

## **Reinterpreting arts based data through multiple theories**

**Joanne Weber, Doctoral student  
University of Regina, Saskatchewan**

### **Introduction**

The field of deaf education in Saskatchewan, Canada, continues to be highly polarized through positions taken up by medical specialists, educators, audiologists, speech pathologists, and academics concerning the best practices in educating d/DHH (deaf or culturally Deaf and hard of hearing\*) people. Since the closure of the R.J.D. Williams Provincial School for the Deaf in 1991, the prevalence of binarized thinking promotes forced choices: first, to be educated with the view to develop speech and the use of residual hearing or cochlear implants, an option that receives dedicated support from the Ministry of Education and school divisions. The oral only camp promotes the use of cochlear implants, auditory verbal therapy, and discourages the use of sign language. The second option, that is, the bilingual education faction, promotes the use of American Sign Language (ASL) at birth while introducing cochlear implants and speech.

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\*"Deaf" and "deaf" refers to two definitions of identity associated with severe to profound hearing loss; "d" refers to the audiological diagnosis of hearing loss, hence the term, hearing impaired, while "D" refers to a Deaf identity which presupposes membership in Deaf culture and the use of American Sign Language (Padden & Humphries, 2005).

\*The term "d/DHH" is applied to all d/Deaf children and those with mild to moderate hearing losses regardless of d/Deaf identity markers or audiological evaluations. This term will be used to describe all d/Deaf and hard of hearing students being educated in inclusive education environments.

The implementation of bilingual models of education using sign and spoken languages is nominally supported by scattered school boards throughout Saskatchewan. In these school divisions, many d/DHH children are taught sign language when efforts at oralism have failed and

long after the optimum period of language acquisition has passed. This haphazard approach and weak commitment to sign language as a language of instruction perpetuates the deficit view that sign language is undesirable and is to be reserved for the “oral failures” who were denied access to a full language as children in the first place.

Furthermore, these binarized choices contribute to the continued linguicide of ASL in Saskatchewan and impact the d/DHH child’s access to language (specifically sign language), identity development and community membership. Educators and parents will decide which community (hearing or Deaf community) to which the d/DHH child will belong and the experiences of Deaf adults who have been educated in inclusive education environments continue to be marginalized. In other words, binarized thinking dominates linguistic and pedagogical choices for d/DHH children and youth.

### **Personal Context**

I am a PhD student at the University of Regina, Regina, Saskatchewan, Canada. My coursework is finished and I am about to start comprehensive finals and then will proceed to working on my dissertation. I am profoundly deaf with excellent speech and sign skills and the only Deaf teacher in province of Saskatchewan. I teach full time in a small resource room program for deaf and hard of hearing adolescents. I grew up “oral” and acquired fluency in American Sign Language as a young adult. As a fully qualified educator in this province, I am keenly aware of how deficit perspectives within myself and others contributes to the polarization of language and literacy choices for d/DHH children. I am highly privileged in that I come from a white, middle class family, am married to a hearing husband and have two hearing daughters. My parents were educators, who took deaf education classes in the United States upon learning I had a profound hearing loss. The ability to make use of my limited hearing and my mother’s innovative pedagogical approaches enabled me to acquire language orally. I had unlimited access to books as I had a large bookshelf dedicated for my use. I am a published author of two books, I have

conducted research on the behalf of the Deaf community and have advocated for the use of sign language for those who cannot access the curriculum orally. Yet, I have detected within myself, a continued complicity in maintaining a deficit lens, an outcome of audism which is an evaluation of how deaf people can approximate the language, behaviours, and cultural norms associated with being “hearing” (Humphries, 1977; Rowley and Eckert, 2013). Before beginning my doctoral studies, I viewed myself as a “missionary” working around the clock to “save the Deaf community”, and as a fierce defender of Deaf culture and American Sign Language. My ineffectiveness as lobbyist, exhaustion and eventual burnout led me to enter the PhD program at the University of Regina in order to discover where and how I had gone wrong.

I had, in my mind, divided the world into hapless d/DHH students, Deaf adults and incompetent educators. As I progressed in my studies, I realized that my thinking was dominated by multiple binaries such as hearing versus deaf and oralism versus sign language, and ASL versus signed English. I came to understand that I was still using deficit language about d/DHH people as established by oppressors who were hearing and who practiced audism. In doing so, I had implicitly placed myself in opposition to the Deaf community, which I was trying to serve. Instead of relying solely on socially constructed theories within the postcolonialism paradigm which relied on binarized thinking (Said, 1979; Fanon, 1963; Pennycook, 1998) and after reading recent critiques of postcolonial theory (Spivak, 2013; Braidotti, 2013), I realized I needed an onto-epistemology that would assist in removing binarized thinking within myself and include the material discursive practices (Barad, 2007) associated with the use of sound, space, bodies, materials, buildings, and technology.

### **Onto-epistemology**

Braidotti (2013) proposes a post-humanist onto-epistemology, which counters epistemological and ontological suppositions about the relationship between humans and their animal, plant and mineral counterparts which, for the most part, is described as hierarchical and

dominated by Western hegemony. Posthumanism poses the subject as relational and complex, whose life is framed by material reality such as embodiment, sexuality, affectivity, empathy and desire rather than determined by the humanist will to achieve, control and dominate through using justifications such as free will, reason, liberty, individualism, freedom, and self-determination (Braidotti, 2013). After her review of attempts at defining critical post-humanism (Said, 1978; Gilroy, 2000; Mies and Shiva, 1993) Braidotti offers her own definition of the post-humanist subject as situated within

an eco-philosophy of multiple belongings, as a relational subject constituted in and by multiplicity, that is to say a subject that works across differences and is also internally differentiated, but is still grounded and accountable (Braidotti, 2013, p. 49).

A radical and critical posthumanist ontology will agree to embrace a minitorian and nomadic stance, one that rejects the traditional view of self as “missionary” and as emanating from the cultural centre of the world, that is, Europe (Braidotti, 2013). Here, social constructivism is inadequate in viewing the relationality of the material world with social, psychic and ecological environments; one must abandon the anthropocentric view of the world and accept organic and non-organic life forms to be related in every dimension.

Binarized thinking often results in coarse grained analysis where positions, policies, decisions, and perceptions are drawn in broad scope. In order to articulate my entanglements with sound, bodies, lines of sight, bodily limitations, surfaces (hard or soft), building construction, I argue that in-depth study of material discursive phenomena will yield valuable insights and a finer grained analysis required to meet the highly variant needs of d/DHH children in this province. In this way, Barad’s work (2007) on agential realism and intra-action will contribute to a renewed understanding of material-discursive practices (Barad, 2007) concerning the use of technology (cochlear implants and hearing technologies), sign language, sound,

bodies, objects and materiality both living and nonliving which is often guessed at and presumed upon by personnel (ear, nose and throat specialists, surgeons, audiologists, speech and language pathologists, teachers of the deaf) working within the auditory industrial complex (Eberwein, 2007). Material discursive practices contain the intra-actions occurring between materiality such as sound, objects, bodies, living and nonliving things including technology.

For instance, as a d/Deaf cyborg, a dedicated hearing aid user, with speech and sign skills, I switch between states that require more listening (still significantly limited) to sound as in traffic, alarm bells, music and human voices emanating from one or two people, often against a noisy background that is often uncontrollable and states that require increased reliance on vision when accessing a conversation in a group through a sign language interpreter. I often manipulate the settings on my hearing aid to control for severe tinnitus (a masking program), highly noisy environments, conversation, and music. These manipulations occur between 15 to 30 times a day, depending on the build-up of moisture in my ear, the demands of my family, workplace, casual interactions and immediate environments. Often, I will turn my hearing aid off to escape the demands of traffic noise, loud music, and large gatherings of people and to retreat within myself. When I use a sign language interpreter, the hearing aid becomes inconsequential and I suspend the need or desire to listen. Even though I may be aware of the environmental noises (including speech around me), my inner state becomes very quiet, almost meditative as thoughts and interpretations appear more quickly and easily while content is being interpreted.

Sound as matter is agentic in that it forces me to switch in and out of listening through obstruction of sightlines, poor lighting, foreign accents, muffled sounds and speech. My access to sound could be described as an electric cord being plugged and unplugged from an electric socket frequently and without warning. This hearing state is characterized by unpredictability, instability and rapid reorganization of my relationship with matter. Rearranging the

environment, moving to more suitable locations, switching to different programs within the hearing aid, waiting for the noise to pass, clearing sightlines of obstructions such as flowers, plants, paper, microphones, planning to frequent environments without hard surfaces, staying out of direct sunlight, away from windows, and being aware of obstacles when walking and lip-reading someone at the same time. In addition, my hearing aid is programmed to cut out noises that are deemed intolerable for my ears which results in a queer splicing of human speech and environmental noise. Non-living matter (as in hearing technologies) then is designed to protect me through interrupting of sound waves. My relationship with matter, living and nonliving, is, then, profoundly entangled.

This entanglement creates difficulty in declaring a position of reflexivity as researcher. Reflexivity concerning my position as researcher requires an epistemology of representation which is imitative in nature as it mirrors what is seen (Barad, 2007). In this study, however, performativity, rather than representationalism, is the basis for methodology designed to study material discursive practices: diffractive analysis. Here, the premise of performativity is that subject and object do not pre-exist prior to examination or analysis. Before diffractive analysis, I am not a separate entity but entangled in a web of relationships that are always in an open-ended process in which every interaction is configured and reconfigured. Within this entanglement, I am not able to sharply differentiate between what is created or renewed, what is began or returned, or what is continuing and what has stopped, what is here or not here, and finally, what is the past and future (Barad, 2007). I intra-act with sound, vision, objects, bodies and matter as part of the entanglement and within this entanglement, I am not deaf or hearing, nor subject or object. Determinate boundaries defining who I am have yet to be specified until revealed through the diffractive study of intra-actions. The outcome of diffractive analysis is to uncover material discursive practices which indicate how I am “marked” on my body and the material differences that truly matter (Barad, 2007). In this diffractive analysis, researcher

performativity only emerges through intra-actions and boundaries concerning my subjectivity are temporarily provided through the use of artwork as a material discursive phenomenon. In this study, diffractive analysis of my artwork as material discursive phenomena will reveal the ways my body is marked in its interactions with sound, vision, bodies, matter as in technology, living and nonliving things and these intra-actions appear as material discursive practices.

## **Research Questions**

I had recently published a research paper (Weber, 2015) using arts based autoethnography to interpret how I negotiated professional and personal identity as a culturally Deaf teacher in an inclusive educational environment in the light of postcolonial theory (Said, 1976; Mignolo, 2000). In this autoethnography, I used artwork in addition to personal journals as data in this study and was able to tell a more nuanced and compassionate version of an unresolved conflict that occurred between my interpreting staff and myself as originally told in my creative non-fiction work, *The Deaf House* (Weber, 2007). As I progressed further in my studies, with the help of Spivak (2013), I realized that I had used binarized thinking in adopting postcolonial theory with which to interpret arts based data. In using postcolonial theory, I identified myself as oppressed and the interpreters and the employer as oppressive even if I did acknowledge the complexities inherent in the oppression and my own complicity in oppressing my students. In other words, binarized thinking continued to dominate my consciousness.

I suspected that I had ignored the material discursive phenomena presented by the art data and had gone on to adopt socially constructed theories to interpret the narrative originally presented as narrative inquiry in *The Deaf House*. The question posed in the Weber (2015) study was: In what ways did I negotiate my professional and personal identities as a culturally Deaf teacher in an inclusive educational environment? In search of a means to reduce or eliminate binarizing, I consider the following question: What do the same arts based data reveal

when the same narrative concerning identity and community belonging is reinterpreted in the light of post-human theory which considers matter to be intelligent and self-organizing and agential? (Braidotti, 2013).

### Methodology

This current autoethnographic study used the original artwork (six images) generated by the author through the process of imagework (Edgar, 2004) in the previous study (Weber, 2015). Furthermore, this study employs diffractive analysis as proposed by Mazzei and Jackson (2012). Diffractive analysis involves interpreting selected data according to several theories in order to uncover nuances and multiple meanings. Mazzei and Jackson (2012) refer to Barad’s notion of diffraction to indicate the existing relationships (or material discursive practices in Barad’s argument) between data and concepts which result in new research questions and ultimately, new researcher selves. The same data, once interpreted according to postcolonial theory (Weber, 2015), will now be interpreted according to posthumanist theory (Braidotti, 2013; Barad, 2007). By the end of this paper, the art data will have traversed three different investigations:

### Theory Paths

Theoretical Paths		
Original Narrative Inquiry (Weber, 2013)	Postcolonial Theory (Mignolo, 2000; Weber, 2015)	Posthumanism (Braidotti, 2013)
Narrative inquiry written in consultation with personal journals (Weber, 2013). Work was published before entry into doctoral studies.	Artwork, personal journals, government documents and previous publications were played against a selection from the narrative inquiry to create an arts based autoethnography (Weber, 2016) using postcolonial theory (Mignolo, 2000)	Visual data from previous study was used to reinterpret the same published narrative (Weber, 2013) using posthumanism (Braidotti, 2013; Mazzei and Jackson, 2013)



<p>Two art pieces were created during the writing of the narrative inquiry.</p> <p>Four out of six pieces of artwork was created through the use of imagework (Edgar, 1999; 2004) after the writing of the published narrative inquiry.</p>	<p>Study used six images from a collection of artwork created during and after the writing of the narrative inquiry in <i>The Deaf House</i>.</p>	<p>Same six images were used from the previous study using postcolonial theory (Weber 2015).</p>
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Secondly, and more specifically, the art data as material discursive phenomenon will be interpreted according to Braidotti's (2013) application of Deleuze and Guattari's work on becoming earth, animal and machine within a post human framework. Within this framework, the intra-actions between myself, my artwork, and matter in the form of sound, bodies, material objects such as traffic, acoustics, sightlines and technology will be explored. The six pieces of artwork will also be reinterpreted according to Braidotti's interpretations of Deleuze and Guattari's theorizing concerning becoming and traversing between animal, earth, and machine within a posthuman framework (Braidotti, 2013). In this study of my artwork, matter will be viewed as agentic, intelligent and self-organizing (Braidotti, 2013). The diffractive analysis of the arts data as material discursive phenomenon offers possibility for a new understanding of the web of relationships between becoming animal, earth and machine, thereby resulting in a new researcher self-characterized as posthumanist.

**Method: Diffractive Analysis**

Material discursive relationships exist between matter such as paint, paper, canvas, glue, and the artist (Konturri, 2013). These material discursive practices record the effect of intra-actions and the ontological unit is not words or concepts but material discursive phenomena (Barad, 2007). Diffractive analysis may serve to uncover the intra-actions between myself, sound, vision, objects, and bodies and the artwork, personal, social and political contexts in which I am entangled, thereby creating new worlds for researchers' consideration.

**Summary of conflict reported in previous study**

In my early years of teaching in a small resource room program in a Canadian prairie city, I worked with two interpreters who happened to be mothers of deaf children who, through their interventions, had gone on to be highly successful deaf adults. They attributed their success to the use of Signed English and active encouragement not to engage with the local Deaf community. In contrast, I was a Deaf adult, a member of the local, provincial and national Deaf communities in Canada, fluent in ASL and who had received teacher training at Gallaudet University, Washington, DC, the only university in the world that serves Deaf and hard of hearing students. The two mother interpreters actively resisted my authority and attempt to improve the quality of instruction and programming for d/Deaf and hard of hearing students (DHH) by introducing ASL into the program. Conflicts soon emerged over the use of ASL versus Signed English and the direct instruction of some struggling DHH students in some English classes as opposed to sending them out into classrooms with an interpreter. Manifestations of this conflict included interference with teaching of English lessons, refusal to perform certain tasks, telling students not to use ASL signs that I had taught them, attempting to “discipline” me by calling a meeting with administrators to discuss my performance despite having already undergone a formal performance review by my supervisors. This conflict was never resolved and we endured working together in this very toxic environment until the interpreter-mothers moved to other positions within the school division or retired.

## **Findings**

### **Becoming Machine**

The image below provides a material discursive phenomena (Barad, 2007) revealed through diffractive analysis of the intra-actions between me, sound, vision, bodies, objects and all matter whether living or nonliving, and in this specific case, technology. In this way, the use of paper, acrylic paints, crushed cereal, water colors, markers, popcorn kernels (as found in the first image) is a material discursive phenomena, illuminating some aspect of the entanglement in

order to reveal new questions, considerations or directions for research (Barad, 2007). This material discursive practice temporarily establishes the boundaries between object and subject whereas before the diffractive analysis, I am not hearing or deaf, but entangled in material discursive practices, a state that is relational, always in flux and unpredictable. In other words, there are no fixed subjects or objects in this study; material discursive phenomenon serves only as a snapshot. Ontologically, I am not an individual submerged in an entanglement. I, along with matter, am entangled and exist as a cluster of relationships rather than an individual entity.

I became distraught over the escalating conflict between the interpreter mothers and myself that, in addition to keeping a daily journal, I turned to art in order to excavate my feelings and to discern possible directions for myself. I knew I was far too clever with words, too well read, and my lack of skills in creating visual art work might allow me to reach parts of myself that were hidden to me and others. In short, I wanted to find out what was “wrong” with me, as at that time, I viewed our conflicts as attributed to strong personalities and not as culturally, socially, and politically shaped. The image below suggests a cyborgian existence where there is a seamless switching between two states dominated by the ear or the eye. The bar across the enlarged eye suggests a reliance more on hearing through technology while the smaller unobstructed eye suggests the use of vision when accessing the world through an interpreter.



A most puzzling aspect in this image is the size of eyes. Here, rather than rushing to interpret what the disparity in the size of the eyes mean and the presence of the bar across the

smaller eyes, I wish to engage in an encounter with the image. This calls for a state of wonder. The barred eye is larger than the unobstructed eye which is smaller and more “normal” sized. What is the potential of having a larger eye with which to see more and perceive more along with enhanced hearing as provided through hearing technologies? If the hearing aid is truly integrated into my body and is not a mere appendage (Barad, 2007), what does the larger eye suggest? What does the bar obstructing the larger eye indicate? Does the bar indicate a restriction of my vision or a privileging of hearing over vision, a social construct that suggests that hearing (and by extension, speaking) is preferable to vision (and by extension, signing). Or does the bar indicate that my vision is restricted when I am in relationship with the agentic qualities of matter such as sound, bodies, and objects exerting its influence upon me? What is this bar? Critical posthumanism might suggest that this bar is the expectation (mine too?) that I prefer sound to sight, thereby reducing the potential to see and perceive more while the hearing aid continues to be an integral part of my body. But my eyes are equally integral to my body. If I accept my body as “not deaf” prior to the web of relationship with sound, vision, bodies, and matter, then I should not have to claim vision or sound as competing claims. The question then becomes, what might I be able to see and perceive when the bar is removed? And when is the bar removed? At times when I remove my hearing aid from my ear? When I switch off my hearing aid? And what intrusions of matter around me may influence my decision to remove this bar? And if I remove this bar, what is the potential of seeing or perceiving with sight only? The high number of unprecedented interactions with matter that may or may not be controlled or manipulated by machines affirms the relationship between sound as mediated through machine, vision and my body as highly complex, variable and entangled.

In return to the narrative of the unresolved conflict between myself and the mother interpreters who worked alongside me, this entanglement leads me to wonder if instead of presenting myself as occupying an opposite pole and the interpreter/mother as my oppressors and

therefore occupying the “hearing” pole in the dichotomy of hearing/deaf relationships, I could present myself as a ‘cyborg’ (Brueggeman, 2009), navigating material shifts literally every second with speech, hearing, vision and sign language. In using the language attributed to becoming machine, I can describe myself as cyborgian, as having a biomediated body and therefore, entangled in the web of relationships between matter, living and nonliving, particularly with respect to sound, vision, bodies and objects. The artwork exerts its agency as a material discursive phenomena, providing a snapshot of this entanglement, which imposes questions that shift away from binarized thinking as I explore ways in which I have become “machine” immersed in intra-actions always in process. The image below is a material discursive phenomena which further explicates the entanglements in which I found myself as I zig zagged between my body and technology (reminiscent of Deleuze and Gauntari’s machine as interpreted by Braidotti, 2013).



The white tree suggests the ghostly background of unseen machines facilitating hearing and electronic networks as found in the interface between the brain and cochlear implants and in my case, hearing aid. This ghostly tree touches a biological life form (the head) within a neural network while the realistic fruit tree (which suggests earth) provides the organic matter with which technology connects. Note that only small connections are made in the image in anticipation of greater connections in the future as hearing technology is currently highly experimental and is prone to failure or limitations. The presence of “blue” in the lower half of

the head (animal) suggests an amniotic like environment reminiscent of “chaos [which] is not chaotic, but it rather contains the infinite expanse of all virtual forces. These potentialities are real in so far they call for actualization through pragmatic and sustainable practices” (Braidotti, 2013, p. 86)

### **Becoming animal**

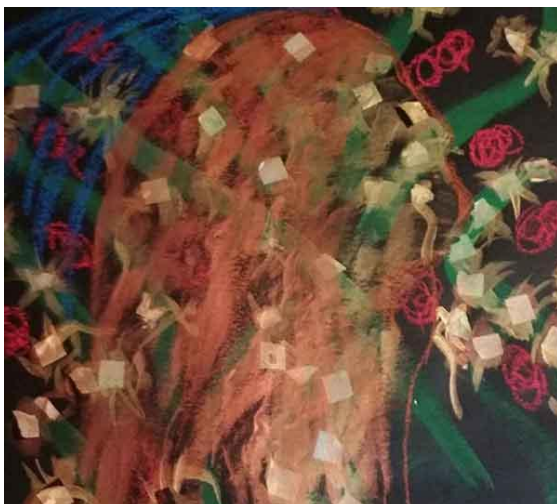
Braidotti (2013) suggests that shared ties of vulnerability with the animal and plant world place the human in a non-hierarchical relationship where notions of the perfect body are challenged. Here, the question of what bodies can do rather than what they should be able to do according to preconceived notions established by Western norms becomes paramount (Braidotti, 2013). Emotion, rather than reason, between humans and nonhumans such as animals and plants becomes the bond of interdependence between species (Braidotti, 2013). The sense of shared vulnerability heightens empathy needed for care and survival of all living matter (Braidotti, 2013).

In the return to consideration of the entangled web including myself, my artwork as apparatus, sound, bodies and objects in relationships always in process, the “material discursive phenomena” provided by the artwork reveals the capacity for empathy. In the entanglement, I am the second swan in companion to the first swan. We are swimming in a roiling body of water, alit with flames. My own self and animal (as in the swan) are in relation to each other in that I possess certain attributes of the swan and the swan also possesses attributes of myself. For instance, in choosing to remain nomadic and minoritarian out of fidelity to my entanglement with matter rather than subscribing to norms presented through Enlightenment epistemology founded upon a mechanistic view of the universe, I am anchored by the swan who is essentially a nomadic bird, destined to be on the move, looking for nests, food and water. Empathy for each other in this “material discursive phenomena” (Barad, 2007), is revealed in a shared vulnerability of being “othered” either as being consumed or controlled for research and scientific processes

(as animals often are). In returning to Barad's (2007) notion that determinate boundaries defining who I am are yet to be specified through this "material discursive phenomena" (and not before), it is essential to remember, that in this entanglement with non-human living things, I am not deaf or hearing. Empathy, rather, than reason used in the drawing up of categories based on representations arrived at through words (Barad, 2007), is an outcome of material discursive relationships.



This empathy is more marked in this second material discursive phenomenon depicted below:



Here, the woman is becoming merged with animal as depicted by the blue bird feathers atop of her head. The green stripes criss crossing woman's head suggest a being encased inside a neural network (machine) while the yellow fragments and coils of red (originally conceived as flowers)

suggest also a network of organic (earth) matter interspersed within the green technological matrix.

Through empathy arising through the entanglement of myself with other nonhuman beings, rather than through reason arising from the bias toward spoken language that is still considered in some circles today, as being more real or rational than sign language, I am in a web of relationships with matter, living and nonliving. Empathy toward animals sacrificed to science and toward other deaf children and youth who received cochlear implants with the expectation that they would become “normal” or “hearing” despite significant gaps in the research concerning the effect of implantation on school performance or psychosocial development (Blume, 2010). Mauldin (2016) suggests that little is known as to how economic status, class, race and culture may impact the success rates of cochlear implants rather than the provision of the surgery and technology. The shifting array of discourses concerning language, communication choices, culture, and medicalization enables me to appreciate the entanglements of my own life and the mother interpreters. Rather than imposing identities which may describe them and myself partially at specific moments in time, I can examine shifting and multiple material discursive phenomena with view to comprehending their dilemmas and choices for their own deaf children. With regard to the original narrative concerning the standoff between myself and the mother interpreters, instead of presenting myself as “othered” and charging the mother/interpreters to view themselves as my oppressors despite being scorned for having chosen sign language (regardless of form and modality), I could have likened our situation to that of animals being used for consumption and research (no one yet has a full solution to educating DHH children). Furthermore, I could have avoided “rational” arguments as I once did with the proffering of research papers, evidence and resource supporting my pedagogical decisions to use American Sign Language by acknowledging that the mother interpreters did not regard ASL as a true language and finding other ways to remain in entanglement with them rather than drawing



divisions and boundaries based on rational constructs. Acknowledging their pain and the historic policy decisions (Weber, 2015) which resulted in their being rejected by other educational professionals whose advice they had held in high esteem, for adopting manual signed code (which was a form of signs based on English word order and including all auditory based morphological constructions) would have provided the empathy needed to ford this difficult period of our working lives. Rather than mirroring each other, I a Deaf teacher and the mother interpreters of deaf children could have viewed ourselves differently. We could have remained entangled rather than adversarial. Before the “material discursive phenomenon” provided by this artwork, all three of us were not deaf or hearing, professionals or nonprofessionals, mothers, hearing, ASL signers, or manually coded (SEE) signers, but were in entanglement and always in process. Accountability to each other would be based, not on preconceived categories or expectations, but on the understanding that we are ultimately and always in intra-action with each other and therefore are comprised as a whole where one is mutually dependent upon the other (Barad, 2007).

### **Becoming Earth**

If matter is intelligent, self-organizing and agentic (Braidotti, 2013; Barad, 2007), then matter is capable of intruding and facilitating key moments or “nodes” within the web of intra-actions. Konturri (2013) proposes the notion of a “particle-sign” to describe an aspect of material discursive relationship between matter such as paint, paper, canvas, glue, and the artist (Konturri, 2013; Barad, 2007) that is unintentional on the part of the artist. In this “material discursive phenomena” (Barad, 2007) made possible with the artwork, the boundaries of certain material discursive serves to defamiliarize the relationships between animal, earth and human. In this way, relationships between species (including human and non-human) and materiality are multiple, open-ended and multi-sexed (Braidotti, 2013). In the image below, the particle sign

emerges in the image below in the unintentionally overly thick application of black gesso toward the banks of a fruit tree orchard and the waters that run by it.



The gesso looks oily, as if the landscape has been doused with an oil spill, yet the vitality in the interplay of lights, fruit, and fading light suggests an environment teeming with life in the dark organic matter. In this garden, where mirrors are affixed to branches and reflect the fading light, there is a sense of liminality, unfamiliar and enticing. The darkened biological matter suggests activity that is regenerative and relational as it absorbs the fragmentation of the flashing mirrors. The thick organic matter of the riverbank and the bushes subdues this fragmentation. Fragmentation is absorbed by the “thickness” of the materiality of life, which suggests an active response to the impact of fragmentation within the entanglement of mirrors, trees, fruit, fading light, moonlight, and organic material. Initially, in the previous study (2015), I had interpreted this image to reveal sound as broken and fragmentary as suggested through the flashing lights reflected in the mirrors. A diffractive reading of the particle sign concerning the thickness of the black gesso however, suggests otherwise. George Veditz, the founder of the National Association of the Deaf and an ardent activist for the right to sign language in the face of worldwide oralism once remarked: “As long as we have deaf people on earth, we will have signs” (Gallaudet University, 2016). The “thickness” of the human body in response to

fragmentation in sound has resulted in the development of sign language, which is a remarkable attempt to reorganize sound, vision, bodies, and matter, and to be organized by the primacy of living life according to one's vision. Moreover, fragmentation, disorientation, and DE familiarization are now absorbed into the body which in turn reorganizes matter and is organized by matter. Sign language has been confirmed to be a true language possessing all of the qualities of spoken language and is an astounding and integral material discursive phenomenon in its own right within the entanglement of sound, vision, body, and objects, and matter (living and nonliving). Moreover, sign language brings increased awareness of matter as agentic as sightlines, lighting, obstructions provided physical objects, distances, ground surfaces must contend with windows, with while signing. With regard to the original conflict between the interpreter mothers and I, the de-familiarization with sign language as a means of reorganizing in response to auditory fragmentation, and the subsequent absorption of fragmentation imposed by the teeming organic matter suggested by the thick black gesso could have lead me to reminded the mother/interpreters of the ways in which animals, technology and the earth miraculously conspire to accommodate, organize, and generate new forms of life and living.

Becoming earth requires a nomadism (Braidotti, 2013) and a minitorian stance which refers to entanglements delineating specific paths, nodes, decisions, units of meaning, directions, without beginning or end, or without finite boundaries producing subject and objects (Barad, 2007). The image of the bird hat below depicts me as becoming animal, with specific nesting grounds, flight paths, and subjected to the demands of certain seasons.



The presence of a hat suggests neural pathways provided by the ability to switch between using sign language and using technology which enables one to be minoritarian and nomadic, which is essential for posthumanism. The bird hat also suggests the ability to fly high above geographical spaces (earth) and have the ability to see certain relationships between the self and matter as in animal, machine and earth, and at the same time, remain inside the entanglement between animal, machine and earth. I do not view these geographical spaces from the viewpoint of a removed observer but as one bound to certain entanglements regardless of my position in space and time. What I can do within this entanglement is dynamic and always changing at any given moment.

### **Implications of the Study**

The reinterpretation of the artwork resulted in an even more nuanced retelling of the selected narrative, providing possibilities for overcoming polarization and binary thinking. For instance, the study successfully bypassed polarization and binary thinking through the consideration of cyborgian states associated with being bilingual (ASL and English). The outcomes of a diffractive analysis provided through three pieces of writing on the same narratives can be best summarized below:

Original Narrative (Weber, 2013)	Postcolonial Theory (Mignolo, 2000)	New Materialism (Braidotti, 2013)
Narrative written strictly from memory - no consultation of primary or secondary sources	Inter-textual approach - visual ethnography was played against autoethnography (journal), government documents, and previous publications	Visual data from previous study was used to reinterpret a published narrative form the same previous study using posthumanism (Braidotti, 2013; Mazzei and Jackson, 2013)

Evoked limited compassion for the players in the conflict	More compassionate and honest about own role in the conflict	Transversal relationships between animal, machine and earth evokes compassion and community building
Downplayed the social and political contexts in creative non-fiction work.	Positioning of visual autoethnography against backdrop of colonialism	Positioning of visual autoethnography from a post-anthropocentric position
Hearing/Deaf binary perpetuated	Added binary of oppressor/oppressed to hearing/deaf binary	No binaries

### **Conclusions and Implications**

A diffractive analysis using narrative inquiry, postcolonial theory and posthumanism resulted in three different retellings of one narrative with the aid of six pieces of artwork generated during the narrative inquiry (Weber, 2013) and prior to the postcolonial (Weber, 2015) and posthumanist (Weber, 2016) retellings. A post human framework with a specific focus on material-discursive practices (Barad, 2007) and the interpretations of Deleuze and Guattari's becoming animal, machine and earth proffered by Braidotti (2013) provide a way out of overly simplistic and polarized discourses (Mauldin, 2016) dominating the education of DHH children and youth. Artwork interpreted according to multiple theories and particularly, diffractive analysis as advanced Barad (2007) can provide richer, more nuanced and fine grained analysis that seeks to overcome binarizing discourses that have the potential to determine language choices, identity development and community membership. Binarized thinking in the area of deaf education can be bypassed by using the work of Barad (2007) and Braidotti (2013) on posthumanism and agential materialism. Coarse grained discourses concerning deaf children such as: sign language isolates deaf people from the hearing world; deaf children must learn only spoken language in order to function in the hearing world or sign language is mandatory for

all deaf babies can be replaced by policy sensitive to the nuanced and rhizomatic interpretations of the learning needs of d/DHH children and youth (Valente, 2014). A posthuman, agential realist, and a material discursive practice might influence a conversation between a Deaf adult and parents of newly diagnosed d/Deaf child to appear something like this:

There are two ways to receive the news that your child has a profound hearing loss. First, you can see it as a loss or as a cultural opportunity for your child to have two languages (English and ASL) and a long road opens up before you, demanding that you invest enormous sums of energy, time and money to invest into your child so that he can become sufficiently “hearing” or “Deaf enough” enough to take his/her place in the world that is governed by primarily hearing people and/or to belong to a community of people who have successfully coped by using sign language and belonging to a sociolinguistic and cultural community. Or there is another way. What if the child you hold in your arms is not hearing or deaf? What if you were to view this child in terms of what he can do, what his body can do within the increasing complications of his life as he grows and develops. What if you think about what his body can do, what other bodies including material, living and nonliving, can do in relation to each other? (Braidotti, 2013). Will you let what he can do within his entangled existence guide your own entangled decisions? How can you and your child in entanglement with matter, human and nonhuman, be open to the opportunities presented by matter that is not always human in nature or matter that can reorganize itself? Until someone or something endeavours to define the limits of who you are and your child is, essentially, you are not individual entities endeavouring to secure a place in the world. Rather, you and your child are already in the world as entangled material discursive phenomena, as relationships, already becoming, already in relationship with matter, living and nonliving.

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