

## ABSTRACT

Title of Thesis: DANCING IN SILENCE; A CENTER FOR DEAF ART AND CUTURE

Maryam Bana Zadeh, Master of Architecture, 2022

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Dancing in Silence is a thesis project that explores the idea of bridging the gap between hearing and Deaf worlds, normalizing the Deaf Culture, and introducing Deaf Gain to the design to enrich spatial experience.

The thesis aims to design a space that facilitates the communication between people with different sensitivities. Language is often used as a tool for communication, but architecture can also serve as a platform for creating a space for people interactions.

The proposed site is part of the Gallaudet University development projects next to the 6th street in Washington DC. It involves a Deaf Art & Culture Center which welcomes hearing individuals. The design relays on Deafspace and multisensory principles to stitch the boundary of the Gallaudet along 6<sup>th</sup> street to union market neighborhood.

DANCING IN SILENCE; A CENTER FOR DEAF ART AND CULTURE

by

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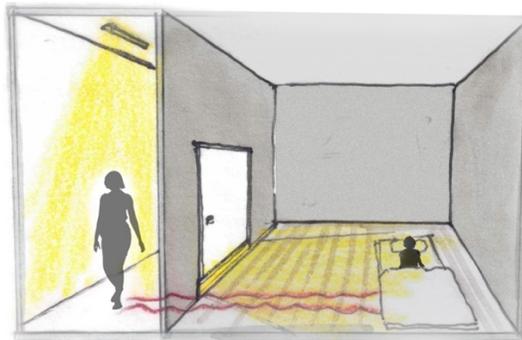
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# Chapter 1: Inspiration and Philosophy

## Inspiration

A main source of inspiration and motivation for this thesis is my sister Marzi. A beautiful dancer, and photographer, Marzi is profoundly hard of hearing. Growing up together, I learned that we have different approaches to navigate through the world around us. For example, when we were children, I noticed that she was very sensitive to both light and vibration and used this heightened awareness to gather information about her surroundings (Figure 1). Noting her reaction to the smallest amount of light coming to the room by opening the door was an interesting observation for me at the time. I remember that I had to walk slowly in her room when she was asleep since she could feel the vibration caused by my feet while stepping on the floor.



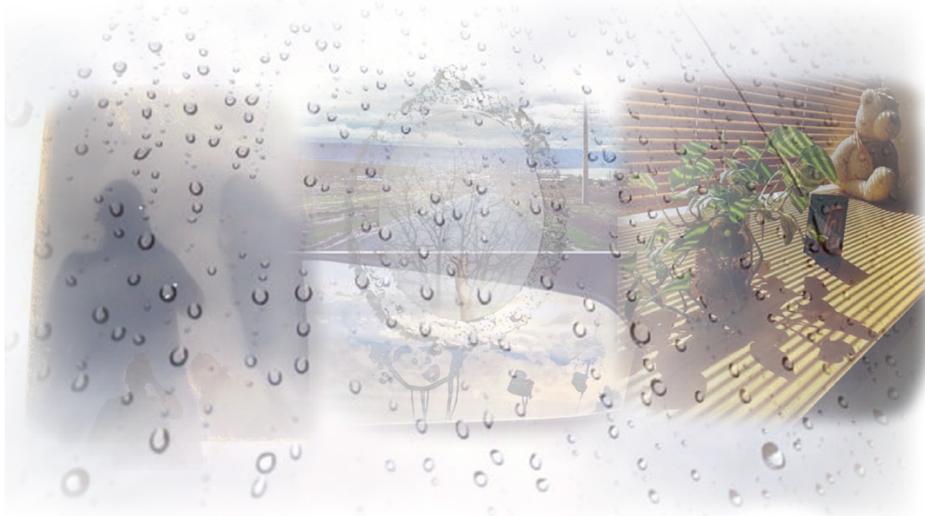
*Figure 1. Sketches of my memories that illustrate light and vibration sensitivity in my sister (illustration: author)*

While she was watching an uncaptioned movie, she was creating her own story and narrative based on her imagination.

She had a great ability to record people's behavior and appearance. In fact, she showed a high eagerness to pantomime family members' behaviors to entertain them and create a nonverbal way of communication. Since she was a child, she has been

always a good dancer. As I noticed, she feels the music vibration and visualizes the rhythm of music in other people' body and then create a more appealing choreography. I learned that these performances are a way of expressing her feelings while communicating and engaging with other people.

From growing with my sister, I have learned paying attention to the world around us through our range of senses and emotions can help us to deepen our understanding of human experience. (Figure 2)



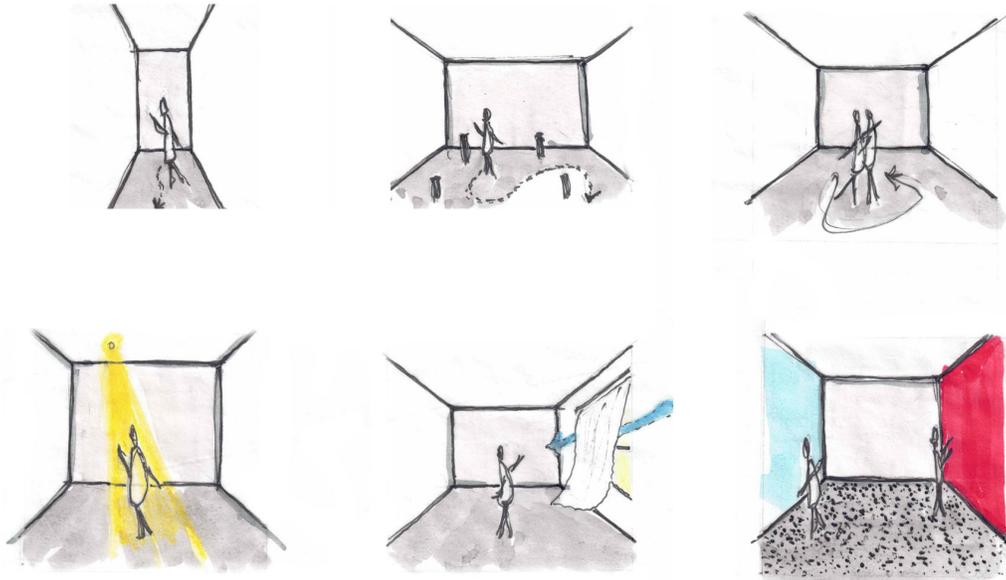
*Figure 2: My sister personal photographs that illustrate tactile and visual expressions (Source: photo by Marzieh Bannazadeh, collage by author)*

### *Dancing in Silence*

My sister's passion for dancing while she is profoundly hard of hearing raises a question how she can follow the music rhythm without hearing.

I always assumed that music is a main inspiration for dancing. But in fact, contrary to traditional dances, in contemporary dance auditory perception is not the only driving force that helps create a choreography. In fact, body, scene design, light, space, partner, and many other factors can also direct the movement in space (

Figure 3).



*Figure 3: Sketches of sensory experiences through Dancing in silence (illustration: author)*

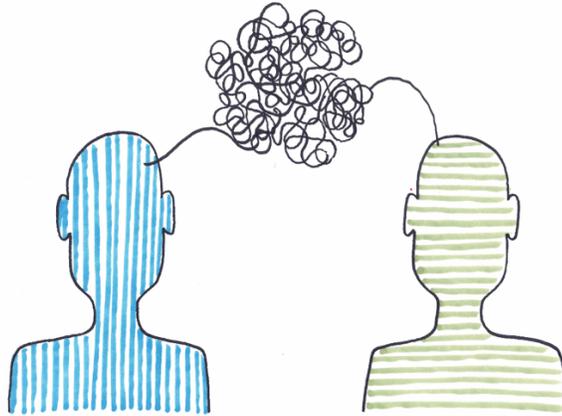
These driving factors can be felt in various ways by our senses to create a choreography that navigates with rhythm and harmony in the space. One can create an analogy between dancing in silence with spatial experience in architecture which involves full engagement of our senses. Complex engagement of our senses highlights the importance of designing multi-sensory environments for diverse sensibility users including hard of hearing clients.

### Philosophy

The philosophy of this thesis was designing a space to bring people with different sensitivity and culture together to meet, interact and engage. In fact, architecture itself is a platform for human interaction and non-verbal communication (Figure 4).

However, if we don't pay attention, we tend to design places that privilege certain people over others – adults over children, average size over large or small people,

fully mobile vs those who require assistance, and hearing people over non-hearing, etc.



*Figure 4: Non-verbal communication (illustration: author)*

This consideration of deaf culture and deaf space opens up a question how we can create an environment that supports the culture of deaf and hard of hearing people which also welcomes those who are not part of that culture. How can we design environments that privileges, welcomes and accommodates a wider variety of people? What do we need to pay attention to?

## Chapter 2: Culture and History

### American Deaf History

There are some significant historical events in American Deaf history that have evolved deaf education and influenced American Sign Language, the main means of communication in Deaf Culture.

Since before eighteenth century, deaf people were deprived from many human rights in society including literacy and education. There was a misconception that understanding the ideas and developing cognitive abilities was related to hearing the words and using the voice in the same way as hearing people. Mid eighteenth century, as part of a general enlightenment, perception of deafness fundamentally improved, and sign language was considered a natural and structured language. This perception allowed deaf people to grow and flourish in academic society. During the nineteenth century, the golden age of deaf education (1840-1912), many deaf schools with previously banned deaf instructors were established, and deaf education started to flourish.<sup>1</sup>

#### First American Deaf School

Hartford Asylum in Hartford, Connecticut was the first American school for deaf students using sign language founded in 1817 by Thomas Gallaudet and Laurent Clerc (Figure 5)<sup>2</sup>.

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<sup>1</sup> Oliver, Sacks. *Seeing voices: a journey into the world of the deaf*. University of California Press (first U.S. edition), August 1989

<sup>2</sup> “Deaf History Timeline”, *American Sign Language at Harvard, Linguistics Department*. n.d. <https://projects.iq.harvard.edu/asl/deaf-history-timeline> (accessed 05 15, 2021)



Figure 5: (Left) Girl students in front of old Hartford building, one of the earliest photos of American Deaf School. (Source: *A Place of Our Own, History Through Deaf Eyes*, Gallaudet University. n.d. <https://www.gallaudet.edu/history-through-deaf-eyes/online-exhibition/formation-of-a-community/a-place-of-our-own> (accessed 08 05, 2021))

(Right) Deaf students in classroom at Hartford school, first American Deaf School. (Source: *History & Cogswell Heritage House, American School for the Deaf*. n.d. <https://www.asd-1817.org/about/history--Cogswell-heritage-house> (accessed 10 25, 2021))

Laurent Clerc (1785 – 1869), a French deaf man brought to America by Gallaudet in 1816, was an inspiring person for deaf teachers who have never been exposed to the deaf individuals’ education and intelligence. The French sign language brought by Clerc was combined by indigenous sign language that was a natural mode of communication between deaf people in America.<sup>3</sup>

#### Gallaudet University Establishment

Thomas Gallaudet (1787- 1851) founded the Gallaudet University (National college for Deaf and Dumb) in 1864 after signing the act by President Abraham Lincoln that

<sup>3</sup> Oliver, Sacks. *Seeing voices: a journey into the world of the deaf*. University of California Press (first U.S. edition), August 1989

allowed the establishment of a college exclusively dedicated to the deaf education (Figure 6). Gallaudet has remained the only Deaf liberal art university in the world.<sup>4</sup>



Figure 6: National college for Deaf and Dumb in 1864 (Source: Institutional Chronology, Gallaudet University. n.d. <https://www.gallaudet.edu/about/glance/#> (accessed 09 14, 2021))

### Oralist Movement

According to Sacks (1989)<sup>5</sup> in the deaf history, there was always a countercurrent feeling that the goal of deaf education should focus more on teaching deaf people how to speak. It was assumed that this could help deaf people communicate with the hearing world. This idea was an origin of founding Clarke school, founded in 1872 by Alexander Graham Bell, for oral education and banning the sign language in schools in 1880 in Milan conference (Figure 7).

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<sup>4</sup> “Deaf History Timeline”, *American Sign Language at Harvard, Linguistics Department*. n.d. <https://projects.iq.harvard.edu/asl/deaf-history-timeline> (accessed 05 15, 2021)

<sup>5</sup> Oliver, Sacks. *Seeing voices: a journey into the world of the deaf*. University of California Press (first U.S. edition), August 1989



Figure 7: Clarke school for deaf, and a center for oral education in 1872 (Source: *The Influence of Alexander Graham Bell, History Through Deaf Eye*, Gallaudet University. n.d. <https://www.gallaudet.edu/history-through-deaf-eyes/online-exhibition/language-and-identity/the-influence-of-alexander-graham-bell/> (accessed 05 03, 2021))

### First American Sign Language Dictionary

Eventually, William Stokoe, a linguist professor at Gallaudet University published his research which proved American Sign Language is a structured and natural language, not only a system of gesture. He finished the first ASL dictionary along with his two colleagues, Carl Croneberg and Dorothy Casterline at Gallaudet University (Figure 8).<sup>6</sup>

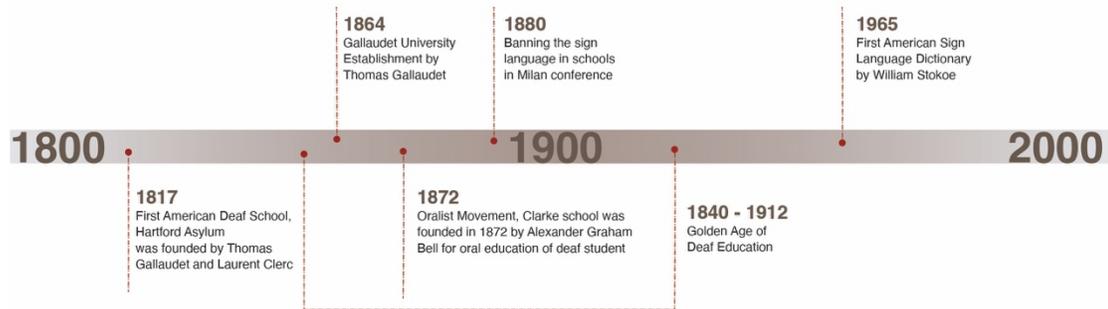


Figure 8: American Deaf history timeline 1800-2000 (Source: illustration by author, data: compiled from “Deaf History Timeline”, *American Sign Language at Harvard, Linguistics Department*. n.d. <https://projects.iq.harvard.edu/asl/deaf-history-timeline> (accessed 05 15, 2021))

<sup>6</sup> “Deaf History Timeline”, *American Sign Language at Harvard, Linguistics Department*. n.d. <https://projects.iq.harvard.edu/asl/deaf-history-timeline> (accessed 05 15, 2021)

In 1980, International congress on the education of deaf stated that the best method of teaching deaf children is a combination of modes that meets individual needs.<sup>7</sup>

### Deaf Culture

Why are we calling a specific characteristic of a group of people, hearing loss and not deaf gain? Does this mean that deafness cannot inherently have a positive implication? This is a fundamental question that leads us to the Deaf culture.

Culture is defined as a common way of life among a group of people who share certain language, characteristics, or specific values. Deaf culture is a set of unique characteristics, behaviors, and shared values which are shaped by deafness and relies on sign languages as the main means of communication. The high willingness to communicate within the deaf community regardless of nationality supports the idea of a common sense of belonging to a shared culture among deaf people. Deaf gain is a concept in the deaf culture which highlight unique and valuable aspects of the deaf way of living. This concept values the differences in humankind and responses to the normalization by arguing that diversity in language, culture, and body can help enhance human view and experience.<sup>8</sup>

Learning about Deaf culture helps to break down social boundaries and celebrate how everyone navigates in the world. (Figure 9)

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<sup>7</sup> Collazo, Victor. *CYRACOM*. March 26, 2019. <https://blog.cyracom.com/icymi-deaf-education-a-history-of-american-sign-language-in-the-united-states> (accessed 08 10, 2021)

<sup>8</sup>Legg, Jannelle , and Sophie Sok. "From 'hearing loss' to Deaf gain." Berkeley City College. Fall 2012. <https://www.berkeleycitycollege.edu/asl/files/2012/08/Fall-12.pdf> (accessed 05 5, 2021).

This thesis highlights the assets of the Deaf Culture to promote cross cultural communication for all people with different sensibility and ability in the society including individual who are identified with deaf Culture.



Figure 9: Illustration about Social boundaries for “Deaf community” in hearing world (Source: Artinspiring. Ableism concept. Discrimination and social prejudice against. Adobe stock.)

### Terminologies in Deaf Culture

There is a diverse range of people in the deaf and hard of hearing community with different levels of hearing, background, education, cultural identity, and communication method. It is a personal choice how individuals identify and relate themselves to the deaf community and culture. The most agreed terms are deaf, hard of hearing, and Deaf.<sup>9</sup> The word deaf with lowercase is labeling the audiological condition of not hearing, and the uppercase Deaf is referring to deaf people who are affiliated with the Deaf Culture and Language. American Sign Language is a primary method of communication in this group, and they embrace a set of attitudes about themselves and their relationship to the larger society. Though all individuals with

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<sup>9</sup> *Community and Culture, National Association of Deaf*. n.d. <https://www.nad.org/resources/american-sign-language/community-and-culture-frequently-asked-questions/> (accessed 04 20, 2021).

variation of deafness have the same condition of not hearing, they do not have a same access to the ritual and beliefs that constitute the Culture for Deaf people.<sup>10</sup>

In addition to the diverse terms associated to the deaf and hard of hearing people, there is a range of terms assigned to family members of this community. For instance, CODA is a hearing child of a deaf adult, GODA is a deaf and hearing grandchild of deaf adult, SODA is a sibling and a spouse of deaf adult, and DODA is a deaf child of a deaf adults.<sup>11</sup> Assigning a specific term to people who are related to deaf individuals create a sense of belonging for them to the deaf community.

### DeafSpace

DeafSpace is a set of guidelines developed by architect Hansel Bauman, at Gallaudet University to accommodate the space for deaf individuals and support the Deaf Culture. These principals consist of more than one hundred and fifty architectural design features which are divided to five major categories. Sensory reach, Light and Color, Mobility and Proximity, Space and Proximity, and acoustics.<sup>12</sup> These architectural elements that are overlooked in the build environment can apply to any building and landscape.

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<sup>10</sup> Carol Padden, and Tom Humphries. *Deaf in America, Voices from a Culture*. Cambridge, MA: Harvard University Press, 1988.

<sup>11</sup> *Deaf-initions: terminology, ASL Dictionary*. n.d. <https://www.handspeak.com/learn/index.php?id=304> (accessed 04 20, 2021).

<sup>12</sup> *Deafspace, Campus Design and Planning, Gallaudet University*. n.d. <https://www.gallaudet.edu/campus-design-and-planning/deafspace/> (accessed 6 14, 2021)

## Sensory Reach

Deaf people read the activities in their surroundings with their visual and tactile sensitivity. It is best if the Deaf person has unobstructed view with greater angle to facilitate orientation and wayfinding (Figure 10).

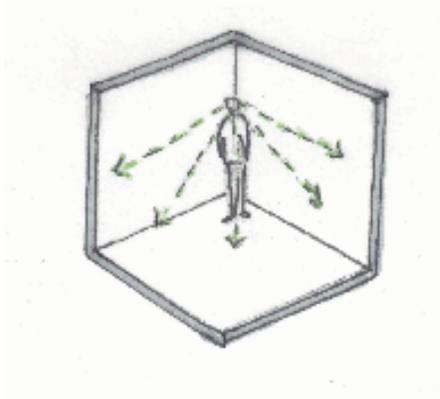


Figure 10: Sensory Reach, DeafSpace Concepts (Source: adopted from Deafspace, Campus Design and Planning, Gallaudet University. n.d. <https://www.gallaudet.edu/campus-design-and-planning/deafspace/> (accessed 6 14, 2021))

## Light and Color

Some colors such as green and blue will cause less eyestrain for Deaf people while conversing in Sign Language. Soft, diffused lighting with toned down brightness is preferable (Figure 11).



Figure 11: Light and Color, DeafSpace Concepts (Source: adopted from Deafspace, Campus Design and Planning, Gallaudet University. n.d. <https://www.gallaudet.edu/campus-design-and-planning/deafspace/> (accessed 6 14, 2021))

## Mobility and Proximity

When people are signing and walking, they are paying attention to one another.

Therefore, it is best to ensure that obstacles or barriers are moved away from general walking paths (Figure 12).

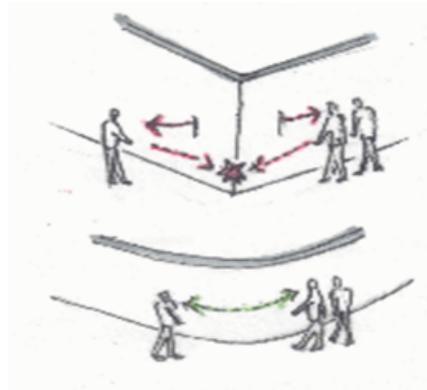


Figure 12: Mobility and Proximity, DeafSpace Concepts (Source: adopted from Deafspace, Campus Design and Planning, Gallaudet University. n.d. <https://www.gallaudet.edu/campus-design-and-planning/deafspace/> (accessed 6 14, 2021))

## Space and Proximity

When communicating in Sign Language, more space is needed between speaking partners to obtain a good visual of the conversation (Figure 13).

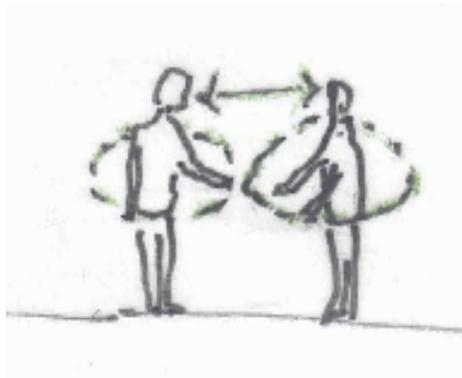


Figure 13: Space and Proximity, DeafSpace Concepts (Source: adopted from Deafspace, Campus Design and Planning, Gallaudet University. n.d. <https://www.gallaudet.edu/campus-design-and-planning/deafspace/> (accessed 6 14, 2021))

### Chapter 3: Where is a good place to explore these ideas?

This thesis encourages learning and celebrating the Deaf culture and integrating deaf community to the larger community as a majority population. Ideal Site should be in an area with maximum accessibility for both deaf community and visitors who are interested in learning about this community.

Site selection was started by researching on educational institutes for the deaf and hard of hearing in the United States as intellectual hubs for the deaf community.

There are three major colleges in the United States that are devoted to the deaf and hard of hearing people. The foremost and oldest one is Gallaudet University in Washington DC, second one is National Technical Institute in Rochester, NY, and third one is Southwest Collegiate Institute in Texas for the Deaf and hard of hearing students.<sup>13</sup> Gallaudet University is the only university not only in the United State, but also in the world that all programs exclusively are designed for the deaf and hard of hearing people. In addition to creation of Academic American Sign Language, this University has been a primary academic source for the deaf community around the globe. These sophisticated features have made the Gallaudet main intellectual deaf community hub, and optimal context for this thesis project.

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<sup>13</sup> Berke, Jamie. *5 U.S. and International Colleges for the Deaf, Very Well Health*. 01 05, 2021. <https://www.verywellhealth.com/deaf-education-colleges-for-the-deaf-1048366>

## Gallaudet University

Gallaudet University in Washington DC (Figure 14) is the only liberal arts university in the world dedicated to accommodating deaf and hard of hearing students. The university's mission is to ensure the intellectual and professional advancement of deaf and hard of hearing individuals through American Sign Language and written English.<sup>14</sup>

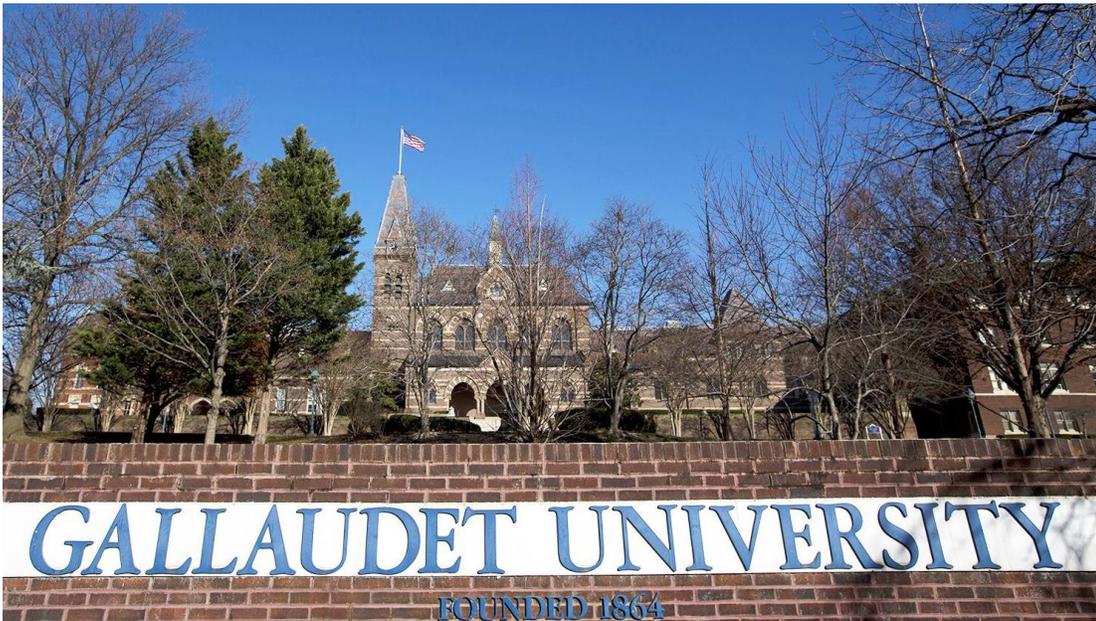


Figure 14: Gallaudet University in Washington DC. Dec. 11, 2019. (Source: Jose Luis Magana. Gallaudet University in Washington . Associated Press, Washington DC.)

### Gallaudet History

Gallaudet University was originally Columbia Institution, a school for deaf and blind students founded in 1857 by Amos Kendall, and directed by Edward Miner Gallaudet, son of Thomas Hopkins Gallaudet, founder of the first American school (Hartford) for deaf. After congress authorization for conferring college degree to the Institute,

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<sup>14</sup> *Fast Fact, Gallaudet University*. n.d. <https://www.gallaudet.edu/about/news-and-media/fast-facts/> (accessed 12 07, 2021)

President Abraham Lincoln signed the bill, and Columbia Institution received the college degree in 1864. In 1894, the name of the college changed to Gallaudet College in honor of Thomas Hopkins Gallaudet.<sup>15</sup> Gallaudet was promoted to be president and with the fund from government, 14 acres land was purchased. Over the years more buildings were added, and campus grew to the northwest to accommodate more deaf students.<sup>16</sup>

#### Original Campus Design

Learning about the history of Gallaudet campus, oldest deaf college in the country is helpful before developing a new architectural program for deaf community.

Gallaudet campus (99 – acre) was originally planned by Frederick Law Olmsted in 1866, and its major Gothic buildings were designed by Frederick Withers. An open green area at the middle of old campus landscape was surrounded by curvilinear paths extending to the corners that connected buildings (Figure 15). A vegetation and orchard garden were designed at the north of the campus. Campus's buildings were a combination of mixed-use educational, residential, and institutional buildings. This design of buildings aimed to bring liveliness to the campus. Olmsted proposed a pastoral landscape not fully executed at the heart of campus which was surrounded by main buildings and corridors to maximize the visual interactions and wayfinding. Natural lights were penetrated to the buildings with utilizing a high ceilings and

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<sup>15</sup> *History of Gallaudet University*. n.d. <https://www.gallaudet.edu/about/history-and-traditions>

<sup>16</sup> "Seventh Annual Report of the Columbia Institution for the Deaf and Dumb, for the Year Ending June 30, 1864." *Gallaudet University Annual Reports, 1858 TO 1967*. 03 16, 2018. <https://archive.org/details/ANNUALREPORT-Gallaudet-1864>

windows to facilitate conversing in sign language, a visual mean of communication (Figure 16 ).<sup>17</sup>

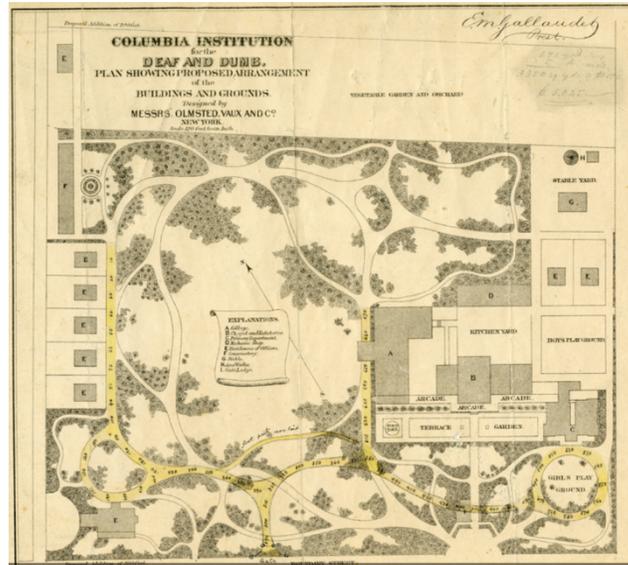


Figure 15: Site Plan of Gallaudet University - 1866, Frederick Law Olmsted Proposed Design for Campus (Source: "Olmsted's Design for Buildings and Grounds, June 1, 1866." Gallaudet University, Historic Timeline. n.d. <https://www.gallaudet.edu/about/history-and-traditions/historical-timeline/> (accessed 08 10, 2021).)



Figure 16: Bird's-eye view of Gallaudet University - 1866, Frederick Law Olmsted Proposed Design for Campus (Source: Dillon, Ian. *The DIRT, Uniting the Build and Natural Environments*. 05 08, 2019. <https://dirt.asla.org/2019/08/05/gallaudet-university-applies-deafspace-guidelines-to-the-landscape/> (accessed 11 05, 2021))

<sup>17</sup> "Olmsted's Design For Buildings And Grounds, June 1, 1866." *Gallaudet University, Historic Timeline*. n.d. <https://www.gallaudet.edu/about/history-and-traditions/historical-timeline/>

### Larger Context

Gallaudet University is located at the Northeast of Washington DC. Main roads around the campus are Florida, New York, and Maryland avenues. Proximity to the red metro line make the University accessible to the rest of the city. NoMa metro station is 5-to-7-minute walk away from the main gate at the Florida Ave. Next major metro station and transportation hub in the city is Union Station. Gallaudet's shuttle busses located in this station bring convenient accessibility to the campus and city for students, faculty, and visitors of the Gallaudet community. Figure 17 illustrates Gallaudet campus position in the Washington DC area and its proximity to downtown DC.

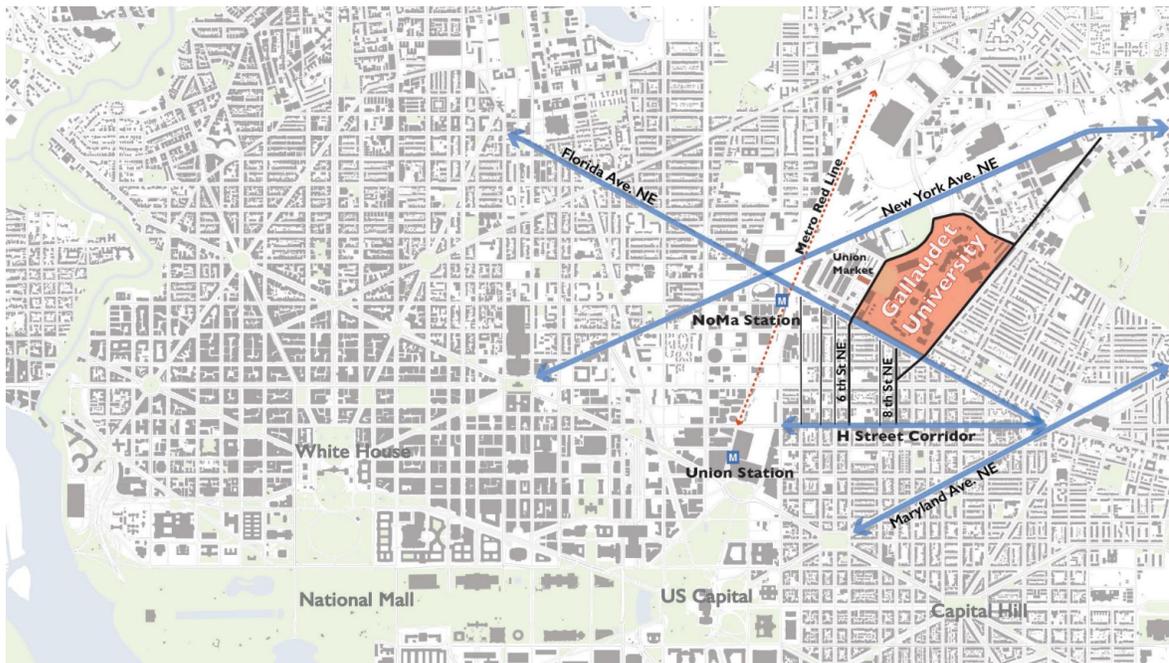


Figure 17: Gallaudet University in the larger context (Illustration: author)

## Surrounding Neighborhoods

Gallaudet University's adjacent neighbors have different background and urban characteristic including history, scale, and program. Union Market district, Residential (Townhouses), and Commercial areas are the main zones around the campus (Figure 18).<sup>18</sup>

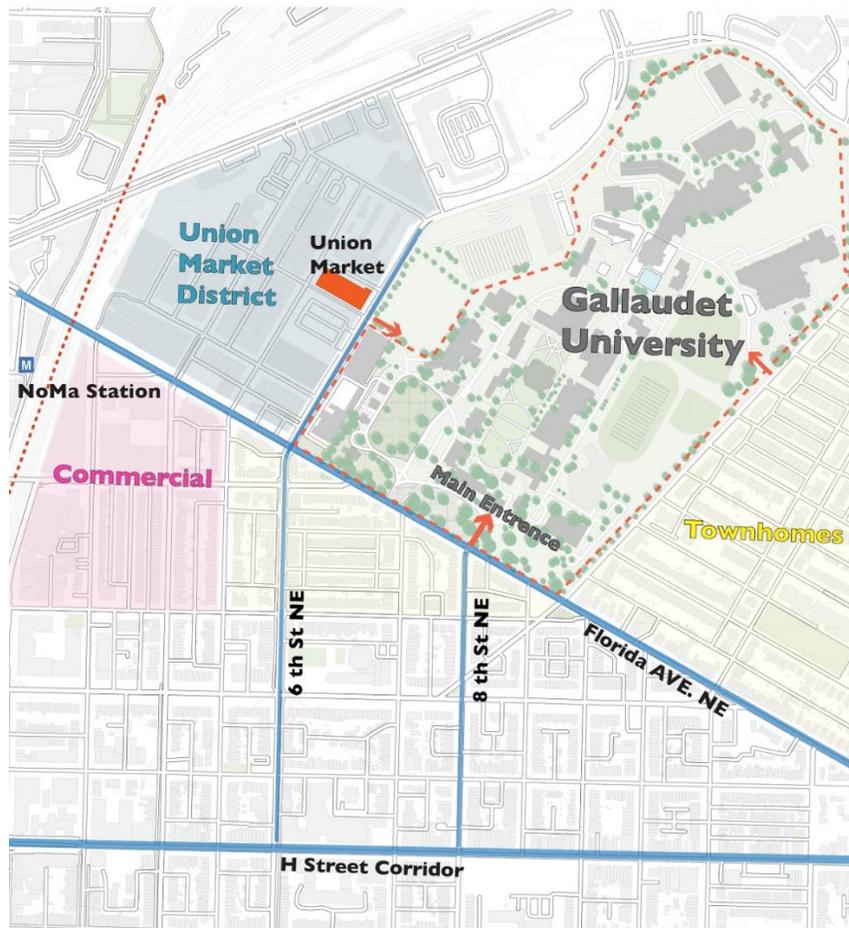


Figure 18: Adjacent neighbors bordering Gallaudet University (Illustration: author)

<sup>18</sup> "Comprehensive Plan Future Land Use Map 7." *DC Office of Planning*. 01 2013. <https://planning.dc.gov/sites/default/files/dc/sites/op/publication/attachments/FutureLandUse7.pdf> (accessed 09 23, 2021)

## Union Market District

Union Market across the 6<sup>th</sup> street at the west side of campus is the Gallaudet's next-door neighbor and has been a multicultural marketplace from 1931 for the community. It has been always a gathering place for youth and families, as Figure 19 illustrates outdoor activities happens on rooftop and plaza at Union Market. "The Market now averages some 15,000 visitors per weekend and is anchoring significant redevelopment within the neighborhood."<sup>19</sup>



*Figure 19: Union Market, rooftop in summer 2021(left) (photo by author) Union Market main entrance (right) (Source: "Union Market and Union Market Streetscape Guidelines." Mahan Rykiel Inc. n.d. <https://www.mahanrykiel.com/portfolio/union-market/> (accessed 09 16, 2021).)*

## H Street Corridor

Gallaudet University's main gate is across Florida and 8th street intersection, and 8th street connects the campus to the H street, a deaf community hub (Figure 20). There are several deaf owned businesses along the H corridor, such as Starbucks signing

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<sup>19</sup> "Union Market and Union Market Streetscape Guidelines." *Mahan Rykiel Inc.* n.d. <https://www.mahanrykiel.com/portfolio/union-market/#jp-carousel-4946> (accessed 09 25, 2021)

store<sup>20</sup> (Figure 20), Biergarten Haus<sup>21</sup>, and Mozzarella deaf pizza for Gallaudet students' gatherings. These amenities create a unique experience for both deaf and hearing individuals, provide the most benefit for an integrated community and support new deaf developments.



Figure 20: Gallaudet University Main Entrance (left) (Source: Google Map Street View). Starbucks Signing Store at H Street (right) (Source: Starbucks Opens American Sign Language Store in Washington, D.C. 10 24, 2018. <https://fabnews.live/starbucks-opens-american-sign-language-store-in-washington-d-c/> (accessed 10 07, 2021))

### Residential and Commercial areas

Residential areas are located between Gallaudet Institution and Commercial areas on Florida Ave. and H street. This low-density zone mostly consists of old Townhouses on the east and south side of the campus. As part of new developments new high density mixed used residential and commercial buildings are constructed on Union Market District, Florida, and New York Ave. (Figure 21)

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<sup>20</sup> Warnick, Jennifer . *Eight things to know about the new Starbucks Signing Store*, Starbucks Stories & News. 10 23, 2018. <https://stories.starbucks.com/stories/2018/eight-things-to-know-about-the-new-starbucks-signing-store/> (accessed 03 14, 2021)

<sup>21</sup> Samuels, Robert . *D.C.'s H Street embedded with deaf culture*, Washington Post. 07 15, 2013. [https://www.washingtonpost.com/local/dcs-h-street-embedded-with-deaf-culture/2013/07/15/efd54732-e3f3-11e2-a11e-c2ea876a8f30\\_story.html](https://www.washingtonpost.com/local/dcs-h-street-embedded-with-deaf-culture/2013/07/15/efd54732-e3f3-11e2-a11e-c2ea876a8f30_story.html) (accessed 03 05, 2021)



*Figure 21: Commercial Area and new development (left) Low density Residential Area, Townhouses (right)  
(photos by author)*

### Fences around the Campus

#### History of Gallaudet Campus Fences

Fences around the Gallaudet were added after MLK protest in 1968. Since 1968 the campus attitude towards its neighbors has been to create a strong boundary.

Although the first intention was noble, it seems like it has lost its purpose these days.

Keeping the fences around the campus is a controversial topic and some believe that

it helps to create a town that centralized deaf community principles and values. I

believe by removing fences Gallaudet can open its border to the larger community

while is retaining its culture. In our daily life and at family level there is no physical

boundary that separates hearing and deaf individuals. Why should we have that at a

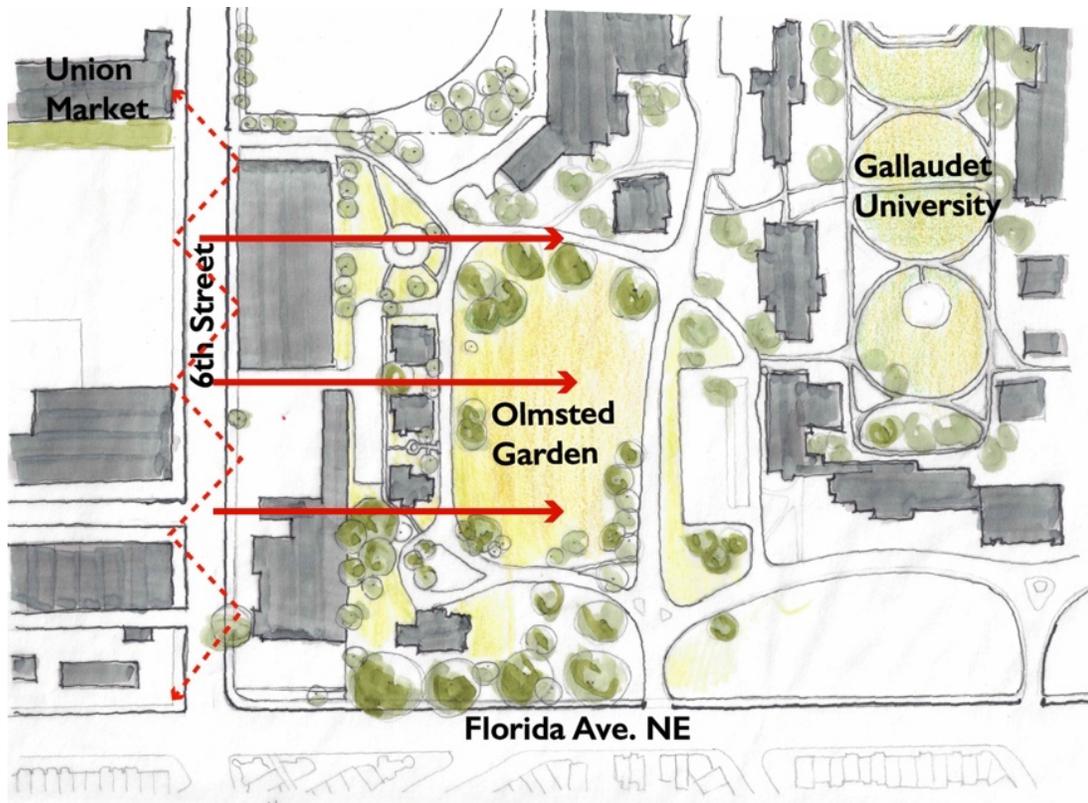
high education level? Can we make the boundary less dividing?



*Figure 22: (Left) Aerial View (1965), Before addition of the fence (Source: Gallaudet University Historical Photograph Collection." Gallaudet University. 1965. <https://gaislandora.wrlc.org/islandora/object/historicalphotographs%3A1091> (accessed 12 05, 2021)). (Right) Florida Ave. View, After addition of the fence in 1968 (Source: Tozier, Jason. Gallaudet College: The Fence)*

### Stitching the Boundary between the Hearing and Deaf Worlds

I had an idea of stitching across the boundary of Gallaudet, from my personal experience with my sister and my family, this boundary didn't feel right. Then as I started working on my thesis, I was thinking this would be one of my main goals (Figure 23).



*Figure 23: Initial sketch of the idea of stitching the boundary between the hearing world (city) and deaf worlds (Gallaudet University), (Illustration: author)*

As I did my research, I was excited to see that this idea was important for the university as well. Gallaudet has realized it has an opportunity to reconsider its relationship with its neighbors in the proposed development along 6th street.

## Chapter 4: Site Selection & Analysis

After analyzing the context, accessibilities, and deaf community amenities around the Gallaudet University, three sites stood out as feasible locations for the project. The keywords to narrow down the criteria to reach out to these potential locations were Gallaudet University, Union Market, and H Street Corridor.

Despite a shared primary concept, each site has a slightly different program and architectural response which grow out of its landscape and context. All possible locations have access to the public transportation, deaf community, and institutional supports. Each prospective site can respond to the Gallaudet's development plan along the 6<sup>th</sup> street and thesis, although in a different way.

### Site 1, Edge of the Gallaudet

First prospective site that I considered was placed at the edge of the Gallaudet campus at the northeast corner of the 6<sup>th</sup> street NE and Florida Ave NE intersection (Figure 26). The existing site condition which is inside the campus is University's Transportation Facility and Garage Buildings (Figure 26). This property is part of the Gallaudet master plan along the 6<sup>th</sup> street Parcel (1, 2A<sub>1</sub>, 2A<sub>2</sub>, 2B), and the program could be part of the development plan. This location bridges the gap between the city as a hearing world, and university as a Deaf world. Gallaudet can open its border to the larger community while retaining its culture. Opening Gallaudet's boarder naturally brings people from around the area and allows students to interact with all age groups. This site can create a new appealing entrance to the Olmsted Garden and main historical building on campus, and the future program would serve as a

threshold between town and groan. Although at present visitors who are not affiliated with the deaf community are not welcome inside the campus in order to protect the culture and safety, university is looking for a way to weave themselves with the town around. This idea can mitigate what now is claiming as a daunting problem of the Gallaudet front door.



*Figure 24: Prospective Sit 1, 6<sup>th</sup> Street- West and Florida Ave. at the edge of the Gallaudet and part of University's development project (Parcel 1, 2A<sub>1</sub>, 2A<sub>2</sub>, 2B (Source: Adopted from Google Earth Pro)*

### Site 2, Market Avenue

Second potential site that I chose was located at the market Avenue at the northwest corner of the 6<sup>th</sup> Street and Florida Ave intersection. In addition, this site is surrounded by 5<sup>th</sup> Street, and Morse Street on the west and north that create a clear edge street block (Figure 25). The existing site condition is low density Retail and Restaurants (Figure 26). This site could be part of the sequence of university developments next to union market and commercial strip. The program for this site is similar to the site 1 but architecture response would emphasize more on the street. Sites 1 and 2 are closer to the metro station and more accessible through the larger city (Figure 27).

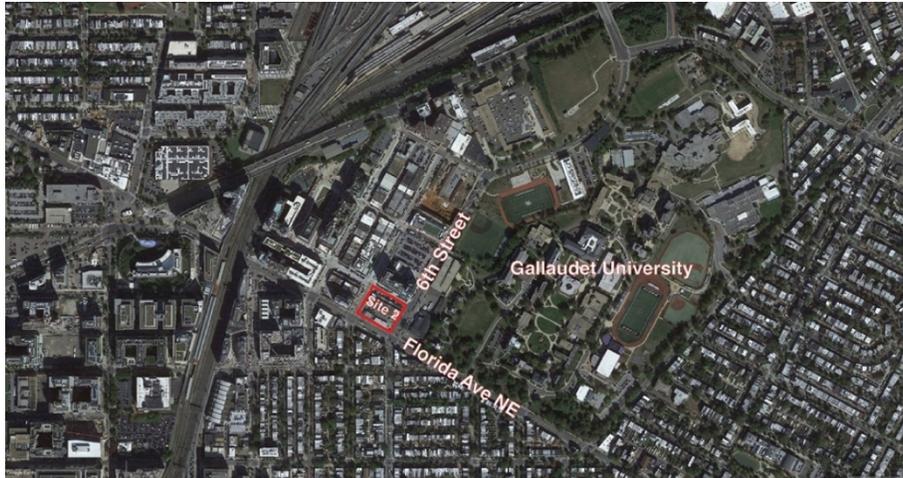


Figure 25: Prospective Sit 2, 6<sup>th</sup> Street, Florida Ave., 5<sup>th</sup> Street, and Morse Street, (Source: Adopted from Google Earth Pro)



Figure 26: Prospective Sit 1 view (left), Existing Condition: University's Transportation Facilities & Garage Buildings. Prospective Sit 2 view (right) at Morse Street, Existing Condition: Retail and Restaurants (Source: Google Map Street View)



Figure 27: Prospective Sit 1 & 2 view at the 6th Street & Florida Ave. intersection (Source: Google Map Street View)

Site 3, H Street Corridor

The third feasible location is at the H corridor between 12<sup>th</sup> & 13<sup>th</sup> Street as mentioned a famous deaf community hub (Figure 28), and the existing condition is an open Parking Lot (Figure 29). This location is more engaged in a city and hearing community welcomes hearing people in a casual and natural way and mainstream Deaf Culture. In addition, people at the Gallaudet would not feel they should stay on the campus, and this site would be another space for them to go. This breaks the boundary in a different way and creates a college-town environment. The program in this site could become part of deaf businesses growth in the city and help strengthen the deaf community developments in a larger scale.

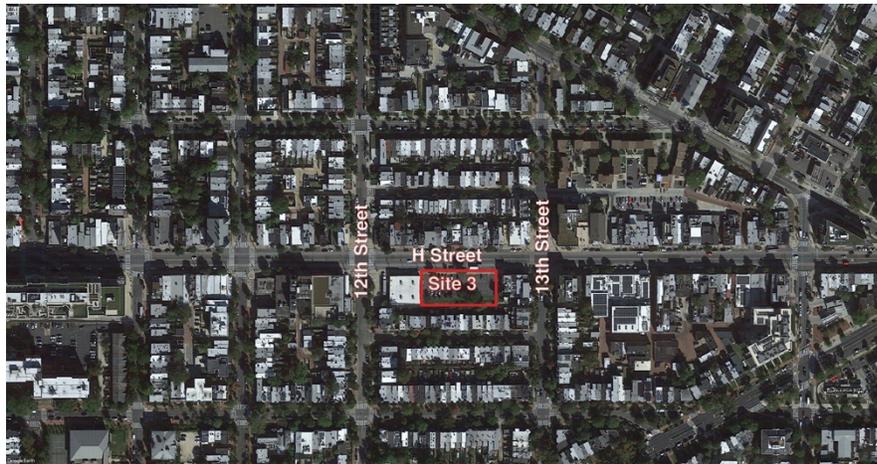


Figure 28: Prospective Sit 3, H Street between 12<sup>th</sup> Street & 13<sup>th</sup> Street (Source: Adopted from Google Earth Pro)



Figure 29: Prospective Sit 3 view at the H Street – Existing Condition: Parking Lot (Source: Google Map Street View)

### Site Selection Criteria

For the next step to choose the site, I developed criteria for site evaluation and use that criterion to help to justify selection of one site over another (Figure 30).

Eventually Site 1 at the edge of the Gallaudet among all received the highest score.

In fact, all locations support the idea of the bridging the gap between Deaf and Hearing community by bringing people inside the Gallaudet (site 1) or pushing the Gallaudet into the community (site 2 & 3). However, site 1 has the most potential to develop this idea further and is a greatest asset for the University.

Criteria	Site 1 Edge of the Gallaudet	Site 2 Market Avenue	Site 3 H Street Corridor
Bridging The Gap Between Deaf & Hearing World	3	2	2
Potential For the Building to Be Threshold	3	2	2
Proximity To the Metro Station	3	3	1
Visibility and accessibility For Hearing Community	1	2	3
Visibility and accessibility For Deaf Community	3	2	1
Proximity To the Institutions	2	2	3
Deaf Community Developments along the 6 <sup>th</sup> Street	3	2	1
Total Score	18	15	13

Figure 30: Site Selection, 1=Lowest Score, 3=Highest Score (Source: Author)

## Chapter 5: Precedent Study

This thesis aims to design a meeting place at the edge of the hearing and deaf worlds to stitch the deaf community to its neighborhood, assist with normalizing the Deaf Culture, and introduce Deaf gains to the design to enrich the spatial experience. The design approach to achieve these goals are through incorporating the DeafSpace principles and multisensory environment strategies. During the thesis research and design development, the author reviewed and analyzed a few architecture projects that were successful to address these strategies. These projects can be generally split into two groups, buildings that implemented DeafSpace guidelines, and multisensory architectures.

### *Deaf Space examples in the Gallaudet University*

Since Gallaudet University is the hub of the DeafSpace design principles, it is the best place to examine the examples of this concept.

#### Living and Learning Residence Hall 6 (LLRH6)

LLRH6 is a five-story dormitory constructed in 2012 and is the first residential building using the DeafSpace design principles. The building location next to the Gallaudet mall was chosen to nullify the current disconnect between residential and academic buildings and bring life and vibrancy to the campus. Some of the distinct architectural elements of the building that would address the DeafSpace principles are:

- Large curtain walls from floor to ceiling at the ground floor where houses all the public areas, to bring ample sunlight to the lobby, and maximize visual interaction (Figure 31)<sup>22</sup>
- Blue and green walls in the public areas and units which are in contrast with the body flesh helping to reduce glare and make the gestures easy to see (Figure 33)
- Proper mobility and visual control between floors (Figure 35)

#### Sorenson Language and Communication Center

Sorenson center is a new three-story building using the DeafSpace design strategies and housing the Gallaudet's ASL, Deaf Studies, and Communication Studies. Some of the distinct architectural elements of this building that would address the DeafSpace principles are:

- A semitransparent elevator that allows a visual interaction with the lobby and penetration of natural light into the elevator (Figure 32)
- Large curtain walls from floor to ceiling that bring ample sunlight to the lobby and address the reach sensory principles (Figure 34)
- An automate glass entrance that allows students to walk through the building without interrupting conversations in sign language
- A horseshoe shape seating area in the lobby that allows formation of conversation circle

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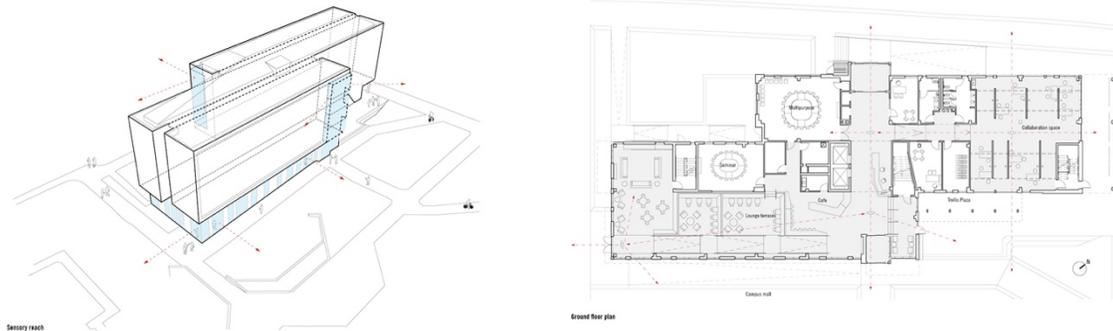
<sup>22</sup> Hales, Linda. *Living and Learning Residence Hall 6*, LTL Architects. 08 2013. <http://ltlarchitects.com/gallaudet-university-residence-hall> (accessed 08 25, 2021)

## Hall McKnight design as part of the Gallaudet design competition

As part of the “6<sup>th</sup> street development”, Gallaudet held a competition in 2016 for parcel 1 at the southwest corner of the campus. The goal was to design a multi-purpose building using the DeafSpace strategies to facilitate interactions among deaf and hard of hearing people and unlock the campus to the city. Hall McKnight firm was the winner of this competition. The project is currently underway and is expected to be completed in 2024. Figure 32 illustrates a central open space in the building receiving ample sunlight that fosters the ASL conversation.<sup>23</sup>

In general, architectural elements of these buildings that intend to address the DeafSpace principles can be classified into three major categories, Sensory reach, Light and Color, and Mobility Space and Proximity As shown in Figure 31 to Figure 34.

### Sensory Reach:



*Figure 31: Sensory Reach, Living and Learning Residence Hall 6, (Source: Hales, Linda. Living and Learning Residence Hall 6, LTL Architects. 08 2013. <http://ltlarchitects.com/gallaudet-university-residence-hall-> accessed 08 25, 2021).)*

<sup>23</sup> Gallaudet University, Hall McKnight. n.d. <https://www.hallmcknight.com/projects/28/gallaudet-university> (accessed 05 25, 2021).



Figure 32: (Left) Sensory Reach, Sorenson Language and Communication Center, (Source: Author) (Right) Sensory Reach, Hall McKnight design for the Gallaudet design competition, (Source: Gallaudet University, Hall McKnight. n.d. <https://www.hallmcknight.com/projects/28/gallaudet-university> -accessed 05 25, 2021).)

### Light and Color:



Figure 33: Proper coloring, Living and Learning Residence Hall 6 (Source: Hales, Linda. Living and Learning Residence Hall 6, LTL Architects. 08 2013. <http://lilarchitects.com/gallaudet-university-residence-hall> -accessed 08 25, 2021).)



Figure 34: (Left) Proper lighting, Sorenson Language and Communication Center, (Source: DeafSpace: the Contribution of Deaf People to Architecture, Unusualverse. n.d. <https://www.unusualverse.com/2022/01/deafspace-architecture.html> -accessed 11 12, 2021). (Right) Proper coloring, Living and Learning Residence Hall 6, (Source: Hales, Linda. Living and Learning Residence Hall 6, LTL Architects. 08 2013. <http://ltlarchitects.com/gallaudet-university-residence-hall> -accessed 08 25, 2021).)

#### Mobility, Space and Proximity:

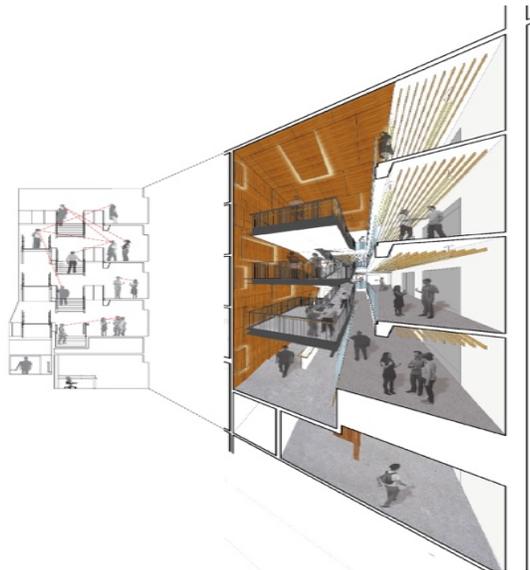


Figure 35: Proper mobility and visual control, Living and Learning Residence Hall 6 (Source: Hales, Linda. Living and Learning Residence Hall 6, LTL Architects. 08 2013. <http://ltlarchitects.com/gallaudet-university-residence-hall> -accessed 08 25, 2021).)



Figure 36: Deaf and hard of hearing individual walking through the wide Campus pathway while conversing in sign Language (Source: Harris , Johnny , and Gina Barton . *How architecture changes for the deaf*, Vox. 03 02, 2016. <https://www.vox.com/2016/3/2/11060484/deaf-university-design-architecture> -accessed 10 06, 2021).)

### Multisensory Environment

#### Glenstone Museum

The pavilion in the Glenstone museum designed by Thomas Phifer and partners, is a building consisting of a few pavilions around a central water courtyard. The pavilions which are fully integrated into the landscape, lead visitors from the ground to the lower level and land in the tranquil water courtyard. The courtyard is surrounded by a glass enclosed corridor that connects to pavilions and brings natural light into the building (Figure 37).<sup>24</sup> Also, pavilions receive indirect sunlight from the skylights. The silence and calmness in the courtyard help the visitors to be stimulated by smell of flowers, touching the materials, and seeing water reflection, light and the sky framed with the pavilions, which creates a rich multisensory experience.

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<sup>24</sup> *Architecture, Glenstone* . n.d. <https://www.glenstone.org/architecture/> (accessed 11 12, 2021).



Figure 37: (Left) Water Court at the pavilion (Source: Architecture, Glenstone . n.d. <https://www.glenstone.org/architecture/> -accessed 11 12, 2021). (Right) Section of the gallery, pavilions, playing with light in Architecture, (Source: Glenstone, Potomac, Maryland / 2006 – 2018, Art & Architecture Quarterly. n.d. <https://aaqeastend.com/contents/glenstone-potomac-maryland-2006-2018-new-1-14-19/>-accessed 10 16, 2021).

### MIT Chapel

The MIT Chapel was designed by Eero Saarinen in 1955 at the Massachusetts Institute of Technology. The exterior is in simple cylindrical form without windows placed inside a shallow moat (Figure 38). But unexpectedly the interior space has a dynamic and fluid form illuminated by cascade of lights from skylight and soft light reflections from the moat. A metal sculpture hanging from the ceiling sparks under the direct light and a shallow slit in the wall reflects the dim light coming from the moat. Through playing with light and shadow, the architect creates a mystical quality that awakens the spirituality<sup>25</sup>.

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<sup>25</sup> Souza , Eduardo . *AD Classics: MIT Chapel / Eero Saarinen*, ArchDaily. n.d. <https://www.archdaily.com/112682/ad-classics-mit-chapel-eero-saarinen> -accessed 11 23, 2021).

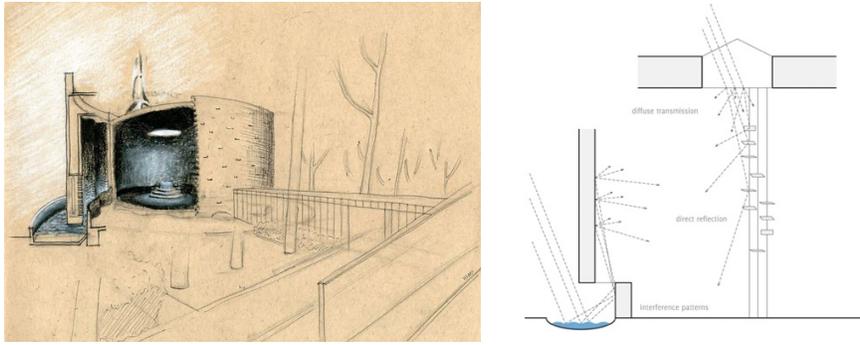


Figure 38: MIT Chapel, lighting strategies (Source: MIT CHAPEL Analytical Drawing, DeviantArt. n.d. <https://www.deviantart.com/general-sau/art/MIT-CHAPEL-Analytical-Drawing-174498037>- accessed 10 24, 2021))

### Chichu Art Museum by Tadao Ando

The Chichu Art Museum was designed by Tadao Ando in 2004 and located in Naoshima, Japan. Despite being a subterranean building integrated into its landscape, it's designed to receive abundant light to illuminate the artworks. This feature affects the atmosphere of the interior spaces throughout the day and along the seasons. Additionally, being underground creates a calm atmosphere that amplifies visitors' sensitivity to further concentrate on the artwork (Figure 39).<sup>26</sup>



Figure 39: Chichu Art Museum by Tadao Ando (Left) playing with light (Source: TADAO ANDO, Chichu Art Museum, Naoshima, Japan, 2004. n.d. <https://setdeco.tumblr.com/post/181547010474/tadao-ando-chichu-art-museum-naoshima-japan> -accessed 11 26, 2021). (Right) Tactile experience (source: Baan, Iwan . Chichu Art Museum by Tadao Ando. Naoshima, Japon.)

<sup>26</sup> Chichu Art Museum, Benesse Art Site Naoshima. n.d. <https://benesse-artsite.jp/en/art/chichu.html> (accessed 09 29, 2021).

## Chapter 6: Center for Deaf Art and Culture

### Proposed Site

#### Gallaudet Master Plan

As it was discussed in chapters 3 and 4 the optimal site was inside the Gallaudet University at the edge of the 6<sup>th</sup> street and Florida intersection. This location is part of the ongoing development planned by the University and D.C. developer The JBG, started in 2014. The project classified as “6<sup>th</sup> Street Development Project” with the D.C. Zoning Commission will add additional office, residential, retail and university space to the region.<sup>27</sup>

The vision is redeveloping the existing condition, adding new programs and streets, and designing the streetscape by implementing DeafSpace guideline. The master plan connects the new developments to the NoMa metro station and tie the campus to the surrounding communities. This outlook brings life and vibrancy to the campus and urban realm while retaining the Gallaudet’s culture and historic campus.<sup>28</sup>

According to D.C. Zoning Commission, 6<sup>th</sup> street development master plan consists of four parcels (Figure 40). Parcel 1, located at the campus southwest corner, is a five-story building allocated to the office and university support spaces. Parcel 2A<sub>1</sub>, 2A<sub>2</sub>, and 2B accommodate university’s programs at the first floor on the campus side, retail frontage across the 6<sup>th</sup> Street, and four top floors for the residential area.

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<sup>27</sup> Goldchain, Michelle. *Massive 1.1M Sq. Ft. Project Planned in NoMa by Gallaudet, JBG, curbeded washington dc*. 10 16, 2015. <https://dc.curbed.com/2015/10/16/9910312/gallaudet-university-jbg-companies-noma-6th-street-ne> (accessed 04 23, 2021)

<sup>28</sup> Flanagan, Neil . *When it redesigns its campus, Gallaudet hopes to pioneer architecture for the Deaf, Greater Greater Washington*. 09 14, 2015. <https://ggwash.org/view/39227/when-it-redesigns-its-campus-gallaudet-hopes-to-pioneer-architecture-for-the-deaf> (accessed 05 03, 2021)

Parcel 3 and 4, 11 story buildings located in front of campus includes retail frontage at the urban façade and residential units at the top.<sup>29</sup>

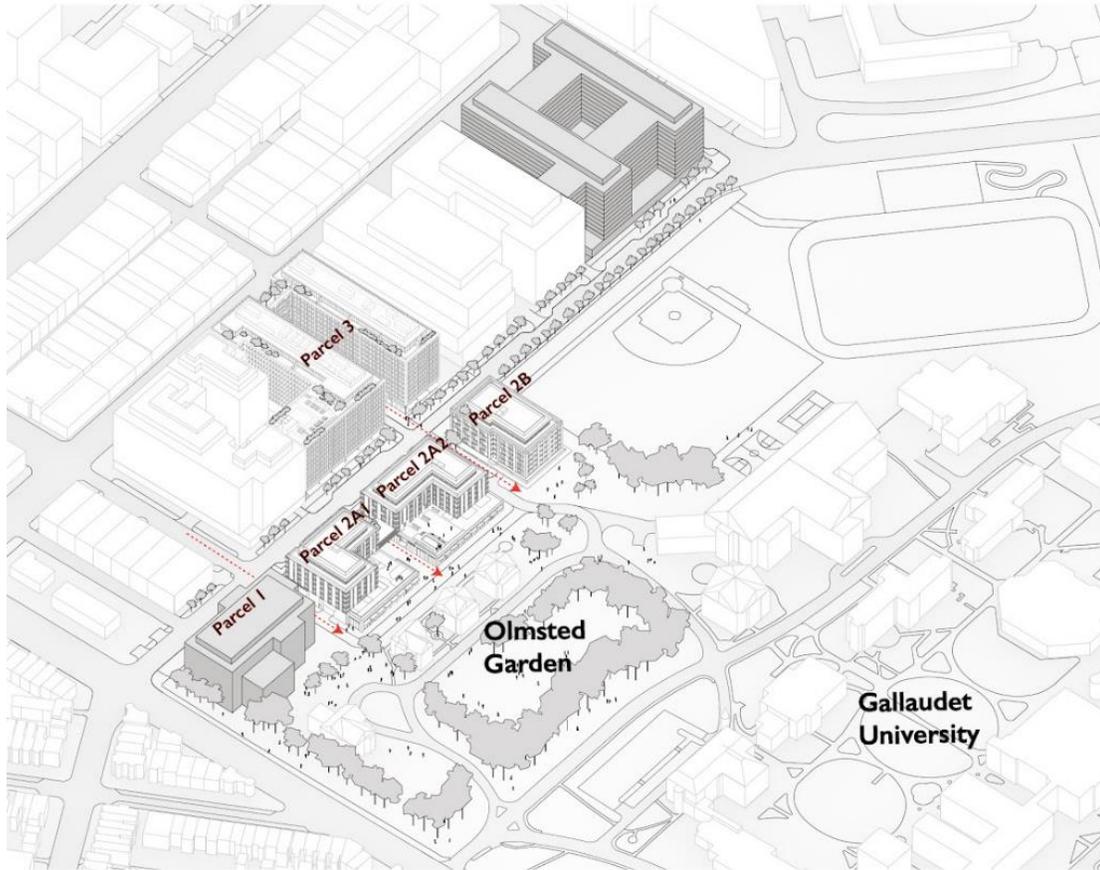


Figure 40: 6<sup>th</sup> Street Development project, Gallaudet Properties, Parcel 1, 2, and 3, and new streets (Source: Adopted from "6th Street Development project ." Interactive Zoning Information System . 08 03, 2020. <https://app.dcoz.dc.gov/Exhibits/2010/ZC/tmp764/Exhibit9.pdf> (accessed 09 30, 2021))

### Site Survey

After determining the potential site discussed in Chapter 4 and reviewing the new developments along the 6<sup>th</sup> street, I accepted the Gallaudet's master plan and chose parcel 2A for the thesis project. This site is significant since is located between the

<sup>29</sup> "6th Street Development project ." *Interactive Zoning Information System* . 08 03, 2020. <https://app.dcoz.dc.gov/Exhibits/2010/ZC/tmp764/Exhibit9.pdf> (accessed 09 30, 2021)

new streets penetrating from the hearing world to the Olmsted Garden at the heart of the Gallaudet. This location as a gateway creates a meeting place for the deaf and hearing community which is one of this thesis goal. Figure 40 illustrates the proposed site in the existing condition, which is part of the parking garage and an open space in front of that.

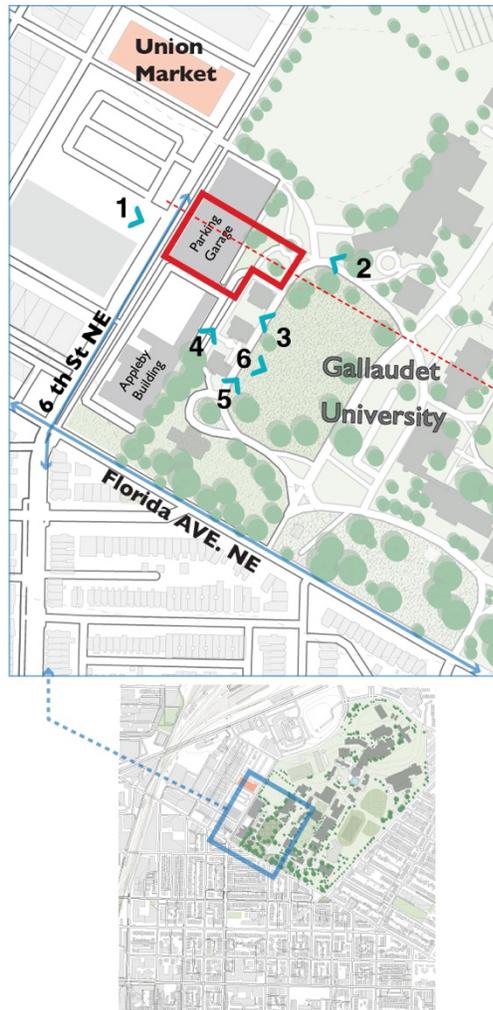


Figure 41: Proposed site - existing condition (Source: Author)

The proposed site is a transition from the busy 6<sup>th</sup> street to the tranquil Olmsted Garden, and the existing site section shows this sequence. The section cut from the parking lot in front of the proposed site, across the 6<sup>th</sup> street goes through the parking

garage, garden, and Edward Miner Gallaudet Memorial building (Figure 42). This historical building also known as house one was the first president house at campus.<sup>30</sup>



Figure 42: Site section - existing condition (Source: Author)

Then I surveyed the site and took the following pictures (Figure 43, Figure 44, Figure 45) to show the sequence of coming from the city to the deaf world. The view point of the pictures has shown in the proposed site plan (Figure 41).



Figure 43: (Left) View from the 6<sup>th</sup> street to the proposed site (parking garage and Appleby Building, the campus transportation building) (Right) View from the campus to the proposed site, parking garage (Source: Author)

<sup>30</sup> *The Edward Miner Gallaudet Residence, Gallaudet University.* n.d. <https://www.gallaudet.edu/about/history-and-traditions/campus-landmarks/house-one>.



Figure 44: (Left) View from the Faculty Row houses looking toward the proposed site (Appleby Building) (Right) View looking north from Faculty Row houses (Source: Author)



Figure 45: (Left) View from the Faculty Row houses looking toward the Ballard House. (Right) View looking toward Olmsted Green and College Hall, one of the main historical buildings at Gallaudet (Source: Author)

### Concept & Program

The primary thesis objective is creating a meeting gate at the edge of the Gallaudet campus that welcomes deaf and hearing individuals and does not privilege any majority group (Figure 46). After reviewing the Gallaudet master plan at the proposed site, I noticed that a Deaf Culture Center, a cross cultural place for students, families, faculties, and visitors is needed. I defined a program that include the retail frontage, university space, and residential units. This can create harmony with the future developments and commercial avenue.



Figure 46: Bridging the Hearing and Deaf world (Source: Author)

The final scheme proposed a center for Deaf Art and Culture to provide a platform for meeting, communicating, and engaging. To create intimacy between people with cross cultural backgrounds, spaces were needed to facilities interactions and collaborations. In addition, multisensory gardens enrich the experience of space and create a shared space that both hearing and deaf individuals can relate (Figure 47). This is a unique aspect of the place that begins to diverge from a typical cultural center, celebrating all our senses to navigate the space and enabling alternative modes of communication. The specific program includes, deaf art and craft shop, café, multisensory gardens, performance Hall, Deaf Culture exhibition, event space, rehearsal Room, workshop, storytelling room, and office space (Figure 48).



Figure 47: Program analysis, shared spaces between Hearing and Deaf (Source: Author)

<b>Deaf Art and Culture Center</b>	
<b>Main programs</b>	
Spaces	Total SF
<b>Interaction</b>	
Café & Restaurant	2,298 SF
Deaf Art & Culture Craft Shop	1,860 SF
Event	3,050 SF
Plaza	6,641SF
Courtyard	1,376 SF
<b>Collaboration</b>	
Workshop	595 SF
Game Room	195 SF
Storytelling Room	400 SF
Flex Spaces	1,035 SF
<b>Curiosity</b>	
Deaf Art & Culture Exhibition	2,640 SF
Rehearsal Room	1,279 SF
Performance Room	1,669 SF
Gardens	5,575 SF
Green Roof	2,609 SF
<b>Admin</b>	
Open Office	704 SF
Conference	270 SF
<b>Service Area</b>	

Entrance Hallways, loggia around Courtyard, & Circulation	10,760 SF
Reception & Cashier	422 SF
Lounge	211 SF
Kitchen	558 SF
Bathrooms	1,106 SF
Mechanical & Utilities & Storage	5,250 SF
Total Gross Square Footage	<b>50503 SF</b>
Outdoor Spaces	12216 SF
Total Site	30309 SF
<b>Residential</b>	
Residential Units	9,000 SF
Amenities, Lobby, and Circulation	2,900 SF
Loading Dock & Trash	525 SF

Figure 48: Deaf Art & Culture Center Program Tabulation (Source: Author)

### Design Proposal

This thesis explores the idea of bringing deaf and hearing worlds together through a center built at the edge of Gallaudet university. The building is located between the two new street penetrating to the campus, vehicular street, and pedestrian pathway between parcel 2A<sub>1</sub> and the Deaf Art and Culture Center. Tapscott street (vehicular) dividing the parcel 3 extends into the university and stitches the new program to the union market community. This Building as a meeting gate is a microcosm of the whole development at the 6<sup>th</sup> street which is a threshold to the deaf community (Figure 49).



Figure 49: Site Plan for the Deaf Art and Culture Center (Source: Author)

The initial idea for architecture was centralizing the courtyard and placing a series of pavilions and multisensory gardens around which are related with loggia. This concept supports the idea of creating a sequence of spaces and string a series of experiences when entering the project and walking toward the campus. This architecture became a platform to enrich the hearing and deaf visitors' experiences and support culture shift. Also, courtyard would maximize the visual interaction and support Reach Sensory principle of the DeafSpace. The three residential floors were added to address the scale consistency with the surroundings buildings, 2A<sub>1</sub>, 2B parcels, and parcel 1 (Figure 50).

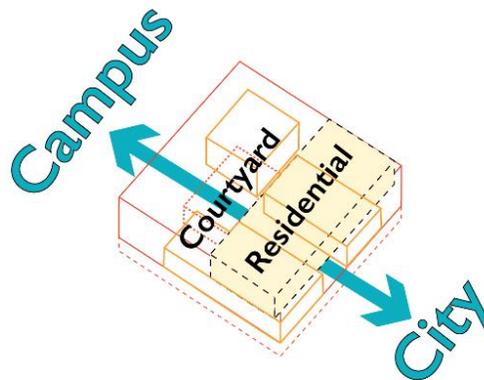


Figure 50: Architectural Concept Diagram for the Deaf Art and Culture Center (Source: Author)

The spaces are divided to two parts, retail frontage including a café and a deaf art and craft shop next to the urban façade which is consistent with the new developments. The second part on the university side includes the Deaf Art and Culture spaces. These two parts are zipped with a service area strip which serves as a threshold between two programs (Figure 51). The residential block is positioned just at the top of the retail and service area, and does not block the top of the Deaf Center significant areas. This design strategy helps maximize the sunlight penetration for the courtyard and multisensory gardens. This strategy also addresses the principal of importance of the light for deaf and hard of hearing people that I learned from growing with my sister. A bridge between the Deaf Art and Culture Center and parcel 2A<sub>1</sub> at the south of the project connects the residential units of both buildings (Figure 52).



*Figure 51: 6<sup>th</sup> Street View – Urban Façade (Source: Author)*

Visitors from the hearing world are welcomed from the 6<sup>th</sup> street entrance to the core of the building through a wide semi open hallway to address the mobility requirement. The hallway between café and deaf art and craft shop is connected visually to the Gravel Garden at the lower floor, and Glass corridor at the second floor. Two glass elevators are located next to the main entrance to the loggia at the 1<sup>st</sup> floor that connects lower level to the third floor and roof garden. The glass material and location of the vertical circulation facilitate the Reach Sensory strategy of the DeafSpace (Figure 52).



Figure 52: (Left) 1st Floor Plan, (Right) Main entrance (Source: Author)

The residential entrance located at the pedestrian pathway leads residences to the residential lobby and brings them to the fourth, fifth, and sixth floor where residential units are located (Figure 52).

The entrance leads visitors to the loggia at the 1<sup>st</sup> floor that has view to both lower level and second floor. Deaf Art and Culture Center Elevators and stairs bring visitors to the lower level, second floor, and third floor. Courtyard, Gravel Garden, Water

Garden, Fragrant Garden, performance hall, and exhibition are the main spaces at the lower level. The gravel, water and fragrant gardens are designed to stimulate the sense of haptic, sight, and smell. There is a wooden walkway that provides a connection among these gardens and accommodates a proper mobility (Figure 53, & Figure 54).



Figure 53: (Left) Lower Floor Plan, (Right) Gravel Garden (Source: Author)



Figure 54: (Left) Water Garden, (Right) Fragrant Garden (Source: Author)

The courtyard at the center of building provides natural light through glazing and skylights. The walls are painted blue to comply with the color strategy in DeafSpace

design. Spaces have visual access which accommodates the reach sensory strategy (Figure 55).



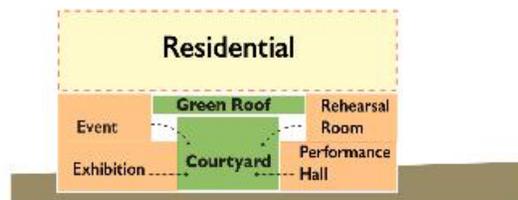
Figure 55: (Left) Water Garden, (Right) Fragrant Garden (Source: Author)

Longitudinal building section shows the movement and transition from the 6<sup>th</sup> street to the plaza at the campus side of the Deaf Art and Culture Center. Plaza provides an appealing outdoor gathering space between the Fragrant Garden and the Olmsted Garden. Blending with the plaza and Olmsted Garden through a series of slow steps, the fragrant garden ties the program to the larger context (Figure 56, & Figure 57).



Figure 56: Longitudinal building section (Source: Author)

Rehearsal room and event space are located on the second floor on top of the performance hall and exhibition. The distinct feature of these primary programs plus retail frontage is the height of ceiling which is 20 feet. Part of the café and shop has the 30 feet high to maximize the received sunlight for the first, second, and third floor at 6<sup>th</sup> street façade. Also, all the spaces have the open view to the core of the building (Figure 57).



*Figure 57: Courtyard Cross-Section (Source: Author)*

The last floor for the Deaf Center is the third floor which has access to the roof garden. The workshop, storytelling, and game room in this floor can increase collaboration and engagement between hearing and deaf individuals. Additionally, an open office space, and collaboration areas have view to the first floor with a void and transparent wall. Residential amenities and access to the bridge which connects the residential part to the next building, is located at the third floor. Typical residential floors start from the fourth floor to the above floors. Figure 58 illustrates the view from the plaza looking toward the fragrant garden and performance hall at night. The architecture of the building aimed to support the transition from the busy urban world to the tranquil campus and create moments and experiences that people from the two worlds can relate and enjoy. This approach ties the Gallaudet and its distinct culture to the surrounding community, while retaining its culture.



Figure 58: Campus View (Source: Author)



Figure 59: (Left) 2nd Floor Plan, (Center) 3rd Floor Plan, (Right) Typical Residential Floor (Source: Author)



Figure 60: Bird Eye View of the Building and Plaza (Source: Author)

## Conclusion

This thesis supports the Gallaudet community and its goals to stitch the campus to the neighborhood with designing a center for Deaf Art and Culture. This place as a meeting gate supports the Deaf Culture and multisensory environment to promote deaf and hearing interactions.

The goal of this thesis is proposing a universal design that is not just about accommodating differences, but also is about understanding, celebrating, and including them in the build environment. Although this project focused on the deaf community, but it is applicable to the larger context.

*I closed my mouth and spoke to you in hundred silent ways...*  
*-Rumi*

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