MEMOIR UPON THE FORMATION OF A VISUAL VARIETY OF THE HUMAN RACE[i]

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In New York City, a father and daughter sat in a cafe people watching out the window and drinking coffee.

"Look across the street," signed the father.

His daughter quickly scoped the busy street packed with people hustling to and fro before quizzically looking back at her dad.

"One of them is deaf… which one is it?" he asked.

She looked back and scanned the crowd. She noticed one man's eyes glancing from side to side. "The one with the brown overcoat," she guessed.

"I agree. Let's watch and see," he suggested.

The man in the brown overcoat was about to cross the street, but sensed the sudden shift in the crowd of people around him as they simultaneously looked in the same direction. He decided he too should check in that direction and saw sirens and flashing lights accompanying a speeding ambulance. After the commotion subsided, he crossed the street and continued walking past the cafe. The father waved his hands in the man's periphery. In the middle of a bustling city, the man in the brown overcoat noticed a flutter of hands through the window and quickly turned to see the father and his daughter.

"You deaf?" signed the father.

The man was astounded and asked, "How did you know?"

People of the Eye

The characters in this short story are unique in that they inhabit a highly visual world. They use a visual language to communicate and have developed a visual system of adaptation to orient them in the world that defines their way of being.[ii]

This is not an unusual story. Episodes like this have been shared and reported all over the world. The claim that deaf people are highly visual and tactile is not a new concept. It has been stated time and time again in various sources—both in writing and through the air ("orally"). The most notable statement came from George Veditz, who eloquently commented at the National Association of the Deaf convention in Colorado in 1910, "…[Deaf people] are first, last and of all time the people of the eye (Veditz, 1910)."[iii]

The strongest support for the notion put forward by Veditz (and others) is the emergence of a visual-gestural language. Since the dawn of time, whenever and wherever there were deaf people[iv] on earth, a visual communication system (using gestures, mime and home signs) would be developed to convey thoughts, feelings, desires and ideas. Although there is no written record of this phenomenon from the ancient times, one of the earliest recorded observations of deaf people using gestures and signs are found in Plato's Cratylus. In ensuing dialogue between Socrates, Hermogenes and Cratylus on issues of names and language, Socrates made an observation in reference to deaf people using gestures/signs in Athens around 400 to 350 BCE:

> *"Suppose that we had no voice or tongue, and wanted to communicate with one another. Should we not, like the deaf and dumb, make signs with the hands and head and the rest of the body?"* (Plato, 1961, 457)

Observations of deaf people creating visual-gestural communication do not only occur in major metropolitan areas but also in isolated places around the globe from the jungles of the Amazons[v] to the many islands scattered all over the world's oceans.[vi] [vii] In essence this discussion highlights what Veditz also said a few years later in 1913, "As long as we have deaf people on earth, we will have signs (National Association of the Deaf, 1913)."

The desire and drive to create signs is deeply rooted in our fundamental human need for communication. The truth is "we cannot be truly human apart from communication…to impede communication is to reduce people to the status of things (Freire quoted in M.J. Wheatley (2002))." Deaf people, being of a human variety, have refused to be reduced to the status of things and found ways to communicate visually and developed visual languages.[viii] That is the essence of their being. All other things are constructed around this, channeled through and by vision.

The roots in visual-gestural languages have pushed the boundary of vision far beyond other human groups known.[ix] This paper will draw from various bodies of research and observations to further demonstrate the significance of "vision" to the Deaf-World.

The use of eyes in language and culture

Before looking at the role that vision and the use of eyes play in the language and culture of deaf people we need to realize two things: 1) there are people who are not deaf but are highly visual in the way they think, behave and express themselves and 2) unlike the ears, human eyes have communicative functions, which play a role in sending and receiving information. Almost all humans are able to display this duality. The size of pupils sends information on whether one is scared, interested and so on. Droopy eyes send the signal of drowsiness.[x] However, among signing deaf people, the

role vision and the use of eyes expands exponentially. We must bear in mind that when using signed languages signers manifest many different kinesthetic features which are depicted visually: the body, head, hands, arms, facial expressions, and the physical space surrounding the signer and his/her eyes. The focus here will be on the role the eyes and vision have in linguistic and discourse exchanges and ways they are extended to other cultural and literary functions.

Various eye behaviors in language

When signing, the signer's eyes are always moving in saccadic manner—rapid eye movements to and from fixation points—to signal various linguistic information in different layers. The eye movement may occur over a single word[xi] to convey specific meaning, appear in sentences to indicate the spatial position of the object, signal constituent boundaries, bring the addressee in and out of a story world and/or play a role in turn-taking. All saccadic movement happens in one brief exchange.

At the lexical level, the eye gaze may shift to correlate with the manual portion of a sign and convey additional meaning to the word. Sentence 1 shows an example of this co-occurrence with an adjective. In this sentence the signer looks at the addressee then quickly shifts his gaze to the hands where the shortness of the cute boy is conveyed and shifts his gaze back to the addressee.

Sentence 1

gaze down

BOY CUTE SHORT.

Translation: The boy is short and cute.

(Note: No eye gaze transcription over a sign means the signer is looking at the addressee).

At the syntactic level, the eyes play a critical role in relations to syntactic constituents, such as noun phrases and verb phrases in simple sentences. They have different functions depending on where in the sentence the eyes are being used. In noun phrases, the eyes can have function to convey the location and distance of an entity.[xii] Eye gaze frequently accompanies the indexical sign that expresses definite determiners in ASL. The eye gaze to the same location in space where the finger points: the location in space associated with the referent that is being referred back to, as seen in sentence 2.

Sentence 2

gaze left
IX-left MAN WANT BUY YOUR CAR
Translation: The man (over there) wants to buy your car.

Indefinite reference in ASL is associated with a broader region in space than just a single point. So, for example the indefinite determiner, SOMETHING/ONE is articulated by an upward pointing index finger moving in quick circles within a small region in space. The eye gaze that accompanies the indefinite determiner is also more diffused within that region of space. So, sentence 3 illustrates the distinction in the definiteness/indefiniteness of the noun is reflected in the different types of eye gaze used.

Sentence 3

diffused gaze
SOMEONE MAN WANT BUY YOUR CAR
Translation: A man wants to buy your car.

In the verb phrase, the eyes used in transitive constructions serve as non-manual markers of syntactic object agreement.[xiii] In sentence 4, the direction of the eye gaze (to the left) marks the location associated with the object and augments the sentence by functioning as a non-manual object agreement marker as it spreads across the verb phrase.

Sentence 4

gaze left
JOHN LOVE MARY.

Translation: John loves Mary.

When engaging in discourse, the listener usually fixes and maintains his gaze on the signer's face, particularly the eyes, thus creating a conversational partnership in regulating different discourse functions. As previously mentioned, the signer's eyes are constantly moving in a saccadic manner to convey various linguistic purposes. This eye movement continues throughout the exchange. The signer gazes away from the addressee (- gaze) for various linguistic and discourse related reasons and gazes back to the addressee (+ gaze) to check on him/her, to keep him/her involved, and/or to give a turn.[xiv] This "checking mechanism" often happens at points that are identified as constituent boundaries or lines.[xv] In a situation where the addressee wants to initiate a turn, he will place his hands in the signer's visual field, wait until the signer is gazing at him (+ gaze), and then start signing. In a heated exchange, the signer can maintain his role by minimizing the number of times he performs + gaze. By doing this he minimizes the chances of being interrupted.[xvi]

The dynamics of a classroom involves more complex turn-taking strategies where the teacher usually assumes the role of a regulator. In the case of signing

classrooms, this equation has been observed: the more fluent the teacher is with visual communication signals, the more fluid classroom discourse will be. These teachers maintain a clear distinction between two forms of gazes: individual gaze (I-gaze) and group gaze (G-gaze).[xvii] In a classroom, the two different gazes serve different functions, for instance, when the teacher wants to address a particular student he employs the I-gaze at that student, by keeping his eyes transfixed to that student (with allowance for saccadic linguistic markers), and maintain mutual eye contact while engaging in questions and answers. When the teacher wants to talk to the class as a whole his gaze is less transfixed and more diffused as he addresses the whole group. The teacher will also sweep his gaze and head around the group to address all of the students. Handling this distinction between the two types of classroom eye gaze has been problematic for non-fluent signing teachers and has caused misunderstandings between the teacher and student. For example, a teacher used an I-gaze at one particular student when he was actually addressing the whole class. Signing "Please pay attention when I am talking," with the eye gaze at one particular student will likely result in the student responding "I have been paying attention ~ why are you picking on me?" [xviii]

While telling a story, a signer typically does not relinquish his/her turn to the audience. Instead the expectation is that the storyteller maintains his/her turn until the story is completed. Thus, the role of eye gaze, while still vital to engaging the listener/audience, takes a somewhat different form. In addition to the constant saccadic shifts that fall within the categories described above (e.g., using eye gaze for lexical and syntactic purposes), the teller uses eye gaze in constructed action/dialogue, to present information from the point of view of a character in the story. This type of eye gaze serves a major function in storytelling. The teller assumes various characters' gazes while signing his/her actions and incorporates reciprocal gazes to clearly represent

dialogues between two or more characters in a story. At a more global level, the teller brings the story world up right before the addressees' eyes, and eye gaze serves to modulate between the narrator's perspective, the story world and the more "direct" depiction of events through the eyes of a character.[xix] In addition closer scrutiny allows one to see that the teller's rhythmic gaze from the story world to the audience serves as a device for demarcating narrative units in a formulaic sense.[xx]

There are eye behaviors, other than gaze directions or saccadic movements, which play additional roles in the language that is worth mentioning here. While accompanying various spatial related signs the aperture of the eyelids can also convey a sense of nearness or farness. When the eyelids widens in association with a lexical item it conveys closeness, whereas the squinting of the eyelids convey distance. Another behavior includes the way the closure of the eyes with a word conveys an emphasis; this has been identified as emphatic eye closure.[xxi]

Another type eye behavior involves eye blinks in sentences. If one looks at the site where eye blinks occur with regularity one will find signers blink their eyes in constituent boundaries that are between the NPs and VPs and at the end of sentences as shown in sentence 7.[xxii]

Sentence 7

Blink Blink
LAST^NIGHT JOHN VISIT MARY.

Translation: Last night John visited Mary.

The proposition that the role of eyes used for signaling communicative function among signing deaf people is expanded exponentially is thus confirmed. The essence

of what may appear as simple eye gazing behavior is in fact part of a complex multi-layered linguistic system in American Sign Language. That is, the signer's eyes are always moving in a saccadic manner to signal various linguistic information in different layers from a single word to interactions with a large group.

Visual language and the brain[xxiii]

Oliver Sacks, a renowned neurologist and author, was astounded at the complexity and multi-layered role that eyes play in conjunction with sign production. He commented, "One can have a dozen, or a dozen-and-a-half, grammatical modifications, done simultaneously, one on top of the other, and when this came home to me, the neurologist in me was aroused. I thought: "that's impossible. How the hell can the brain analyze eighteen simultaneous visual patterns?" I was filled with a sort of neurological awe. The answer to this, briefly, is that the normal brain can't make such visual analysis, but it can learn to do so."[xxiv]

There are a number of neurological studies examining the interactive function of signed language, vision and the brain that support Sacks' observation. In this paper the focus is on three research areas that portray this learned visual way of being: 1) peripheral vision, 2) spatial processing tasks and 3) rapidly presented visual information tasks.

Since the 1980's several studies have looked at peripheral vision and deaf people through electroencephalograms (EEGs) and functional magnetic resonance imaging (fMRIs) tests. The results have consistently shown that signers have superior attention to the peripheral visual space.[xxv] This scientific proof gave legitimacy to what has been known in the Deaf community for a long time. The story in the beginning of this paper showed how the man in the brown overcoat was able to use his peripheral

vision to “navigate” his way in the world of sound. This attention to the periphery develops at a very early age in children. One personal observation concerns my daughter when she was 3 1/2. She was engaged in a conversation with an adult seated across from her at the dining room table. I was seated to her right (in her periphery). They were going over the names of her classmates in pre-school. I supplied a name sign hoping to clarify and help out the adult. My daughter quickly looked away from the adult and corrected the way I produced that particular classmate’s name. I was astonished that at age 3 1/2, she was able to recognize the name sign error I made out of her peripheral line of vision. Her facility using peripheral vision is further evidence in support of the claim that signers have superior attention in this area.

Several spatial processing tasks were also done comparing native signers of ASL with non-signers. The tasks required subjects to recall, compare and identify various mental and visual images. They include being able to quickly identify, generate and transform mental and mirror images.[xxvi] Tests include spatial cognition tasks in non-verbal IQ tests such as block designs, a subtest of the Wechsler Intelligence Scale for Children[xxvii] and recognition and matching an array of six faces oriented and shadowed differently with the target face.[xxviii] These spatial processing tasks show that native signers of ASL performed better than non-signers.[xxix]

Another task focused on the ability of deaf people to recognize rapidly presented visual information. Researchers created a videotaped test of invented Chinese characters written in the air with tiny light bulbs attached to a hand. The videotape was shown to a group of deaf and hearing Chinese first graders. The tasks required students to maintain in memory the path traced rapidly, analysis into component strokes and finally reproduction on paper. The Deaf signing first graders significantly outperformed their hearing counterparts.[xxx]

The perception tasks discussed above do not require knowledge or use of signed languages. However, comparative results show that the native signers had a consistent advantage when performing the tasks. These studies reinforce the notion that signing Deaf people make better use of vision.

In Culture and Literature

The visual way of being in the world discussed thus far is carried over into the cultural lives, values, consciousness, social spaces, and literatures of signers.[xxxi] Recall the story in the beginning of this paper, where the father and daughter were able to identify the man in the brown overcoat as deaf out of thousands of people on the bustling city street. They noticed the subtleties that only members of this culture (those who share the visual experience) can see. The first visual cue was the way the man in the brown overcoat was orienting himself in the streets of New York City by executing saccadic eye and head movements. The father and daughter knew from observing the synchrony of these movements that there was something uniquely familiar about this man; something this is visual only to deaf people. This man had what is known in the community as "deaf eyes." The daughter's guess that the man in the brown overcoat was "the" deaf man was confirmed by observing how he read the world.

Visual-cultural adaptations

There are different sets of learned behaviors and adaptive systems that are passed on with respect to "reading the world." One learns to engage in observing, looking and eventually seeing that sound has ways of bouncing off visual cues. I remember my father's advice as I was growing up. He would sign, "Observe others around you; if you notice them looking in one direction, something is happening over

there. This is not limited to people walking, but also driving. If cars in front of you slow down or stop at an intersection when the light is green, do not attempt to pass without checking around you because this is a telltale sign of an oncoming ambulance or police in the intersection." My father also noted that pets and/or other animals are able to broadcast auditory cues. My wife and I are able to "hear" our kids coming down the stairs or playing upstairs when they are supposed to be in bed by noticing our pets (cats and dog) perk up from their sleep and glance at the space behind us. When I walk my dog in the woods I often "hear" things by noticing her glances in particular directions. Another "visual rule" my father hammered into me as a child was the necessity of looking back every time you leave a room or place. "You never know if someone may need your attention, so it is a courtesy to look behind you to check with others before you leave." I also learned the significance of periphery as an integral part of reading the world. The man in the overcoat used it to respond to the father through the café window just as my 3 1/2 year old daughter used it to correct me when I incorrectly produced her friend's name sign.

When we look at social spaces we see that the proxemics or social distance between interlocutors is at a distance that is comfortable for the eyes. When more than two people are involved, the spacing arrangement between signers becomes triangular. When additional signers join the conversation the circle becomes larger, and always maintains visual sight lines of one another. At conferences or sporting events it is common to see many circles forming throughout the lobby and people maintaining appropriate visual proxemics.

When participating and/or joining a circle, signers need to be in synchrony with each other's body rhythm.[xxxii] Listeners need to be in sync with the signer's pace of signs, body and saccadic movements in order to take a turn. To join a conversation

already underway, the newcomer needs to be in sync with the established interlocutors. When deftly done it appears as if the person was part of the initial conversation.

There appears to be symbiosis between native members of the signing community. Whenever native signers go to a location for the first time, whether it is a national or international site, they meet new people and hang out with new friends. Invariably these new friends are also native signers. It is remarkable that without actively seeking them out they naturally connect with other native signers. There is clearly a rapport, a synchronicity, and a subjective way of being that binds them. Having grown up in visual environments they learn to use the eyes and body for various functions related to language, discourse and culture. When they meet someone else who has acquired and emits this ways of being, synchronicity happens and a connection results.

Another related area is how signers naturally create or modify their habitat as exemplified by the phrase "this is a deaf house." This comment indicates that the particular house has earned the "seal of approval" for the way it is structured for vision. The floor plan of a "deaf house" is usually open, has fewer walls and many windows in the common area.[xxxiii] Additionally the line of sight to the second floor is not obstructed and there are visual extensions of auditory signals such as flashing doorbell lights, phone and baby-cry signals. Some homes also have strategically placed lights to maximize vision at night and mirrors to allow for visual access in other parts of the house that are obstructed. The significant features of this type of habitat, a "deaf house," create minimal visual obstructions and enhance visual communication pathways.

Visual symbolism in arts & literature

In this section we look at ways the visual experience permeates into the arts and literature by looking at some symbols: doors, windows, light and night. Although the signing community shares many established symbols in various arts and literary works with the majority culture, there are some idiosyncratic representations that are indigenous among signers. Examination of these symbols provides insight into the consciousness that binds the community.

Doors and Windows[xxxiv]

The attributes of doors and windows are often tied to visual permeability, which for our purpose is connected to language modality. A large number of "Deaf" narratives, especially narratives of personal experiences, have recurrent themes of protagonists being caught, shut in or locked out behind doors. Conflicts arise because of the opaqueness of doors, which make them inaccessible transporters of visual elements and language modalities. In seeking resolution, the protagonists try various visual extensions of sound to get the attention of the party "on the other side".[xxxv] More conflicts arise when these extensions fail and the ultimate solution is almost always found through a window of some sort. Windows are permeable; protagonists wave through windows, throw objects at windows, and climb up to windows in order to communicate. As conveyors of light, windows are conveyors of visual communication.

In terms of communication permeability, doors are to hearing people what windows are to deaf people. Though they do impede the process, hearing people can communicate through closed doors because they allow the transmission of sound. Otherwise, there would be no "knock-knock" jokes. Their prevalence in the hearing community speaks volumes. There is even a website devoted exclusively to knock-

knock jokes (www.knock-knock-joke.com). Here is an example of conversations happening through doors:

> Knock Knock!
>
> Who's there?
>
> Doris.
>
> Doris, who?
>
> Doris locked, that's why I had to knock!
>
> (www.knock-knock-joke.com)

Knock-knock jokes are almost non-existent in the deaf signing community; for Deaf people the exchange stops at "knock-knock."[xxxvi] Windows, on the other hand, silence hearing people. Generally, hearing people have difficulty carrying on conversations through closed windows. One scene in the mockumentary film, "This is Spinal Tap," about a heavy metal band in decline, effectively demonstrates this point. There is a scene involving the heavy metal band riding in the back of a limousine whose driver incessantly and fanatically rambles about Frank Sinatra to them. An annoyed member of the band presses the button closing the power window behind the driver in order to shut him up. The impermeability and divisiveness of windows as a conductor of speech communication is echoed in "The Ebony Tower," by John Fowles:

> *"The cruelty of glass: as transparent as air, as divisive as steel."* [xxxvii]

Thus, even though non-deaf people can see each other, communication is assumed to be blocked, if the auditory channel is reduced as in the case with a closed window. In comparison, windows allow visual communication for signers as this story demonstrates:[xxxviii]

A Deaf couple stops by a supermarket to pick up a few items on their way home. As they pull into the shopping center, they realize that their two-year-old child has fallen asleep. Rather than waking up the child, they agree that the mother should stay in the car and the father goes in for the items they need. As he shops, the father realizes he is not sure which type of herbal tea his wife wanted. So, he goes to the front of the store, past the cashier and waves through the window to get the answer to his question. The mother notices someone waving in side the store and looks up. Through two sets of windows (the store window and car window) they clarify exactly the kind of tea she wants. As he turns to go back to the aisle where teas are shelved, he notices all the people around the cashier staring at him wondering what he was doing.

The following story[xxxix] further illustrates the differences in the way a deaf man and a hearing man deal with windows and communication.

At a stoplight a deaf man noticed out of his periphery that the driver of the car to his left had rolled down the passenger window. The deaf man turned to find the driver asking, "May I have the time?" Which the deaf man was able to lip-read,

The deaf man glanced at his wristwatch and gestured (by holding up 5 on one hand and an index finger on the other hand), "six."

The hearing driver shook his head and said, "Roll down

the window."

The deaf man rolled down his window and repeated the gesture "six."

The hearing man finally got it.

The humorous tale above is a spoof on hearing people and their helplessness when it comes to communicating through windows. There was no change in the way the deaf person expressed himself. The visual message was the same; it only became "louder" to the hearing person when the gesture was done through an open window.

There are also several poems that incorporate the use of doors and/or windows. Consider Ella Lentz's poem "The Door."[xl] This creative work describes deaf people breaking free from the bondage of oralism, sheltering themselves in a room with a heavily secured door. Later in the poem, someone bangs on the door and the deaf people in the room wonder who it could be. Finally, one person goes to open the door, but the other cautions this person saying, "You don't know who it could be!" The role of the door as "a passage" takes on additional meaning here. In this case, as in other literary works, it represents taking a risk, opening the door to an inaccessible unknown.[xli]

In a performance entitled "Doors for Sale: Audism in the Deaf World" (St. Paul College, MN, May 7, 2004), I told various stories and talked about doors as a metaphor for oppression and barriers in the Deaf World and proposed their elimination. After all, unless you can hear, one never knows who stands on the other side. Soon after my presentation I received this email from John Lee Clark.

"I recalled a 1921 obituary in the Minnesota State Academy for the Deaf's school paper, "The Companion". You know, in those

days deaf families would have hearing neighbors who they'd go to if they needed important calls made. Well, late one night this fellow's wife became very sick and urged her husband to go over to the next house to have the widow there call the doctor. He goes over there and knocks on the door. No reply. More knocking. Still no reply. More kno--BOOM! --The guy is shot dead. The widow was calling "Who's there?" and grew panicky when she got no response and she got the rifle and simply shot through the door. So you can say that at least one door killed a deaf person. A window would've saved his life. Even a small window, bullet-hole sized like a peephole, would've been enough to save his life. I've thought about that story now and then, but now it has a new significance for me." (John Lee Clark, personal communication- May 7, 2004)

A similar application of these literary analyses to visual arts adds new perspectives on several paintings by the late Harry R. Williams. In these paintings, doors are featured in the middle of landscapes.[xlii] The "Coffin Door," figure 1, is one example.

Figure 1

HRW painting

"Coffin Door"

(©Harry R. Williams)

In this picture, we see a door shaped like a coffin (resembling one at Gallaudet University) directly in the middle of beautiful seascape blocking its visual continuity and obstructing the view. A hand enfolds (from behind) the top of the door suggesting that

someone is behind it. This demystifies the situation, yet we never know who it is. To the left of the door in the distance is a picture window of the city of Los Angeles. In the foreground is a rowboat, presumably ready to travel towards the window suggesting an orientation towards the visible.[xliii]

As we further extend the symbols it is important to note that doors and windows are parts of a dwelling. If we consider the human body "a dwelling" it creates an interesting metaphor related to particular signs that closely resemble doors and windows. The sign DOOR (figure 2) is done with the same "B" hand shape and palm orientation as the formal sign DEAF (figure 3).[xliv]

Figure 2

DOOR

Figure 3

DEAF

The sign for WINDOWS (figure 4) is made with the same hand shape and palm orientation as the signs EYES^SHUTand EYES^OPEN[xlv] shown in figure 5 and 6 respectively.

Figure 4

WINDOW

Figure 5

EYES^SHUT

Figure 6

EYES^OPEN

It is doubtful whether the association is intentional, but the natural relationships of these parallels are worth pursuing. It is beyond question that they further contribute to a pattern of symbolic representations of visual communication and opacity. But, interestingly, unlike real windows, the sign WINDOW cannot be seen through. Thus the abstract representation loses something that is in the real world.

Light and Night

Light and absence of light (i.e., night) is another constant theme that's widely reported and acknowledged.[xlvi] The theme of light is permeated in various forms of Deaf life from the way different organizations/companies name themselves (e.g., DawnSignPress, www.lightkitchen.com, etc.)[xlvii] to the folk explanations of why Deaf people gather in the kitchen. The common saying is they do that because the lights are brighter in the kitchen. This may be true but it is also true for many hearing people of other cultures. The issue is deeper than that because light is a deeply ingrained value for those leading a visual way of being. Light, like windows, signifies the ability to communicate and when one communicates one belong. And when one belongs, one is at home in the world.

Ladd reports of Deaf people assembling around a lamppost long after clubs closed for the night in UK.[xlviii] Similar observations has been noted elsewhere. In fact, after the "Doors For Sale" performance in Minnesota, a security guard apparently well advised, began to turn off the lights in the auditorium and then the lobby, managing to herd a bunch of deaf people out of the building. Instead of going home, as one would

expect, they all congregated around a lamppost in the parking lot. As I was observing this procession, a young woman came up to me and asked this question, "What do Deaf people and moths have in common?"[xlix]

Peters noticed that the consistency of light as a theme and symbol is illuminated various in Deaf literary works—from the “birth of the community” light is prominent in the story of how Epee came upon the two young deaf sisters one night in front of a fire place[l] to the presence of and absence of light as symbol in various literary works from ASL Poetry (e.g., Valli’s “Bright Windy Morning” to ASL narratives (e.g,.Bahan’s Bird of a Different Feather).[li]

In the end of “Bird of a Different Feather”, the surgically altered bird, unable to fit in either world (the eagle and the bird world), decided to fly away into the sunset followed by darkness. To many the symbolic interpretation of night in this context is death. There is another possible way of interpreting the end of the story, using lens from those leading a visually oriented way of life. Night takes on additional meaning, unlike those who hear, the absence of light means there is no access to communication. In order to communicate one will have to resort to tactile means, and for those with no or limited experience with tactile communication it is like being removed from the world. Unhomed and alone in the world of night, as a theme or symbol in literature one can say in the context of visual communication, night is to doors as windows is to light.

Reflection

The thoughts accumulated for this paper—though not comprehensive— shows how signing Deaf people acquire this multilayered visual ways of being in the world beyond the capacity of ordinary eyes. They inhabit a highly visual sensory world and appear to be pushing the boundaries of vision far beyond limits known by other human groups. The push springs from the innate human need to communicate. This desire is essential and powerful enough to cause a domino effect in the following areas:

- In language: We have seen the emergence and flourishing of visual languages (using space and physical phonological building blocks) as well as the role of eyes inside and outside the linguistic, discourse and neurological system.
- In culture: We have discussed examples of ways the culture offer suggestions to lead a visually encompassed life.
- In arts and literature: We have examined some recurrent themes and symbols associated to vision,

This just scratches the surface of the potential for vision and visuality. And in terms of examining Deaf people's sensory worlds, we have not yet explored in depth or discussed another territory that has been told in countless life stories and anecdotes — on the ways deaf people develop tactile minds. This is another dimension definitely worth exploring.

In retrospect I can't help but wonder about the "what ifs," because it has taken society so long to acknowledge the role of vision and signed languages in the lives of Deaf people. So many generations of signers have been handcuffed in a society intoxicated by the ideology that speech is language and vice versa. It is amazing that with these impositions, deaf people have developed into one of the most visual groups of

people on the face of the Earth. One wonders what the possibilities would be if they were allowed to proceed in life unbounded… how far would this human variety push the boundaries of vision?

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FIGURES TO BE INSERTED WHERE MENTIONED IN THE PAPER

FIGURE 1 “Coffin Door”

FIGURE 2 DOOR

FIGURE 3 DEAF

FIGURE 4 WINDOW

FIGURE 5 EYE^SHUT

FIGURE 6 EYE^OPEN

[i] A lot of thoughts and discussions with the following colleagues have lead their way into this paper, I thank: Dirksen Bauman, MJ Bienvenu, Todd Czubek, Janey Greenwald, John Lee Clark, Robert Lee, Flavia Fleischer, Sue Burnes, Steve Nover, Carol Neidle, Laura Petitto, Bob Hoffmeister and Harlan Lane. I want to particularly thank Janey Greenwald, Robert Lee, and Dirksen Bauman for their editorial assistance. And Sue Burnes for appearing as sign model in this paper.

[ii] E. T. Hall 1982. *The Hidden Dimension.* New York: Anchor Books stated that "people of different cultures not only speak different languages but, what is possibly more important inhabit different sensory worlds"(2).

[iii] Veditz, G. 1910. "President's Message", *Proceedings of the Ninth Convention of the National Association of the Deaf and the Third Worlds Congress of the Deaf, 1910.* Philadelphia: Philocophus Press, 1912 (30). George Veditz used the phrase "people of the eye" at least twice. The first can be found in his president's message to the congress, "… all-wise Mother Nature designed for the people of the eye, a language…" p. 22.

[iv] The discussion here refers to those who were born deaf or became deaf in their infancy.

[v] Kakumasu, J. 1968. Urubu Sign Language. *International Journal of American Linguistics,* 34(4): 275-281; Farb, P. 1973. *Word Play: What Happens When People Talk.* New York: Vintage

[vi] See for example, Woodward, J. 1978. “Attitudes toward deaf people on Providence Island, Columbia.” *American Anthropologist 63:* 49-68; Poole, J. 1979. “A Preliminary description of Martha’s Vineyard Sign Language”. Paper presented at the 3rd International Symposium on Sign Language Research, Rome Itlay, June 1983; Groce, N. 1985. *Everyone Here Spoke Sign Language: Hereditary deafness on Martha’s Vineyard.* Cambridge: Harvard Press; Washbaugh, W. 1986. *Five fingers for survival.* Ann Arbor: Karoma Publishers.

[vii] For further information on the development of home signs and gestures among deaf children in contemporary world, see Goldin-Meadow, S. 2003. *The Resilence of Language: What gesture creation in deaf children can tell us about how all children learn language.* New York: Psychology Press Inc.

[viii] Over the course of human history, the social perception of gestures and sign language swayed from being acceptable to not acceptable. In the later part of western civilization (from the mid 19th century to today) many have held that the uses of gestures and sign language were not language per se or have no significant social value; and have imposed restrictions on its development and use (see for example: Baynton, D. 1996. *Forbidden Signs: American Culture and the campaign against sign language.* Chicago: University of Chicago Press).

[ix] See for example Chamberlain, C. 1994. *Do the Deaf “See” Better? Effects of Deafness on Visuospatial Skills.* MS Thesis, McGill University, which argues that being deaf alone is not enough to see enhanced visual processing skills. The research suggests that it is the inclusion and use of sign language that enables this enhancement.

[x] For more discussion of this function see Edward T. Hall (1982) *The Hidden Dimension*

and Jay, M. 1993. *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought.* Berkeley: University of California Press.

[xi] The term 'word' is used in this paper instead of 'sign' to reduce the need for such distinction because there is no difference. A human utterance is a human utterance whether signed or spoken.

[xii] MacLaughlin, D. 1997. *The Structure of Determiner Phrases: Evidence from American Sign Language*. Ph.D. diss., Boston University; Bahan, B. 1996. *Non-manual Realization of Agreement in American Sign Language.* Ph.D. diss. Boston University; Neidle, K., J. Kegl, D. MacLaughlin, B. Bahan and R. Lee. 2000. *The Syntax of American Sign Language: Functional Categories and Hierarchical Structure.* Cambridge: MIT Press.

[xiii] In case of first person object, the eye gaze will mark the subject. For more information see Bahan, B. 1996. *Non-manual Realization of Agreement in American Sign Language*, Neidle, K., J. Kegl, D. MacLaughlin, B. Bahan and R. Lee. 2000. *The Syntax of American Sign Language: Functional Categories and Hierarchical Structure*.

[xiv] Baker, C. 1976. "Eye-openers in ASL". Paper presented at the California Linguistic Association Conference, San Diego State University; Baker, C. 1977. "Regulators and turn-taking in American Sign Language discourse". In *On the other hand: New perspectives on American Sign Language,* edited by L. Freidman. New York: Academic Press; Baker, C. and Padden, C. 1978. "Focusing on nonmanual components of American Sign Language". In *Understanding language through sign language research,* edited by P. Siple. New York: Academic Press; Bahan, B. and S. Supalla. 1995. "Line Segmentation and Narrative Structure: A Study of Eye Gaze Behavior in American Sign

Language". In *Sign, Gesture and Space,* edited by K. Emmorey and J. Reilly. Hillsdale, NJ: Lawrence Erlbaum Associates.

[xv] Bahan and Supalla, 1995; Baker, 1976, 1977; Baker and Padden 1978.

[xvi] Baker, 1976, 1977; Baker and Padden 1978.

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[xviii] See Mather, 1987 and 1989 for more details about this phenomenon.

[xix] Bahan and Supalla, 1995

[xx] Bahan and Supalla, 1995

[xxi] Baker, C. 1976.

[xxii] See for example: Baker, 1976, 1977; Baker and Padden 1978; Bahan and S.Supalla, 1995; Wilbur, R. 1994. "Eye Blinks and ASL Phrase Structure", *Sign Language Studies* 84: 221-240.

[xxiii]Most information in this section draws from Lane, H., Hoffmeister, R., and Bahan, B. 1996. *A Journey into the DEAF-WORLD.* San Diego: DawnSignPress.

[xxiv] Sacks, O. 1990. "Seeing Voices: Lecture at Durham University", video transcript. Durham, England: Deaf Studies Research Unit. January 31, 1990. Reported in Thoutenhoofd, E (1997) "Vision | Deaf: Vision as a constitutive element of 'Deaf communities." *Deaf Worlds*, 1:13 (26).

[xxv] Neville, H. 1988. “Cerebral organization for spatial attention.” In *Spatial cognition: Brain bases and development,* edited by J. Stiles-Davis, M. Kritchevsky and U. Bellugi. Hillsdale, NJ: Lawrence Erlbaum Associates; Bavelier, D., Tomann, A., Hutton, C., Mitchell, T., Corina, D., Liu G., and Neville, H. 2000. “Visual Attention to the Periphery is Enhanced in Congenitally Deaf Individuals”. *The Journal of Neruoscience,*20.

[xxvi] Emmorey, K. 1993. “Processing a dynamic visual-spatial language: Psycholinguistic studies of American Sign Language”. *Journal of Psycholinguistic Research,* 22(2): 153 - 188; Lane, Hoffmeister and Bahan, 1996.

[xxvii] Bellugi, U., O’Grady, L., Lillo-Martin, D., O’Grady-Hynes, M., van Hoek K. and Corina, D. 1994. “Enhancement of Spatial Cognition in Deaf Children”. In *From gesture to language in hearing and deaf children*, edited by V. Volterra and C. Erting. Berlin: Springer Verlag; Sisco, F.H. and Anderson, R. J. 1980. “Deaf children’s performance on the WISC-R relative to hearing status of parents and child-rearing experiences”. *American Annals of the Deaf* 125*,* 923-930; Lane, Hoffmeister and Bahan, 1996.

[xxviii] Bellugi, U., O’Grady, L., Lillo-Martin, D., O’Grady-Hynes, M., van Hoek K. and Corina, D. 1994; Emmorey, 1993; Lane, Hoffmeister and Bahan,1996.

[xxix] With exception of several studies on non-verbal IQ tests which showed deaf children scoring higher than hearing children.

[xxx] Klima, E.S., Tzeng, O., Fok, A., Bellugi, U., Corina, D., and Bettger, J. 1999. From sign to script: Effects of linguistic experience on perceptual categorization. *The Biological Bases of Language, Monograph series, 13, Journal of Chinese Linguistics*, 96-129; Lane, Hoffmeister and Bahan, 1996.

[xxxi] Most of the observations discussed in this section are based personal experience as a native member of this visual culture.

[xxxii] For some examples of synchrony of body rhythms see Hall, E.T. 1994. Deaf Culture, Tacit Culture, and Ethnic Relations. In *The Deaf Way: Perspectives from the International Conference on Deaf Culture,* edited by C.J Erting, R.C Johnson, D.L Smith, and B.D. Snider. Washington DC: Gallaudet University Press. 31-39.

[xxxiii] One should take a look at houses or buildings designed by Olof Hanson, a deaf architect in the late 19th and early 20th century.

[xxxiv] Interestingly, the dichotomy of a window and a door is a metaphor for deaf signers was used as far back as 1776 in the preface of Épée's book on methods of educating the deaf through sign language. He stated, "The book will show, as clearly as possible, how to go about bringing in through the window what cannot come in through the door; namely, to insinuate into the minds of the deaf through the visual channel what cannot reach them through the auditory channel (51)." (Epée, Charles-Michel, 1984. "Institution des sourds et muets par la voie des signes méthodiques" in *The Deaf Experience: Classics in Language and Education,* edited by H. Lane. Cambridge: Harvard Press, 1984 (51).

[xxxv] In narratives of personal experiences persons are deaf by default, unless mentioned for emphasis. Those non-deaf are usually identified, e.g. hearing person.

[xxxvi] There are some people who enjoy these jokes and translate them into ASL, but this is not widespread.

[xxxvii] I thank John Lee Clark for bringing this to my attention.

[xxxviii] This composite was told at several storytelling events by Ben Bahan.

[xxxix] This composite was told at several storytelling events by Ben Bahan.

[xl] Lentz, E. 1995. *The Treasure: Poems by Ella Mae Lentz.* Berkeley: In Motion Press.

[xli] A hearing person would have simply asked, “Who’s there?”

[xlii] HRW, as he is known, has done several paintings that feature doors, one is featured on the cover of the text Journey into the Deaf World. Near the end of his life he has painted a series of coffin doors, which may have foreshadowed his coming demise.

[xliii] Like all artworks, there may be different interpretations on this. I am merely applying what I have learned from various literary works to the painting. Unfortunately, I cannot confirm this analysis with HRW.

[xliv] I thank Dirksen Bauman for this insight.

[xlv] There are other signs used to depict the same concept.

[xlvi] See for example Padden and Humphries, 1988 Padden, C. and T. Humphries. 1988. *Deaf in America: Voices from a culture.* Cambridge: Harvard University Press; Peters, C. 2000. *Deaf American Literature: From Carnival to the Canon.* Washington, DC: Gallaudet University Press; Ladd, P. 2003. *Understanding Deaf Culture: In Search of Deafhood.* Clevedon: Multilingual Matters.

[xlvii] Peters, Deaf American Literature, 48.

[xlviii] Ladd, Understanding Deaf Culture, reports “It should be noted here that the lamp-post, a source of light at night for Deaf people, is a significant symbol within Deaf culture, one that carried even more weight in the era before homes were lit with electricity. It

also rendered Deaf people and their signing highly visible to the public. Since most Deaf gatherings took place after work, willingness to be seen signing in public was symbolised by the lamp-post" (344).

[xlix] They both are drawn to light.

[l] Reported in Padden and Humphries, 1988.

[li] Peters, Deaf American Literature, 49.