilcoxon Rank Sum Tests show (1) a highly significant difference between the deaf high school group and the hearing young adult group ($p < 0.001$), (2) a marginally significant difference between deaf young adult group and the hearing young adult group ($p < 0.05$), and (3) a marginally significant difference between deaf high school group and the deaf young adult group ($p < 0.05$). Although the hearing group scored much higher overall in this sentence comprehension task than the deaf group, unlike the lexical comprehension task, they did not show a ceiling effect here even though these items were taken from 3rd to 5th grade exam questions.

Figure 3.3. shows the breakdown of scores by question type across all three groups (a total of three participants with no data were not included in this analysis). We can say that all three groups follow a similar trend for the most part, with the deaf young adult group performing slightly higher than the deaf high-school group and slightly lower

than the hearing young adult group. Once again, pair-wise comparisons of total accuracy scores among three groups across all five question types, using one-tailed Wilcoxon Rank Sum Tests show (1) a highly significant difference between the deaf high school group and the hearing young adult group for *grammatical judgment* ($p < 0.001$), (2) significant differences between the same two groups for the *word order* and *causality* questions ($p < 0.01$), and (3) a significant difference between the deaf young adult group and the hearing young adult group for *grammatical judgment* ($p < 0.01$), and (4) a marginally significant difference between the two deaf groups for *word order* ($p < 0.05$). All other pair-wise comparisons showed differences that were not statistically significant.



Graph 3.3 Accuracy rates for the 9-Item Turkish Sentence Comprehension Task by Group and Question Type (***$p < 0.001$, **$p < 0.01$ and *$p < 0.05$)

All groups did slightly better in the "Word-Order" questions, where they had to put a series of lexical items in the right order to form a grammatically correct sentence. An example could be this:

Q. phone - punished - teacher - who - the - on - student -the - the -got
1 2 3 4 5 6 7 8 9 10
Which order of words listed below would produce a grammatically correct sentence?
a) 3-6-4-1-2-6-8-5-7-9-10
b) 5-3-2-8-7-4-10-6-9-1
c) 6-10-2-7-3-9-5-1-4-8

However, in Turkish they would need to know case marking and other morphosyntactic elements to answer this question correctly. It is also possible, however, that these scores were higher as a result of the correct answer being "a" in both questions. The "Grammatical Judgment" questions were relatively harder for most deaf participants, where they had to find the grammatically correct sentence, requiring knowledge on case marking and possessive suffixes in Turkish. Finally, identifying sentences that include "Similarity" or "Comparison" statements was difficult for all groups, while identifying "Causal Relationship" in sentences was relatively easier.

As mentioned earlier, what was interesting in these findings is the fact that the hearing control group did not show a ceiling effect in their performance for this task, which was intended to be only elementary school level. Especially with the grammatical judgment related questions, it was surprising to see hearing participants perform poorly in this written task, although they were perfectly fine using these structures correctly in spoken language. It is likely that some of these items were highly linked to schooling related metalinguistic competencies, such that concepts like causality, comparison or similarity were too abstract for the majority, especially for the deaf participants. This could suggest that this task was measuring more abstract metalinguistic awareness and lexical knowledge of constructs, instead of the actual comprehension of these constructs in sentences.

The second task I used to test for comprehension at the sentence level was the 16-item Sentence Comprehension Test. This is a task in which sentence prompts vary with respect to semantic plausibility (whether or not the actor-patient relationship was parallel with real-life patterns), and syntactic complexity (having one or two relative clauses). Examples are THE POSTMAN BIT THE DOG, as a semantically implausible statement with one relative clause, or THE LANDLORD HELPED THE YOUNG GIRL MOVE IN, as a semantically plausible statement with two relative clauses.

As we can see, the average scores were highest for plausible sentences with one relative clause, while the lowest was for implausible sentences with two relative clauses (See Table 3.1.). Overall, it appears that the effect of plausibility on sentence comprehension is larger than the effect of sentence complexity. This suggests that readers made assumptions based more on likely scenarios involving these characters from their event knowledge than from the morpho-syntactic structure of the sentences in completing this task on actor-patient relationships. When this finding is compared with Güldenoğlu's (2012) study that included high school deaf students (9^{th} and 10^{th} graders), the effect of the plausibility of argument on the comprehension of sentence appears to be stronger than in his study, especially in the young adult group.

One problem with this task, which was very informative of the participants' comprehension skills overall, was the use of passive voice in some of the items. This added a third level of complexity to the task. The additional cognitive and linguistic work required by this linguistic property became more apparent while watching one of my hearing participants. This participant decided to read the entire task out loud while taking it. However, when it came to sentences with passive voice, she persistently omitted the

passive voice suffix in her articulation, even when asked to repeat the sentence several times. This resulted in her misunderstanding the actor-patient relationship in those sentences, and thus an incorrect answer.

Table 3.1 Miller's 16-item Sentence Comprehension Test Scores, by Group and Sentence Type

		Plausible	**Implausible**	**TOTAL**
1 relative clause	**Deaf**	**2.56/4.00**	**2.19/4.00**	**4.75/8.00**
	high school	2.41	2.35	4.76
	young adult	3.11	1.89	5.00
	Hearing	*3.50/4.00*	*2.50/4.00*	*6.00/8.00*
2 relative clauses	**Deaf**	**2.58/4.00**	**1.04/4.00**	**3.62/8.00**
	high school	2.29	1.89	3.12
	young adult	3.11	1.44	4.56
	Hearing	*3.25/4.00*	*3.13/4.00*	*6.38/8.00*
TOTAL	**Deaf**	**5.13/8.00**	**3.23/8.00**	
	high school	4.71	3.18	
	young adult	6.22	3.33	
	Hearing	*6.75/8.00*	*5.63/8.00*	

Finally in the paragraph level comprehension tasks, we see the comprehension performance of the deaf group dropping significantly both as the vocabulary increases in difficulty and as the syntactic structures become more, both of which are required to comprehend the narratives. Overall performance was higher on the 3rd grade and 4th grade paragraphs, followed by multiple-choice questions. However, once the deaf participants were also asked to re-tell the stories in TID after answering the questions, it was apparent that their comprehension was in fact much lower than what the multiple choice questions could capture.

The two, adult level texts were followed by open-ended instead of multiple-choice questions. There were two tasks. The short task consisted of a paragraph that was taken from an online news website. The longer task, on the other hand, was the same story as the paragraph used in the 5th grade paragraph comprehension task, only that this time it was extended to match Mayberry's ASL Van Story in its narrative structure and length, as well as the type of open ended questions that followed. For the short version adult level text, comprehension was lower than the 3rd and 4th grade paragraphs. As to the longer version that was slightly longer than a page, all deaf participants, except for two, declined reading and completing the task all together. They either found the text too lengthy and overwhelming, or they did not want to answer open ended questions that required not only clear comprehension of the text, but also the ability to construct sentences in Turkish from scratch. And this brings us to the findings concerning the participants' written production of Turkish and expressive abilities in TID.

3.4.1.2 Production in Turkish and Turkish Sign Language (TID)

The expressive part of *TIFALDI* was used to test the production abilities of participants in Turkish and Turkish Sign Language. This was an 80-item picture-naming task with items increasing in difficulty. The same stimuli set was used twice, first for Turkish, then for TID, and always with other Turkish language measures administered in between the two. For Turkish, the participants had to write the corresponding lexical item on a form with numbered lines, while for the sign language version they were instructed to produce the lexical item to the camera in TID, as if signing to a deaf friend.

Parallel with previous literature, the writing abilities of the participants in this study was significantly lower than their already low reading abilities in Turkish. As can be seen in Table 3.2., a majority of deaf high school students did not meet the baseline criteria to continue the Turkish expressive task as defined in the instructions of TIFALDI (which was producing 8 consecutive correct answers). Fourteen participants in the deaf high school group and 6 participants in the deaf young adult group left many lexical items blank, as well as making mistakes in naming or spelling. Likewise, the original instructions also state that correct items should be counted from this beginning point until the participant gives a total of 6 incorrect answers in a block of 8 items. The mean number of correct items indicated in the table below shows only the participants who met the baseline requirements until the ceiling point as per the test instructions.

Table 3.2. TIFALDI Turkish Written Production results by Group

Participant Group	*Does not meet criteria to continue task*	*Mean Correct*	*Range*	*Standard Deviation*
Deaf High School	14/18 (78%)	53.25 (67%)[n=4]	37-73	15.11
Deaf Young Adult	6/15 (40%)	56.95 (72%)[n=9]	36-75	13.23
Hearing Young Adult	0/7 (0%)	73.14 (92%)[n=7]	69-80	3.98

As mentioned earlier, TIFALDI is originally designed for hearing children of ages 0-12, aimed at giving an age-based language development score for the child. In this study, however, these 104 items were used as a set of lexical items that a 12 year old is expected to know. Aside from the baseline criteria for continuing and discontinuing the task, I wanted to know how well deaf children and young adults would perform in expressing this set of lexical items in written Turkish and TID. This meant that I

continued the task until I perceived discomfort or an open request to discontinue from the participants. This lead to all participants continuing the task all the way through, except for nine deaf high school students, for whom the average item to discontinue was 52 out of 80 total items (range?). The mean correct items in this alternative scoring condition were 24.41 (31%) and 63.5 (79%), for deaf high school students and deaf young adults respectively. Top four performers of the TIFALDI Expressive Task in the deaf high school group identified and produced 74, 58, 52, and 37 Turkish written words correctly out of 80. All of these individuals went through and completed the task. The bottom four performers, on the other hand, could identify and produce only 6, 6, 7, and 8 Turkish written words out of 80.

While the older deaf group performed better on this task than the younger deaf group in the study, we cannot necessarily conclude that the difference is due to age effects. Overall, the older deaf group reported to have more residual hearing than the younger high school group during the interviews[58], some of whom were also mainstreamed during at least part of their education. It is also possible that they were a relatively higher functioning group than the younger group of deaf high school students. I came across the older deaf participants either via Dream Academy[59] or through my existing networks in the Turkish deaf community. Almost all participants in the older deaf group were either employed or were volunteering in various organizations, where they had to interact with hearing people on a regular basis. The majority of high school students, on the other hand, had relatively less residual hearing, and were from families

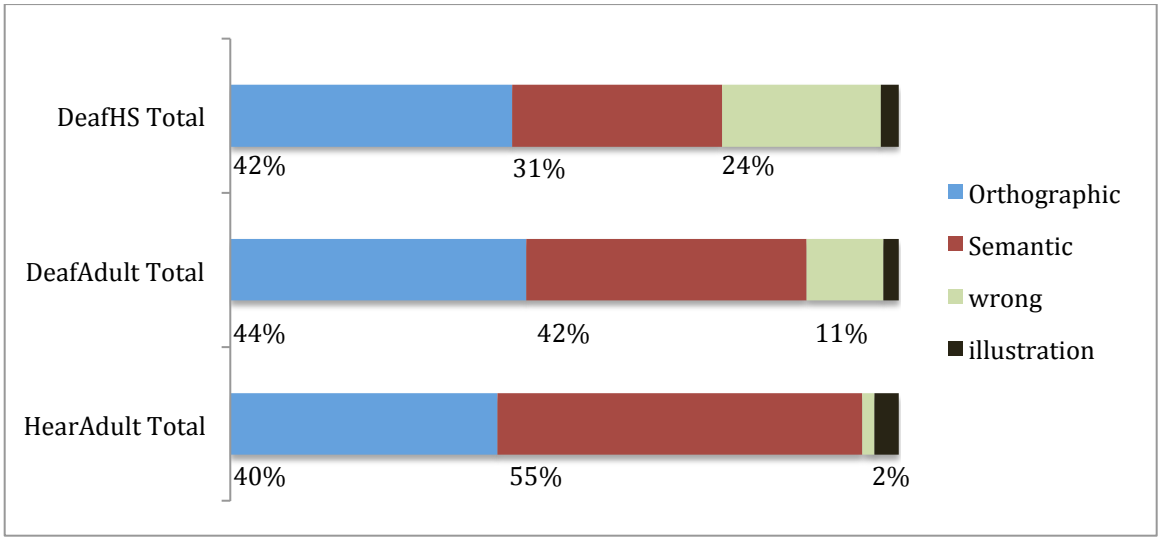
58 The results of the interview will largely be discussed in the next chapter.

59 Düşler Akademisi (Dream Academy) is an Art Academy/NGO serving children and youth of a diverse set of abilities in Turkey, providing "equal participation opportunities with an "art for everyone" approach". http://www.duslerakademisi.org/en

of limited education and low SES. This resulted in limited access to assistive and communicative technologies: many had hearing aids that needed to be fixed or had dead batteries for years, and several either did not have mobile phones or were using affordable packages with limited access to Internet and multimedia exchange services. Several high school participants also indicated that their literacy skills used to be better in elementary school where they continued to receive Turkish language instruction and the sign language competencies of their teachers were relatively higher. Further investigation is required to understand what factors explain the differences between the scores of deaf high school students and young adults, such as age of language acquisition, hearing status, educational background, parental involvement, and SES.

Next I examined the kind of writing errors made by the deaf participants. For this purpose, all Turkish lexical responses were coded for type of error in detail, and then these errors were collapsed into four categories: orthographic errors, semantic errors, wrong answers, and illustration related errors.[60] As can be seen from Graph 3.4, most errors for all groups were either orthographic or semantic errors. While the hearing group made more semantic errors than orthographic errors, more of the errors that deaf participants made were orthographic errors overall.

60 Some examples to each category is as follows: (1) Orthographic errors included missing, extra or incorrect letters, as well as metathesis, (2) Semantic errors were acceptable alternatives, hypernyms or related words, (3) Wrong answers were responses that were completely unrelated to stimulus or meaningless words, and (4) Illustration caused errors were those that suggested problems with the stimuli themselves such as ambiguous drawings.



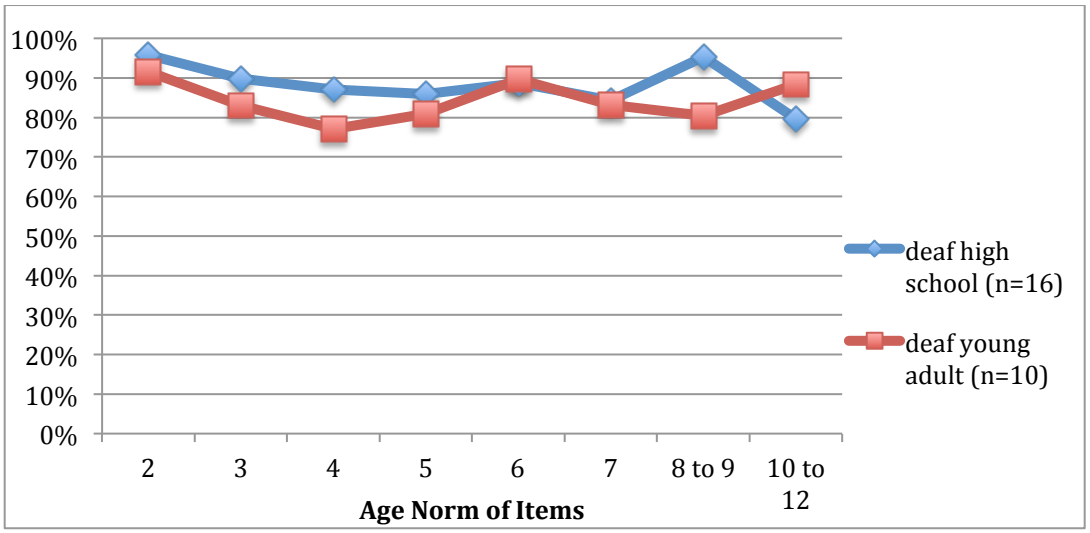
Graph 3.4. Accuracy and Types of Errors for Turkish Word Production by Group

The majority of orthographic errors for hearing participants meant making an error with only one letter of the lexical item, either by misspelling (46%) the letter or by not using umlauts correctly (41%). Misuse of umlauts (i.e., AGAC instead of AĞAÇ, meaning TREE in Turkish) is a common error seen in texting or online textual exchanges in Turkish, due to keyboard defaults being set to English. It is particularly interesting to see a similar lack of emphasis or care with the use of umlauts in handwriting.

Looking at the kinds of orthographic errors that deaf participants made, we see a different distribution. In addition to errors with one letter (36%) and errors in the use of umlauts (15%), we see errors extending up to two syllables (27%), incomplete words with only their first syllables (13%), and finally the switching of adjacent letters (9%), also known as metathesis.

As mentioned earlier, I used a TID adaptation of TIFALDI as my lexical comprehension and production measure for TID. This time, although there was some variation across participants for a few items, the participants almost always had a sign for

each item. This kind of limited variation is parallel with the literature, as well as with the variation across schools and generations reported by the participants in the interviews. With an average of 85% (86% for the high school group and 81% for the young adult group), we see a near ceiling effect in the expressive lexical TID task for deaf participants, similar to what we see in the lexical Turkish tasks for the hearing group.



Graph 3.5. TIFALDI TID Production Accuracy by Group

As we can see in Graph 3.5, deaf high school students performed slightly higher in this task than their older peers. This could be explained by both hearing status and everyday communication habits. The younger group primarily uses TID in their daily interactions at school with their deaf friends, while the older group reported interacting primarily with hearing peers, both because there were more hard of hearing individuals in this group, who were also employed.

For Turkish writing skills at the sentence level, we can look at the answers to the open-ended questions that followed the adult level reading comprehension text, which was declined many participants. The few individuals who agreed to do the task either copied incomplete phrases or full sentences from the paragraph on top of the page, or

only answered some of the questions. Looking at the responses to this task, we can see that questions that required inference or world knowledge were significantly harder for deaf participants, than factual questions that gave direct references to the text. This could suggest that the participants were dealing with difficulties not only with comprehension, but also with limitations in expressive capabilities in written Turkish.

These findings show that the social function and significance of expressive linguistic skills is so great that it requires more attention. For this reason, I will be return to this topic and the notion of authorship in the following chapters, especially when I address the social implications of various literacies as these young deaf individuals transition to adulthood.

3.4.2. Linguistic Literacy Narratives of Deaf youth in Turkey

This section consists of two parts: one part focuses on how young deaf adults in Turkey acquire literacy in Turkish and TID, and the other part looks at their current textual and non-textual literacy practices in their daily lives based on the participants' personal accounts and my ethnographic observations. The goal is both to identify some of the critical factors that inform Turkish deaf youth's exposure to and acquisition of linguistic competencies, and to obtain a better sense of how their limited linguistic literacies are in fact employed, alongside other types of literacies and strategies, to achieve particular social goals. Before describing individual accounts, however, I give an overview of how my participants acquired TID and Turkish.

Based on literature concerning age of language exposure effects on language skills later in life, the first factor I looked at in the interviews was language acquisition

(Chamberlain & Mayberry, 2008). Only 3 high school students from 33 total deaf participants had a deaf parent, while 14 had at least one deaf sibling. The average age of exposure to TID in the deaf high school group was 7.3, while this number was 15.7 for the deaf young adult group. However, it is important to look at the ratio of pre-lingual and post-lingual deafness in both of these groups, in order to obtain a better sense of language exposure. Post-lingually deaf children loose their hearing after the age of one and typically have exposure to spoken language early in life. These individuals benefit significantly from this initial exposure to language in terms of language and cognitive development. Post-lingual deafness in the high school group was 3 out of 18, with a mean of 3 years and 6 months, while this number was 7 out of 15 in the young adult group, with a mean of 3 years and 5 months. Moreover, at least 3 individuals in the young adult group identified as hard of hearing, referring to themselves as "YARIM" in TID, which in Turkish means half. These facts together explain and help us better interpret the higher scores of the older deaf group in the language measures, especially in the Turkish lexical task and in their writing abilities.

Except for those with signing deaf parents and older deaf siblings, majority of participants learned TID from their deaf peers starting the age of six or seven when they began elementary school. There were 11 participants who learned TID past the age of 11, and 4 as late as college years. Several participants reported trying to teach TID to their family members, but in most cases the only family members who were successful in acquiring and actively using TID were their younger siblings. Among hearing parents, mothers were more likely to be fluent in sign language than fathers. There was only one native signer among all participants. One male student had two older deaf sisters who did

not know TID, because they grew up in a rural part of Turkey and did not go to school where they could meet deaf peers. Others with deaf siblings were either the older deaf sibling themselves, or their older deaf sibling attended a deaf school away from home, preventing early exposure to TID.

Despite Turkish deaf youth showing limited skills in reading and writing Turkish, there were still individuals within this group who were clearly more skilled than their peers. So, what are some shared features among participants who are more skilled as readers and writers? How are the participants that are more skilled and less skilled in Turkish different from one another, especially in their language background and their literacy narratives?

The first factor that seems to play a role in reading and writing skills is early language exposure, as mentioned above. Parallel with literature (Lenneberg, 1967; Newport, 1990; Mayberry & Fischer, 1989), deaf individuals in my study who were exposed to any language early in life, signed or spoken, also show language benefits, which we can see more clearly in the Turkish lexical task and in their writing abilities. Likewise, having conversational partners in TID at home also seems to play a role in language abilities later in life. All of the top 5 performers of the Turkish lexical comprehension and production tasks had deaf siblings at home who were also signers of TID, while only 2 of the bottom 5 in both tasks (the same individuals) had deaf siblings who could sign.

The second potential factor may be parental support in literacy acquisition. One of my observations during data collection was that those who performed better in written Turkish language tasks appeared to have either a parent or an older sibling who worked

closely with them on their literacy skills from early on. So the next step was to look at the interviews more closely to see if there was actually a correlation between parental or family support in literacy acquisition and better literacy skills later in life.

There were only 3 deaf participants who openly reported direct and continued support from a parent or older sibling during their acquisition of Turkish literacy. These three individuals were not necessarily the better readers and writers of Turkish in the group. Unfortunately, this factor was not a part of the original set of interview questions, so this number could in fact be greater. These individuals not only received literacy support early on in their lives, but were often also more regularly engaged in textual communication with their family members through their cell phones. It can be argued that such regular textual communication allows for diverse social and pragmatic contexts in which a wider set of vocabulary and syntactic structures to be necessary and functional. This way, hearing family members who are more skilled in reading and writing Turkish can be language models on a daily basis, allowing for informal lifelong learning. That is why, future work on the literacy narratives of deaf youth should look more closely at the kinds of support received from parents and other family members, as well as potential informal learning environments created through regular mediated communication between them.

Next I compared and looked more closely at the interviews of the top and bottom scoring deaf participants in the Turkish lexical tasks. The top four deaf, high school performers on the TIFALDI Turkish Comprehension Task and the TIFALDI Turkish Expressive Task were not the same individuals, although there was overlap. Nevertheless, the TIFALDI Turkish Comprehension scores of this group were strongly predictive of

their TIFALDI Turkish Expressive scores, as revealed by a correlation analysis (R^2=0.48, n=18, p=0.0006). Likewise, the top scorers on both Turkish written lexical tasks were also the top scorers of the TID versions of the same tasks, with an average of 84% for TID Comprehension and 94% for TID production for the top 5.

The two deaf individuals who scored the highest the Turkish lexical comprehension and production tasks in the high school group were the same people. They were both postlingually deaf. The top scorer was a 21-year-old male student (88% and 91.3% respectively), Ali, who was diagnosed at the age of 4 and currently identifies as hard of hearing. Ali also had the highest score in the two sentence tasks. When it came to paragraph level tasks with open-ended questions, however, he was reluctant. He declined doing the page-long narrative, stating that he gets *"confused and overwhelmed reading passages this long"*. Likewise, he only partially answered a few of the open-ended questions in the shorter passage, which required writing sentences from scratch. Ali used a lot of fingerspelling during our interview, whenever we had a communication breakdown in sign language, and he reported fingerspelling being one of the primary means through which he communicates with his hearing mother and sibling at home. Ali also reported to having learned English in 7th grade, and having acquired "European Sign Language"[61] and ASL by himself, through watching videos online. However, he wasn't aware of TID videos on Facebook. I will come back to Ali's story in the next section, with respect to literacy sponsorship.

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61 It was a common for my deaf participants to refer to other sign languages as "European Sign Language", likely referring to the pidgin/International Sign that they encounter online when signers from different countries communicate with one another. But this is also parallel with a common discourse among the less educated Turkish population in referring to foreign countries simply as "Europe", despite their geographical location (i.e., Israel, US, Australia).

The second top scorer on these two lexical tasks was a 17-year-old female student, Ece, who lost her hearing at the age of 2.5 due to sickness and high fever. Both her parents are hearing with elementary school degrees only. Unlike her mother, her father likes reading books and he also learned TID from her. Ece also used fingerspelling as a recovery strategy when I could not comprehend her signing.

The next highest Turkish lexical comprehension score in the group belonged to Alev, the only deaf of deaf participant in this study. Her parents also only have elementary school degrees, while her dad is a better reader than her mother. Alev's score went down almost by half in the Turkish lexical production task, however. This shows that reading performance is not necessarily indicative of writing performance. In the sentence comprehension tasks, she had the second highest score in the 9-item task, and third highest in the 16-item task.

It was interesting to note that the deaf high school students' subjective reports of their Turkish skills did not predict their Turkish (TIFALDI) Lexical Comprehension scores, as revealed by a correlation analysis (R^2=0.08, n=16, p=0.15). The fact that especially the less skilled participants overestimated their comprehension skills in Turkish is exactly the problem that I have with subjective census report based literacy rates used in Turkey and other UN members. During census reports, it is even more misleading, since they only get to choose between literate and illiterate. Likewise, neither mothers' nor fathers' education levels were predictive of the participants' scores in any of the literacy tasks in Turkish.

So, what are some common features across those individuals who performed the best in these language measures? Overall, when we look at better readers in the high

school group, we see that the top three scorers have all benefited from early language exposure. While the top two were postlingually deaf individuals with early spoken language exposure, the next best performer was the only deaf participant with deaf parents in the group, who had full sign language exposure from birth onwards. Also, those who performed better in the language tasks had a habit of turning their mistakes into learning opportunities by asking me clarifying questions, wanting to know the correct answer. They also were relatively more interested in the interview sheets in front of me, as well as the notes that I was taking.

Here, I provided a summary of results for the language measures that I have used to try and measure my participant's skills in written Turkish and TID, in three levels. In the next section, I will address some of the trends in which my participants have acquired these skills, as well as the collaborative nature of acquiring literacy.

3.4.3. Everyday textual practices, Literacies and Transliteracies of Deaf youth in Turkey

3.4.3.1. Sponsors of Literacy and Transliteracies as Social Capital

> **Hasan** (male, 25, hard of hearing, TID signer): *I used to go to Silivri [a coastal town about an hour away from Istanbul city center, by car] in the summers, back when I was a student. I could easily go swimming everyday. There, there were a lot of deaf people. They were doing really badly. They don't know their sentences. They don't know how to write. At the beginning I got really frustrated, but then I helped them a lot. I taught them sentences. I taught them suffixes, like you know, for example "geliyor-UM" [ENGLISH: "I" am coming] or "geliyor-SUN" [ENGLISH: "you" are coming], [referring to tense and case marking in Turkish]. Some improved a little after that. There, in Silivri, there are a lot of deaf people who are not educated. They are really ignored and it is really bad. But they get together a lot. And I joined them too…I didn't look down or anything.*
> **Deniz***: So is this after you were 15 years old, more or less?*

> **Hasan:** *Yes, that was before I entered College. I used to go there during the summer break. Then after College, I began spending summers in Istanbul…(getting my attention as I take notes)…you know, in Silivri, it's like a village. They were all illiterate and ignorant. So I really enjoyed going there, catching their mistakes and teaching them."*

This is not the only instance where more competent peers mentoring less competent peers on language came up in the interviews. Both at the vocational high school for the deaf and during the interviews with young deaf adults, it came up that especially hard of hearing individuals serve as mentors and intermediaries between the teachers and students. The next example is an excerpt from my interview with one of the vocational high school students.

> **Deniz***: Does your computer teacher know sign language? For example, if he's introducing a new topic, can he explain the concepts in sign language with ease?*
> **Ali** (male, 21, hard of hearing)*: Just a little. I get online and try to understand. If I don't, then I call him for help. He sits next to me, we do it together, and then I understand. When I do, I go ahead and teach other students in the class, so that they can understand it too…I do that in other classes too.*

Ali is 21 years old and is still in 11th grade because he began school late, at the age of 10. Born with some residual hearing, Ali became deaf when he was almost five years old. Despite starting school at a much later age, he seems to have benefited significantly from having some initial yet limited access to language through the auditory channel. Ali in fact scored the highest in TIFALDI's lexical comprehension and expressive tasks, in the high school group.

Ali lost his father when he was seven. His mother, who migrated to Istanbul from an Eastern rural town, never went to school and was at a loss for Ali's education for a long time. At the time, she was more concerned with making a living so that she could

take care of her five children, by cleaning houses. Nevertheless, she also acquired literacy in written Turkish by attending a literacy program. It wasn't until Ali's better-educated maternal uncle took him by the hand and explored educational possibilities for deaf and hard of hearing that they found a fitting school for him. Ali has a younger deaf sister, who is also a student at the same school and grade. As the second deaf child to the family, she was luckier to benefit from Ali's and his family's experiences, and have access to education much sooner than him.

The majority of my deaf participants came from low educated and low SES families in which the majority of older siblings were more educated and knowledgeable than their parents. In many of these families, these older siblings served as literacy sponsors for their younger deaf siblings. Brandt defines literacy sponsors as *"any agents, local or distant, concrete or abstract, who enable, support, teach, model, as well as recruit, regulate, suppress, or withhold literacy—and gain advantage by it in some way"* (Brandt, 1998, p. 167). Many hearing older siblings in my study were instrumental in locating educational services for the deaf and convincing their parents to send their younger deaf siblings to school, similar to what Ali's uncle did for him. Some of them physically taking their younger deaf siblings by the hand and taking them to school, despite their parents' reluctance. As we will see in the next section, these hearing siblings also continue to serve as life-long language models in Turkish as they engage with textual communication on a regular basis via digital technologies. Deaf older siblings, on the other hand, often serve as sign language models for their younger siblings, both deaf and hearing. This benefits especially the deaf siblings, by creating a richer conversational environment at home from an earlier age than they themselves had the opportunity for.

The individuals mentioned above can be considered the literacy sponsors for their younger, less educated, less aware or less literate peers. While Ali's uncle was his literacy sponsor, over the years Ali himself became the literacy sponsor for his younger deaf sibling, as well as his less competent peers in the classroom. Ali's is not an isolated case in Turkey however, in that the more language competent or better hearing deaf individuals function as mediators in the classroom setting. As we saw in the previous chapter, with a few exceptions, the teachers of the deaf in Turkey are not fluent in TID, even at the conversational level. This creates a significant communication barrier in the classroom, which is partially overcome by more competent students like Ali, who almost serve as a teacher aid. More about this will be addressed in the conclusion section of this chapter and the dissertation.

Such bimodal-bilingual capacity can also be considered as a kind of transliteracy.[62] As discussed by Sue Thomas, transliterate individuals are often located at the boundaries of or intersections between communities (of practice), and they are the ones who can access both communities using the literacies of these communities. Thomas defines transliteracy as *"the ability to read, write and interact across a range of platforms, tools and media from signing and orality through handwriting, print, TV, radio and films, to digital social networks"* (Thomas, web[63]). While multiliteracy refers

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62 Transliteracies is only a decade old concept that came out of a multidisciplinary project concerned with the intersection of reading and digital technologies, directed by Alan Liu from the University of California (UC), Santa Barbara. The project soon became a larger multi-campus UC research group, concerned with the critical study of online reading. Since the Future of Creative Technologies Conference in 2005, however, we also see the development and dissemination of the of the more inclusive term "transliteracy", mainly by Sue Thomas and her colleagues at the Institute of Creative Technology at De Montfort University.

63 http://suethomasnet.wordpress.com/transliteracy/

to being skilled in multiple forms of literacy, transliteracy is the skill of juggling and successfully drawing from these multiple literacies depending on the situation. According to Thomas, transliteracy is a move toward *"a unifying ecology of not just media, but of all literacies relevant to reading, writing, interaction and culture"*. I also find the idea of media ecology critical here in interpreting literacies as situated practices, a concept that goes back to McLuhan (1964) and was further developed by Neil Postman in 1968. In this sense, transliteracy is both a skill that is required from the teachers of the deaf, and a quality to be nourished in students, deaf and hearing alike. Transliterate individuals are the most mobile communicatively as well. For this reason I will revisit transliteracy in the next chapter, in the context of mobility and language repertoires (Blommaert, 2010).

3.4.3.2. Mediated Textual Communication, Smart Technologies and Emerging Literacies

With the prevalence of digital and mobile communication technologies, contemporary textual practices predominantly take place in the digital platform, and rarely involve handwriting anymore. Especially among mobile individuals, the portability and accessibility of the medium of textual exchange is an important factor in this preference. Thus, paper and pen/pencil is no longer used by many, urban and rural alike. Especially with many elementary schools gradually discontinuing the instruction of handwriting or cursive, it is slowly becoming obsolete with newer generations, who rely less and less on it in everyday interaction. This shift also applies to everyday textual practices of deaf people.

Textual communication can be utilized both when the interlocutors are physically co-present and when they are at a distance. Writing has traditionally be a mutually accessible communication method preferred among deaf and hearing interlocutors when face-to-face, in order to overcome the conversational language modality barrier. While older generations of deaf people used to write notes back and forth to interact with the hearing, this too is gradually being replaced with typing on shared mobile devices that are readily accessible. Everyone has cell phones with texting capabilities now, if not smart phones. Not only can these technologies effectively produce legible texts compared to variations in handwriting, but most also have auto-correction features that can support individuals with poorer textual-literacy skills. Textual communication can also be used when the parties are at a distance, between deaf and hearing alike. Historically speaking, the telegram and the fax machine have been the two widely used textual communication technologies in most parts of the world, including Turkey. Due to their visual nature, these technologies have typically been adopted by deaf people (Power, Power & Horstmanshof, 2007). In addition, deaf people in North America also had access to *teletypewriters* (TTY) 1960s onwards, which is an electronic device that uses the telephone line for textual communication (a.k.a. *textphone* in Europe and *minicom* in the UK). TTYs could then either be connected directly to each other, or to a voice caller via a relay operator who also had a TTY. Later TTYs were portable enough for deaf people to travel with. Pocketsize TTYs with cell phone compatibility are still available today, yet underused due to the prevalence of smart technologies. Unlike the telegram and the fax machine, TTYs never made it to Turkey. In that sense, synchronous electronic or digital textual communication only became available in Turkey in late 1990s with Internet Relay

Chat clients like mIRC[64] and ICQ, which were only accessible via desktop computers at the time.

A possible explanation of the sharp difference between Turkish and American deaf youth in textual literacy could be related to the lack of any teletypewriter technology for the deaf in Turkey, in contrast to their long presence in the US since the 1960s. It is likely that deaf people in the US have acquired the skill and culture of elaborate textual communication that is readily transferred to e-mail, whereas Turkish deaf people have traditionally relied on other mostly non-textual, gestural or indirect means to communicate. My findings confirm Power & Power's (2010) findings from their study with deaf people in Australia, that a low level of literacy is one of the impeding factors in a deaf person's benefiting from the full range of visual communication technologies.

Unlike texting, e-mail is not a common practice among deaf youth in Turkey. This preference is likely due to literacy problems and the prevalence of online video chat from home computers that allows for direct communication in sign language instead. This tendency is not parallel with the statistics on e-mail use among the Turkish population at large (72%), and also potentially limits these individuals' asynchronous interactions with non-signers. This is probably why they prefer text messaging to email, since the former is a genre of textual communication that permits the use of simpler sentences and abbreviations to communicate with one another.

Mobile phones are a part of almost all deaf individual's daily life in Turkey, and smart phones are increasingly becoming prevalent as they become more affordable. The two primary means of communication preferred by my informants were text messaging

64 http://www.mirc.com/

using cell phones and instant messaging using MSN. As MSN has retired as of April 2013, I have been informed that this conversation has since primarily shifted to Skype, with some increased use of Facebook messaging. This topic will be covered in more in the next chapter with respect to the communicative mobilities afforded by such technologically mediated interaction.

According to my informants, for long distance communication, text messaging with cell phones is the primary means through which young deaf people in Turkey communicate with their family members. However, there appears to be three major factors that inform their access to and use of text messaging: (1) their own textual-literacy abilities, (2) the textual-literacy and digital literacy abilities of their family members, and (3) the socio-economic status of their families.

As early adapters, my participants were rarely limited in their digital literacy skills in using and navigating the textual communication components of their mobile or smart technologies. On the other hand, if they themselves or their parents were not skilled enough in written Turkish, textual communication ceases to be a viable option among them. Interestingly, more of my participants reported being limited by their less educated hearing parent's literacy skills than their own. There were many deaf participants from the high school group, who reported that either one of their parents (but mostly mothers) did not know how to read and write. So these deaf individuals could not use text messaging with their parents, even though they themselves were actively doing so with other relatives or friends. Likewise, some parents were not comfortable with either typing or navigating cell phones, although they did know how to read and write in Turkish. In these cases, deaf individuals relied on hearing people in their physical proximity to talk to

their parents on their behalf (i.e., teachers, administrators, friends, parents of friends). I will return to this last point in the next chapter when discussing the situated strategies around mobility with respect to literacies.

The socio-economic status and education level of families impacted the use of smart technologies in two ways. The first one is more obvious, in that it affects whether or not the deaf child owns assistive and communicative technologies, and if so, of what quality. The second and more interesting effect of parental SES and education is the ways in which these technologies are used and maintained in the long run by their deaf children. Many of my informants reported having broken hearing aids or having batteries in need of replacement for many years. Their parents either did not have the financial means, the time since they were working, or the world knowledge as to how to fix this problem. On the other hand, a significant number of my deaf participants indicated using more affordable packages in their smart phones, with limited access to Internet and multimedia exchange services. It was common practice to keep the 3G off in these devices, such that it would only be turned on either earlier in the month when their parents could pay for it, or if there is a communicative emergency. This is important, as the video chat function is not available without 3G, preventing dialogues to take place in TID. This is why they temporarily turn their 3G back on only when text only communication fails with their deaf friends to resolve the conflict in TID. Similarly, when the connection speed is a problem, they instead share images or videos to support their communication.

Based on my observations of the written Turkish skills of younger and older Turkish Deaf adults on Facebook, I can say that the majority of deaf people in Turkey are

not skilled enough in standard written Turkish to effectively express their complex thoughts and ideas in text. However, this does not stop them from engaging in regular textual conversation online. That is to say, the majority of written exchanges are either simple or incomplete Turkish sentences, or a long series of words that are typed using no punctuation or violating Turkish morpho-syntactic structure. Instead, many appear to be using Turkish words to represent TID, such that only thinking in TID makes these textual utterances intelligible to others. This is by no means specific to the Turkish Deaf community. Also, referred to as "glossing", this is a symbolic manipulation tactic used by many Deaf people around the world, exploiting the written word to represent sign languages (Okuyama, 2013). More comparative studies with this age group is needed to see the strategic differences in how deaf and hearing youth populations manipulate textual norms to fit their communicative needs, and to what extent these practices are later adopted by populations at large.

Even more intriguing is how the exchange of multimedia and especially video content in TID seems to be changing the nature of deaf people's online textual exchanges in Turkish. Looking at the "Comments" feature of Facebook, and comparing the threads under photo posts with those that are under video posts, there seem to be a significant qualitative difference between them. It appears that the ability to post more complex ideas in TID by video sharing creates a context in which other deaf people engaging with those videos are motivated to use Turkish in more complex and creative ways. Likewise, the accessibility and content of these videos also trigger responses from other deaf people who post and share sign language videos on their wall. This trend is very similar to the interactive practices around YouTube Vlogs in ASL.

Statistics show that only 24.1% of the Turkish population uploads original text and audiovisual content for public sharing (IAB, 2011). In the earlier phases of my dissertation work (2012-2013), I saw a similar trend among deaf people in Turkey, such that posting original sign language videos via social networking sites was not a common practice. This was partly due to cultural reasons, considering hearing Turkish people do not necessarily share videos of themselves either. Except for a few deaf individuals, TID content on Facebook had been limited to those produced by organizations like TSMF and TSFD. In the past year, however, there has been a significant rise in the sharing of TID-based video by deaf individuals in Turkey, on a range of topics that are of concern to their community. In Chapter 5, I will be addressing this topic at great length, both historically and qualitatively.

3.4.3.3. Literacies around Gaming

Both my in-depth interviews and online observations of my Turkish deaf contacts on Facebook point to another important catalyzer of social interaction, and that is online gaming. Despite a period of hesitation and skepticism among scholars on the effects of video games on children and adolescent cognitive and social development in the 1980s, the majority of more recent work point to the psychosocial benefits of gaming instead. These benefits range from *computer literacy* (Benedict, 1990), *visual attention* (Bavelier & Green, 2003), *problem-solving skills* and *higher-level thinking* (Gee, 2003; Johnson, 2005), *empathy* (Luff, 2000), *therapeutic effects and emotional readiness for learning* (Csikszentimihalyi, 1990; Turkle, 1995), and *collaborative learning* (Hertz, 2002). Based on the fact that learning is a social practice, and emphasizing the value of *situated*

learning (Lave & Wenger, 1991), many scholars agree that different game genres can offer environments where particular psychosocial states and skills can be promoted to improve learning and socialization.

One of the ways in which games can help with literacy is at the level of lexical acquisition, especially in the case of language games, both online and offline. One such game that is becoming increasingly popular among deaf people in Turkey is a picture-word association game called "*Resimli kelime bulmaca*",[65] which is a Turkish adaptation of the original game: "4 Pics 1 Word".[66] This is a game where players are given four images sharing a similar quality that can be identified with one lexical item. Their task is to come up with that lexical item by using the letter tiles that are provided below. These target lexical items can be nouns, adjective and nouns. Both the nature of underlying similarity between images and the words vary in complexity throughout the game. This game is a cross-platform application for smart phones and tablets, largely promoting solitary play and cognitive linguistic skills. However, I think that the more interesting aspect is the collaborative opportunities that the use of this game in conjunction with social media.

65 https://play.google.com/store/apps/details?id=com.tgw.RKB
66 https://itunes.apple.com/us/app/4-pics-1-word/id595558452?mt=8



Figure 3.1. Screenshot of Facebook Post on Language Games

This application has a Facebook integration option, where one can connect with friends on Facebook and collaborate on the task of finding words. One of my deaf informants, whom I called Beliz in the opening of this chapter, is in her early twenties and is quite active on Facebook. Beliz either uses this function or more frequently takes screenshots from her smart phone whenever she is stuck finding a target word. She then shares this screenshot on her Facebook wall along with "Does anyone know this word?" or a simple "??". These inquiries create threads joined by deaf and hearing friends in her circle. These threads of varying length are made of a series of correct and incorrect lexical attempts by her connections. Soon after the inquiry begins, the correct target word is identified either by an individual or as a collective effort. This allows her to move on to the next puzzle, and to have access to a new set of concepts and lexical items.

These threads are often seen as opportunities for other deaf and hearing friends to both become aware of the game and sometimes to share their own inquiries for support. Since Beliz's threads already establish a community of practice around the task, others take advantage of this interaction. Instead of posting their screenshots on their own Facebook walls, they instead post these images in Beliz's thread and capitalize on her expertise in the game and connections. In the meantime, Beliz becoming more and more experienced in the game, she can in fact provide support to her friends who are newcomers to the game. This is a beautiful example of situated learning (Lave & Wenger, 1991), where the practice of and engaged participation in the social interaction around the game creates a particular community of practice, in which many levels of learning is possible.

In addition to practices of textual literacy, the activities around this game tap into various kinds of digital literacies, such as downloading new applications, taking screenshots on a smart phone, and uploading images to Facebook, etc. In addition, this game like many other online game communities, have external message boards or blogs in which previous players offer cheat sheets. To the extent that deaf people come to know of, access, acquire and use these resources effectively to improve their performance, we can also talk about practices of information literacy around this game.

Another way in which deaf youth in Turkey encounter other written languages and engage with textual communication in these languages is through multiplayer Internet based games. During their interviews, nine of my deaf participants brought up that they regularly play online games (7 male). Some of the online games mentioned by male participants were *Grand Theft Auto* (action-adventure), *FIFA* or *Pro Evolution Soccer [PES]* (soccer simulation), *CounterStrike16 [CS16]* (first person shooter), *Age of Empires* (real time strategy), and *Metin2* (Massively Multiplayer Online Role-Playing Game- [MMORPG]). In addition, two male participants reported playing games on Facebook, like *Top Eleven* (soccer management) and *Mafia Wars* (strategy). There were only two female participants who brought up online gaming in the interviews. One of them mentioned playing Silkroad (MMORPG) and basketball games on Facebook, while the other stated playing backgammon, chess and rummikub (also called Okey in Turkish), all of which are common games in Turkey to play face-to-face. Gaming appears to be a gendered practice within deaf youth, similar to the Turkish population at large. According to a survey by Tahiroglu, Celik, Uzel, Ozcan & Avci (2008) with 3,975 sixth to twelfth-graders (12-18 years old) in Adana, Turkey, only 41.6% of female students reported

playing games online, while this number was 86.6% for male students. This is important to consider with respect to literacy practices, as multiplayer games preferred by male deaf participants potentially engender more opportunities for textual communication and negotiation, unless visuals for the game are utilized as conversation starters on Facebook as we saw in the previous example.

Overall, there was a preference for soccer or strategy games among male participants that are often multiplayer with real time interaction. Especially on Facebook, but also with a few other online games, participants indicated a preference for private sessions with friends. Here's a student explaining how he coordinates with his friend to play CS16:

> *P: Let's say I'm sitting at home, in [neighborhood X], and then a friend is all the way [in neighborhood Y]. I send him a message and tell him: 'Give me your IP number!' He sends it to me and I put the number in. Then we are connected online. That's how we play.*
> *Deniz: And these are your deaf friends?*
> *P: Yes, deaf friends, correct.*

However, there are two interesting issues that are important to discuss here. First of all, online games like these seem to encourage textual communication both before and during the game session. Before the game, there is a need to coordinate the logistics of meeting online, which is often a brief series of exchanges. In addition, some of these games like CS16, have chat functions built in, where players can carry a conversation that extend throughout the game. The majority of such real time multiplayer online games require textual negotiation of some kind as players from around the world coordinate around a task. While many, especially the younger deaf participants, prefer private sessions where they share an online space with their existing deaf friends, others in fact

interact with hearing strangers who just happen to be interested in that particular game. So the activity of gaming provides them the motivation to socialize with hearing strangers and to engage with textual communication on a daily basis. Although gaming jargon can be more minimal and different than other textual communication, this still suggests that they have opportunities for being regularly exposed to written Turkish from hearing peers too. Since these online games are open to players of varying ages and nationalities who speak different languages, often players agree on English as the language of choice. These games then become activity spaces in which written English serves as a valuable tool for navigation. I will soon come back to online practices around written English, in the context of social media.

The second important point is to acknowledge the extent of digital literacy that is required to operate these technologies around gaming and to coordinate socially around them. Participating in these online games require the ability to (1) operate a computer, (2) to find, download and install the game, (3) to follow the instructions and navigate the gaming space, and finally (4) to be able to connect to other players by using Internet Protocol (IP). In addition, among those who prefer private sessions with friends, often other hardware (mobile and smart phones) and software (*MSN, Skype, Facebook, Whatsapp* and other communication software) are used to coordinate meeting times and other details. In the next chapter I will revisit this topic of gaming, this time in the context of social networks and mobilities around these online activities. There I will also discuss in more detail, the implications of similar activities with respect to virtual, communicative and physical mobilities of deaf youth in Turkey.

As we can see here, the kinds of social interaction, literacy practices and situated learning that takes place around online and offline gaming among deaf youth in Turkey and other parts of the world deserves more attention. Similarly, a detailed study on deaf people's use of Turkish on Facebook would be extremely valuable in understanding their actual writing skills and practices.

3.5. Conclusion

My goal here was to provide a pluralistic and situated picture of the literacy skills, narratives and practices of deaf youth in Turkey, as they intersect with prevalent technologies of information and communication. Partly with the purposes of bringing current shifts in Literacy Studies to Deaf Studies or Deaf Education, this is also an intentional shift from a discourse of lack to one of existing vernacular strategies and competencies around new media. Understanding that such technologies are social artifacts that are designed and selectively repurposed to support and extend our connections and agencies in everyday life, this chapter as well as this dissertation, also takes a pragmatic standpoint in its interpretation of deaf people's literacies. Now let's revisit some of the important findings on the literacies of deaf youth in Turkey.

The findings of my dissertation work confirms earlier studies in the field. Similar to other deaf populations around the world, deaf youth in Turkey have very limited skills in comprehending and producing textual language. While we can begin to see this limitation as early as the lexical level, it becomes even more drastic at the sentence and paragraph levels, where morphosyntactic awareness and skills (i.e., case and tense marking) are required for the construction of basic arguments in Turkish. This confirms

my initial speculations that deaf people in Turkey go through elementary and high school education without becoming functionally literate in written Turkish. With a few exceptions, deaf people in Turkey are unable to comprehend text-based narratives in mass media, let alone expressing their thoughts and ideas accurately in written Turkish. Over time, this also leads to disinterest in text-heavy social platforms, and limits their world knowledge and awareness of current events. Up until this point, these findings paint a dark picture, but the story does not end there. Deaf youth in Turkey still rely primarily on text in mobile communication, both with their families and their deaf peers, especially when finances limit their use of 3G on their devices. As we will see more of in the next chapter, cheaper Internet connections at home, paired with webcams, allow for direct communication in sign language among young deaf people.

Looking at deaf individuals with better textual literacy skills, early and continued access to language appears to play the biggest role in their competencies. We can see this in the finding that those who scored higher on my Turkish language measures were either postlingually deafened individuals with early exposure to spoken Turkish, better hearing individuals who have access to spoken Turkish, or deaf individuals from signing deaf parents who had early exposure to TID. The deaf participants in my study also seemed to have benefited from having conversational partners at home. More of the higher scorers in the Turkish lexical tasks had signing deaf siblings at home than the lower scorers. When parents were from rural parts of Turkey or were less educated, we see older siblings stepping in both to guide their parents in finding the right educational services for their younger deaf siblings, and also to serve them as lifelong language models though regular textual communication in Turkish via mobile technologies.

As addressed in the previous chapter, teachers of the deaf in Turkey are generally unskilled in TID, which makes instruction and communication close to impossible in the classroom. In these instances, whenever available, we see better hearing or linguistically equipped deaf students stepping in to take on the mediator role in the classroom. According to the interviews, this applies more to the vocational high schools for the deaf, where the teachers are typically trained only in the subject areas and not on Special Education or Deaf Education. This is one of the reasons why the rapid employment of competent bilingual deaf adults as teacher aids in Deaf Education is a critical action to take in Turkey. This can be a transitional strategy while teacher training programs are improved, advanced TID signing skills become mandatory, and the necessary accommodations are made, such that motivated deaf individuals can become teachers of the deaf themselves. It can also be a more permanent shift in educational policy, such that deaf teacher-aids serve as communication facilitators and language models for young deaf pupils when their teachers are hearing non-signers.

My research proposes that digital literacies of deaf youth in Turkey far surpass their textual literacy skills. With a few exceptions, all my deaf participants have mobile or smart phones, as well as computers with webcams at home. Like their hearing peers, deaf youth in Turkey are also among the early adapters of new technologies. Their limited literacy skills in Turkish does not seem to limit their awareness or use of latest hardware or software. Just like with language related literacies, technology related literacies are also often acquired from more competent peers in informal social interaction. In many ways, they become each other's literacy sponsors.

My second question was the extent to which their new media literacies could offer new opportunities to overcome social barriers and their limitations in textual-linguistic literacy. The short answer is, yes they do. Not only that new technologies allow for improved connectivity and increased interaction among deaf youth in Turkey, visual and multimodal affordances of social media create novel opportunities for textual engagement among them. The presence and the active participation of Turkish deaf youth in social media have been on a rise in the past years, particularly on Facebook. Being able to express more complex ideas and concerns in social media via screenshots, photos and videos, also appears to increase their motivation to engage with and become more competent in textual communication. We can see this in the textual interaction following such visual media, compared with text only exchanges. Likewise, online gaming practices also lead to new purposes and opportunities for textual communication. In as much as meaningful and accessible social interactions take place in these online and offline spaces that are mediated by visual technologies, limited textual utterances also get anchored in ways that make comprehension and learning possible.

This relationship between literacy related competencies and everyday practices, is crucial to understanding the critical literacies required by deaf people to effectively navigate 21st century social life in Turkey. That is exactly why the next chapters will be looking more closely at what forms this "social navigation" can take, by discussing how these literacies intersect with the mobilities and agencies of deaf youth.

In addition, my work reveals a collaborative tendency in the ways that Turkish deaf youth's literacies are utilized in everyday life, where individual competencies matter not only to the individual, but also to their social networks. These competencies serve as

a form of social capital that fulfills both individual motivations and those of their communities, a collaborative tendency that is illustrated by yet likely extends beyond the deaf community.

Deaf youth in Turkey resort to a range of communicative strategies with one another depending on diverse juxtapositions of the textual literacies of interlocutors, the technological infrastructure and devices at hand, as well as the financial constraints on their choice of services. Exchanging instant text messages, photos, locations through the use of GPS based technologies, and videos in TİD are among these strategies. In sum, new media does seem to offer new opportunities for social interaction, collaboration, learning and authorship to young deaf people in Turkey. However, there still appear to be some limitations as to how much new literacies can improve their social navigation and civic participation. That is precisely why in the next chapters I will be addressing how these emerging technologically mediated practices all relate to the mobilities and agencies of deaf people in Turkey.

Limited sections of this chapter are reprints of the material that appeared in the book chapter Communicative Practices of Deaf People in Turkey and the Sociolinguistics of Turkish Sign Language in a volume edited by Arik, E., Cambridge Scholarly Press, 2013, as well as translations from a forthcoming book chapter in Turkish, in a volume edited by Arik, E., Koc University Press. Other sections of this chapter will appear in the book chapter Social Media Practices of Deaf Youth in Turkey: Emerging Mobilities and Language Choice in a forthcoming volume edited by Friedner, M. & Kusters, A., Gallaudet University Press. The dissertation author was the primary investigator and author of all three of these book chapters.

CHAPTER 4: Mobilities and Social Networks of Deaf Youth in Turkey

Gülnaz is a fifteen-year-old deaf woman who lives in a remote village in the Central Taurus Mountains of Turkey. Until recently, rough winters made it difficult for any transportation to and from the village. Snow covers the roads for many months of the year, forcing those living in the village to be self-sufficient. Villagers grow their own produce, and care for livestock like goats and sheep. Wheat fields and apple trees that once provided for the village in abundance are slowly being replaced with walnut trees that are more profitable to farmers and resilient to changes in climate. Many of the villagers have not traveled beyond nearby towns. Even such small trips have been rare for women who work at home, though some men travel for business.

The older members of the village trace deafness seven generations back in this village. Not every generation has produced a deaf child. About three generations ago, there were more deaf children and adults, giving birth to a village sign language, Central Taurus Sign Language (CTSL). Gülnaz has a hearing mother with an elementary school degree, and a deaf father, who was not sent to school like many of his deaf peers in the village. This is changing with younger generations and both deaf and hearing children now attend school. The closest town is growing in size and services, exposing those who live in villages to many of the material goods of modern society. Young couples with deaf children are moving to the city if they can afford it.

Gülnaz loved going to school. For five years, she attended an elementary school for the deaf in the nearest large city, roughly a two hour drive from the village. She stayed at the dormitory with other girls from nearby towns, and came home during holidays. She excelled in all of her classes, learned TID, and made a lot of friends. When

she was 11, just before she could finish elementary school, Gülnaz came home for good. She was born with a degenerative bone joint condition, and her physical mobility has declined significantly in the last couple of years. None of the schools for the deaf in the area could accommodate her physical condition, so her parents decided that it would be best to have her at home, where they could continue to provide for her increasing needs.

Gülnaz misses her friends and the social environment at school. She has found ways to stay in touch from a distance. She does not own a computer, but has a smartphone that allows for texting, sharing photos and videos, and access to social media. Though most people in the village own mobile phones, the mobile Internet connection in the village is very weak. Despite all the features of her phone, her actual use of Internet-based services such as video streaming has been very limited. Additionally, her limited monthly plan only allows for only a certain number of multimedia exchanges. She sometimes goes to an older neighbor's house to use her desktop computer and webcam, so that she can video chat with her friends from school. The neighbor is in her 40s, lives in the city and comes back to the village during the summer. She is one of the few people in the village who has cable Internet connection.

Gülnaz mostly uses texting and Facebook to keep in touch with her friends. She has almost 400 contacts on Facebook. Most of these contacts are friends from school, and others are friends of friends who have added her. With such low speed Internet connection, however, it has been a challenge for her to acquire this online network. In fact, the origin of this network was a collaborative effort with one of her best friends who lives in the city and has high-speed connection at home. Her friend not only set up a new account under her name, but also added most of her own contacts. Once the account was

set and the connections were made, all that Gülnaz had to do was to change the password and make some tweaks to take over this account. Gülnaz has her phone with her at all times and checks her Facebook everyday. She follows how her friends are doing and regularly posts photos that she takes in the village. "Her photos get at least 40 likes! People love them!" says her hearing cousin Hasan, who also has deaf parents. Growing up with two cousins who have been to deaf schools, Hasan is also a signer of both CTSL and TID.

Texting is the main tool that Gülnaz uses to communicate with her mother, relatives and friends from school. Her deaf father doesn't know how to read and write, so unlike other villagers, he does not own a cell phone. Gülnaz cannot walk long distances on her own and often needs to be carried to the car to travel. Since Gülnaz depends on her father for her physical mobility, she needs to be able to reach him from a distance. If her parents are together, she simply reaches him by texting her mother. But if he is away, Gülnaz has to go through a chain of mediators to reach her father. Let's say she is visiting a neighbor in the village and wants to tell her father to come get her at a certain time. First she finds a hearing person to call the coffee house, where men of the village hang out, located not too far from their home. Someone from the coffee house then looks for her father in the small village or walks over to Gülnaz's family home. Once her father is located, this person explains the situation to her father. If further negotiations are necessary, her father either comes to the coffee house or they call back using this messenger's cell phone.

4.1. Introduction

Since the turn of the century, our lives have been increasingly impacted by digital

and mobile technologies that mediate our everyday interactions. These new technologies of information and communication lead to new mobilities: they create novel patterns of movement, paths, and relationships between people, objects and ideas, extending our social practice beyond the physical realm (Latour, 1997; Urry, 2000, 2007). According to Urry, the concept of 'mobility' is pivotal in understanding late modern individuals and the societies within which they live. Urry emphasizes the need to study mobility in its multiplicities, following individuals as they interact with increasingly complex tools that extend further into space and time. Hence he proposes five interdependent "mobilities": corporeal, physical, imaginary, virtual and communicative (See Figure 4.1).

Mobility has been of primary concern within the borders of the European Union (EU), where the reconfiguring of national regulations and policies aims at improving the movement of people and goods, both within and across national borders. Understanding the factors involved in changing mobilities has led to the field of Mobility Studies. Established in 2003, the field brings together scholars from Urban Sociology, Human Geography, Transportation Studies and Anthropology, who work on issues of "diaspora, migration, transnationality, and global interaction." (Interview with Todd Presner, n.d.). The increasing interest in the field of Mobility Studies by scholars captures the conceptualization of mobility as social capital, especially for the 21st century global citizen. Kauffman, Bergman & Joye (2004) bring in Castell's (1977) formulation of mobility as "the social production of spatial forms", and how these spatial forms play a role in "the structural formations of a society" (ibid.: 138). I will return to this point in the next chapter, with respect to the agencies that are afforded by the mobilities practiced by deaf people in Turkey.

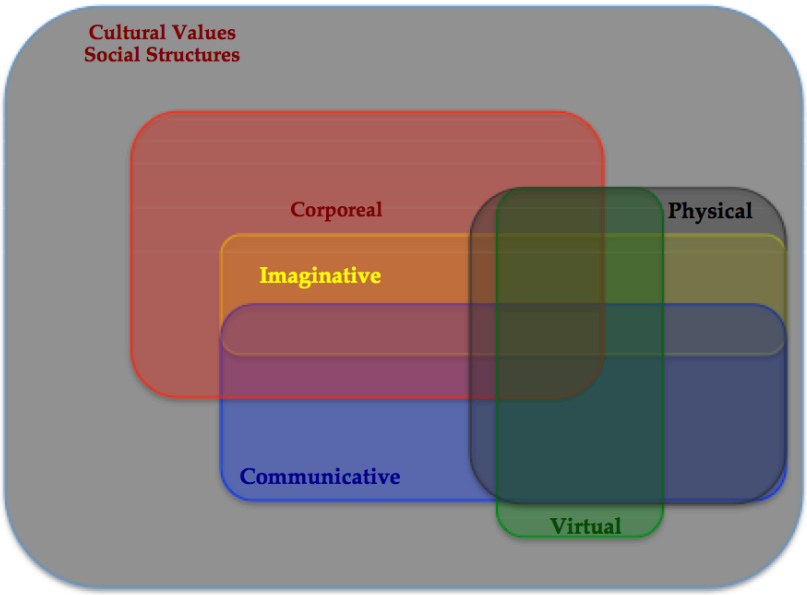


Figure 4.1. Graphic representation of Urry's (2000) intersecting mobilities

Despite the multiplicity of mobilities in the framework of Mobility Studies, there is still an emphasis on corporeal movement. Most of the studies in this field focus on the psychosocial outcomes of and the perception of time-space relationship for those who are engaged with modes of transportation (Nowicka, 2006; Conradson & Mckay, 2007; Ureta, 2008). Only more recently has the field turned to the study of mobile technologies (Christensen et al., 2011; Fortunati, 2005; Larsen, Axhausen, & Urry, 2006; Rettie, 2008).

The field has been criticized for exaggerating and romanticizing the positive effects of one's ability to transport oneself in 21st century life, such that being mobile is viewed as "good" and remaining immobile is "bad." Following this train of thought, Neyland (2006) asks a different question: "When so many sociotechnical systems are oriented toward mobility, what are the costs of standing still?" (p. 364) Likewise, one could also ask: are there any benefits to immobility?

Here, I make the distinction between voluntary and involuntary states of being mobile or immobile, as well as individual versus social aspirations. Both the aspiration of and the realization of mobilities are often tied to those of others, particularly those who are closely related in one's social networks. While these distinctions are often made in contemporary Migration Studies (Hammar, Brochmann & Tamas, 1997), they are relatively less articulated in studies of 21st century mobilities. While it may be perfectly fine, safe and productive to not engage in movement, inasmuch as it creates a sense of restlessness for the individual, it can also create conflict. What if the individual is not aware of the possibilities of destinations and travel?

Mobility has been a concept less researched within Deaf Studies. This is perhaps due to the traditional academic emphasis on the physical properties of human movement. Mobility has been picked up and problematized by Disability Studies scholars and activists, in their critique of dominant social structures that assume idealized "abled" bodies in their design. Deaf people's struggle for social and economic equity has been less about the physical obstacles they face in social life, and more about the systemic physical and social oppression they experience through the medicalization of their bodies. Activists and scholars of Deaf empowerment, mainly in the United States, have strategically moved away from the body and disability in their discourse, and instead adopted identity, culture and language as models of differentiation (Padden & Humphries, 1988). Though in Europe, we see more of a shared discourse between Disability Studies and Deaf Studies through the "independent living" narrative, the field of Deaf Studies has largely been informed by the scholarly debate in the United States. This has been changing since the turn of the century however, as new studies on deaf

communities around the world are undertaken by Deaf and hearing scholars alike (Friedner, 2008, 2011; Kelly, 2008; Kisch, 2008; Kusters, 2012, Nakamura, 2006). Additionally, new relations between deaf people and their social spaces have also been explored (Bauman & Murray, 2014; Valentine & Skelton, 2008). These more recent studies provide insight into how deaf people's navigation of social life is a diversely mediated and culturally situated practice.

As with any other individual or community, mobilities of deaf and hard of hearing youth are embodied, mediated and practiced in different ways around the world. This diversity of experience comes out of intersecting variables around the individual and the societies in which they live. Biological, cultural, historical, economic, institutional and political factors come together to create particular sociotechnical landscapes and value systems surrounding and embodied by deaf individuals. Understanding the mobilities of deaf youth in a given society requires the careful consideration of these intersectional variables. The goal of this chapter is not only to discuss factors surrounding the intersecting mobilities of young deaf individuals in Turkey, but to explore to what extent new mobile technologies and literacies allow them new opportunities for social navigation and participation.

In this chapter, I will discuss possible mobilities of deaf youth in Turkey, drawing from my interviews and surveys with young deaf adults in Istanbul and elsewhere in Turkey. I focus on four main themes concerning deaf youth in Turkey: (1) the tools and systems of mobility, (2) the nature of mobilities that are afforded by these tools and systems, (3) other social factors that shape how these tools are adopted, and (4) how their mobilities are tied to their social networks. My analysis is mainly informed by the

following work: (1) Urry's Mobilities paradigm (2000, 2007), (2) Blommaert's (2012) perspective on the Sociolinguistics of Mobility in the light of globalization, and (3) Larsen et al.'s (2006) ideas on the communicative implications of new mobilities and social networks. With their frameworks in mind, I first introduce recent work on current trends in deaf people's social networks, as situated and technologically mediated practices around the world. I then discuss my findings in the light of these theories and earlier work.

In addressing these issues, I draw from the in-depth interviews that were carried out with 33 young deaf and hard of hearing individuals in Istanbul, as well as 2 that I conducted in a remote village on the Central Taurus Mountains of Turkey. Other findings come from my ethnographic work, involving my participant observation and interactions with the Turkish Deaf community in the past decade, but particularly since 2010. Lately, I have been paying closer attention to the communicative practices of my Turkish deaf contacts on Facebook. This has turned into a virtual participant ethnography, which in turn serves as a prolific source of information about the actual preferences and practices of this population.

4.2. Review of Literature

4.2.1. Research on the Mobilities and Geographies of Deaf People

As I have argued earlier, "mobility" has not been foregrounded as a concept in Deaf Studies until recently, at least not as much as it has been in Disability Studies. In this section, I provide a brief summary of existing work in Deaf Studies, focusing on the following questions:

(1) How is the notion of 'mobility' discussed in contemporary works in Deaf Studies?

(2) How can concepts from mobilities research be used to contribute to understanding the current language and social practices of deaf people?

I address three main concepts in Deaf studies that capture some of these ideas about mobility: (1) Deaf space, (2) the Deaf Gain movement, and (3) the emergence of Deaf Geography as a new field.

Padden and Humphries' (1988) book *Deaf in America: Voices from a Culture*, set the tone for the field of Deaf Studies and articulated a critical shift of center in the social study of deaf people. In this work, and others that followed, we see a detailed investigation of the role of sign language (attitudes, practices and affordances) in deaf people's navigation of social life. In that respect, research and discourse on the "communicative mobilities" of deaf people is not new. Padden & Humphries' (2005) work is also one of the first to address the diversity within the American Deaf community with respect to factors like geographical location, class, profession, ethnicity, and race. They refer to the post 1860s through 1970s racial segregation resulting in separate schools for black and white deaf children, leading to a distinct black variety of ASL. As we can see in studies concerning a range of communities, language, as the critical tool for communication, is greatly informed by the spatial distribution and mobilities of communities, as well as identity work (Blommaert, 2010; Blommaert & Dong, 2010; Milroy & Gordon, 2003). In that sense, there is a significant link between the mobilities and immobilities of deaf people, their group affiliations and their language repertoires.

This recognition of diversity was picked up on largely by sociolinguists of sign language, a topic to which I will return to in the next section.

Historically, Deaf spaces refer to places like Deaf schools, Deaf clubs or Deaf events that regularly bring Deaf people together, physically. These are places where sign language is the dominant means of communication, the socio-technical landscape is somewhat configured to respond to Deaf sensibilities, and appropriate social behaviors are those that are parallel with Deaf cultural norms. Within academia, we can see that the interest in Deaf space is typically aligned with the premises of the US-based Deaf Empowerment movement that reached its climax in the late 1980s. This emphasis was a natural extension of sign language capturing the essence of this new positive cultural identity claimed by deaf people and the new politics of space that deaf people have adopted to gain more agency in social life. In this sense, earlier academic work on Deaf space has been mainly tied to identity work and agency, and is less concerned with physical movement.

With the advancements in communication technologies, people have been increasingly freed from the constraints of physical spaces to socialize in new ways. In the past couple of decades we have witnessed a shift in the understanding of social space, not solely as a physical "place" where interaction occurs, but as "activity spaces" constructed by practice[67]. Activity spaces refer to domains within which daily activities occur and social interaction unfolds alongside one's patterns of movement and flow in the physical or virtual realm. That is why, in its contemporary conceptualization, Deaf Space can also

67 Social scientists have responded to this shift with a range of theories: Leontiev & Engestrom's "Activity Theory", Lave & Wenger's "Community of Practice", Bourdieu's "Habitus" and "Field", Latour's "Actor-Network Theory", Holland et al.'s "Theory of Figured Worlds".

refer to a physical or virtual space where a critical mass of Deaf people populate and communicate with one another in ways that are shared culturally among the Deaf community, including sign language.

Valentine and Skelton's (2008) study with Deaf in the UK reveals how the Internet has liberated the community from fixed time/spaces of Deaf clubs. Deaf individuals rely more on online and mobile means to communicate with one another and to coordinate new meeting spots that allow for alternative Deaf spaces to materialize, as critical masses of Deaf people gather in hearing spaces and socialize in sign language. This confirms Padden's (2007) observation that younger generations of deaf people in the US and in Europe are less committed to physical places and prefer more fluid patterns of social interaction. While the majority of research on the social and communicative practices of deaf people comes from North America and Western Europe, more recently there are studies of non-Western deaf communities whose sociotechnical, cultural and political landscape intersects with modernity in unique ways. Bringing in Lefebvre's notion of 'spatial practices', Kusters (2012) looks at the production of 'Deaf Spaces' in Mumbai as Deaf people interact with one another while commuting and moving around the city, and how the use of mobile phones augments these emerging spatial and linguistic practices.

Within the past decade, we see more practical applications of this conceptual line of work concerning Deaf space, especially in the fields of Design and Architecture. This growing interest among deaf people in owning the making of architectural spaces is likely due to several factors: (1) the increased shared awareness among deaf communities that our material environment is primarily constructed by and for hearing people

(Derrida, 1979; Dirksen-Bauman, 2008), (2) the shortcomings of Universal Design principles in responding to deaf people's particular needs and preferences for social navigation, and (3) the growing population of Deaf professionals in social sciences and design related fields. Initiated by Hansel Bauman's "DeafSpace Project" (DSP) in 2005, Gallaudet University has been home to a detailed investigation that addresses the relationship between deaf people's daily practices and sensibilities and the built environment. In doing this, the project aims to document existing design preferences of Deaf people as captured in their homes or other Deaf spaces, as well as developing new architectural design principles and elements that address Deaf people's visual-kinesthetic mode of communication. This investigation focuses on the creation, documentation and application of best practices in five main areas: space and proximity, sensory reach, mobility and proximity, light and color, and acoustics.[68] The main goal of this project has been to maximize the perceptive, communicative and social preferences of deaf people through the redesign of architectural spaces, as well as the choice of materials used in the construction of these spaces. In this respect, we can say that the project also aims to maximize the corporeal and communicative mobilities of deaf people, with the intentions of increasing their agencies in daily life.

Embracing a "people of the eye" framework (Lane, Pillard, & Hedberg, 2011), combined with the interest in the making of Deaf Spaces has led to the larger "Deaf Gain" movement (Bauman & Murray, 2014; Hauser, 2010). This framework can be considered a practical application of what Padden & Humphries (1988) once called the

68 For more information on the specifics of DeafSpace, see: http://www.gallaudet.edu/campus_design/deafspace.html

shifting of center (from a hearing-centric emphasis on lack to a celebration of the linguistic and cultural values of deaf people). Deaf Gain aims to move beyond the oppression and resentment discourse, such that Deaf awareness, skills and knowledge on the visiospatial aspects of our perception to be put in use for the betterment of human civilization at large. In that sense, this framework can be considered the phenomenology of deaf bodies put into practice. A potential problem with this framework is that it seems to gesture towards a somewhat essentialist approach with its singularity of Deaf ways. As more non-Western accounts of deaf people from around the world emerge, notions like Deafhood and the Deaf identity become more Western appearing in their experience (Friedner, 2010). On the other hand, a possible strength of the framework would come from its ability to embrace the diversity in deaf experiences informed by local and global dynamics, and to bring them to the discourse around the design of future environments. This is one of the important points that I will come back to in the next chapter, when I address the relationship between design and agency.

Recently, scholars concerned with deaf people's relationship to and movement in social space have explored the theories and methods of Human Geography (i.e., Human Geography, Urban Geography, Historical Geography) (Gulliver & Kitzel, 2014; Matthews, 2006). A shared interest in this topic brought a group of us together in New York City, at the Association for American Geographers (AAG) Conference in 2012[69], for a panel on Deaf Geographies. Scholars in this community of practice, which has grown in size and scope since then, come from a diverse set of disciplinary backgrounds

[69] For a full list of presentations at the AAG 2012 panel on Deaf Geographies, please see this link: http://deafgeographies.weebly.com/conferences.html

(i.e., Geography, Architecture, Communication, Deaf Studies). The panel presentations covered a range of topics including the relationship between sign language and space, the visiospatial sensibilities of deaf people, mapping of urban Deaf geographies using GIS, the DeafSpace project, the mobilities of deaf people in late modernity, and the future of Deaf geographies.

Deaf Geographies intersects significantly with Mobility Studies, which has roots in Human Geography. Research in the two fields seems to share an interest in foregrounding corporeal modes and embodied practices of social navigation. This runs parallel with the primacy of the physical contact that Urry and his colleagues talk about, as the driving mode of relating to one another and ultimately shapes our social networks (Larsen et al, 2006). This trend is reflective of Deaf people's long preference for face-to-face gatherings, and creating safe spaces where their shared embodied experiences, obstacles, values and heritage can be exchanged. Their desire for face-to-face encounters is shared by many minority groups, but for deaf people more so, due to the highly visual and tactile nature of social interaction preferred. As the field of Deaf Geographies begins to define its scope, it is critical for scholars to preserve a balanced interest in the physical as well as virtual productions of Deaf space(s), as afforded by information and communication technologies. There is already new work in this area, though some of these researchers may not self-identify as part of the Deaf Geographies movement (Kusters, 2012; Valentine & Skelton, 2008).

4.2.2. Research on the Sociolinguistics of Deaf People's Mobilities

Scholarly study of social factors in language practices takes different forms in the

subfields of Sociolinguistics, Pragmatics, Linguistic Typology, Linguistic Anthropology, and Linguistic Geography. Scholars in these fields are engaged in studies of language variation across time and space, language contact and multilingualism, language change, social networks, language attitudes and ideology, and language policy and planning. The basic assumption in these subfields is that linguistic forms and practices are shaped by social practice. Another assumption is that language change and linguistic variation interact with social variables (i.e., gender, age, education, SES, geographical location) as well as institutional forces (i.e., power, identity, culture). As Milroy & Gordon (2003) point out, the sociolinguistic consequences of mobility and contact are increasingly being investigated in the context of migration. Moreover, following Granovetter's (1973) canonical work "The Strength of Weak Ties", it has long been acknowledged that, although most sociolinguistic work focuses on language communities with close-knit networks, it is through weak-ties and mobile language users that language variants reach distinct close-knit groups. These weak-ties also function as the bridge between otherwise disconnected communities, allowing for richer social exchange, exploration and learning to take place. The question arises as to what extent prevalent technologies of communication, information and transportation increase the likelihood that these weak-ties form and are maintained over time.

Surveys of the literature on the sociolinguistics of sign language can be found in several volumes edited by Ceil Lucas and her colleagues (Lucas, 1989, 1995, 1996, 2001; Lucas et al., 2001). Their studies focus mostly on: sign language variation (Woll, 1991; Le Master & Dwyer, 1991; Lucas et al., ibid), deaf and hearing language contact (Woodward & Markowicz, 1980; Reilly & McIntryre, 1980; Groce, 1985), sign language

geographies (Padden, 2010; Al-Fityani & Padden, 2010), sign language attitudes (Berke, 1978; Ward Trotter, 1989; Fenn, 1992; Kyle & Allsop, 1997), emerging sign languages and sign language change (Kegl et al., 1999; Meir et al., 2010), social networks (Nonaka, 2009; Power & Power, 2004, 2010), and language policy and identity (Erting 1994; Ramsey, 1989).

Blommaert (2012) discusses how 21st century mobilities relate to linguistic resources, referring to the semiotic viability and value of one's linguistic resources across social contexts. An emerging paradigm, 'sociolinguistics of mobility', studies language-in-motion across interacting spatiotemporal frames, and as such complicates the traditional 'sociolinguistics of distribution,' that investigates 'language-in-place'. Blommaert argues that as individuals and groups move through a range of social spaces, they acquire, produce, and move with them a repertoire of language and literacy varieties, reflecting their biographies. He refers to the super-diverse language situations resulting from globalization and multilingual repertoires of immigrants, but also the diverse set of online and offline activity spaces many of us broadly participate in.

A natural outcome of this shift to activity spaces is the emphasis on 'social networks' made up of strong and weak ties, which are gradually taking over the role that formal institutions used to play as the main providers of social space and community (Yowell, n.d). Larsen et al. (2006) discuss how increases in the capacities of travel and communication in the past decade have changed the nature of our social networks, such that while strong ties are more sustainable across broader geographies, we also see a proliferation in acquisition and maintenance of weak ties. They propose a new form of network-based social capital in which such networks generate value and support in

contemporary societies. Relating to Granovetter's and Milroy's work, this has important implications with respect to language contact and the distribution of varieties. It is important to note that their findings show that people still connect most frequently with strong ties that live nearby, via phone calls, texting and face-to-face meetings. In the next section, I will discuss the institutional factors behind young deaf people's mobilities in Turkey, and address other individual and social factors that intersect with the realization of these mobilities.

4.3. Institutional Factors around the Mobilities of Deaf Youth in Turkey

Urry (2007) refers to "mobility-systems" that distribute people, activities and objects through time and space. In his work, and in the work of others who use his paradigm, the term is primarily used to refer to systems that enable means of physical transportation (i.e., the pedestrian-system, the road-system, the rail-system), as well as technologies that organize our imaginative, communicative and virtual travels (i.e., the telephone-system, networked computer-systems). Here, I would like to propose describing deaf institutions as a mobility system that organizes the mobilities of deaf people in particular ways.[70] In order to avoid confusion of terminology, however, I will be using "system of mobilities" instead of "mobility systems" from now on, to refer to this institutional structuring of deaf people's mobilities. I argue that educational institutions, inasmuch as they create and regulate patterns of social movement for a range of participants and material artifacts, can be studied as systems of mobilities. In fact,

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70 This is perhaps similar to how Cultural Historical Activity Theory (CHAT) treats a school or a classroom as an "activity system" that produces events (Cole, 2010; Engeström, 1987). CHAT aims to understand how practice is shaped and situated in particular social settings, by studying the six components of this system: subject, object/goals, mediating artifacts/tools, rules, community and division of labor.

Hannam, Sheller and Urry (2006) do point out that "[m]obilities cannot be described without attention to the necessary spatial, infrastructural and institutional moorings that configure and enable mobilities" (p.3). However, their emphasis appears to be more on the fixities and immobilities created through institutions, rather than on a complex set of mobility patterns. In understanding the larger forces that structure and regulate various mobility systems, Urry also uses Foucault's notion of "governmentality", pointing to the control of corporeal and material movement as a critical instrument of state power. Urry then brings in culture as a complementary system that informs how mobilities are practiced, communicated and imagined in real life. Here, I propose studying mobilities of deaf people from the perspective of institutions, because institutions are the intermediary materialization of both culture and governmentality.[71]

In this section, I will first look at how the schools for the deaf function as a system that regulates the mobilities of young deaf people in Turkey. Then, I will move to the role of national and international deaf rights and sports organizations, and discuss the social movement of deaf youth around these systems of mobilities. Once these institutional factors are laid out, I will come back to my in-depth interviews and further discuss the technologically mediated social practices of deaf youth in Turkey, using Urry's mobilities paradigm.

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71 To a certain extent, my interpretation of deaf institutions as a "system of mobilities" resembles Bourdieu's (1980) formulation of social spaces in his theory of practice. According to this framework, a "field" is a social space with its own set of rules, values and power dynamics, and a "habitus" is a system of individual tastes, dispositions, and expectations that are informed and constrained by objective encounters in these social spaces. While Bourdieu's project is not incompatible with my overall intentions with this dissertation, my focus in this chapter is on the diversity of mobilities as structured and organized by various institutions. However, a detailed reading of Turkish deaf people's mobilities using Bourdieu's theory of practice can be a productive future exercise to explore new dimensions of the structure and agency relationship for this community.

4.3.1. Mobilities and Fixities around Educational Institutions for the Deaf

4.3.1.1. The Schools for the Deaf as a System of Mobilities

Schools are the primary institutions where young people socialize. For deaf children, most of whom are born to hearing non-signer parents with whom they often have very limited communication, schools play an even more critical role in their socialization. From a very early age, school placements of deaf children in Turkey are determined largely by the specialists at the Counseling and Research Centers (RAM)[72], who direct parents to an educational institution and provide additional services that they see appropriate for a particular child.

For those who have access to educational and rehabilitation services, the everyday corporeal mobilities of deaf children in Turkey take place between their homes, their schools, and other institutions where they can get additional services, like speech therapy. In larger cities like Istanbul, Ankara, or Izmir, there are multiple counseling and educational institutions that offer a range of services. In rural parts of Turkey, however, not every large city has a deaf school. As a result, many deaf children from these rural areas separate from their families as early as primary school to stay at dormitories in other cities. In such cases, parents of deaf girls can be especially reluctant to send their children to school, due to a combination of fear for their safety and a lack of support for the role of schooling in their children's future. One of my male deaf participants at the high school reported having two older deaf siblings, both women, who were never sent to

[72] According to the Ministry of Education website, currently there 226 of these Counseling and Research Centers (Turkish: Rehberlik ve Araştırma Merkezleri-RAM) spread across different parts of Turkey. More information can be found here: http://orgm.meb.gov.tr/alt_sayfalar/kurum.asp

school. They grew up with very limited communication with their parents and without access to TID until they were much older, after their deaf brother was sent to school. Cases like these result in not only significant corporeal immobilities for deaf girls, but also lack of linguistic and communicative input leading to limitations in their imaginative and corporeal mobilities.

Deaf schools are places that deaf children go to or reside in for nine months of the year, typically from ages 6 to 15 years, until they become young adults. However, beyond being educational destinations, these institutions offer further opportunities of travel. One of the tasks that I asked my participants do was to point out on a map of Turkey the cities that they have traveled to along with an explanation for the reasons of their travel. Other than traveling to the hometowns of their parents for family visits or weddings, school trips turned out to be the primary opportunity for travel to other parts of Turkey. This is particularly true for those coming from low-income families that constitute the majority of the rural population, who have neither the means nor the time to go on trips together. There were two main reasons for school trips: (1) visiting major historical sites for instructional purposes (i.e., Atatürk's mausoleum Anıtkabir in Ankara, or Çanakkale Martyrs' Memorial), or (2) attending national sports or folkloric dance competitions. Here I focus more on the participants' reports of the latter, mainly due to their frequency and the fact that these trips revolve around other meaningful communities of practice, with implications for emerging new social networks.

For an earlier project in 2010 involving a history of deaf education in Turkey, I interviewed several older deaf individuals who were students at the first school for the deaf in Istanbul in addition to two teachers of the deaf who worked at this institution in

the 1980s. Both the students and teachers brought up the use of local school trips as a teaching strategy at this school, which they believe resulted in a richer learning environment for the students. Many of the deaf elders mentioned how the trips helped them understand historical concepts and provided them with a rare opportunity to travel around the city. The trips provided hands-on and informal learning opportunities and allowed their growing world knowledge to be grounded in actual experience. This is a practice that seems to have lessened over the years, most likely likely because the student population at deaf schools has increased, and spreading urbanization has led to difficulties in the logistics, safety and execution of travel in a chaotic city, especially in big cities like Istanbul.

Just like their hearing peers, deaf children who join sports and traditional Turkish dance clubs at their schools also attend competitions, both within and outside of their cities. While some of these competitions are specifically for deaf children, some allow deaf and hearing children of particular age groups to compete together. Occasionally schools for the deaf partner up with mainstreamed programs in schools to allow teams to practice together. Deaf students who are members of these clubs would seem to be more advantaged, both in having more opportunities to travel as well as meeting peers of diverse backgrounds with similar interests.

Some of these encounters, especially those with deaf peers in other schools and cities, lead to friendships that are sustained via social media and other online communication tools. This is also how they often encounter regional sign language variants. While most deaf people in Turkey are aware of sign language variation across the nation, they say that variation is not at a level that hinders their communication with

one another. The longevity of these new connections depends largely on the ease of long-distance communication, as well as the likelihood of meeting again in the near future. The ease of distance communication suggests that having both access to technologies of communication (i.e., smart phones, computers, webcams) and the appropriate literacies enables them to navigate virtual spaces that are created or accessed via these technologies. This brings us to perhaps the most critical role that schools for the deaf can play in the lives of deaf children in Turkey: to provide an opportunity to acquire the communicative tools and skills that enable them to socialize with others throughout their lives.

In the previous chapter, I described how most deaf children in Turkey are initially exposed to TID, which is only when they enter primary schools for the deaf, some as late as the age of six or seven, if they did not attend preschool. Many participants in my study agreed that it takes them up to three years to acquire enough proficiency to fully express themselves in TID. This means that deaf children are almost nine or ten years old by the time that they can comfortably communicate in TID. This matters because language and linguistic exchange not only captures the many dimensions of a community's cultural heritage, but also serves as one of the most basic forms of human agency (Austin, 1962).

Acquiring these communicative skills can take place with a range of technologies, from analog to digital, or stationary to mobile. Sign language is a primary tool for deaf people to communicate face-to-face. Another tool that allows for communication over space is writing, which they acquire at school and then practice with their deaf classmates and family members through texting. In this era, the communicative mobilities of deaf people increasingly intersect with new digital media and visual technologies that take this

social exchange to a virtual level. These technologies allow deaf people to practice synchronous and asynchronous communication in the visual modality, using text and sign language. Deaf schools are pivotal in deaf children's acquisition of a range of literacies. And as I explained in the previous chapter, much of technological literacies are acquired largely through peer informal learning, rather than formal instruction.

At one of the schools in Istanbul that I worked with, the majority of students live at home and take the school bus from different parts of the city. Most of these students come from families with lower socioeconomic status and they live in poorer parts of Istanbul. Like their hearing peers, they spend between an hour to two hours each day traveling between their homes and the school, on the school bus, except for a few of the older boys who use public transportation. Some of the students from lower income families, and more men than women, reported working at their family business during the weekends and summers, to support their families. Considering that these are periods when students have opportunity to continue contact with one another, online or offline, the additional responsibility to work seems to cut into their social time with deaf peers.

Situated in Eskisehir Anadolu University is an educational institution for the deaf, Center for Research, Education and Application for Hearing Impaired Children, İÇEM (Turkish: İşitme Engelli Çocuklar Eğitim, Araştırma ve Uygulama Merkezi), which provides education and counseling services to deaf children from ages 2 and up73. My knowledge of this institution is based on an interview that I conducted with Cem Girgin, the director of the program. Founded in 1979, the school strictly abides by an auditory-

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73 More information on İÇEM can be found at their website: http://icem.anadolu.edu.tr/

verbal method in teaching deaf children and they require parental involvement in the education of their children from the time of their enrollment. Due to their methods of teaching and high expectations from students and their parents, there is a rigorous initial screening of applicants to this program. The students who are selected to be a part of this program are deaf children who either have a minimum level of functional hearing or have cochlear implants before the age of 2. In addition, because they adopt a family oriented approach, only those children whose parents are willing to and are able to move to Eskisehir are eligible to enter this program. This kind of relocation is not available to many parents. A majority of parents whose children attend this school are state-employed individuals, such as doctors, policemen or military personnel. They regularly visit the school and become an integral part of their hard-of-hearing child's education. Moreover, because the students live with their parents, they are more likely to travel with them, as well as to have better access to Internet-based communication technologies at home, compared to their deaf counterparts staying at dorms. Due to extensive auditory and speech therapy that they receive, the communicative abilities and mobilities of this population of students seem noticeably different than that of the deaf population at large. In addition, these students are better equipped in written and spoken Turkish, to qualify and enter the two-year college degrees offered to deaf people at the same institution. This in turn also broadens their employment opportunities and potential mobilities. However, it is important to note here that these additional benefits do not necessarily reflect the strength of the oral approach in deaf education, instead they follow from the demographics of the students who qualify to enter this program, and the available time and wealth of their parents.

While elementary schools for the deaf play a large role in influencing communicative mobilities, the vocational high schools shape the future corporeal and social mobilities of deaf people. With a large population of young individuals competing for jobs, employment rates are low even among the well-educated in Turkey. Among deaf people, employment rates are significantly lower. Vocational high schools for the deaf provide their students the professional skills and the business contacts, making their graduates among the more advantageous for employment opportunities. In the next chapter, I provide a more detailed account of the nature and limitations of jobs that are available to deaf people in Turkey, and the extent to which they require certain literacies.

4.3.1.2 Mobilities and Moorings of Dorm Life

The majority of my participants in the high school group were female students who were staying at the dormitory. These were deaf and hard of hearing girls from all over Turkey, including cities like Van or Kars, located at the very east of Turkey. During my visit, there were a total of twelve girls, many of whom had left their families in their hometowns, only to return during long school breaks.

The dorm is located on the second floor of the school building. The staircase leading to the dorm is separated from the rest of the school by a gate that is locked most of the day, except for a few hours right after the school ends. The administrators of the school take all measures to make sure that the students are safe and under their watch at all times. Students staying at the dorm need to coordinate with the dorm supervisors who have the key to the gate, in order to get in and out. Although there is a doorbell at the gate, it tends to break -as it did during my visit, leading to the students being temporarily

locked out of the dorm, inside the school building. When this happens, students text their friends that are inside the dorm, or the supervisor directly. The students find this very frustrating, as it can take a while for them to reach the attention of the supervisors.

The girls staying at the dorm spend almost all of their time at the institution during the school year. They are in the school building during class hours, as well as after dinner, until the morning. They are allowed in the schoolyard during break and after hours, where they can play sports, like volleyball or basketball. The only physical access that these students have to the world outside of school is their brief visits to a nearby supermarket over the weekends, so that they can purchase whatever their allowances permit. For many, this isn't much. So they would rather stay in the dull comfort of their dorm rooms, rather than go out, be tempted and feel frustrated.

For those students with family members in Istanbul, they spend their weekends, or every other weekend with them. These may be family older siblings or aunts and uncles, who had moved to Istanbul for educational or employment reasons. These students count themselves the lucky few who can leave school over the weekends, enjoying some family time, the city, and sometimes, even arranging to meet their classmates outside of school. However, many of these students reported these family members being more protective than their own parents, not letting them go out on their own to meet with their classmates whose families reside in Istanbul. Students say they have more freedom to move independently in their hometowns, on the other hand, when they are back home during the breaks to stay with their parents. But when they are in Istanbul, their physical mobility is tied to those of their relatives, only going out together to visit neighbors or

other family members in town. Otherwise, their guardian relatives will say they are worried that something might happen to them under their watch.

At the dorm, the students spend most of their time chatting with one another and watching television, mainly Turkish soap operas in the evenings, which are also very popular among the general population in Turkey. While they do sometimes watch the news, they seem to be less interested, both with respect to content, but also for being dependent on their hearing dorm supervisor to interpret, since there are no captions on mainstream Turkish television. Often the supervisors quickly tire of interpreting. The soap operas on the other hand, mostly dramas, move much slower in pace and are significantly more transparent with respect to the series of events. I will come back to this in the next section.

There are two news segments on Turkish television that have simultaneous TID interpreting, however one of them is early in the morning when the students are getting ready for school (Fox TV - 7am), and the other one is in the afternoon (TRT2 - 2pm) when they are still at school. Though the latter is archived online, none of the students said they tried to locate the segments online. Students staying at the dorm do not get any after hours access to the computer room at school. With a few exceptions, they do not own laptops either. I did witness a student borrowing another student's laptop overnight. As a result, their online connectivity is largely limited to their smart phones if they have one, and whatever features their limited packages allow.

It is important to note here that in deaf schools, separating the dorms by gender is a common practice in Turkey. Not only are the dorms for boys and girls in different buildings, but also in different parts of town, and sometimes even in different cities. This

means that, with a few exceptions, a school for the deaf will have a dorm either for girls or for boys, but not both. When I talked to the administrators of the school about this practice, they say that the decision comes out of a necessity to "contain" these young individuals and to prevent unwanted behaviors between the two sexes. Despite these spatial institutional restrictions, young deaf boys manage to find ways to meet deaf girls at other schools after hours, particularly for middle and high schools. In more rural and eastern parts of Turkey, where educational institutions for the deaf are scarcer, deaf siblings of the opposite sex may end up in two different cities.

I had originally planned to work at two high schools for the deaf in Istanbul, so that I could compare the experiences of deaf boys and girls staying at dorms. However, although I had obtained an official document from the Ministry of Education in Turkey approving my work at one particular institution, the principal of the school declined my request to carry out my study there, so I decided to discontinue working at that school. As a result, I had no access to the male high school students staying at the dorm. I cannot discuss at length how mobility and gender intersect in the context of deaf education. However, lower income and more conservative families in Turkey generally allow young boys more freedom to move independently, and to do so at an earlier age than girls. Extrapolating this with accounts from my participants, it would be reasonable to expect that male deaf high school students living at the dorms are more able to leave the school premises, and to do so more often than their female counterparts.

I conclude that deaf schools operate as a system of mobilities that interact with various factors in the way that they affect the lives of deaf students. These factors include: (1) gender of the students, (2) socioeconomic status of their families, (3) the

geographical distance between the students' homes and the location of the school, (4) the students' interest in extracurricular activities like sports and folkloric dance, (5) the students' collection of linguistic, digital and cultural literacies, and (6) the cultural values of the administrators and policy makers who control the distribution of services, as well as the regulations to be followed at these educational institutions.

4.3.2. Deaf run organizations and the mediated mobilities around them

In Chapter 1, I provided a historical background on deaf clubs in Turkey. Deaf clubs have traditionally been one of the few places that deaf people have called their own, as the foremost places where deaf people of diverse demographics come together (Padden, 2007). These clubs have played a role contributing to the preservation and the growth of national sign languages, as they provide a physical space for sign language interaction across generations to take place, and because they provide an opportunity for everyday social experiences of the community to be shared 'in' sign language. Padden finds, however, that younger generations of deaf people in the US and in Europe are becoming less committed to these physical places and prefer more fluid and less committed patterns of social interaction. She ties this to the growth of the deaf middle-class via increased professionalization of deaf education and improved working conditions of deaf individuals, made possible by the work of Deaf advocacy organizations. She also finds that younger deaf individuals' desire for autonomy comes from greater access to technologies and services that change how they communicate with others. Although Padden's study focuses on American Deaf clubs, a decline in attendance in deaf clubs is reported for many deaf communities across the globe, with interesting

differences arising from sociopolitical dynamics as in the case of Cyprus and Greece (Hadjikakou & Nikolaraizi, 2011). A similar trend is found among deaf youth in Turkey, not necessarily because there is a growing deaf middle-class, but because of the ubiquity of smart technologies and the decreased need to rely on these static meeting-points.

Based in Istanbul, The Turkish National Federation of the Deaf (Türkiye Sağırlar Milli Federasyonu -TSMF)[74] was founded in 1960, and is one of the 128 members of the World Federation of the Deaf (WFD) and collaborates with the United Nations Educational Scientific and Cultural Organization (UNESCO), the United Nations Economic and Social Council (ECOSOC), International Labour Organization (ILO), and World Health Organization (WHO). TSMF is the official organization recognized by the state and its corresponding institutions as representing the deaf and hard of hearing population in Turkey. TSMF is also a member of the Balkan Association of the Deaf as well as a participant in international assemblies that bring together national deaf associations from countries in the Middle East and North Africa region[75].

The first deaf club was established in Istanbul in 1958 and it provided the foundation of the TSMF based in Istanbul. TSMF also has a youth section, which focuses

74 Originally called Türkiye İşitme Engelliler Milli Federasyonu (TİEMF), the Federation has changed its name in 2014, replacing the term 'işitme engelli' meaning hearing impaired, with 'sağır' that means Deaf. This was a political move aligned with the Deaf Empowerment movement, also supported by WFD to which Turkey is a member of. For more information on the TSMF, the reader can visit the website of the Federation: http://www.tiemf.org/tr/

75 In addition to the national federation that is officially recognized by the state, two other competing federations have been established in Turkey within the past decade. These federations have emerged mainly as a result of the competition for leadership, as well as advocacy for particular political ideologies. The first one, Anatolian Deaf Federation (Anadolu Sağırlar Federasyonu-ASF), was founded in 2008. The other is the Federation of the Hearing Impaired (İşitme Engelliler Federasyonu-İEF) founded in İstanbul. The emergence of these new federations is symptomatic of the particular political dynamics in modern Turkey, creating some tension and confusion among the deaf population and state officials, not to mention competition for funding and other resources.

on issues concerning younger deaf individuals, such as education and employment, and they organize the annual deaf youth summer and winter camps. Currently there are a total of 46 local deaf clubs affiliated with TSMF. Traditionally these clubs have been the primary locations that have brought deaf people together beyond the schools for the deaf by providing deaf-run spaces and recreational activities to the community. Within the past decade however, there has been a significant decline in attendance. Today, deaf clubs in Turkey are primarily spaces for older men, with one or two days a week set aside for women to socialize at the club. Otherwise, deaf women prefer to get together either in the privacy of their homes or other public spaces (i.e., cafes, restaurants). What continues to draw deaf people to the club is regular practice for folkloric dance or theater. Younger deaf people use the association's spaces as transient meeting points for activities elsewhere, rather than as places to stay and socialize. Their changed practices are largely made possible through the widespread use of Internet and mobile technologies.

The older high school students often provide a link between younger deaf children and the deaf adult community. This age group occupies a transitional period between two worlds: the school and the post-graduation patterns of social life. These students often have friends outside of school, most of which are in fact alumni of their own schools. Younger alumni seem to be more motivated to meet and interact with new deaf peers outside of their existing circle, as a consequence, they are exposed to sign language variants. Some of the high school students that I worked with in my study mentioned the differences between the sign language used at deaf schools and that of deaf clubs. Here's an account from a young boy in Istanbul:

"No, they're different. I don't know, but they're different. I know the one here (at school), I don't understand the one there at the clubs…the signs here at school are old, the ones at the club is new…so we learn it there and teach it to people here…then they know too…"

Although there is a decline among the younger generation to become affiliated with and attend deaf clubs, they still participate in sports events organized by the sports clubs for the deaf. Founded in 1990 as the Turkish Sports Federation for the Handicapped, TÖSF (Turkish: Türkiye Özürlüler Spor Federasyonu), Turkish Sports Federation of the Deaf, TIESF (Turkish: Türkiye İşitme Engelliler Spor Federasyonu) became a separate organization for deaf athletes in 2000. Currently a member of the International Committee of Sports for the Deaf (CISS), TIESF has 101 sports clubs for the deaf throughout Turkey. While in most cases the sports clubs share the same space as deaf clubs mentioned above, others have separate locations. Members of these sports clubs come together regularly for practice or games, creating sites of social interaction and communities of practice within the deaf community, leading to specialized lexicons in TİD. In addition to local activities, scheduled sports events such as tournaments bring together young deaf individuals from across the country. Currently there are almost 8,000 deaf athletes registered with TIESF, across seventeen different branches, with a 6 to 1 ratio of men to women.

Finally, and equally importantly, Turkish Deaf individuals' initial encounter with Deaf people from around the world primarily takes place through their participation in international Deaf sports events such as the *Deaflympics*, or other events organized by the

International Committee of Sports for the Deaf (ICSD)[76]. Currently there are more than 16 thousand "Deaflympians" from 109 countries that are listed under ICSD. Statistics show a noticeable rise in participation from Turkey especially since 2009, with the number of athletes doubling to reach 169 by 2013[77]. Similar to the national breakdown, there is a significant asymmetry in the gender distribution among Turkish Deaf athletes competing internationally, however, with 131 male (mean age=26.9) to 38 female (mean age=23.4) athletes. These are important to keep in mind, with respect to the demographics of Turkish deaf people who have direct access to IS and other sign languages around sports events.

When deaf people from different countries meet and spend time together, often a pidgin of the national sign languages that are in contact quıckly emerges for purposes of communication. In some cases, these short-term encounters lead to longer term networks through the use of webcams and smart phones. The first TID/IS book with a DVD included was published in 2012 by TIESF. This new resource may encourage greater IS literacy and use among Deaf in Turkey, and possibly lead to more Turkish participation in international Deaf events.

Responding to this need, TSFD has been organizing workshops on IS in several cities. These emerging workshops and resources on IS are partly in preparation for the next World Federation of the Deaf World Congress (WFDWC) that Turkey will be

[76] For a calendar of upcoming international deaf sports events organized by ICSD, see the link: http://www.deaflympics.com/calendar.asp
[77] For a breakdown of statistics on Turkish Deaf athletes participating in ICSD, see the link: http://www.deaflympics.com/countries.asp?country=TUR

hosting in Istanbul next summer[78]. WFDWC is one of the largest Deaf-run events of the world, informing and mobilizing deaf individuals from all around the world. Every four years as many as six to ten thousand deaf and hearing participants from different countries gather at the Congress, attending presentations concerning different aspects of deaf people's lives. Just as in the international Deaf sports events, the Congress brings deaf people of different countries together, providing opportunities for IS to flourish. The Congress is of particular value to deaf people in the host country, such that deaf people from around the world are brought to their country without requiring travel to far away destinations. The upcoming Congress in 2015 will likely instigate a range of communicative mobilities for deaf people in Turkey, with the potential of shaping their virtual and even future corporeal mobilities.

These workshops and published resources on IS reflect an increasing demand among young deaf people in Turkey for access to international opportunities. Due to an increasing number of global Deaf events and cheaper travel, they have more chances to meet deaf people from other countries. Turkey is also a popular travel destination for many, including deaf people. Many Deaf tourists, especially those from Western countries, seek opportunities to meet Turkish Deaf people when they are in Turkey. Then both the national sign languages of their interlocutors and IS become meaningful as they are anchored in shared experience and depending on the potential of these new connections lasting, worth retaining as a useful communication tool. Similarly, the home countries of these tourists become a part of their conceptual map, perceived not as

[78] The XVII World Congress of the World Federation of the Deaf will be held in Istanbul between July 28-August 1, 2015. For more information, the reader can refer to the official website for the Congress: http://www.wfdcongress2015.org/

abstract concepts, but as real places that can be potential future destinations to be travelled to.

Later in the chapter, I return to the changing prestige of IS among deaf people in Turkey, as reflected in the language preferences in sign language videos authored by Turkish Deaf youth. These videos and exchanges on social media reveal tensions between TID purists and the emerging global Deaf citizens of Turkey.

4.3.3. Mediated social practices and intersectional mobilities of Turkish Deaf Youth

Up until this point, I have addressed the social navigation patterns of deaf youth in Turkey, primarily with regards to educational institutions, social rights organizations of the deaf, and Deaf events. In the introduction chapter of this dissertation, I also presented Urry's mobilities paradigm and provided a detailed description of the five different modes of mobility that he elucidates. Here, I will address how these diverse modes of travel are experienced by deaf youth in Turkey. It is important to keep in mind that in making this distinction between these different types of travel, Urry does not necessarily intend them to be studied separately. Likewise, my intention here is to use these distinctions primarily as a conceptual structure for organizing my findings about this population's navigation of social networks, which are informed by a complex set of factors.

Urry makes two important distinctions in his description of five modes of mobilities. The first is between the movement of objects and of people, as illustrated by corporeal versus physical movement categories. The second is between the different modes of travel that a person can practice depending on the medium of social interaction,

as illustrated by the corporeal (bodily), imaginative (cognitive), virtual (digital), and communicative (linguistic) mobilities. The organization of this section will thus follow a similar structure. Here, I refer to the circulation of material artifacts/technologies throughout my discussion, as enablers of these four modes of travel (See Figure 4.1 for a detailed breakdown).

Table 4.1. Modes of travel based on Urry's (2000, 2007) Mobilities Paradigm

Mode of TRAVEL	Primary Medium of Interaction	Description
CORPOREAL	**Physical** Space	*People traveling from one physical location to another (for survival, legal, work, pleasure, exploration, etc.)*
IMAGINATIVE	**Cognitive** Space	*The sense of being displaced while interacting with a range of visual media (i.e., text, images, film or one's own memory)*
COMMUNICATIVE	**Linguistic** Space	*The sense of travel one experiences by communicating with another person (via bodies, writing, pigeons, fax, telephone, mobile phones, etc.)*
VIRTUAL	**Digital** Space	*People traveling in virtual space and interacting with things, people and places without having to relocate physically (via Internet, social media, gaming, etc.)*

Corporeal mobility is concerned with people traveling from one physical location to another. Such movement can be for a range of reasons, including but not limited to survival, regulations, work, pleasure, exploration, or being forced. These acts of travel can be once in a lifetime, as well as ongoing or repeated practices. Earlier in the chapter, I talked about how the corporeal mobilities of deaf youth were significantly structured by educational and rehabilitation institutions of the deaf, the sports and dance clubs that they are a part of, deaf clubs, deaf sports clubs as well as other transnational deaf events and organizations. What is yet to be discussed is how some of these

mobilities are particularly mediated through material artifacts. While it is impossible to cover all of these technologies that mediate the lives of deaf youth in Turkey, what follows is a selection of additional items that seem to play a large role in their mobilities.

In Turkey, one of the primary artifacts that regulates deaf people's relationship to a range of institutions, to their deaf peers, and secures their ease of independent physical travel is their medical report. Soon after the initial screening and diagnosis of a deaf child, health and counseling professionals administer a series of inspections and tests. . This process requires the parents to locate and travel with their deaf children from one medical institution to another, in their early years. These test results are then used in acquiring their medical reports that are required for their access to a range of future services and benefits. It is through these reports that a child is directed to an educational institution, which largely determines the makeup of their dominant social environment until adulthood. This medical report also determines the amount of disability pension that the deaf child's parents receive from the government every three months as their guardians. When the deaf individual turns 18 years old, he or she begin to receive this pension directly.[79]

Finally, deaf people use this medical report to acquire a State administered special identification card for people with disabilities.[80] This Disability ID card (called *Engelli Kimlik Kartı* in Turkish) allows them to travel locally for free, using the majority of public transportation systems (i.e., bus, train, boat, metro). This card also provides up to

79 It is also argued that some lower income parents even discourage their children from using hearing aids or get additional rehabilitation, so that they appear lower functioning and more "disabled", resulting in higher pensions. In these cases, the deaf child is seen as a source of income to the family. Although this came up several times during my interactions with school administrators and teachers of the deaf, as well as older deaf community members, however, I do not currently have enough evidence to support this claim.

30% discount or refund in other means of transportation between cities. Some metropolitan municipalities, like İstanbul, issue additional free pass cards to people with disabilities, upon the presentation of this disability card and a small fee.[81] The Disability ID Card is designed so that depending on the severity of the individual's "disability", or hearing impairment in this case, the individual is also allowed to bring an escort without disabilities to travel with them, for free. This is a case in which hearing people benefit from the corporeal mobilities of deaf people.

Another material artifact that is critical in an individual's corporeal mobilities in urban life is a driver license. In Turkey, deaf people can only acquire a Class H license, which is a special category for people with disabilities. As opposed to a Class B license that hearing and "able" people get, deaf people can only drive non-commercial vehicles with the Class H license.[82]. There are numerous driving schools all around Turkey that provide the necessary theoretical and practical training for those who are interested in acquiring a drivers' license. It is technically possible to take the driving exam at one of these institutions, and apply for a Class H license. However, since the language of instruction at these schools is spoken Turkish, deaf people do not have much access to instruction at these schools. The only driving school that came up in my interviews, as

81 More information on the Free Pass-IstanbulCard: http://skart.iett.gov.tr/Ucretsiz-Kart-Detaylari.aspx?id=7

82 In the past, this particular license required either having a special plate with the International Symbol of Access on it, or stickers of International Symbol of Deaf/Hard of Hearing placed on the top right or left corners of the back window. This special plate requirement was abolished with the new changes in Highway Traffic Regulations in 2011, and replaced with the Disabled Park Card (Turkish: Engelli Park Kartı) to be kept in the car. The official announcement for the changes in the Highway Traffic Regulations can be accessed here: http://www.resmigazete.gov.tr/eskiler/2011/09/20110909-8.htm

providing instruction in Turkish Sign Language, is located in Ankara. Most of the participants in my study did not even know about this opportunity however. My online research shows that occasionally, deaf clubs or other deaf related institutions also organize similar courses in sign language to prepare deaf people for the driver license exam. However, they are very rare.

One of the main topics of this dissertation has been the role of new information and communication technologies in how deaf people in Turkey navigate social space. In her work on emerging Deaf spaces around the Lifeline of Mumbai, Kusters (2012) mentions how deaf people carefully coordinate their face-to-face meetings at the train station or on the train through the use of texting. On a similar line, one of my interests was to see how deaf people in Turkey, who have significantly limited textual literacy skills, as we saw in the previous chapter, could be making use of these technologies in coordinating their meetings.

As I have already established in the previous chapter, mobile phones are a part of almost all deaf individuals' daily lives in Turkey, and smart phones are becoming increasingly prevalent as they become more affordable. However, my in-depth interviews were aimed at exploring not only to what extent, but also *how* these technologies were being used. Therefore one of the questions that I asked my participants, especially those in the older group, was this: *"Let's say that you are meeting with a deaf friend at a new place that you have not been before, how do you coordinate? How do you explain where to meet exactly?"* Texting was the first response that many of my participants gave, but then I continued: *"What if you or the person that you are communicating isn't very skilled in written Turkish to explain? What do you do then?"* This follow up question

brought up a series of interesting strategies. Some mentioned taking a photo of their surrounding environment, of streets, buildings or other markers, and sharing those with one another. Others mentioned just turning on their 3G, showing their environment in real time and even communicating directly in sign language via video. However, as I mentioned in the previous chapter, their use of 3G depends highly on their financial situation at a given time. Since 3G is still a relatively costly additional service, many who have smart phones do not use it apart from emergency situations.

Among those who owned smart phones, however, there was a strong preference for using *Whatsapp*, which is an Internet based text and multimedia messaging application for iPhone and Android phones. One of my male participants in the young adult group explained that *Whatsapp* had a "Location Share" feature, which I did not even know about until this interview (See Image 4.1). Through this feature that uses GPS technology, any user can share the exact coordinates of their location with their interlocutors. Once the interlocutor receives this location, they can then zoom in or zoom out as much as they need to on this interactive map. Apparently, this is one of the common strategies that is currently used by deaf people in Turkey in the coordination of their meeting spots, especially in highly complex urban settings like Istanbul.

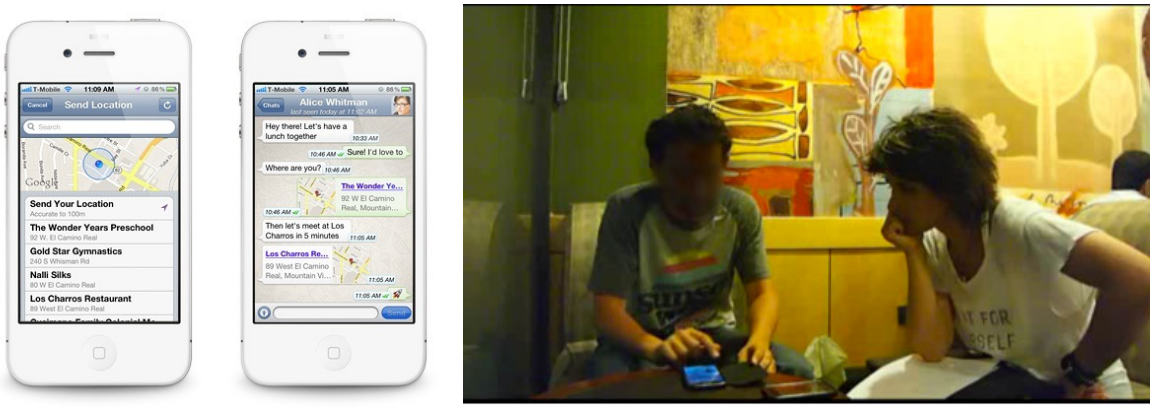


Figure 4.2. *Whatsapp* Location Share feature via GPS technology

Imaginative travel, on the other hand, has to do with the sense of being displaced while interacting with a range of visual media: text, images, film or one's own memory. Before I get to my findings on how young deaf people interact with a range of visual media, however, I would like to touch on another point: their desire to move.

One of the questions that I asked my participants at the end of the interviews was this: Where would you like to travel to, if you could go anywhere? The answers ranged from nowhere to coastal vacation towns of Turkey, Europe[83] and all the way to Canada and the United States. The point here is that one can only want to go to a place if one knows about it. The majority of places listed as desired destinations were in Turkey. Another group of high school students indicated disinterest in traveling to new places altogether, stating being content with what they know or have seen so far. Europe, on the other hand, was often referred to as this umbrella term, without any specifics. Here is an excerpt from one of my interviews:

> *D: So where would you like to go, if you could go anywhere?*
> *S: Europe!*

83 Among other foreign destinations listed by the deaf young adult group were Germany, Holland, Spain, France, Austria, Italy, Rome, and Sweden in Europe, while a few others mentioned China and Africa.

D: Europe is a big place. Do you know where in Europe you want to see? Which country?
S: I don't know their names, like that.
D: Do you have any relatives who live there?
S: No, none! I just want to go and travel around, by myself.
D: Do you have anyone in your family who has been there?
S: My brother, he did.
D: Where in Europe, do you know? Germany perhaps?
S: No. He went to Europe, I don't know more. Europe is beautiful.
…
D: So when you go to Europe, for example, what would you do other than travel around? Would you like to meet other deaf people there?
S: No, not really. There's no point. I can't understand their signs anyways…I've been used to Turkish deaf people and Turkish sign.

So, as we can see with high school students, the responses to this question somewhat reflect their past interactions with friends and family members, as well as the norms, habits, values and desires of the communities that they are a part of. Among those coming from more religious families, Mecca was one of the top desired destinations. Although several of these individuals did not actually know where it was, they cared about what it represented. It mattered to them in as much as the pilgrimage to Mecca was a highly valued practice in their community, being one of the five pillars of Islam. Their desire to travel was motivated by their values and belief systems, as well as some kind of identity work. I will come back to this in the next chapter when I discuss the agencies of deaf youth in Turkey, both as lived practice and also as capabilities that are imagined.

Recent UNESCO statistics on national book reading practices reveal that this practice is exceptionally low in Turkey. This national cultural tendency, combined with the low textual literacy skills of the deaf population as I illustrated in the previous chapter, explains why book reading did not turn out to be a common practice among my young deaf participants. Considering that almost all of my participants turned down my

page-long passage reading comprehension task that I explained in chapter 3, reporting feeling overwhelmed by the length and complexity of the text, this did not come as a surprise. With a few exceptions, none of my participants mentioned reading on a regular basis. For many, book reading has been nothing beyond a forced activity in elementary school, which they did not benefit much from in the first place. In that sense, we cannot really talk about a book reading-based imaginative travel experienced by this population as Urry refers to, to places or the lives of others.

This applies to newspapers as well. However, since Turkish newspapers tend to make considerable use of photographs and images, they are relatively more accessible than books. Overall, more of my male participants reported reading newspapers than female participants, focusing mainly on the sports section at the end. This is due to the visual nature and the relative simplicity in the language used in reporting sports news, coupled with their personal interests and prior knowledge in the subject, as well as sports-related literacies. Likely parallel with the population at large, there was a tendency to prefer reading the news online than in the paper format. The sports websites they follow also include videos of actual games, providing young deaf people the opportunity to experience a sense of imaginative travel from one game to the other, primarily soccer.

As I briefly mentioned about the students staying at the dorm, the majority of time that young deaf people spend in front of a television consists of watching Turkish soap operas, mostly dramas[84]. Taking up the bulk of prime time television in Turkey, these

84 Within the past decade there has been a significant boom in the prevalence of Turkish television series, and these series have penetrated not only Turkish prime time television, but also entered the world media market. As of 2011, Turkish TV series were screened in more than fifty countries; bringing an export revenue of 50 million dollars (Cereci, 2014). This interest initially began in Turkic countries (i.e., Azerbaijan, Turkmenistan), but it soon spread over to Eastern Europe, Northern Africa, Middle East, as

dramas reflect Turkish social norms and values, as well as typical class struggles and dynamics that they can relate to. Although these series are not accompanied by captions, their slow pace and often predictable plots make them relatively easier to follow by deaf people, even without captions or someone interpreting.[85] It is possible that the highly gestural aspect of Turkish culture also makes them easier to read. Because these series are a significant portion of the popular culture in Turkey, following them also provides access to a collective conscious and a sense of cultural affiliation.

Currently, CNBC-e is the only channel on Turkish cable television that provides captioning for American TV series and foreign films. Although the majority of my participants were aware of this channel, they preferred to watch Turkish TV series with no captions instead. One reason for their lack of interest in captioning is that they lack the literacy skills necessary for following the captions. The other reason is disinterest in the content of the programs currently captioned. In most cases watching Turkish series is a family activity and they instead ask their siblings or parents for clarification when necessary. At the dorm, they direct such inquiries to their supervisors. Several participants stated that they were simply not interested in the content of foreign series, as one student explained: *"They are foreign. I don't get it. There is no taste/flavor in it!"*.

In the older deaf group and among male participants, there was more interest in American television series. This wasn't necessarily related to interest in Western popular

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well as Far East. While Turkish drama appears to be a genre that travels the best across geographies, languages and cultures, Turkish sitcoms and youth series do not find as much of an audience outside of Turkey.

85 About a year after the interviews that took place in 2012, Kanal-D launched its new website (engelsiz.kanald.com.tr), where all of their Turkish TV series are made accessible, through Turkish captions and TİD interpreting for the deaf and audio descriptions for the blind.

culture, but it seemed more an outcome of their interest in particular genres that tend to be more prevalent in American series and movies (i.e., horror, action, vampires, science fiction). These participants also mentioned watching foreign films with captions on the Internet.

Deaf high school students were not interested in sign language videos produced by Deaf signers from foreign countries due to the language barrier. When asked about what kind of sign language material they tend to watch online, here's how one of the female students from the first study responded: *"I watch only Turkish Sign (Language)… not those of other countries… I don't know their languages, so I don't watch them."* This was a trend among the majority of my respondents who were high school students. Only a few students reported that they watched videos in other sign languages, because they were fascinated with the sign language song interpretations that deaf people in other countries were producing.

I find it important to note here that most of the deaf students at the high school were very much interested in learning American Sign Language (ASL) from me, during the time that I spent at this school. Many times during lunch, students would bombard me with questions, asking me to sign a series of concepts in ASL. Some of the students even asked me to spend a night at the dorm, so that I could give them a crash course in ASL. However due to both time limitations and ethical concerns, I had to turn down that invitation. I bring this up because I believe that the fact that younger deaf individuals do not watch as many videos online that are of other national sign languages is the lack of particular linguistic and cultural literacies to make sense of them, not because of their disinterest in other sign languages or in the lives of other deaf people. When they get

older and get out of school, however, they seem to find more opportunities to interact with peers who are more competent in IS or other national sign languages. This often happens while traveling or interacting with older peers who have travelled internationally more frequently in the past. Once they acquire more cultural and linguistic knowledge about other deaf worlds, have more time and interest in making new connections, and have more access to high speed Internet, they also seem to be more interested exploring more sign language videos online. There were several individuals in my older deaf group who mentioned watching Deaf Vlogs on Youtube or Facebook for instance, especially those that are tailored to the International Deaf audience, like interviews with deaf people from around the world.

Communicative travel, in this paradigm, refers to the sense of travel we experience by communicating with another person. The technologies that make this happen range from bodies to things, from analog to digital, from stationary to mobile (i.e., telegraphs, letters, pigeons, fax, telephone, mobile phones, text messages). Internet based technologies that are becoming increasingly visual, smart and mobile, support deaf people's social connectivity in an unprecedented way, at both the individual and the organizational levels. As communication becomes increasingly mobile and mediated by Internet-based technologies in the 21st century, communicative travel and virtual travel clearly overlap with one another. The difference is that in communicative travel the emphasis is human interaction, while virtual travel could also refer to spatial practices that take place in the virtual realm, without the need for interacting with another person. In this section, I will primarily answer two questions with respect to communicative

travel: (1) With whom are Turkish Deaf youth communicating? (2) How are young deaf people communicating with one another in Turkey?

As I brought up earlier in this chapter, until they finish school deaf children and youth in Turkey primarily interact with their deaf peers at their own schools. Only when they get to travel to other deaf schools, or to other cities in Turkey for sports or dance events, do they encounter new variants of TID. Despite these minimal institutional and geographical differences in TID, most of the students can interact perfectly fine with deaf peers whom they encounter at these brief yet sometimes reoccurring meetings. Face-to-face communication among deaf individuals in this case, employ the technology of bodies, as well as the technology of sign language.

When communicating with hearing people, on the other hand, deaf people make use of a range of intermediary technologies. Some of these technologies are the bodies of others, as in the case of sign language interpreters, who mediate communication between deaf and hearing people. Until recently sign language interpreting in Turkey was done informally, by children of deaf adults (CODAs), and often on a volunteer basis. One of the retired teachers of the deaf that I interviewed for another project also mentioned volunteering to interpret for the deaf community in a range of settings.

Additional technologies of communication that deaf people use are assistive devices such as hearing aids or cochlear implants. It is through these devices that deaf people have certain level of access to spoken language, and thus to direct communicative interaction with hearing people. As sign language is becoming more prevalent and popular in Turkey, it is looking more promising that such interaction may soon also take place in TID, potentially leading to new ways of understanding, travel and growth.

Almost all young deaf individuals participating in my study, who were living with their parents, had access to a computer with Internet connection at home, and many had webcams. Residential students were the most limited in terms of Internet access, both because some dorms do not allow laptops, and also because many cannot afford it. In my study MSN Messenger and Facebook turned out to be the two most popular online social networking sites among deaf youth. However, when MSN discontinued its services in 2013, most deaf users moved their accounts to Skype. Almost all of my participants had more contacts that they keep in touch via Facebook compared to MSN Messenger, because they view the latter to be a more private space (See Figure 4-1). They use MSN and Skype primarily for instant messaging or video chatting with close friends and relatives in sign language.



Figure 4.3. TİD variants of *MSN* and *Facebook*.

A few of my deaf participants also reported using CamFrog (TİD: "W-E-B"), especially in the young adult group. Although some had experienced public chat rooms and the multi-user video chat function of Camfrog and OOVOO that brings Deaf people from around the world together virtually, they tend to hack these platforms by limiting their use to private sessions with close friends. They instead host password protected private sessions, which they only share with their close friends via invitation. It appears that one of the reasons behind such conservative use of this online platform is the

mismatch between their cultural and moral values and the behaviors that they observe in these temporary virtual international Deaf spaces created. One of my participants indicated avoiding this platform altogether, due to the "vulgar" things that could happen in this environment, but she did not give any specifics.

One of my participants in the young adult group, who is hard of hearing and has limited TID skills, shared his experience with OOVOO with me as follows:

> *I had an account when I was 17 or 18 years old. An older deaf friend who knew sign [international] helped me with it. He travelled to Europe for some sports events when he was 25, and that's where he learned it [international sign]…Then one day I asked him, 'Hey, what are you up to?' and he said 'I'm chatting with Deaf on OOVOO, come on join us, I'll show you how!'. So I did! You know, with boxes, you see different people in each one. He would help me, show me around, and we would all chat together…. I was curious at first, so I opened an account, began chatting, and adding more people. But then you chat and chat and sign and there is nothing. I didn't really get it. So one by one I began deleting my contacts. Then I dropped it all together.*

Another young deaf adult mentioned that since there is no face-to-face interaction to build up connections made via OOVOO, they tend to get boring and not last too long. Apart from a few exceptions, all participants said that their contacts on online social networking sites are people with whom they frequently interact face to face, such as close friends or relatives. This is parallel with findings in literature on communication and travel practices with respect to the geographical distribution of strong and weak ties within one's social networks (Urry, 2003; Larsen et al., 2006). The majority had access to a webcam at home. While they mostly use text messaging to communicate with family members, webcams are mainly used to continue conversations with close friends that they frequently meet physically, and at times for keeping in touch with relatives living far

away. This suggests that the sign language interlocutors that this population interacts with via webcam are predominantly the same individuals that they interact with face-to-face.

The two primary means of communication preferred by my informants were text messaging using cell phones and instant messaging using MSN. E-mail is not a common practice among this group, likely due to literacy problems and the prevalence of online video chat from home computers that allows for direct communication in sign language instead. This tendency also limits these individuals' interactions with non-signers. This finding does not parallel the statistics on e-mail use among the Turkish population at large (72%). This confirms Power & Power's (2010) finding from their study with deaf people in Australia that low levels of literacy are one impeding factor in a deaf person's benefitting from the full range of visual communication technologies. Based on my study and observations of the written Turkish skills of young and older Turkish Deaf adults in social media, it is my impression that the majority of deaf people in Turkey are not skilled enough in written Turkish to carry on extensive conversations. That is probably why they prefer text messaging to email, since the former is a genre of textual communication that permits the use of simpler sentences and abbreviations to communicate with one another. A possible explanation of the sharp difference between Turkish and American deaf youth in textual literacy could be related to the lack of any teletypewriter technology for the deaf in Turkey, in contrast to their long presence in the US since the 1960s. It is likely that deaf people in the US have acquired the skill and culture of elaborate textual communication that is readily transferred to e-mail, whereas Turkish deaf people have traditionally relied on other mostly non-textual means to

communicate.

I believe that another potential indicator of imaginative and communicative travel experienced by young deaf people in Turkey is their language preference in the sign language videos that they produce. In the previous chapter, I had briefly mentioned that especially within the past year, deaf people in Turkey became more interested in sharing authentic sign language videos via Facebook. In the next chapter, I will provide a more detailed account of this matter, with respect to authorship, language ideology and agency. Here, however, I just would like to mention that as this practice is becoming more prevalent among especially deaf community leaders, what we see is a negotiation of language choice, which speaks to the kinds of audience that these individuals envision and are willing to reach out to. At least for a while, there has been a tendency to code-switch to IS in these videos, if not using IS altogether. As a result, we also began to see more metalinguistic and reflective videos that are produced by other deaf people, mostly older, criticizing the preference for IS, when they could be signing in TID for their own community. Materialized in these videos and the comments that follow, is also the emergence of TID purists responding to the newly emerging global Deaf citizens from Turkey, who wish to be legible by deaf people beyond their national borders.

Virtual travel has to do with travel that transcends geographical means, such that individuals can travel in virtual space and interact with things, people and places without having to relocate physically. Unlike imaginative travel that is solely a cognitive experience of the individual, virtual travel involves a certain level of spatial and social interaction. This kind of travel often requires a certain level of technological infrastructure, hardware and software, as well as individuals with a particular set of skills

and knowledge. While virtual travel can be perceived as an opportunity to overcome particular social and physical barriers in social interaction, it is also argued that existing social divides are often reinforced in these new social platforms.

At the opening of this chapter, I presented the story of Gülnaz, a fifteen-year-old deaf woman who lives in the southern mountains of Turkey. Her case is illustrative of how a series of bodily, technical, geographic, financial and sociocultural factors intersect with and inform the mobilities of deaf people around Turkey. Her story reveals additional limitations that deaf people face in rural settings, both with respect to accessing services, but also in terms of the baseline technological infrastructure that they have to work around. More importantly however, we see various strategies in which one's communicative and virtual mobilities are supported by others in their social networks. In Gülnaz's case, we see this tendency for collaboration in the ways that the fellow villagers mediate her distant-communication with her illiterate deaf father, her older neighbor sharing her desktop computer, webcam and cable Internet with her, as well as her classmate meticulously setting up her entire Facebook account on her behalf. Such habit of sharing of resources is more common than simply being isolated events, especially in rural settings. In the previous chapter, we also saw other examples to such collaborative practice with respect to literacies.

Another interview that I conducted with Mehmet, a 20 year-old deaf man in a nearby village, illustrates a similar practice. Mehmet received his elementary and high school degrees at deaf schools in two separate large cities nearby. He is grateful to his grandfather for his schooling, who tried hard to convince his parents about the importance of Mehmet's education. His younger deaf brother was not as lucky on the

other hand: he was never sent to school and instead stayed at home with his family. Mehmet was exposed to TID initially at his elementary school, but his signing skills improved significantly during high school, which was located in a more urban city, closer to Izmir. He has enough textual literacy in written Turkish to carry out conversations via text messaging, as well additional literacies to participate in Facebook (i.e., visual literacy, digital literacy). There were two main obstacles in his connectivity: (1) the socioeconomic limitations – problems in technology ownership, and (2) limitations in technological infrastructure and services –very slow and limited Internet services provided by cell phone companies. Mehmet does not own a computer, but has a smart phone that he uses frequently. It turns out that this smart phone was in fact a gift from a friend of his, along with an initial prepaid plan. Once this prepaid plan ends, he will switch to an affordable data plan of roughly 20$ a month. Although the phone and Internet connection in the village is poor, this smart phone still allows him to communicate with his friends and family, exchange multimedia, and keep in touch with his larger network via Facebook. In addition, he occasionally travels to a relatively larger town about an hour away. He stays with friends there, and can more easily navigate the Internet as well as connect with friends, using their computers, webcam and high speed Internet. Considering that Mehmet ultimately wants to find a job and move to a more urban setting, staying connected and improving his social networks is a significant investment for him.

In this section, I would also like to revisit online games as technologies that mediate and create a range of corporeal, communicative and virtual mobilities for deaf people. As we saw in the previous chapter, gaming is one of the most popular leisurely

activities among male deaf youth, especially in the high school group. Several male high school students mentioned having weekly gatherings with friends at either Internet Cafés or a Playstation (PS) Cafés to play games. For the most part, these are friends from school, or other friends that they regularly interact with. In this case, the motivation for and practice of gaming creates new physical mobilities for deaf gamers.

Gaming also creates communicative and virtual mobilities for deaf players. The kinds of Massively Multiplayer Online Role-Playing Games (MMORPGs), Strategy Games, or Management Games that my male deaf participants mentioned playing, often have a built in chat function through which players can communicate with one another. Younger deaf players prefer to share this virtual platform with their friends and classmates, using these online games to extend their existing face-to-face social interactions to the virtual space. For older deaf gamers, these online games become activity spaces through which they encounter and interact with deaf and hearing people from different nationalities and ages. In these transnational online activity spaces that favor textual communication over others, English often emerges as the primary means of social exchange. This creates new motivations and new literacies.

Another dimension of online gaming is the alternative experiences of social navigation that it creates for deaf users. Unlike the inherent phonocentrism of real life that discriminates against deaf people through a range of material and social structures, the activity spaces of virtual gaming environments primarily favor visuospatial abilities. In that respect, deaf and hearing gamers are equal in their access to these digital game-worlds, their ability to navigate these virtual spaces, and the kinds of agency that they have in these spaces. These online games, which often involve complex social structures,

rules and roles, are alternative activity spaces in which deaf people can participate. However, new studies on the gaming practices of deaf people are needed, in order to explore better understand how deaf people's relative textual literacies could be potentially hindering their participation as well.

4.4. Conclusion

Understanding social practice in the 21st century requires considering how social life is complexly mediated through digital and mobile technologies, and the factors that inform the use of these technologies across demographics. Scholars of Deaf Studies have also been responding more critically to current changes in sociotechnical landscapes recently, and questioning deaf people's relationship to these landscapes. This chapter was my own attempt to further this new line of work in Deaf Studies, by bringing in the foundational framework of Mobility Studies as an analytical tool to investigate the social practices of deaf youth in Turkey. This also proved to be a productive exercise in identifying some limitations of Mobility Studies, such as its engagement with the role of institutions in patterns of human movement, or the over-emphasis on corporeal mobilities over other modes of social movement.

In this chapter, I was able to flesh out different patterns of social navigation that young deaf people in Turkey experience, using Urry's mobilities paradigm as an analytical framework. My data came from a collection of interviews and participant observations that I have conducted with three groups of deaf youth in Turkey: (1) students at a vocational high school for the deaf in Istanbul, (2) young deaf and hard of hearing adults in Istanbul, and (3) two young deaf adults in a remote village on the Central Taurus Mountains of Turkey. In describing the range of their mobilities, I also

discussed how they interact with other social factors like culture, gender, socioeconomic status, schooling and institutional affiliation. Throughout my investigation, I was primarily concerned with how this population's contemporary social and spatial experiences were diversely mediated by prevalent information and communication technologies.

I began this chapter with a discussion of how scholars in Deaf Studies have so far addressed issues that relate to mobilities, although they may not have used this particular term. After all, "the spatial practices of deaf people" was not necessarily a new concept to investigate. In this section, I addressed how concepts like Deaf culture, Deaf space, Deaf Gain, and particularly the emergence of Deaf Geographies as a new academic field speaks to the pluralistic conceptualization of mobilities that I am using as a framework in my dissertation and in this chapter.

Then I shared a reading of deaf schools as a "system of mobilities" for deaf people. Unlike the term "mobility systems" that is commonly used in Mobility Studies suggesting systems of physical transportation or virtual travel, I instead addressed the patterns of various mobilities that are structured by institutions. This interpretation was not necessarily in contraction with Urry's conceptualization of the role that institutions play on mobilities, but rather an expansion of it. I argued that deaf schools at once create mobilities and fixities for their students. Deaf schools shape the current mobilities of their students through their physical locations, the social environment and networks that they provide, as well as through institutional regulations, recurring activities and architectural structures. In addition, they shape the future mobilities of their students through the range of literacies and networks that these students acquire at these institutions, mostly from

competent peers through informal interaction. Dorms at these schools, on the other hand, create opportunities for deaf youth from rural or remote parts of Turkey, while at once resulting in a significant degree of immobility and confinement for these students during their education. This was especially true for the female students that I worked with, but further investigation on male deaf dorm students would give us more insight into the gender dimension of this institutional mobility pattern.

Both locally and internationally, Deaf sports events are the main driving forces behind the mobilities of deaf people in Turkey, likely similar those in other countries. While younger students get to travel around Turkey through these events, young deaf adults travel internationally to meet deaf people from other countries. During these corporeal journeys, they expand their world knowledge, connect with new deaf peers who are from other places, and are exposed to variants of TID or other sign languages. Sometimes they even add these new deaf contacts to their social networks and maintain ties with them via social media and other Internet based visual communication tools. These ties may or may not last, depending on their likelihood of getting together again face-to-face.

Overall, I believe that the international mobilities of Turkish deaf youth are informed by a combination of factors that include and are not limited to the following: (1) the possibility of the initial physical encounter with a deaf person from another country, (2) the communicative success and psychosocial gratification from this shared experience, (3) the conceptualization of these new people and places as destinations that are aligned with one's identity and social goals, (4) the motivation to reconnect, and (5) the socioeconomic and technological factors that inform the ease to communicate and

travel to one another.

In the last section of the chapter, I came back to Urry's mobilities paradigm and provided an overview of this population's mobilities by addressing their corporeal, imaginative, communicative and virtual travel one by one. Here, instead of treating the physical travel of material artifacts concerning the deaf community[86], I looked at how various material artifacts inform their different modes of travel.

For **corporeal** travel, the medical report, the disability ID card, and the driver license appear to be critical artifacts in shaping the mobilities of deaf people in Turkey. While the first two are required for deaf people in Turkey, in order to access a range of rights and services, their access to the latter is more limited. Most young deaf people in Turkey own mobile and smart phones despite financial limitations. That being said, some lower SES high school students do report waiting until being employed to acquire or upgrade their smart phones to eliminate further costs to their families. Deaf youth not only uses these devices to communicate with their deaf and hearing contacts, but also to improve the efficiency of their face-to-face meetings with their deaf peers, especially in the urban setting. These visual strategies (i.e., image, video, or GPS location sharing) seem to help them overcome their limitations in Turkish textual literacy. Since real time video communication requires 3G, which is still relatively expensive in Turkey, we can say their ability to make use of advanced media services is largely determined by their financial situation at a given time, rather than their ownership of hardware. That is also why the young adult group, which consisted of deaf and hard of hearing individuals many

86 A follow up study tracing the circulation of material objects that are used by deaf people in Turkey could be an interesting one, providing a different social dimension of mobilities concerning this population.

of whom were also employed, turned out to have more reliable access to and continued use of high speed Internet from their smart phones, allowing them to regularly surf the Internet and make video calls on the move.

With respect to the **imaginative** mobilities of deaf youth in Turkey, I have addressed the future corporeal journeys that they imagine, as well as their actual practices of imaginative travel. Specifically, what I described in this section was their habits of engaging with books, newspapers, images and videos, websites, as well as television. Overall, both their imagined future mobilities and existing imaginative mobilities seem to reflect their past experiences, interests and social networks, their social, cultural and religious values, as well as their financial and linguistic capabilities.

Technologies of communication begin with the body, extend to language, as well as to material artifacts that mediate communication. That is why, in considering the **communicative** travel patterns of deaf youth in Turkey, I began with sign language based communication, moved to writing practices, then to the role of interpreters and assistive devices in communicating with hearing people, to their habits of using mobile communication technologies, and finally to the nature of their networks in social media.

Finally, I elaborated on the **virtual** journeys of deaf youth in Turkey, to discuss their spatial and social interaction that takes place in the virtual realm. This is also where I came back to the case that I introduced at the opening of this chapter, addressing how especially in rural settings one's online communicative practices and virtual mobilities appear to be supported by their social ties. In addition, I laid out the corporeal, communicative and virtual mobilities that online computer games create for deaf youth, primarily young deaf men.

Putting all of this together, the following appear to be critical in Turkish deaf youth's mobilities: (1) the socially anchored and meaningful integration of people, communities, things and places in one's conceptual map, (2) the financial means to access, connect with and travel to these material and virtual social destinations, (3) the social value and relevance of contacts, activities and destinations, and (4) the competence in the literacies that are required to travel to and navigate these social spaces. To illustrate, I would like to return to Gülnaz, the young deaf woman that I opened the chapter with. It is perhaps no surprise that after a long enough time being back in the village and having minimal contact with her friends in the city, Gülnaz is no longer active on Facebook. That being said, given the collaborative practices that I have described throughout the chapter, it is very possible that she still logs in from her friends' accounts to passively observe Facebook content.

Based on these findings, in the next chapter I will be looking at emerging forms of agency that are currently being practiced by deaf people in Turkey, particularly focusing on the new opportunities for authorship and political engagement that are afforded by and mobilized through social media platforms like Facebook.

Limited sections of this chapter will appear in the book chapter Social Media Practices of Deaf Youth in Turkey: Emerging Mobilities and Language Choice in a forthcoming volume edited by Friedner, M. & Kusters, A., Gallaudet University Press. The dissertation author was the primary investigator and author of both of this book chapter.

Chapter 5: New Faces of Access, Authorship and Community Building

In the fall of 2014, a series of exchanges between Turkish deaf people and their allies on Facebook signalled the growing use of social media by the deaf community in Turkey. Some of these exchanges had to do with the negotiation of personal and professional boundaries between sign language interpreters and the deaf community. Others had to do with opinions among Turkish deaf people about the actions of their government. One such topic involving the last category I would like to describe here in more detail.

When the new school year began in September of 2014, the students attending one of the oldest vocational high schools for the deaf in İstanbul were faced with surprising news. The Turkish Ministry of Education (MEB) had announced that their school was about to be relocated to a neighborhood in the outskirts of İstanbul, about 50 kilometers away from its current location[87]. This meant students would have to spend more time travelling to and from a new school in an isolated neighborhood. For some, particularly female students, this might even mean having to leave school because they would be less protected at this new, more isolated location. Unfortunately, this school follows a pattern of many deaf schools in Turkey. They have been reclaimed and repurposed by the state institutions, in ways that often supported its larger economic and political goals. However, this time the news of the relocation led to an uproar by the community and a series of protests took place in İstanbul.

On September 29 and October 9 of 2014, members of the Turkish deaf community and several rights organizations met in two different locations to demonstrate against the

87 http://www.hurriyet.com.tr/egitim/27285725.asp

relocation of this vocational high school in İstanbul. These demonstrations were organized on Facebook, featuring videos in Turkish Sign Language that were produced by a group of young deaf and hard of hearing men. The first videos on this topic were informational in nature, covering the details on the forced relocation of the deaf school by the MEB. News articles on the events were also posted, reaching out to the hearing non-signer community. Soon after, new videos emerged, sharing the date and time of the demonstrations. The group of young deaf men who organized and attended these protests conducted video interviews with deaf students of this high school, and quickly posted their videos on Facebook. One video had close to 4,000 views and was re-posted by 90 people, deaf and hearing, who made it available on their own Facebook walls. This was likely one of the first instances when deaf people documented a political event involving the deaf community in Turkish Sign Language and shared it with the public using social media. Instead of relying on news releases by hearing people in written or spoken Turkish, young deaf video makers became the primary authors of their own history.

5.1. Introduction

In this chapter, I provide a description of the changing experiences of social access and practices of authorship among deaf youth in Turkey. I am interested in the forms of self-expression and social mobilization that are afforded to deaf people by social media, and the extent to which deaf youth in Turkey exploit these opportunities. From access to state services, to opportunities of employment and new forms of visibility, engagement in performance and dialogue, this chapter is a critical view of opportunities and obstacles involving social media. I illustrate here how some of these emerging forms

of agency are based both in the cultural and material landscape of the Turkish society, and in the dominant forms of empowerment that are shared across deaf communities around the world. I argue that while social media promotes, even facilitates, political involvement to a certain extent, these technologically mediated agencies of young deaf people in Turkey remain constrained by the social and political divides that are observed in the Turkish society at large. Nevertheless, new community leaders are emerging in this critical historical moment, notably among a small group of better educated and transliterate deaf and hearing men.

By the term "agency", I refer to an individual or a collective's capacity and ability to act in the world in a way that parallels their needs, intentions, motivations and aspirations. Agency is the ability to write one's material environment legible and aligned with oneself, such that one can effectively extend into and move within the horizon of possibilities that matter. In her book *Queer Phenomenology: Orientations, Object, Others*, Sara Ahmed (2006) uses Merleau-Ponty's understanding of space as a field of action that is shaped by the purposefulness of the body, as well as a horizon of possibilities that aligns with bodily practices. What is natural in the social environment is the diversity of bodies and the key human motivation to extend oneself into this phenomenal and social reality. Ahmed's perspective on orientation has several implications for the materiality of social space in the Deaf context. It shows us that the dominant human material culture is designed mostly to align with the tendencies, capacities and intentions of speaking-hearing bodies. It makes embodied intentions and design of hearing lives visible where it may be assumed natural. With this framework, we begin to see the dominant human materiality as a horizon of possibilities that has

morphed along with practices of speaking-hearing bodies[88], and how alternative new horizons might be created with the active involvement of deaf sensibilities.

Although often collapsed into a single category called "literacy", the ability to *read* and the ability to *write* come out of very different social purposes and result in qualitatively different forms of agencies (Brandt, 2009). Using the pluralistic understanding of literacy from Chapter 3, this chapter embeds reading comprehension and writing expression skills as part of a larger range of linguistic and non-linguistic means of human social exchange. Reading, or the ability to decode and comprehend existing texts, structures and artifacts is an important aspect of enculturation, social awareness and cohesion. However, learning to read and write requires compliance with existing educational structures and consumption of established forms of knowledge, practices and lifestyles that are designed by others and based on their own experiences, expectations and ideals. The ability to express one's unique perception of the world and imagination of possible futures, either by using language or by other materializations is the first act of social change. By authorship, then, I refer to the ability to express one's own thoughts, ideas, feelings, perceptions and sensibilities, which can materialize in a range of media, in different scales, for different audiences. In that sense, I see authorship as an extension of existing individual agencies, as well as the process through which one participates in the creation of agencies of others.

Agencies of deaf people, like other minority groups, are tied to their active

88 Derrida (1976) was one of the first to articulate the inherent phonocentrism in the conception of human language, thought and of being. He argued that the historical prejudice for the primacy of speech and phonetic writing was perhaps one of "the most original and powerful ethnocentrism" prevalent in human civilizations (5). Dirksen-Bauman's (2008) critique of Derrida is that his arguments fall short because he has not directly engaged with deafness and sign languages that could have offered him a stronger case.

participation in societies they live, which is possible through a collection of literacies, mobilities and interventions. Active participation requires a certain level of skills, knowledge and reflection from their modern deaf selves, as well as the accessibility of various state services to meet the needs of its deaf citizens. Authorship, for deaf people, suggest both the writing and archiving of new narratives of self in their national sign languages and critiques of social structures from their complexly embodied standpoints. Moreover, securing future agencies requires coming together as an organized group to extend into the state apparatus to author relevant changes, making deaf selves legible to the system, and vice versa. The rise of an educated group of deaf peopled has been pivotal in this shift: political activists, community leaders and scholars. Finally, the invention of film and video, and more recently the ubiquity of advanced information and communication technologies have been important catalyzers in both of these processes, particularly in Europe and North America.

In the context of Turkey, its citizens saw a significant shift in the discourse on accessibility during the 21st century, mainly as a motivated response to the priorities of the European Union with respect to equal access in services and mobilities. This shift also had implications for deaf people. As detailed in Chapter 2, a series of legal and legislative measures were taken since the Disability Bill of 2005 in Turkey, aiming to provide and promote more services to deaf people in both the public and private sector. The question remains, however, as to how successful these measures have been in augmenting deaf people's social reach in the practice of everyday life. Parallel to these relatively top-down measures, we also see the utilization of video-based social media as a platform to explore new means of connectivity, visibility and dialogue among the Turkish

deaf community - in sign language. To what extent this new archived form of interaction translates into new social capitals and agencies, has yet to be investigated and analyzed. This chapter will begin with addressing the role of sign language-based authorship in deaf people's empowerment and increased social participation in the digital age. Then I will briefly touch on the consequences of increased global contact across sign languages and some of the political and social implications of these interactions for national sign languages and deaf communities.

The rest of the chapter will be dedicated to a discussion of the agencies of deaf youth in Turkey, grouped in three sections: (1) the links between the literacies, mobilities and agencies of deaf people in Turkey with an emphasis on employment, (2) recent changes in Turkish deaf people's access to social life in the past decade with a focus on the impact of legal measures, and (3) emerging forms of authorship afforded by social media, primarily Facebook. My discussion of these three areas will be based on my in-depth interviews, particularly with the deaf young adults, as well as my more recent virtual participant ethnography on Facebook.

5.2. Language and domination

Historically, practices of writing have often been privy to those in power or for a smaller group of elites, while those subject to power have been encouraged to simply consume what has been written for them (Anzaldua, 1987). I do not describe the act of writing as mere reproduction, but the active production of original text and the notion of authorship. Often times, writing has intentionally been discouraged because of its potential to materialize and disseminate new ideas in order to mobilize communities

towards uprisings (Chartier, 1989). Looking at nation states, we can see that at least one form of linguistic domination is in the declaration of official languages to be used in bureaucratic documentation and exchange, including by educational, legal and health institutions that provide basic services to its citizens. This means many ethnic or cultural minority groups in these nation states lack the right to request services in their native language. When these groups mobilize to demand rights from the dominant governing body, language-related services are often among the first to be demanded. In the case of Turkey, there are 35 spoken languages that are used conversationally. However, since the foundation of the Republic, Turkish has been the only constitutionally accepted language for bureaucratic, legal and educational services. [89]

McCleary (2003) talks about the sociopolitical inequalities of languages, and says that '*powerful discourses exist that validate some languages and invalidate others'*. Sign cultures resemble oral cultures in the sense that traditionally the communicative and cultural exchanges require face-to-face interactions as well as a struggle for legitimization with respect to written cultures. This can also be framed as a linguistic human rights issue. Some have claimed linguistic genocide, using the case of Deaf culture and signed languages suppressed by the hearing majority as spoken languages are imposed upon the deaf population of the world (Skutnabb-Kangas, 2001). However,

89 Below are the related articles in the 1982 Constitution of the Turkish Republic that frame the official use of language in Turkey:
"ARTICLE 3- The State of Turkey, with its territory and nation, is an indivisible entity. Its language is Turkish…."
"ARTICLE 10- Everyone is equal before the law without distinction as to language, race, colour, sex, political opinion, philosophical belief, religion and sect, or any such grounds…"
"ARTICLE 42 – (last paragraph) …No language other than Turkish shall be taught as a mother tongue to Turkish citizens at any institution of education. Foreign languages to be taught in institutions of education and the rules to be followed by schools conducting education in a foreign language shall be determined by law. The provisions of international treaties are reserved."

much of this privileging of spoken languages changed to a certain extent after the advent of video-based documentation and communication technologies. The advent of video technologies has altered the exchange of Deaf people's exchange of ideas among themselves in space and time, creating new geographies of authorship and authority through the use of sign language (Krentz, 2006).

5.2.1. Sign language and new lines for Deaf authorship

As Humphries (2008) indicates in *Signs and Voices*, performance is one of the most critical cultural processes at work through which Deaf people gain an opportunity to transform narratives about themselves and their own language. Humphries alludes to the theatrical performance in and of sign language, as well as the signed performance of everyday life in a Goffmanian sense (7). Framing the everyday instrumentality of sign language by Deaf people as a performative act, Humphries demonstrates its significance in a) bringing the language and the culture into the public sphere, b) attracting larger audiences through the aesthetic qualities of signing, and c) making the emerging scientific discourse on sign language accessible to a wider group by providing recognizable demonstrations and explanations (ibid).

A performative example can be found in the poetry performances of Peter Cook, a deaf American and his hearing collaborator, Kenny Lerner (a.k.a. *the Flying Words Project*)[90]. In 2001, they were invited to perform at UCSD as part of the *New Writing Series*. Their opening performance was a sign poem titled "Language"[91]. This is a two-

[90] http://deafpetercook.com/home/Flying_Words_Project.html
[91] The video recording of this performance of "Language" can be accessed from this link, between 5'20"-8'30": https://www.youtube.com/watch?v=rm0WOZqItHg

body, four-handed bimodal-bilingual poetry using ASL and spoken English in a complementary fashion. The spoken interpretation part of the poem goes like this:

> *"Look at all of these deaf people…*
> *Deaf people always signing away, signing away …*
> *And look, at all of these hearing people…*
> *Always, talking away, talking away…*
> *with their BIG MOUTHS!!…*
> *And deaf and hearing poetry…poetry…*
> *I can beat you with my four arms!*
> *I can control LANGUAGE!!*
> *I can play with language, language, language, language, language…*
> *YEAH!*
> *Watch this! I'm gonna throw it around the world…*
> *Let's see…it is 4:30 here in Chicago, should be 6:30 in NY…*
> *7:30! Here it comes!*
> *Language…and poetry…around the world…LANGUAGE!!!"*

Using spoken words, Cook and Lerner exploit the creative possibilities of ASL by using their combined four hands and arms, two of deaf and two of hearing, resembling the Hindu deity Vishna[92], "the protector and preserver of the universe", who is believed to manifest in any shape and form anytime he is needed to fight evil (See Figure 5.1 for a comparison). Using this powerful imagery, the performers playfully depict a visual, gestural and affectual representation of spoken and sign languages, materialized in their bodies. Their poem begins with a portrayal of language as diversely embodied and produced by deaf and hearing people, from the perspective of deaf people. What follows is a claiming of power using the control of language, accompanied by an initial clumsy negotiation of power between their deaf and hearing halves. Once the deaf half tames the

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[92] "…Vishnu is the preserver and protector of the universe. His role is to return to the earth in troubled times and restore the balance of good and evil…" http://www.bbc.co.uk/religion/religions/hinduism/deities/vishnu.shtml

hearing half getting out of line, the now harmonious deity continues to protect and preserve sign language, through the use of artistic expression. In their poem, sign language unfolds gradually first as a thing, a weapon, a toy, then finally a vehicle that travels around the world, through time and space.



Figure 5.1. Comparison of the Hindu deity Vishna[93] and the Flying Words project

In 2011, I had the privilege to watch *The Flying Words Project* live at the closing of Theoretical Issues in Sign Language Research Conference (TISLR 10) at Purdue

93 http://www.bbc.co.uk/religion/religions/hinduism/deities/vishnu.shtml

University. Their poetry covered a wide range of everyday observations and experiences, all the way from conflicts between deaf and hearing people, the relationship between humans and animals, to environmental and political consequences of industrial life. Through their work, we not only see a celebration of sign language and collaboration between deaf and hearing people, but also a new embodied poetics of social critique.

Returning to the history of deaf people in Modern Turkey, we see that the performative claiming of power through sign language has not necessarily been similar to these examples. In terms of the claiming and preservation of TID by deaf people in Turkey, perhaps the most critical figure was Süleyman Gök. Also a deaf man himself, Gök founded the first deaf club in Turkey and later, a private deaf school in İstanbul in 1944. Sign language was highly encouraged at this school. Gök was not only a great storyteller in sign language, as his students describe him, he also published the first books that documented signs in TID (Gök, 1940)[94]. In terms of the performativity of TID, perhaps it has been confined to deaf clubs in Turkey for a long time, especially considering a long period when sign language was discouraged at deaf schools. Theater productions by deaf people in Turkey have traditionally been more gesture and mime-based, rather than sign language until recently. This shift in the employment of TID in theatrical performance likely follows Turkish deaf people's increased contact with European and North American Deaf communities, as well as exposure to Sign Poetry and Sign Stories via YouTube and Facebook. This is an important point that I will return to in the last section of this chapter. Similarly, to date, I have not encountered any TID poetry

94 Please see Ilkbasaran & Tasci (2012) for a more detailed account of Süleyman Gök and the history of deaf education in Turkey.

or traditional stories that have been passed on from one generation to the next. Even my deaf consultants who come from deaf families going back many generations could not come up with any origin stories or older performances, either from their families, or the deaf community at large.

The visibility of TID in the public sphere goes back to 1993, when the national television channel TRT began airing the "news for the hearing impaired", featuring Nermin Merdanoğlu, a CODA who interpreted the news into TID. This was initiated personally by Merdanoğlu, following her exposure to interpreters on French television, and it predates any organized state initiative in this area. Although aired only once a week, we can see that it quickly made its way to popular culture from the way it was appropriated a year later by one of the most popular comedy shows on Turkish television at the time (see Figure 5.2)[95]. In their sketch, they mock sign language interpretation of the news as a social critique: the hopeless social and political state of the country could be illustrated by a few obscene hand gestures used by the "interpreter." It is not clear that the visibility of sign language on television led to greater visibility of the deaf community, but I cite it here as evidence for its recognition by hearing people. Between 1998-2004, Merdanoğlu also hosted the first TV Show in TID on TRT-2, titled "Iki Elin Sesi" (The Sound of Two Hands), which aired close to 300 episodes on a range of topics.

95 http://alkislarlayasiyorum.com/icerik/164843/olacak-o-kadar-isitme-engelliler-haber-bulteni-1994



Figure 5.2. Screenshot of the 1994 sketch from the comedy show *Olacak O Kadar,* mocking the use of sign language on the "news for the hearing impaired".

TID's main recognition in the public sphere in recent years has been through performances of Turkish texts that are central to Turkish civic and popular life. The TID interpretation of the Turkish National Anthem[96] is one such example, which gave visibility to deaf people in bureaucratic settings. This has proven to be quite symbolic of deaf people claiming their citizenship in the public sphere. On television, we not only have more TID interpreting of news, but also of a weekly prime time comedy and satire program since 2012. Having TID interpreters is becoming a more standard practice for public events, meetings and conferences, especially in the political and bureaucratic spheres. On the Internet, we see more Turkish popular songs being interpreted into TID by either CODAs or other hearing people. Unlike the news programs, these song interpretations have attracted a lot of attention from the hearing community. Many of these videos, as well as some public service ads, are signed by non-signer hearing actors

96 The TID interpretation of the Turkish National Anthem was also created by Nermin Merdanoğlu.

who are taught signs by a CODA. In these video productions, aesthetic concerns and the popularity of actors are often prioritized over the clarity and accuracy of signing. These interpretations often become literal translations of Turkish, with little artful translation. For most of the viewing public in Turkey, hearing CODAs or non-signer actors have been the face of TID. On Facebook, however, there are more Turkish Deaf signers and performers.

The invention of film and later, video, not only allowed narratives in sign language to be captured and circulated more widely across space and time, but this spatiotemporal shift has also created opportunities for self-reflection (both individually and as a group) and social progress (Krentz, 2006). Compared to Turkey, deaf signers in the West have more control over their institutions, and their public image (Humphries, 2007). For the United States, the popularity of ASL vlogs (video blogs) on YouTube can be traced back at least eight years. These vlogs have created a democratic platform of dialogue and negotiation for the American Deaf community. Authored by deaf people from a range of backgrounds, these vlogs have mostly been opinion pieces that have to do with community empowerment or negotiation of ASL signs. Some of these vlogs were authored by community leaders, whose YouTube channels were frequently attended by many. While beyond the scope of this dissertation, a detailed content analysis of these videos would definitely be valuable in revealing some tensions and competing discourses among the deaf community.

In the 21st century, there were two other important interventions led by U.S. scholars at Gallaudet University, in documenting and disseminating its own narratives

about itself: the Gallaudet Video Library[97] and the Deaf Studies Digital Journal[98]. While the former created an archive of American Deaf heritage, the latter promoted the production of new knowledge directly in ASL, claiming a new mode of academic inquiry.

Another line of work regarding Deaf authorship has been the exploration of orthographic representations for sign languages. The need to create a writing system that is based on sign language is not a new concept. Sign language researchers have long played with the idea and came up with various notation systems for sign language phonology (e.g. Stokoe Notation, the Hamburg Sign Language Notation System (HamNoSys), SignWriting), primarily to code sign language for further linguistic analysis. What is unique about Robert Arnolds' (2011) ASL writing system *Si5s* is that it is developed *by* Deaf people *for* the everyday use of Deaf people. It is a two dimensional cultural artifact to represent, document and exchange their visuospatial language more accurately. Designed originally based on ASL, Arnolds' intention is for Si5s to be adapted to other national sign languages in the long run. However, although there are workshops to promote the use of Sign Writing and Si5s, neither one of them appeared to be used in everyday exchanges among Deaf people. This is likely due to the prevalence of video based documentation and communication technologies that allow for the capturing of sign language as is.

97 http://videolibrary.gallaudet.edu/
98 http://dsdj.gallaudet.edu/

5.2.2. Sign language contact and the agencies of deaf people

What followed the recognition and appreciation of national sign languages was increased political activism and mobility among Deaf communities, extending beyond national borders. As McKee and Napier (2002) point out, when Deaf people became politically organized and mobilized on a global scale, thus increased international contact among them and there emerged a need to standardize an international sign system to facilitate formal communication at international gatherings.[99]

Instantiated as a contact language that is lexically and grammatically a simplified approximation of participating national sign languages, the majority of sign linguists consider International Sign (IS) as a 'pidgin' (Moody, 1994; McKee & Napier, 2002). Studies show that compared to typical spoken pidgins however, it makes more systematic and complex use of grammar (Webb & Supalla; 1994, 1995). The agreed upon lexical items in IS are often those that are either borrowed from a particular sign language due to their highly iconic nature, or are simplified approximations of several similar representations that are made more iconic.[100]

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99 In 1951, the first World Deaf Congress was hosted by the Italian Deaf Association (ENS) in Rome, and was attended by representatives from 25 countries. It was during that first Congress that the World Federation of the Deaf (WFD) was founded and the discussions over the possibility of a universal sign language first began (Reagan, 2010). It was not until the early 70s that 'the Commission of Unification of Signs' was established by the WFD, as a committee responsible to create an international sign language for the Deaf. The initial attempt, called Gestuno, consisted of about 1500 relatively simplified signs that occurred similarly across major Western sign languages, used in a gestural manner (British Deaf Association, 1975). This was a top-down attempt in creating a language that was unintelligible for most deaf people who have attended the next few international gatherings that followed (Rosenstock, 2004). While Gestuno failed due to its reliance on a prematurely fixed vocabulary and gestures, the later developed IS rather emphasized grammatical structures that are shared across sign languages, liberating lexical units to be realized with respect to the properties of participating national sign languages (Allsop, et.el, 1995). Thus, compared to national sign languages IS has a much smaller lexical pool and these items are more vulnerable to change, responding to the linguistic needs of present interlocutors.

100 In order to investigate the origins of IS vocabulary, Rosenstock (2005) looked at 12 five-minute clips of IS interpretations from Deaf Way II. Her analysis showed that more than 60% of the IS vocabulary

Although IS does not qualify as a full-fledged language, it is still a successful communication device in international contact situations. While we need more detailed linguistic research to correctly identify the origin of signs in IS, as well as the extent of IS influence on national sign languages, in literature this phenomenon has been studied using the following terminology: code-switching, code-mixing, and borrowing. [101]

Goffman (1981) sees code-switching as one of the ways to signal change in footing, which refers to *"changes in alignment that we take up to ourselves and others"* during an interaction (128). Similar to earlier views on the social indexicality of language variations, Goffman refers to interlocutors shifting social roles through the use of language codes, yet he further complicates his model by referring to *"multiple embeddings of different footings"* through interrelated incarnation of selves (Woolard, 2004, 86). Bakhtin (1986) considers words and phrases as public objects, which are continuously reinterpreted in the complexity of the moment that they are uttered during particular interactions, participating within a chain of responsive reactions to one another (91). According to him, while their appropriation as a part of the conversation brings in their social meanings experienced and shared prior to the interaction, it is only through the complexity of the utterances expressed that they realize and serve their

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occurred in the same form in more than eight sign languages, 2% were unique to IS, and the remaining 38% were loan signs that could be traced back to a particular sign language (2).

101 Woolard (2004) defines code-switching as "an individual's use of two or more language varieties in the same speech event or exchange" (74). By language varieties, Woolard refers to distinct languages as well as dialects of the same language. This is a relatively broader definition that refers to the alternating use of elements from multiple language varieties within the same speech act. Other linguists however, would consider Woolard's definition to be over-inclusive and lacking specificity. Instead, they would prefer to differentiate between the cross-linguistic alternations that occur at the phonological, lexical, morphological and syntactic levels. Kuntze (2000) for instance, articulates the conventional understanding of code-switching as "the mixing of two languages in an utterance in which elements of each language retain the phonological and morphological structure of the mother tongue" (289). With this definition, bringing in lexical units from another language without any morphological components would be considered as borrowing.

communicative purpose.

In the 21st century, more deaf people get to travel physically and virtually to meet other deaf people around the world and are thus exposed to IS in a range of social contexts (i.e., International Deaf sports events, travel, multiuser video chat like *ooVoo*). It is important to point out that most of these international Deaf events mentioned earlier have taken place within the Western world. Most of these sports events and political meetings occurred either in Europe or in Northern America, resulting in the development of a contact language that was informed mostly by national sign languages from those particular regions. Although member countries to CISS and WFD include those from Africa, Middle East or Asia, their inclusion to this international language pool leading to an agreed upon sign system have been relatively scarce and recent. Moreover, many Deaf people around the world learn ASL as a foreign language, putting ASL in a similar position in relation to national sign languages, as English has over national spoken languages (Reagan, 2001).

With growing international Deaf contact, questions on the sociopolitical relationships between national sign languages (NSLs) and international contact sign systems have also been attended by scholars, especially linguistic anthropologists (Lucas, 2001; Woll, B., Sutton-Spence, R. & Elton, F. 2001). The use of language is as an ongoing identity performance and social negotiation defining the boundaries of one's group affiliations and agencies (Anzaldua, 1987; Blommaert, 1992). In that sense, reading the dynamics between NSLs and IS can be a useful strategy in tracing a particular deaf community's links to the prevalent global discourse on Deaf people's agencies.

In reference to spoken languages, de Swaan (2001) argues that the languages with

potential communicative and social advantage (i.e., access to art, media, culture, services) are more likely to be acquired by people. After all, languages are simply tools for access and only those tools that serve functional are likely to be adopted. De Swaan (2001) also offers a hierarchical model of languages, in which there are four different categories with respect to the extent to which a language affords connectivity among communities around the world (*hypercentral, supercentral, central* and *peripheral*) [102]. Hiddinga & Crasborn (2011) liken sign languages to peripheral languages de Swaan's global language system; in that they do not have a written form and that they offer access to a limited set of resources. They argue that no national sign language has yet reached the status of being as hypercentral a language as English, although ASL has the potential for it largely due to international traffic at Gallaudet University. They also discuss the ways in which IS could relate to this model, and conclude that although it resembles a hypercentral language, it is still too limited and in flux to result in as efficient of a communication as English offers among spoken languages.

The majority of literature on code-switching or code-mixing with regards to sign languages has been about cross-modal alternations and not across sign languages. That is, excluding the work on the manual representations of written/spoken languages in the immediate national or regional sign languages that are in contact, such as the case of Signed Exact English (SEE) and American Sign Language (ASL) for instance (Kuntze, 2000). Kuntze writes that claiming codeswitching between two languages of different

102 According to De Swaan's (2001) model, English is the only "hypercentral" language that connects the users of twelve "supercentral" languages (i.e., Arabic, Spanish, German, Russian, Japanese) with wide number of users across geographies, as well as more than a hundred "central" languages that are also pretty established. Finally, the last category of "peripheral" languages refers to languages that are used by smaller communities, and would not typically be a useful communicative tool in multilingual situations.

modalities, such as ASL and English, contradicts the widely accepted understanding of the term. This is likely due to the term being conventionalized mostly through the study of spoken languages.

5.3. Contemporary Agencies of Deaf Youth in Turkey

In this section, I will elaborate on the different avenues and barriers to the agencies of deaf youth in Turkey, across a range of social domains and media. I will begin with the implications of their literacies and social networks on their employment opportunities, along with additional state measures to create job opportunities for deaf people. Then, I will discuss this population's ability to access state services and participate in civic life as citizens, through examining the accessibility of several key state institutions, both online and offline. This will be followed by a consideration of how gaming affords additional agencies to deaf youth in Turkey through regular participation in game-worlds. Then in the last section, I provide a detailed description of emerging practices of Turkish Deaf authorship through sign language videos shared via social media, particularly Facebook. Here, I first discuss the normalization process of sharing TID videos on Facebook, initiated by Deaf rights organizations and leaders. Then after a survey of deaf-authored public pages on Facebook, I will offer a sociolinguistic reading of language preferences in the videos produced and shared by deaf youth in Turkey.

5.3.1. Literacies, Social Networks and Employment Opportunities for Deaf Youth

Sustenance and financial independence is one of the most crucial requirements of agency in social life, especially in the urban setting. As I have mentioned in Chapter 2, within the past decade the Turkish government has taken several steps towards positive

discrimination for its citizens with disabilities. The first one of these measures is a change in the labor law in 2008, bringing a 4% disability quota for businesses that have 50 or more employees[103]. However, both my interviews and the focus group meeting with a group of employed deaf youth in Istanbul have revealed that deaf people are often not among the hired. Instead, many businesses hire individuals with minor disabilities to fill the quotas. And even when they are hired, they are usually overqualified for the positions and are usually only paid minimum wage, which is 891,03 Turkish Liras (~400 US dollars) net[104]. See Figure 3 below for an image that has been circulating on Facebook recently, comparing the typical salaries of deaf people with other disability groups in Turkey.



Figure 5.3. Image shared on Facebook, comparing salaries of deaf people (bottom), with other disability groups (from left to right, people with: motor disability, cognitive disability, vision disability)

In addition, one of the issues that came up in the focus group meeting was that deaf people were less likely to get a promotion. They had observed several times that between one deaf and one hearing people hired, the hearing employee would often get

103 http://www.iskanunu.com/images/dokuman/4857-sayili-is-kanunu-guncel-tam-metin-2012.pdf
104 http://www.csgb.gov.tr/csgbPortal/cgm.portal?page=asgari

promoted to higher positions, while deaf employees would remain in the same position for years. Here's an excerpt from my interview with a 40 year old hard of hearing man:

> *You need to be able to talk. First they hire you, then they tell you 'but you can't speak!' and fire you… Here, social security is really low. It is much better in Europe. They have much better job opportunities there, which are also paid well. I hear all that from my friends. By January or February, my retirement pension will kick in. I'll be getting about 1500TL (~670 US Dollars). As soon as that is taken care of, I want to get out of here. Europe is really nice.*

As a hard of hearing person, he can talk a little bit, which helped with his employment situation a lot. He has had many different jobs until now, and most of them he found through friends and personal connections. It is also important to note that his older brother paid extra for his retirement fund, that is why his retirement pension is significantly higher than average.

The second government initiative with respect to employment has been to organize a national selection and placement exam for public personnel, specifically offered to people with disabilities (disability status 40% or higher), starting 2012. Initially called ÖMSS (Özürlü Memur Seçme Sınavı), currently titled EKPSS (Engelli Kamu Personeli Seçme Sınavı)[105], this is a written exam for which different disability groups receive different accommodations. After the first exam in 2012, further adjustments and simplifications have been made to the exam that deaf people take. According to state statistics, in 2014, a total of 2,062 people with "hearing disability" were employed through this exam[106]. This is a much lower number compared to 10,977 with "orthopedic disability", 7,491 with "vision disability", and another 9,338 who are unclassified. In

105 This distinction between "özürlü" and "engelli" is an important one, with the former suggesting "handicapped", while the latter refers to "disabled" in Turkish.
106 http://www.dpb.gov.tr/tr-tr/istatistikler/engelli-personel-ve-omss-istatistikleri

2012, we had asked ÖSYM to allow for TİD interpreters for the exam, however, they have since declined this request due to the difficulty of monitoring interpreters, who could potentially give away the answers to the applicants. This comes from the illegibility of sign language by the State, while no other disability group is denied the support of a third party if needed for assistance.

Based on my interviews with young deaf adults, several points can be made about the employment patterns of deaf youth in Turkey: (1) employment rate is not high among this population, (2) the internships that are arranged through vocational high schools for the deaf seem to provide the initial job opportunities upon graduation, (3) social networks play a large role in finding jobs, (4) government initiatives create new job opportunities for deaf people, (5) communication difficulties with co-workers and employers are among the biggest obstacles in their employment, (6) limitations in reading and writing skills in Turkish.

5.3.2. Sign Language Interpreting and Negotiating Agency

In Chapter 1, I provided a more detailed description of the state of sign language interpreting in Turkey. What I would like to focus on here is instead the political dynamics between deaf and hearing people around interpreting, and the visibility of TID as a result. In the past, interpreting was done informally and often on a volunteer basis by CODAs or teachers of the deaf. The institutionalization and professionalization of sign language interpreting, on the other hand, is only a few years old in Turkey, and is still in progress. While the main purpose of interpreting is extending the agencies of deaf people, the potential commodification of interpreting has recently created some tensions that are

worth discussing here.

As I mentioned in the opening of this chapter, one of the topics that occupied the Facebook pages of many Turkish Deaf people in the Fall of 2014 had to do with a conflict between the deaf people and sign language interpreters. This event took place in the first week of September, triggered by a conflict between a Turkish Deaf scholar/community leader and the president of the Turkish National Association of Sign Language Interpreters (TIDTD). The events started with the announcement of a three-week-long program designed for skilled deaf signers of TID, with the intention of getting them trained, evaluated and certified to become teachers of TID. Prior to this program, there had been several opportunities offered to Turkish CODAs[107] as well as other hearing TID signers to become certified in teaching sign language. This program was a first of its kind in the country, both in terms of the length and intensity of teacher training, and also in its aim to certify Turkish deaf people to become teachers of their own language.

When the request of some hearing CODAs who also wanted to be a part of this training was turned down, the president of TIDTD, also a CODA herself, made a public announcement that they would not be providing any interpreting services to this project out of principle. Following this announcement, the Deaf scholar leading the project shared a video explanation of the situation on Facebook, and invited members of the Turkish Deaf community to share and elaborate on their thoughts on this issue by filming and posting their TID videos on Facebook. This call resulted in an unprecedented density

107 CODA refers to "Children of Deaf Adults", which in most cases refers to hearing individuals who are born to deaf parents, and have acquired sign language at home as their native language.

of opinion pieces in TID online, authored by Turkish deaf people. Dozens of young deaf men and women from Turkey posted their own videos, as well as commenting on each other's videos in Turkish and other visuals. These videos were soon accompanied by those of the president and members of TIDTD, responding to claims and defending their position. Within a week, these TID video threads were circulating on the Facebook walls of Turkish deaf community members, making it the trending topic of conversation. The videos posted by deaf people were almost entirely supportive of their community leader, telling TIDTD to back off from this project and release a public apology. Some of these videos from both sides were more aggressive and resentful, dismissing the interpreters altogether. Eventually, this online exchange created a serious conflict between the Turkish CODA/Interpreter community and the Turkish deaf community, drawing them further and further apart.

At this point, the president of TSMF, a CODA himself, jumped in this virtual conversation. He criticized the increasingly aggressive tone of these videos, asked both sides to end this growing virtual quarrel, and invited them to come together for a face-to-face meeting at the Federation instead. The video exchanges continued online for another while, complemented by others who were trying to mediate this conflict between the two sides, reminding them that the two communities are a family and that they depend on each other. Finally, a week later, the president of TIDTD has announced a public apology from the Turkish deaf community, temporarily putting an end to this virtual dispute. While this was certainly not the first time that deaf people and CODAs or sign language interpreters have been in conflict with one another in Turkey, the virtual nature of this one made it visible, accessible and documentable to anyone fluent in TID. Also, due to

the speed of exchanges, from its initiation to its resolution, this conflict unfolded in a quicker and more transparent manner, while perhaps growing larger in size.

5.3.3. State Services and Agencies of Civic Participation

One of the questions that I have directed towards my participants both in writing and during the interviews, particularly in the older deaf group, was the following: *What are some of the biggest obstacles that you think deaf people in Turkey face? What needs to be done?*

The three main themes that came up as a response to these questions had to do with access to education, health and mass media. Starting with education, below are a few excerpts from their responses:

> *Deaf schools are insufficient. Education for the deaf should be improved. Courses should not only cover religion, but topics like psychology, communication, socialization, or things that support a deaf person's daily life and problems.* (Deaf male, age 27)
> *At school we must have interpreters with us. We want to be more successful. We cannot understand and follow the class without the interpreter. We cannot form sentences properly. It is very difficult to find a job, because they won't hire us."* (Hard of hearing male, age 30, implanted at age 15)

Looking at these narratives and many others that I brought up in Chapters 2 and 3, the lack of communication between the teachers and the students at deaf schools is a serious obstacle for the agencies of deaf people in Turkey. This is unacceptable, not only because it leads to poor quality education in subject areas or domains of real world knowledge, but also because it fundamentally prevents their acquisition of textual literacy in Turkish. While these institutions create the environment in which deaf students can informally acquire sing language from one another, when it comes to future interactions with hearing people, they still have to rely on writing for the most part. This applies to

their personal, social, and professional lives, as well as to their bureaucratic interactions with the government as a citizen of Turkey.

> *Deaf need to get educated. They need to acquire reading and writing. I get really frustrated because there is no captioning on television. Television is not really my thing. And I think normal (hearing) people need to learn our sign language too. Doctors or teachers for instance. How is a deaf student supposed to follow the class if the teacher is hearing? Deaf should be able to understand the lecture and follow the class really well. Unfortunately that is not the case. Here, deaf students have a serious literacy (reading and writing) problem, and they would like their teachers to be deaf. If they get trained and educated, I trust that it will be really valuable."* (Hard of hearing man, age 28)
>
> *When I go to the doctor, I need to ask questions to the doctor sometimes, but the doctor wouldn't explain. I need to know how to use my prescriptions right, but the doctor wouldn't explain.*

In chapter 2, I addressed some of the steps that the Turkish government has taken since the turn of the century, towards becoming an "Information Society" (i.e., the "eTransformation Turkey Project" [2003] or the "Fatih Project" [2010]). What these projects had in common was a move towards digitizing as many state services as possible, combined with technology implementation at related state institutions. With the launch of the eGovernment[108] (eDevlet) portal in December 2008, many state related inquiries and applications that previously required citizens to physically travel to state agencies, moved to the virtual realm. While this potentially created faster and more efficient services to many, this new digital platform of interaction has its own affordances. This new setup assumes citizens who not only have access to computers or smart phones with fast enough Internet, but also the kinds of literacies that are required to navigate these online textual spaces once accessed. This so called e-democracy underestimates the social, digital and literacy divides among the citizens.

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108 https://www.turkiye.gov.tr/

The relationship of Turkish Deaf organizations to the government has parallels in other non-Western deaf communities, for example India. Friedner (2008) states that the Association of People with Disabilities (APD) in India, is "extremely careful to not antagonize the state." (20). Similarly in Turkey, despite a slower pace than ideal, there have been several state initiatives for deaf people as I explained in Chapter 1, and TSMF seems to prioritize better relations over creating enough community pressure sometimes. And considering the possibility of bottom-up grass-roots initiatives coming from the deaf community, one of the biggest obstacles seems like the "substantial communication barriers that start in childhood" and difficulties in the full comprehension of concepts like "human rights" or "empowerment" to begin with (21).

In order to evaluate how accessible the websites of the most relevant state institutions are to deaf people in Turkey, I have picked four institutions: (1) *The Ministry of Education* (MEB), (2) *the Student Selection and Placement Center* (ÖSYM) that organizes all nationwide exams in Turkey, (3) *the Ministry of Family of Social Policies*, which *the General Directorate of People with Disabilities and the Elderly* (EYH) is under, and (4) *the Ministry of Health*. At these websites, I looked at both the complexity of written language used, and the extent to which each of they had TİD interpretations of their content.

None of these four government websites have their main Turkish content available in TID, or have a hotline for deaf people to make inquiries directly in TİD. This means that navigation of the websites requires comprehension skills in Turkish, and the ability to direct inquiries to these government agencies depends on one's Turkish writing skills. That being said, out of the four, ÖSYM and EYH provide TID translations for

limited sections of their website: (1) ÖSYM has some of its exam handbooks available in TID since 2012, produced in-house by TSMF and signed by its president who is a CODA[109], and EYH has (2) a separate website where latest disability related news and announcements are being shared in TID since 2013, as well as (3) the *United Nations Convention on the Rights of Persons with Disabilities*[110] interpreted to TID with captions in Turkish. In fact, all videos on the EYH are signed by the same individual, which shows that they have hired a full time TID interpreter for this purpose. Moreover, in April 2014, EYH has announced a call for hiring 75 new TID interpreters across 72 cities[111]. This suggests that at least during their face-to-face visits, deaf people living in those cities can interact with this particular government agency through sign language interpreters.

However, coming back to the TID content on these websites, it is important to note that they are rather difficult to access. When one begins navigation from the homepage of each website, it is neither mentioned that these accessible pages with TID content exist, nor transparent as to how one could get there, even for someone who is fluent in written Turkish. These links are often buried deep in the navigational structures of websites, and only accessible through a determined Google search with keywords.

Comparing the written Turkish used on these websites with how my participants related to the Turkish texts that I have used in my language measures (as presented in Chapter 2), it is not realistic to assume that deaf people in Turkey have the textual literacy skills in Turkish to navigate these virtual spaces or fully comprehend the Turkish

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109 This is a process that I have also been involved with in 2012. See the introduction of Chapter 3 for more details about the process and my involvement with it.

110The TID interpretation for the United Nations Convention on the Rights of Persons with Disabilities can be accessed from the EYH link here: http://engelli.oyhgm.gov.tr/sozlesme/sozlesme_gorsel_isitsel.aspx?madde=giris

111

content provided on them. Perhaps with a few exceptions, they would need to access these websites with a hearing person who is skilled in written Turkish and TID, who can help accomplish their goals. Given the lack of sufficient and professional services for TID-Turkish interpreters in the country, however, they are more likely to rely on the limited interpretations of family members or friends.

Finally, returning to the "Removing Barriers in Communication" (Turkish: "İletişimde Engelleri Kaldırıyoruz")[112] project of UDI, which allow deaf people to communicate textually with landlines, this application seems to capitalize on existing communicative practices and skills of deaf people. As we saw in Chapters 2 and 3, texting is one of the most preferred means of communication among the deaf, but it is also widely used among hearing people. With this new platform, both deaf and hearing people who prefer texting for various reasons can get services.

In the light of literature on the religious factors behind mass literacy practices that I brought up earlier in the chapter, I also wanted to look at sign language content on the website of the highest ranking religious institution in Turkey. The "Republic of Turkey, Presidency of Religious Affairs" (Turkish: Diyanet İşleri Başkanlığı) has its own separate "accessible" website in which an elaborate TİD dictionary of religion (Islam) is made available online.[113] This website not only includes about 800 videos of religious signs and idioms, but also written descriptions of how the signs should be produced, along with a

112 http://www.iletisimdeengellerikaldiriyoruz.com/
http://www.bthaber.com/engelsiz-mesaj-ile-sessizlik-sese-donusuyor/

113 The Turkish word that is prevalent in accessibility related projects and interventions is "engelsiz", which means "no barriers". To view this website, you can follow the link here: http://engelsiz.diyanet.gov.tr/Sozluk/%C3%82

simple definition of the concept in Turkish[114]. This dictionary is also available as a downloadable .PDF file (208 pages), with arrowed still images of videos and descriptions. This website appears to be a recent virtual extension of an older pilot project that was launched by the same institution in 2011[115], at 12 mosques in 11 cities, where sermons and khutbahs were interpreted to TID for the deaf community. In fact, a few of the high school students who have participated in my pilot study in 2010-2011 had mentioned that a mosque not too far from their school was holding special meetings for the deaf community Friday afternoons, in TİD. At these meetings that were attended by many, topics of the sermons ranged from the Quran to the life and words of the prophet Mohammed and living a faithful life. In the next section, when I talk about the content created and shared by deaf people in social media, I will come back to the prevalence of religious content in the TID videos that are available online.

5.3.4. Games and Agencies of Social Participation

In this section I cover two types of game worlds that I will cover in this section and unpack their implications for agency and the experience of deaf empowerment: the world of sports and online game-worlds. While the former largely unfolds in the physical realm and has virtual extensions, the latter takes place in the virtual realm and at times extends to physical space. While deaf men and women are interested in and engaged with a range of sports, gaming, or at least the kind of complex and social online games that I will refer to in this section, is largely a male activity among deaf youth in Turkey.

As we have seen in previous chapters that preceded this one, sports events are

114 http://www.diyanet.gov.tr/tr/icerik/diyanet%E2%80%99ten-isitme-engellilere-buyuk-hizmet%E2%80%A6/12674
115 http://diyanet.gov.tr/tr/icerik/isaret-diliyle-vaaz-ve-hutbe-11-ilde-devam-ediyor%E2%80%A6/6844

central to many young deaf people in Turkey. This begins as early as elementary school when they join sports or folkloric dance teams, and continues with deaf youth becoming members of deaf sports clubs. Some of these youths even go on to compete internationally with the support of TIESF . The varying popularity of sports among the population at large is also represented in these branches. Especially in soccer, wrestling, athleticism, and taekwondo, sports based affiliations and accomplishment in competitions are perhaps the highest source of satisfaction and recognition among deaf people in Turkey. It is through the performance of sports that they get the opportunity to rewrite a positive narrative of themselves, which is legible by the Turkish society at large.

There are no deaf characters in a game-world; rather, there are players. The ability of a player to navigate these game-worlds has little to do with their hearing status, except for perhaps the indirect consequences of limited textual literacy in games that are more text based. The navigation of and the activities within virtual game environments primarily require a combination of visiospatial abilities and hand-eye coordination, both of which are strengths for most deaf people. In that sense, the experience of equal access and activity is perhaps the first forms of agency that gaming creates for deaf and hearing players alike (Crowe & Bradford, 2006). Not only that, but through participation in these game-worlds, deaf youth become a part of activity based communities of practice that often have nothing to do with their deafness. These communities of practice that form around computer games are among the most diverse groups that cuts across geographical, ethnic, religious, and corporeal boundaries. Through these games, players momentarily get a chance to escape real life structures, value systems, and roles. Instead, these online

games often involve complex social structures, rules and roles, are alternative activity spaces in which deaf people can participate.

As a reminder, some of the most popular games among my participants were soccer simulation games like *FIFA and PES*, along with real time strategy games like *Age of Empires, or* Massively Multiplayer Online Role-Playing Game (MMORPGs) *like Metin2*. The two soccer simulation games *PES* and *FIFA* are also in the top 3 best-selling console games and top 5 computer games in Turkey for 2012[116]. Looking at the world trends in game sales, we can see that FIFA is in the top 10, while PES is not even listed (ESA, 2013). This shows a trend that is situated and informed by Turkish people's interest in soccer, both in the real world and its simulations. This is to say, participation in these gaming communities, gives deaf youth the opportunity to not only access, but also the possibility to become active members in an important part of popular youth culture in Turkey.

5.3.5. New Faces of Turkish Deaf Authorship on Facebook

In the previous chapters, I described how Deaf organizations like TSMF and TSFD have increasingly been making use of social media to inform the Turkish deaf community of news and events that are of interest to them. Just like these national organizations, local deaf clubs and sports clubs in Turkey also make use of social media to keep their communities updated. Apart from these institutional uses of social media, however, Facebook is gradually becoming a platform where Turkish deaf individuals share their personal knowledge and opinions on issues that are of concern to the rest of

116 http://www.dr.com.tr/Main/Home/PageContent/2012encoksatanlar

the community. Especially in the past year, Facebook has been increasingly used as a mobilizing device among the Turkish deaf community in Turkey, which is primarily achieved by the production and sharing of video content in TID.

My deaf informants in a focus group meeting that I held in 2013 indicated that the under utilization of TID videos on social media was partly due to cultural norms. Unlike text, which is a relatively distanced way of expressing one's thoughts and feelings, self-authored videos result in direct visibility of the author, which thus demand a certain set of skills, knowledge and personality traits. The extent of performativity required from these videos is not necessarily parallel with Turkish cultural values or habits, as much as it is with American or other Western cultural emphasis on public speech. Thus, unless it comes from experts, community leaders or politicians, such self-authored videos are typically received with a level of doubt and disapproval in Turkey. One female deaf informant in her mid 20s wanted to have a cooking related video blog (vlog) in TID, for instance, but she quit when her very first video received many negative comments from the deaf community. They were criticizing her for her "attention seeking" behavior.

Presence of TİD content on Facebook had been very limited until 2014, and existing videos were mostly authored by deaf organizations using this platform to expand their social reach. In addition, there had been several young deaf adults who occasionally shared videos of funny stories or of religious content. The participants of my study were mostly aware of the videos produced and shared by older Turkish Deaf youth via Facebook or YouTube. They also stated that producing original sign language content for sharing was predominantly a male activity among the deaf population in Turkey. We do

need more studies on Turkish youth groups and Deaf youth around the world, in order to speculate further on this gendered practice of authorship.

Looking at current practices on Facebook, I can say that this trend of low TID-based authorship has been changing in the past year. More and more deaf individuals in Turkey are producing videos in TID and sharing them on Facebook now. In a way, the increased frequency of TID videos shared by the leaders or administrators of deaf organizations in Turkey seems to be normalizing the practice of sharing original TID video content among the community. While initially deaf individuals were sharing videos concerned with holiday or birthday greetings, these videos are gradually being accompanied by opinion pieces on particular Deaf events (like national or international Deaf sports events) or other topics concerning deaf people in Turkey (like nationwide entrance exams for education or employment) or world events (such as the Israel-Palestine conflict).

5.3.5.1. Emergence of deaf channels and deaf leaders on Facebook

This eventual normalization of the production and sharing of online sign language videos by deaf people in Turkey has led to several types of deaf-authored public pages on Facebook: (1) pages that address deaf people in Turkey, (2) pages that relay international Deaf news to deaf people in Turkey, and (3) pages that aim to reach both Turkish and International Deaf communities through their videos. My data in this section comes from virtual ethnography, consisting of both my virtual participant observations on Facebook and the responses to a mini online survey that I conducted in November 2014. This survey consisted of a TID video that I produced and shared on my Facebook wall,

through which I asked my deaf contacts in Turkey to post their favorite Turkish Deaf authored Facebook pages or groups as a comment. I have then created an Excel document with the details of these Pages, based on all this information.

As of November 2014, I have identified fourteen such public Facebook Pages that are authored by deaf people in Turkey, where they share original content in TID. Eight of these Pages include the words "Deaf" or TV" in their titles. This appropriation of the English term "Deaf" instead of the Turkish word "işitme engelli" (meaning hearing impaired) could be a political gesture towards the Western Deaf cultural identity and empowerment discourse. As Friedman frames it in the context of India, however, referring to the impact of the now global but mostly Western Deaf rights movement:

> *[W]hile discourse can and does travel, there are no guarantees of what it might (or might not) do on the ground. While hands and bodies can mimic signs, it is not clear what these signs "do" for those doing the mimicking. (Friedman, 2008, p. 21)*

This may as well be a reference to a particular genre of Deaf authored social media channels, a common practice that can be observed internationally. Both on YouTube and on Facebook, a quick search on "Deaf TV" results in many channels from all around the world. In that sense, it could be a shared code among deaf people around the world, making pages with sign language content easily searchable and identifiable. Despite the preference for the word "Deaf", the language of choice on these Pages is primarily TID. This suggests aiming for a Turkish Deaf audience particularly and not an International Deaf audience in mind. The use of the term "TV" is also indicative of their function similar to television channels. One of my hard of hearing informants tie this behavior to the lack of captioning on Turkish broadcast television, stating that this made Turkish deaf and hard of hearing people to exploit Facebook's features such that it

functions like a television channel for Turkish deaf people. Another feature that many of these Facebook pages share in common is a page specific logo that appears both on the profile picture or the cover photo of the page, and sometimes even in opening of the videos produced by the hosts or it is placed on the top right corner. Some examples to these logos can be seen in Figure 5 below. For all these reasons combined, I will be using the terms Facebook "pages" and "channels" interchangeably during the remainder of the chapter.



Figure 5.4. A collection of logos from Turkish Deaf TV channels on Facebook.

Almost all of these Facebook channels have more than 1,400 followers. An overview of all such Facebook channels reveal the following: (1) all authors are young Deaf men from Turkey between their 20s and 30s, except for two public pages that are authored by married couples, (2) half of these channels were launched in 2014, suggesting an increasing trend, (3) the most common type of content appear to be stories and jokes, announcements related to deaf people, as well as instructional videos on Islam, and (4) some of these authors show advanced skills in video editing, as can be seen from the use of subtitles, photo overlays, transitions, integration of multiple video files, or screen captured Skype interviews.

In addition to these Facebook channels summarized above, some Deaf or hard of hearing people in Turkey use their personal Facebook accounts to occasionally share TID videos, responding to current events or telling their personal stories. However, overall deaf people in Turkey still primarily use a mix of photographs or written Turkish in their status updates. An important technical limitation of Facebook is that one cannot post a "Comment" in video, making it impossible for Deaf people to carry out sign language conversations directly. That is why even when responding to sign language videos on Facebook, deaf people are restricted to using text and images. Technically it is possible to create one's own channel on YouTube, upload one's sign language comment there, and simply post the link as a comment. However, this requires more digital literacy and more of a longer-term investment.

5.3.5.2. Content of videos and domains of social life addressed

Here, I provide a more detailed analysis of the content of self-authored TID videos on Facebook. Overall, we can summarize the content of these videos under these categories: jokes and comical stories, announcements related to deaf people in Turkey, responses to personal or institutional conflicts in the deaf community, informative videos on public figures, fundraisers for deaf people who need financial help, and instructional videos on Islam. Next I analyze the content of videos under three categories that seemed more compelling in relation to the scope of this dissertation: (1) most popular "Deaf TV" pages that are hosted by Turkish Deaf people that have the most followers, (2) most popular pages that are hosted by Turkish CODAs or hearing signers of TID, and (3) other interesting themes and patterns that come up in other TID pages on Facebook.

The oldest and most popular of these pages was founded by a Turkish Deaf man in 2009, sharing 156 TID videos, and has around 12,500 followers to date. This page has a mix of videos clipped from the news (no captions or sign language), and self-authored TID videos of original content. The most common topics in videos on this page range from stories of unusual events from the news, informative videos on leaders in history (i.e., Suleiman the Magnificent, Hitler, Malcolm X), opinion pieces on topics related to deafness or religion, and tour of famous mosques in Turkey. Overall, his videos seem to get 2,000-3,000 views. The video with the highest number of likes, shares, and comments, however, was an informative one concerning traffic laws in Turkey and the driver license that people with disabilities have. This was a video in which the host was sharing his real life story of getting fined by a traffic police, for renting a B class car with an H class driver license. This video was shared by almost 500 people and it resulted in a long thread of comments in Turkish.

The next page with the most followers is one hosted by a young Turkish Deaf couple. This page was opened in early 2013, has 37 sign language videos and around 8,500 followers to date. This is a page that is primarily focused on entertainment, covering jokes, stories, short films, and signed music videos. Although this page has a lower number of official followers than the previous example, their videos appear to be viewed by 4,000-10,000 people. They achieve this wider reach by tagging more than 40 people while posting their videos, which makes use of their social networks, allowing the video to also appear on their contacts pages. In fact, such mass tagging is a strategy used by other Deaf people in Turkey too, capitalizing on the networks of their contacts when they want their videos to reach a wider audience.

What makes this page different than many others from Turkey is that the language of videos vary from TID and IS (or rather, a combination of ASL and European signs). These videos that are signed in IS also have English captions along with Turkish ones, and this time tag a mix of Turkish and international contacts. One unique example among these videos is the female host's remake of the Deaf American performance artist Rosa Lee Timm's "It feels so good" in ASL, without the music. What is really interesting is that, since the host is not fluent in ASL, most of the video becomes more of an imitation of Rosa Lee's gestures and body language rather than the actual lyrics. Exactly a year after this video, we see the host sharing another one, this time what appears to be an IS sign poetry authored by herself, based on a French music video that takes place in Paris. In her signing, we can see elements of ASL storytelling, and she uses a mix of ASL and European signs. I find these examples valuable as they capture both: (1) the appeal that Western and mostly American Deaf performance (poetry, storytelling and song interpretations) has on Turkish Deaf youth, and (2) the new generation's growing interest in connecting with the international Deaf audience.

Finally, the third most popular Turkish Deaf TV host on Facebook is a young Turkish Deaf man, who has posted about 22 videos since July 2014, and already has acquired almost 5,000 followers. A significant part of the videos shared by him are for fundraising purposes, for deaf people in need, both in Turkey and outside. Some examples to date have been deaf parents whose children who need to be operated, a deaf man in Egypt who needs to be operated, and deaf people in Gaza, Palestine, who were in need of food after the latest attacks this fall. This is important, because of the way that it capitalizes on social networks through social media, as well as religious and cultural

affiliations to raise funds for deaf people. He is not the first Deaf TV host to use social media to collect money from the community, and as must as support, these kinds of activities have also led to some controversy among community.

One more page, also hosted by a young deaf Turkish man warrants mention. He states that his goal with this group is to share informative and instructional TID or Turkish captioned foreign videos on latest technology with the deaf community in Turkey. Active since August 2012, the video content on this group ranges from reviews of smart and mobile devices, cutting edge design and technologies, as well as tutorials on computer installation or on online computer games that are popular among deaf people in Turkey. What makes this page special is that it aims to promote technological and digital literacy among deaf people in Turkey. With close to 3,000 followers, this page has been well received by the community. However, within the past year, the page has been less active and we see a clear decline in the community's interest of this page. We can see that from the number of "likes" and "shares" that each post gets. In the earlier phases of this page, there were many self-authored instructional TID videos that were also captioned in Turkish, making the videos both interesting and the content accessible. In the past year, these videos have been replaced by shorter posts in Turkish or simply sharing of foreign videos without captions. So while the posts were still relevant to the "technology", the content became less accessible and less relevant to the Turkish deaf community.

Returning to the Facebook pages hosted by Turkish CODAs or hearing TID signers makes visible how their content compares qualitatively to those of Turkish Deaf hosts. These channels are not as many as those hosted by Deaf individuals, however they

do attract a lot of people. Three such channels offer good examples: one hosted by a CODA and interpreter of TID, and the other two by hearing signers.

The first channel that I would like to discuss here is one that is hosted by a hearing young man from Ankara, who has acquired TID later in life. With more than 25,000 likes, this channel has the highest number of followers on Facebook, among all public channels with TİD content. This number is twice as much as the most popular TID based channel hosted by deaf people in Turkey. This is likely due to the bilingual nature of his videos, where TID signs are accompanied by either voiced or captioned interpretations in Turkish. Also reading through the comments to his videos, it appears that he is mainly reaching the hearing audience who want to learn TID.

In the very first video that this young man posted on this channel, he talks about how he became a TID signer about five years ago, and advanced his signing skills so quickly that he soon began both interpreting for deaf people at courts and teaching TİD to hearing people. He also became a public speaker, regularly giving talks at various educational institutions on sign language. He states his main incentive as giving access to deaf people in social domains that they do not otherwise have access to. As a result, his channel brings together three otherwise seemingly incompatible sets of videos: (1) interpretations of fatwas given by an Islamic clergy, (2) domain specific TİD terminology upon request from hearing professionals (i.e., health, fashion, art, sports), and (3) TID interpretations of popular Turkish and English songs (i.e., Lady Gaga, Tarkan, Yıldız Tilbe). Although the host is very expressive in his facial and bodily gestures, his interpretations of popular songs are largely signed Turkish accompanied by hearing gestures, instead of signing TID along with the its particular grammatical use of facial

expressions. While there are only about 90 videos on his Facebook page, the same host also has a YouTube channel with more than 120 videos, some of which have been viewed more than 100,000 times. Recently, he has also initiated a playlist on TID interpretations and explanations of İslamic terms and idioms.

This special case embodies many of the tensions and conflicts that are in effect with respect to the agencies of deaf people in Turkey: the foregrounding of hearing people in the increasing visibility of TID, problems with certification of TID interpreting, as well as Turkish cultural interactions between Islam, modernity and popular culture. His approachable and warm attitude, and the content of his videos appeal to religious and conservative sensibilities, contemporary popular Turkish youth cultures, as well as a range of professional groups all at once. For many hearing people who are interested in learning sign language, he has become the face of TID. Consented mediation and claiming of authorship on behalf of the other are two very different things. That is why such reappropriations of national sign languages by hearing people are problematic, even when they may be coming from intentions of charity and support. I will come back to this important point in the conclusion.

The second of the three TID pages hosted by a hearing person is one hosted by a CODA from Ankara, who is a TID interpreter and a sign language instructor. The host states the page to be founded for the development of deaf people and sign language. With more than 8,000 followers, this page is linked to a YouTube channel that consists of more than 60 videos to date, as well as a website with the same name. This page targets both the deaf and hearing individuals: providing text based announcements and news about TID classes for the hearing population, while authoring TID videos of stories,

explanations, news and announcements for the deaf community. In addition, there are also a few song interpretations and videos introducing famous tourist attractions around Turkey.

The last of the three hearing hosted TID channels appears to be hosted by a religion instructor, who teaches Qur'an to both deaf and hearing individuals in TID. With almost 2,000 followers, the description of the page reads as follows: "This is the sharing space for religious activities organized for deaf people", in Turkish. While half of the fifteen videos are recordings of himself teaching in the classroom, voicing in Turkish and signing in TID, there are also other videos that feature him reciting the Qur'an in Arabic, interpreting in TID, with captions in Turkish. On the same page, there is also a video of roughly 30 students who recite the Qur'an as a choir after each cue given in Turkish, likely from the teacher himself. In addition to original videos recorded by the host, the page features news and videos of other events concerning deaf people and Islam. Overall, this is a page designed to promote educating deaf people in the teachings of Islam, as well as training hearing people in learning Islamic signs.

TID based Facebook pages are becoming more popular everyday, and the descriptions above are only a snapshot of current practices that are prevalent among deaf and hearing people in Turkey.

5.3.5.3. Language choice (TID vs. IS) and intended audience

As the practice of sharing sign language videos on Facebook becomes increasingly popular among deaf people in Turkey, we also see interesting dynamics with respect to the language choice of authors. In the previous chapters, I had mentioned the

increasing popularity of International Sign (IS) among deaf people in Turkey. Here, I would like to elaborate more on what this means in terms of deaf people's language ideologies and mobilities, as materialized in their sign language practices on Facebook.

The previous chapter discussed the rise of International Deaf contact and IS exposure also applies to deaf people in Turkey. This exposure lends itself to TID signers borrowing elements from IS in their daily life, which is a typical phenomenon seen as a result of any language contact situation (Blommaert, 2012; Woolard, 2004).

Just like English is for spoken and written languages, IS appears to be a higher prestige language form among Deaf people in Turkey. It is important to note here that in Turkey, the majority of the Deaf community does not know the globally accepted IS sign for INTERNATIONAL SIGN, and instead refer to it as EUROPE SIGN (ES) in TID. This is parallel with the existing and potential mobilities and sign language contact situations available to deaf people in Turkey. Then again, what is referred to as ES signs by Turkish Deaf signers, may in fact be ASL signs at times, suggesting more of a conceptual framing of Western other, than actual origins. That being said, there is an increasing tendency among Turkish Deaf Facebook Page hosts to bring in foreign signs to their self-authored videos. Considering that the bulk of exposure and communicative access to IS takes place in the virtual realm for deaf people in Turkey, there is even a higher tendency to bring in IS to one's language performance, consciously or not. There could be several reasons for this. Here, building on the literature above, I would like to argue that one of the appeals of using IS/ES/ASL is its symbolic association to a range of literacies and mobilities.

I argue that in Turkey, IS or ES symbolizes "mobility" as it (1) reveals one's past

physical or virtual International Deaf contact and language exposure, (2) implies a certain social status or mobility by giving reference to one's capability of such travel, (3) offers a form of communicative travel in the moment of its articulation, (4) creates a potential for imaginative travel in the moment of its reception, (5) suggests one's potential for future corporeal, virtual or communicative travel outside of Turkish social boundaries.

I believe that this tendency could also be partly the influence of other "Deaf TV"s out there, either on YouTube or Facebook, which are channels where Deaf people from around the world publish their original content, primarily in IS. In particular, for many new Deaf hosts in Turkey, a Romania based Turkish Deaf man's Facebook page serves as a model. This particular page has been up and running since 2011, with close to 140 IS videos to date on a range of topics, and more than 60,000 followers from all around the world.

While currently the frequency of IS or ES use is not too much compared to TID on these Turkey based Facebook pages overall, there is still an increasing interest and tendency, especially among the younger generation. These instances are regarded as more disconcerting and threatening by older Turkish Deaf people. So much that this October, one older Turkish Deaf woman who currently resides in the United Kingdom felt the need to make her own video in TID (except for some BSL and IS code-switching herself), criticizing this temptation and explaining why Turkish Deaf people should hold on to their own heritage and use TID. What we see in Figure 6 is a screenshot of the description that this woman has posted along with her video. The video itself, almost 4 minutes in length, elaborates on when it is appropriate to use IS or borrow signs from other national sign languages (i.e., international contact situations, living in a different

country), and when these habits become a threat to the future of one's own national sign language.



Figure 5.5 Screenshot of Facebook Post Caption on TID vs IS use by Turkish Deaf people.[117]

However, the anxiety of national languages against languages dominating the neoliberal global economy is not unique to sign languages. That is why I would like to read this anxiety in relation to an image that was circulating on Facebook recently, for Turkish. As made obvious in Figure 7, this is an issue even for Turkish which is prhaps one of the most documented languages. In the case of TID, although the language became official and legally accepted in 2005, research on the language is only a little more than a decade old, and it is not yet thoroughly documented. Such under-documentation makes languages a lot more fragile in front of established languages, let alone a hypercentral language like English.

117 https://www.facebook.com/video.php?v=10201751159740653&pnref=story



Figure 5.6. Facebook image, translation of title "When there is a Turkish version"

5.4. Conclusion

This chapter was an investigation of these agencies of young deaf people in Turkey, in a range of social domains, as they intersect with different social factors (i.e., gender, education, employment, socio economic status, religion). The overall message is this: Especially in the past few years, social media appears to have augmented the connectivity of deaf people in Turkey, while also giving them new opportunities of authorship and dialogue. However, a careful investigation of these practices reveals that being a man, coming from a higher socioeconomic status (or having connections there), having better hearing, and being more literate in written Turkish are factors that

significantly produce advantage. Moreover, in many cases, these new online and offline opportunities for visibility and agency are once again hijacked by hearing people.

Within the past decade, the Turkish government has taken various measures to modernize and digitize many of its state institutions to meet the needs of its growing and technologically connected population more effectively. Among these measures were those that were particularly aimed at giving deaf people more access to information and services. In this chapter, I showed that the majority of these interventions had limited impact on the agencies of deaf people, mostly due to disabling educational practices that constrain their linguistic skills and capacities from a very young age. While some of these interventions have led to the rise of new occupations like sign language teaching and sign language interpreting, these opportunities appear to have served CODAs and hearing people more than deaf people. The commodification of sign language instruction and interpreting has created an unprecedented visibility of TID in the public sphere and popular culture, however mostly through hearing bodies.

In employment, the inability to communicate, verbally and textually appears to be one of the biggest obstacles for deaf people in Turkey. Spoken and written language being the central means of communication at most work settings, hearing employers and co-workers often do not know how else to communicate with deaf employees. Employment opportunities of deaf people appear to be significantly limited by their Turkish literacy skills. That is also why vocational high schools for the deaf are still the most critical means of securing job security among deaf people. Just like in history, these schools largely offer degrees in occupations that are based on manual skills, which lead to lower paying jobs if any.

In this limited world of opportunities, many young deaf people created new agencies for themselves, particularly through participating in communities of practice around sports and gaming. As we have seen in the previous chapter, this begins as early as elementary school, and continues into young adulthood. The accomplishments of deaf athletes, in both national and international competitions, have been the primary source of success and recognition for deaf people in Turkey. However, even this opportunity intersects with the gender, similar to many social domains within the society at large. There is a significant gender divide among deaf athletes, with a 6 to 1 ratio of men to women.

Access to health and education services are the two most critical areas that came up in almost every interview that I conducted. In both, the problem comes down to communication breakdown between deaf and hearing people: the most critical one being the breakdown of communication between deaf students and their teachers. Going through their education without acquiring textual literacy skills in Turkish and world knowledge, appears to be the most disabling factor that affects their future agencies of deaf people. This applies both to civic participation and accessing basic human rights as citizens, as well as employment opportunities. It is promising that by the end of 2014, at least one TID interpreter will be hired to work at the main offices of *the General Directorate of People with Disabilities and the Elderly (EYH)* in 75 of 81 cities across Turkey. Then again, without proper sign language interpreter programs in place and lack of professionalization in the field, the quality standards and ethical concerns in TID interpreting are a big concern.

The newly developed websites and virtual portals of state institutions that came out of the e-Government project are largely not accessible to deaf people, or likewise to hearing others who lack sufficient literacy skills in written Turkish. Apart from a limited set of content that is predetermined by these institutions, TID interpretation of the bulk of website content and navigation are not provided. Even existing TID content on these websites are hard to find, nested in convoluted navigational structures, making them impossible to come across unless direct links are provided by deaf rights organizations or peers via social media.

What we are currently observing Turkish Deaf people in the process of finding their own visibility and voice through social media, both individually and as a group. This is similar to the wave of ASL vlogs that goes back roughly 8 years, which has created an enormous amount of dialogue and reflection among deaf people in the United States. In Turkey, perhaps due to delayed connectivity or the preventative measures of the government that interrupted YouTube at great lengths at a time, this habit did not materialize until recently on Facebook. That being said, following Blommaert and Dong (2010), I argue that the use of sign language variants on social media gives away not only the past corporeal mobilities and contacts of deaf people, but also their conceptual frameworks on the linguistic norms of this virtual social space, as well as their communicative motivations and imagined interlocutors.

This is a critical point in the history of deaf people in Turkey, where the ubiquity of smart technologies and social media that legitimizes both textual and non-textual forms of expression and exchange, is creating a potential route for empowerment. While these new opportunities afforded by new information and communication technologies

has led to the documentation and circulation of an unprecedented number of TID content in the public sphere, these online practices have also been constrained by existing social divides in the Turkish society.

Coming back to the story that I opened this chapter with, I would like to bring us to the first TID call to protest video produced and shared by a young hard of hearing man, and end with his closing remarks in this video:

"I have attended the Halıcıoğlu School for the Deaf and I am hard of hearing. But it is imperative that I support these events at the Fatih School. These are all people that we love. Please be aware of that. This protest is very important. We must keep on sharing the news via Facebook and unite as a group. We should be pray for Facebook. Facebook is very important. Maybe from now on, other topics may arise, like the EKPSS (placement exam for state personnel) for instance, we could then come together and protest about that. Or perhaps it could be about the instruction of TID, we could protest against that. It could be a range of topics. Please continue to join. It doesn't matter if it is small at first, we can grow together as a group and unite. If need be we can even go to Ankara (the capital). I kindly ask this from you."

What I see here is a community leader in the making. And I think what is happening here in terms of the face of empowerment is similar to many other minority groups, deaf and hearing. It appears like the more advantaged and transliterate few are likely to become the kind of community leaders who are both equipped and committed to creating a discourse of empowerment that can be legible by everyone. And it is exactly this intricate relationship that I will be elaborating on in my conclusion chapter that follows. Sections of this chapter, particularly those concerning language ideology and social media, will be published in Ilkbasaran (Forthcoming), as a chapter in an edited volume on international deaf spaces[118].

[118] Ilkbasaran, D. (Forthcoming). Social Media Practices of Deaf Youth in Turkey: Emerging mobilities and language choice. In Friedner, M. & Kusters, A. (Eds.) It's a Small World": Inquiries into international deaf spaces. Gallaudet University Press

Limited sections of this chapter will appear in the book chapter Social Media Practices of Deaf Youth in Turkey: Emerging Mobilities and Language Choice in a forthcoming volume edited by Friedner, M. & Kusters, A., Gallaudet University Press. The dissertation author was the primary investigator and author of both of this book chapter.

Conclusion

This dissertation was a multilevel and multifaceted investigation of deaf youth agencies in Turkey, situated in tensions between technological progress and traditional values. It is an experiment on using more holistic frameworks of literacy and social navigation, towards a comprehensive social study of deaf people and their situated agencies in everyday life. For this, I made use of mixed-methods across a span of two years, based on data of actual linguistic performance, in-depth interviews on a range of linguistic and social constructs, a focus group meeting on employment, a 10-month-long participant ethnography in Istanbul, combined with a virtual participant ethnography of social media practices on Facebook. This dissertation work reveals opportunities for deaf people's agencies in Turkey, which arise from youthful exploration of new technologies and social media, as well as constraints that fundamentally stem from problems in deaf education and existing divides in society based on factors like gender, income and urbanization. While it is not possible to fit all findings of this dissertation into this conclusion, here I would like to provide a summary of highlights among these findings, along with a more critical discussion that brings it all together.

The first chapter of the dissertation was a brief historical overview of the sociopolitical significance of reading and writing, along with a discussion of relevant terminology regarding literacy, particularly as it relates to new technologies of information and communication. In the second chapter, I provided background information about deaf people in Turkey, with an emphasis on the demographic, linguistic and educational factors, along with a summary of recent state interventions

concerning this community. With this background in mind, the third chapter presented a pluralistic and situated portrayal of the literacy skills and practices of deaf youth in Turkey, revealing the current state of deaf education, as well as some of the vernacular and technologically mediated literacy practices of this population. Chapter four discussed 1) the mobilities of deaf youth in Turkey using Urry's mobilities paradigm as an analytical framework, fleshing out diverse modes of travel (corporeal, imaginative, communicative, and virtual) that deaf individuals experience through educational, sports, and rights institutions, 2) along with the social networks that are created around activities, and 3) the technologies of communication that help sustain these networks. Finally in chapter five, the literacies and mobilities of Turkish deaf youth that I described earlier were used to evaluate the extent to which this population could actively participate in society as independent agents who can engage with a critique of society and mobilize as a group for social change.

I had several goals in proceeding with this investigation. The first one was to contribute to the Turkish Deaf heritage as well as the field of Deaf Studies, with an in-depth description of the contemporary social and communicative practices of deaf people in Turkey. This narrative was missing in Deaf Studies, but more importantly in Turkish academic literature concerning deafness, media and communication. The second one was to document the current status of deaf education in Turkey, by showing what young adults who have been through the system can and cannot do in terms of textual literacy in Turkish. Considering that in the 21st century the bulk of the investments in education are spent on technology implementation to the classroom (i.e., the Fatih project), it was important to provide evidence for the need to focus on the content for instruction rather

than on the medium. The teachers and administrators I interviewed during my visits at their high school also support this argument. They say that they lack professional training, curriculum and educational materials that both meet the needs of the student and support the teachers. The third goal was to challenge existing literature and investigation of deaf people's literacies, by bringing in elements from new wave Literacy Studies, so that a better sense of the multiple dimensions and implications of this construct can be achieved. This was also an intentional shift in discourse concerning deaf people's literacy skills, from one of lack and incompetence to another of vernacular strategies and alternative competencies. However, it is important to note here that my intentions were not to dismiss the critical role that traditional forms of literacy plays in social navigation and participation, but to add to it through literacy narratives and multiliteracies of deaf people, considering the role that new digital technologies and online spaces play.

Almost a decade after passing the 2005 Disabilities Act and more than five years after the signing of the UNCRPD in 2007, Turkey still has a long way to go in supporting and empowering its deaf citizens. My research reveals that the most critical area in which this intervention and reform is needed is deaf education. There is consensus in the deaf community, and among the participants in my study, that deaf schools in Turkey are not equipped to provide quality education to their students. My findings capture this consensus.

It is true that parallel with previous literature on reading skills of deaf people, my findings show that the reading skills of Turkish deaf youth are also unfortunately quite limited, and their productive skills in written Turkish need even greater attention. I examined how my deaf participants' processed various levels of information and found

growing difficulties from the lexical level through the sentence level (which required morphosyntactic skills), and finally at the paragraph level (which additionally required inferential reasoning and world knowledge). What is the reason behind this generally low performance then? The primary reason appears to be the lack of early language exposure and conversational partners, as could be seen in the relative higher performances of the few participants who were postlingually deaf, or of those who have deaf parents. The next critical problem is the illiteracy of the teachers of the deaf in TID, making it close to impossible for them to communicate with their students, let alone being able to teach literacy or course content through the use of TID. Deaf children with additional disabilities are even more immobilized in this poorly functioning system that lacks professionalization and services for multiple disabilities. Currently, in Turkey, deaf education not only fails to meet the needs of deaf people in becoming competent young adults, but it also appears to cause long-term harm on their social welfare. This can be considered both in terms of future employment opportunities and potential interactions with state institutions as adults.

My study suggests that having limited skills in reading and writing Turkish is one of the primary obstacles in employment, and this is threefold: (1) it interferes with following course content, academic achievement and performance in nationwide exams for higher education that could lead to professionalization, (2) it negatively affects performance in employment related exams like EKPSS that are placed as positive discrimination for people with disabilities, and (3) the inability to communicate, verbally or textually, turned out to be one of the key factors for employers to not hire or promote deaf employees. Deaf individuals who are employed have either finished vocational high

schools with a specialization, had good contacts in their social networks, less severe hearing loss, and as a consequence higher levels of education and speech.

As to access to state institutions, in order to make inquiries or get services, this takes place strictly in Turkish for now. This also applies to e-government in Turkey, where majority of state services can be accessed online, such that despite having the necessary digital literacies, the relatively obscure text based navigation and content prevents deaf people from accessing these services. However, with EYH hiring 75 TID interpreters for their offices across Turkey, at least one state agency that primarily serves deaf people will be more accessible via these interpreters.

The main source of accomplishment and recognition for deaf people in Turkey appear to be sports activities. Engaging in sports is not only fulfilling as an embodied social activity in and of itself, it also helps create an alternative positive narrative of self, as able-bodied and successful individuals in society. Sports events are also one of the primary forces behind the mobilities of deaf youth in Turkey, both at the national and international levels. While younger students get to travel around Turkey for competitions, young deaf adults also travel internationally for these events, meeting deaf people from other countries. During these corporeal journeys, they expand their world knowledge, connect with deaf peers from other places, and are exposed to variants of TID or other sign languages. In some cases, these short-term encounters lead to more long term networks through the use of webcams and smart phones.

That being said, there is a significant asymmetry in the gender distribution of Turkish deaf athletes competing nationally (6:1) and internationally (7:2). This is important because it represents the gendered asymmetry among Turkish deaf people who

have direct access to a wide range of mobilities around these sports events, as well as to the social networks and resources through these mobilities. Linguistic and cultural literacies are among such resources, which also make a range of future mobilities possible.

In the 21st century, digital technologies afford new juxtapositions of image and text, through which meaningful social interactions can take place. This is a critical historical point for deaf people in Turkey, where the ubiquity of smart technologies and social media that legitimize both textual and non-textual forms of expression, is creating new juxtapositions of symbolic exchange and new routes for empowerment. Through these tools, deaf youth have found vernacular ways to communicate with each another and hearing people, at times bypassing their limited skills in written Turkish. Some of these strategies involve the exchange of images, videos (of places or of self-authored TID content), sharing their locations via GPS, and the use of 3G for direct communication in TID. The frequency in the use of these practices however, is limited by the availability of technological infrastructure (as in the case of rural parts of Turkey), as well as one's socioeconomic status (as in the case of 3G utilization).

Earlier on in this dissertation, I showed that across many civilizations, from Early Modern Europe to Modern Turkey, (1) the content and form of everyday literacy practices are revealing of existing power dynamics in a given society, (2) religion has traditionally been one of the strongest forces in creating communities of practice through readership, (3) practices of reading and writing have been closely tied to practices of power, and (4) gaining access to public authorship, which for the most part has been privy to small groups of male agents initially, is critical in acquiring rights and benefits,

both as an individual and as a group. That is precisely why I have been interested in exploring the language practices of deaf people, and the nature of the opportunities for deaf authorship in Turkey. It is clear that the potential foregrounding of Turkish Sign Language in the public sphere has similar political and social implications for the future empowerment of deaf people in Turkey.

This brings us to Facebook, where Turkish deaf people are finding new opportunities to create new narratives about themselves through TID-based videos that they author and share. Especially in the past year, deaf people in Turkey have been in the process of finding their own voice through social media, both individually and as a group. It is possible that the utilization of TID videos by the leaders or administrators of deaf organizations in Turkey have normalized this practice among the community. As a result, we have seen the circulation and archiving of an unprecedented amount of TID content on Facebook, bringing conversations on a range of topics within the community to a wider public sphere.

It is intriguing how the exchange of multimedia and especially video content in TID also seems to be changing the nature of deaf people's online exchanges in written Turkish. Looking at the "Comments" feature of Facebook, and comparing the threads under photo or text posts with those that are under video posts, there seem to be a noticeable qualitative difference between them. While this requires further analysis, it appears that the ability to post more complex ideas in TID by video sharing creates a context in which other deaf people engaging with those videos are motivated to use Turkish in more complex and creative ways. Likewise, the accessibility and content of

these videos also trigger responses from other deaf people who post and share sign language videos on their wall.

Currently there are about fifteen public Facebook pages that are owned by deaf youth in Turkey, most of which are referred to as "Deaf TV"s that function like television shows or television channels. An overview of Facebook shows that this practice in naming appears to be adopted by Deaf people from around the world, making their pages easily searchable and identifiable to others. Except for two married couples that co-host these pages, all of them are owned by young men. They serve a similar purpose as the ASL vlogs on YouTube that have been popular among American Deaf people, however, in addition, they make use of social networks that are already established on Facebook. Through these Turkish "Deaf TV"s and other Deaf individuals who periodically share news and information concerning the community, enough to mobilize masses to protest against the government, we are witnessing the emergence of a new generation of deaf leaders in Turkey.

This new wave of Turkish deaf authorship is both borrowing from and clashing with Western sensibilities of Deaf performance and visibility. Some of these hosts prefer to use International Sign, American Sign Language or other European sign languages. I find these examples interesting as they capture both: (1) the appeal that Western and mostly American Deaf performance (poetry, storytelling and song interpretations) has on Turkish Deaf youth, and (2) the new generation's growing interest in connecting with the international Deaf audience. For now, this practice can be observed among a relatively small group of young and privileged deaf people in Turkey, who are already fluent in TID, live in large cities, and have international deaf contacts with whom they can meet in

person, even if sporadically. It appears that these instances are regarded as more disconcerting and threatening by the Turkish Deaf community, particularly older members. So much that in the fall of 2014, several Turkish Deaf people made their own videos in TID, criticizing this preference and explaining why Turkish Deaf people should hold on to their own heritage and use TID. These videos and the comments that follow reveal the emergence of TID nationalists responding to the newly emerging global Deaf citizens from Turkey, who wish to be legible by deaf people beyond their national borders.

And this brings us to the relationship between authorship and agency. Although often collapsed into the term "literacy", the ability to *read* and the ability to *write* come out of different social purposes and result in different forms of agencies (Brandt, 2009). For an individual, group or a state, claiming power requires the ability to both write one's environment legible for itself, and to author new narratives of itself that are legible by others. While this applies both to governments and to their subjects, the two often have conflicting interests, especially in the case of minorities. Authorship, for deaf people, suggest both the writing and archiving of new narratives of self in national sign languages and critiques of the dominant social structures from their complexly embodied standpoints. Moreover, securing future agencies requires coming together as an organized group to extend into the state apparatus to author relevant changes, making deaf selves legible to the governing system, and vice versa.

Coming back to deaf education in Turkey and the limitations of state services, I see part of the problem being the continued illegibility of deaf people by the governing body. For the most part, State interventions regarding this population either follow

international conventions last minute to avoid penalties or consist of major technology investments without fully considering their necessary infrastructure or outcomes. The Turkish State is not fully aware of the social needs or mediated practices of the deaf community. That is precisely why I see transliteracy as a relevant skill in the empowerment of deaf youth in Turkey, so that both parties can first become legible to one another. While in its initial stages, sign language interpreters or CODAs can and have been providing this mediation, ultimately it boils down to deaf people in Turkey becoming transliterate themselves, to skillfully write and navigate both deaf and hearing dominant bureaucratic spaces. In that sense, as the few examples among my participants show, hard of hearing or postlingually deafened individuals can be the transitional figures in this process of empowerment.

That being said, perhaps the most encouraging step taken for the empowerment of deaf people in Turkey has been the certification of 18 young deaf individuals to become teachers of TID in the fall of 2014. This was the first time that Turkish Deaf people were certified to teach their own language, TID. It is my hope that some of these deaf teachers start working at deaf schools or similar training and certification programs are organized in the future for deaf people in Turkey who wish to become teachers of deaf children. Only then we can have a new generation of deaf youth, equipped to initiate and sustain more grounded efforts in expanding deaf people's agencies in Turkey.

Looking at it from the perspective of legibility, the rise in the popularity of Islamic literacy among the deaf community in Turkey, could also be interpreted as an attempt to create a new Turkish deaf identity that is aligned with what the current Islamic government imagines as the citizens of the so-called "New Turkey". Time will tell how

these dynamics play out. Ultimately, currently trending practices of online TID-based authorships shows similar gender and power dynamics that we see throughout history with respect to writing, while being coherent with cultural norms of the Turkish society. This new form of Turkish deaf authorship favors the public visibility of deaf men over deaf women, hearing men over deaf men, and seems to initially attract more audience through Islamic content than secular.

Like many trends in social media, the trends in Turkish deaf youth are also changing very quickly. That is precisely why it is important for social scientists and particularly Deaf Studies scholars to be on the lookout for emerging trends among deaf people on social media, and continue to conduct studies across a range of demographics. Only when we make the connections between these online and offline practices of different deaf groups can we get a fuller and pluralistic picture of what it means to be deaf in the 21st century.

Appendix

Deaf High School Students

	f1	*f2*	*f3*	*f4*	*f5*	*f6*	*f7*	*f8*	*f9*	*f10*	*f11*	*f12*	*m1*	*m2*	*m3*	*m4*	*m5*	*m6*
born in	İstanbul	Çanakkale	Kocaeli	Kars	Yalova	Bilecik	Bingöl	Van	Kartal	Bilecik	İstanbul	Kars	Konya	İstanbul	İstanbul	Rize	İstanbul	Tokat
family home in	İstanbul	Çanakkale	Kocaeli	Kars	Edirne	Bilecik	Bingöl	Van	İstanbul	Bilecik	Edirne	İstanbul	İstanbul	İstanbul	İstanbul	İstanbul	İstanbul	İstanbul
age	19	17	18	18	17	15	16	16	16	15	17	19	19	18	19	16	21	21
age of deafness	0	2.5	0	0	0	0	0	0	0	0	4	0	0	0	0	n/a	4.5	0
age of exposure to TID	8	7	7	12	6	6	7	11	0	6		6	7	7	n/a	7	10	9
age of exposure to written Turkish	8	7	7	8	5	6	7	6	6	6		6	8	7	n/a	7	10	9
mother who signs	0	0.5	1	gest	1	0	0.5	1	1	0.5		0	0.5	1	0	abc	abc	gest
father who signs	0	1	1	gest	0.5	0.5	0.5	0	1	1		0	0.5	1	1	0	0	gest
hearing sibling who signs	0	0	1	3	1	0.5	3	0	1	1		2	abc	0	0	abc	abc	abc
deaf sibling who signs	1	n/a	3	3	0	1	3	0	1	1		3	0	1	0	0	1	0
uses TID to comm with family	sib	n/a	sib	sib	1	1	1	0	1	1		1	0.5	1	0.5	0	0	gest
exposure to sign from birth	0	0	0	0	0	0	0	0	1	0		0	0	0	0	0	0	0
exposure to sign at school	1	1	1	0	1	1	1	1	0	1		1	1	1	1	1	1	1

Young Deaf Adults

	f1	*f2*	*f3*	*f4*	*f5*	*m1*	*m2*	*m3*	*m4*	*m5*	*m6*	*m7*	*m8*	*m9*	*m10*
born in	İstanbul	İstanbul	Ankara	Kırklareli	Malatya	İstanbul	İstanbul	Ankara	İstanbul	Ordu	n/a	İstanbul	İstanbul	İstanbul	Bursa
family home in	İstanbul	İstanbul	Ankara	İstanbul	İstanbul	İstanbul	İstanbul	İstanbul	İstanbul	İstanbul	n/a	İstanbul	İstanbul	İstanbul	Bursa
age	18	28	31	24	24	21	26	28	27	27	23	20	24	25	40
age of deafness	0	1	0	0.25	3.5	8mths	3	1	0	0	n/a	10	0	3	2.5
age of exposure to TID	7?	15	7	9	21	11	22	18	20	7	n/a	11.5	8	16	38
age of exposure to written Turkish	7?	birth/7	7	6	6	7	7	3	7	7	n/a	7	7	15	7
mother who signs	0	0	0	1	0	0	0	0	0	0	n/a	1	0.5	0.5	0
father who signs	0	0	0	0	0	0	0	0	0	0	n/a	1	0	0.5	0
hearing sibling who signs	0.5	0	0	1	0	0	0	0	abc	0	n/a	2	0.5	0.5	0
deaf sibling who signs	0	0.5	0	0	0	0	0	0	0	0	n/a	0	0	1	0
uses TID to comm with family	0	0.5	0	mom	0	0	0	0	0	0	n/a	1	0.5	1	0
exposure to sign from birth	0	0	0	0	0	0	0	0	0	0	n/a	0	0	0	0
exposure to sign at school	1	1	1	1	0	1	0	1	1	1	n/a	1	1	1	0

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