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MEMORY COMES BEFORE KNOWLEDGE — NORTH AMERICAN INDIGENOUS DEAF: SOCIO-CULTURAL STUDY OF ROCK/PICTURE WRITING, COMMUNITY, SIGN LANGUAGES, AND KINSHIP

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By
Melanie R. McKay-Cody
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MEMORY COMES BEFORE KNOWLEDGE — NORTH AMERICAN INDIGENOUS DEAF: SOCIO-CULTURAL STUDY OF ROCK/PICTURE WRITING, COMMUNITY, SIGN LANGUAGES, AND KINSHIP

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF ANTHROPOLOGY

BY

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Wado udohiyu utsati (wah-doh ou-doh-hee-yu ou-chah-tee)

Thank you very much (in Cherokee)

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Abstract

Because of both their deafness and their ethnicity, Indigenous Deaf people area doubly marginalized group, not only in society as a whole, but also within both Indigenous and Deaf communities. This dissertation will present new research related to them and their use of sign language. Set within a theoretical framework of Indigenous Methodologies, it examines this community's important connections to past, present and future. For the past, it examines North American Indian Sign Language as represented on Rock Panels, a form of writing that evidences a pure form of indigenous sign expression prior to European contact and invasion and thus provides the present community with an anchor to the past. For the present and future, it considers language socialization and identity among Deaf Indigenous people today, and the complex interplay of stereotyping, language ideology, language endangerment, language and culture acquisition, and a special type of non-biological kinship that has developed to supplement the lack of connection provided by biological kinship.

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Chapter 1

Introduction

North American Indigenous Deaf people are a multiply marginalized group, not only in society as a whole, but also within both the Indigenous and Deaf communities. To clarify what type of Indigenous group I am referring to, in the United States, the terms used range from "American Indians" to "Natives" and "Native Americans," but most Natives would prefer to refer to their specific tribes (e.g., Northern Cheyenne, or Ojibwa) (Menzies 2001; Mishesuah 2005, 1998). In Canada, "Aboriginal People," "First Nations," and "Natives" are considered suitable terms (Kovach 2009; Lambert 2014; Menzies 2001; Wilson 2008). Mexican Indigenous Deaf peoples call themselves "Mexican Indigenous Deaf," but also prefer to name a specific tribe like Aztec (Azteca) Deaf, and Huichol Deaf (A. Ortiz and C. Bueno, personal communication, 2018). People who are Indigenous Deaf will often use whichever name their tribes calls themselves. Chapter 6 will provide selected signs for the term "Indigenous," as created and used by Indigenous Deaf people in the three North America countries.

The other important point to consider throughout this paper is that the terms, "Deaf" and "deaf" denote a difference: "Deaf" with an uppercase D refers to people who grew up in Deaf residential schools and acquired Deaf Culture. The lowercase d in "deaf" refers to hearing loss, a pathological and clinical use of the term, and also for people who are deaf but not exposed to Deaf Culture, typically coming from mainstreamed public schools with no Deaf teachers or Deaf role models. Putting these two identities together, we get people who identify as Indigenous Deaf, meaning people who are both Deaf and Indigenous, and were raised in Deaf residential

schools in North America—people who were exposed to and raised in both their Native culture and Deaf culture.

Within the broader North American Deaf community, specifically referring to people who are non-Indigenous, American Sign Language (ASL) has usually been created by white Deaf people. The American Asylum for the Deaf and Dumb, founded in 1817 (it is currently called American School for the Deaf, in Hartford, Connecticut), was established by Thomas Hopkins Gallaudet a hearing educator, and Laurent Clerc, the Deaf Frenchman who left his country to assist Mr. Gallaudet. They provided education to Deaf children, many of whom went on to become Deaf teachers, spreading out across the US, founding more Deaf residential schools. From that time on, most ASL signs have been based on a white, Deaf signers' lens. Signs were created based on their Euro-centric and burgeoning American worldviews and culture, not through the eyes or culture of Indigenous or non-European immigrants during the English Colonial era. Because ASL is a creolized sign language, some of the tribal signs from eastern tribes in the New England area, especially, became incorporated into ASL, but credit to the two-centuries-old Indigenous Deaf students for their contributions to creating this country's signed language are long overdue. Besides the American Colonial period, there are Indigenous communities in Mexico, the US, and Canada who were colonized by people from the United Kingdom, France, and Spain, mostly.

This was the beginning of natural language elimination and expected assimilation into European-style cultures. The European colonizers forcefully eradicated Native cultures and languages, and at the same time, the same principle colonized teaching at the Deaf residential schools around USA and Canada—meaning the loss of tribal signed languages for students who

were not of European heritage; their heritage languages were removed once they enrolled in Deaf residential schools.

Today, researchers have coined terms like language genocide (Skutnabb-Kangas 2000), language loss, reversing language shift (Fishman 1991), heritage language and language revitalization. There has not been a study applied to signed languages until recently: a study of ASL as a heritage language (Compton 2014). The most recent study by Albert Bickford and Melanie McKay-Cody discusses endangered signed languages and signed language revitalization (2018).

People who are Indigenous Deaf are typically marginalized by many societies. They are often considered "invisible and well-hidden people" (McKay-Cody 1998-1999). Here are a few of the many instances of marginalization and erasure experienced by Indigenous Deaf peoples: 1) Gallaudet University and the National Technical Institute of the Deaf (colleges for Deaf and Hard of Hearing students) do not teach courses on Indigenous Deaf Studies or embed such teachings in their broader coursework; 2) Deaf communities neglect Indigenous Deaf people in many events, meetings, trainings and exhibits; 3) curricula at Deaf residential schools marginalize or fail to represent any historical Indigenous Deaf peoples, or their tribal history, culture, and other aspects of their lives; 4) Deaf and Native communities have mislabeled Indigenous Deaf people based on learning from the Euro-American culture; and, 6) racial measurement based on skin color. The relatively recent emergence of academic dissertations, theses, and journals relating to these topics makes it difficult to find scholarly works that demonstrate an excellent command of Indigenous Methodologies, especially those concentrating on Indigenous Deaf people.

My research goal is to draw on a blend of Indigenous and Deaf Methodologies to address these topics and their interrelationships, using epistemological analytical tools. Indigenous Methodologies (Kovach 2009; Wilson 2008) are currently widely used among Indigenous researchers worldwide, but have not yet been applied to American Indigenous Deaf people. Indigenous Methodologies combine aspects of epistemology, ontology, methodology and axiology. Such methodologies rely on the epistemological and ontological underpinnings of Indigenous knowledges and values, unlike Western research, which focuses more on theories, typical of non-Indigenous works—the research design between the two are not similar. Data collection will be drawn from narratives (storytelling and personal experiences) and discussions of language use. A variety of technologies is used, with the primary collection method being live conversations via videophones, as well as internet-based communication, and in-person interviews/naturally occurring conversations conducted in American Sign Language, which is the preferred means of communication for the participants in this work because it allows them to express themselves more freely and completely than in written or spoken English.

Unlike many Indigenous methodologies researchers who studied in one community for their work, because Plains Indian Sign Language users and Indigneous Deaf research participants are scattered geographically—found in several states and provinces—my research necessarily involves multi-sited ethnographic study. I would like to mention that in anthropological study, multi-sited ethnography is used as part of the research design. George Marcus coined this term in 1995, but it is mentioned nowhere in popular Indigenous Methodologies. Indigenous Methodologies researchers use the concepts of "sharing circles (Kovach 2009)," "community

research (Smith 2012)," and "relational accountability" (Wilson 2008). For research on, about, and for Indigenous Deaf peoples, the suggested methodology of study is a combination of multi-sited ethnographies and relational accountability among the Indigenous Deaf communities. Even though many of us are scattered in all directions, we are considered one community enough to allow community research in spite of geography because we are involved in a shared signing circle.

As a linguistic and socio-cultural anthropologist, my research has to be based on contemporary anthropological work, which means focusing on the contemporary issues faced by the Indigenous Deaf peoples in their various communities today. This particular group is often overlooked by both the Deaf community and by Indigenous communities in literature, perhaps being mentioned briefly in North America. It would indeed be a rarity for any single tribe to have large enough numbers of family members who are D/deaf and have the support from their own tribe that they could form a single-sited ethnography. If such a case existed, though, these people should be less marginalized in their tribal community.

In an effort to be the most current with the field, my study includes multi-sited ethnography, unlike most research conducted by hearing researchers within a "world system" or globalization framework (Falzon 2009; Marcus 1995). Marcus's argument is that sometimes the study of social phenomena is not available at a single site; the idea of multi-sited ethnography (MSE) was formed (Falzon 2009, 1). Due to the fact that there are not usually large numbers of Indigenous Deaf people per community, many of them are isolated within the tribe, or have left the tribal community to live in urban cities where Deaf services are available. My study focuses on the Indigenous Deaf people in North America in different locations and from different tribes, but in the eyes of Indigenous Deaf people, it is not multiple communities but a multiplicity of

members within one geographically rootless community. The single biggest need as Indigenous Deaf people is access to communication. One of the multi-sited ethnographic studies already in the literature consists of people, connections, associations and relationship across space (Falzon 2009, 1-2). Falzon also discusses Malinowski's participant observation at a single site on an island that, opposed to MSE, shows the depth of the study of one culture. Some researchers see MSE as incomplete or lacking depth as compared to Geertz's thick descriptions (Falzon 2009, 3).

I would like to briefly discuss Falzon's description, "... multiplicity of multi-sitedness makes up for its inadequacies in any single site. That it, as ethnographers move around, it becomes a matter of adding short durations to make a long one" (2009, 8). In regards to this, my research is neither single-sited, nor do I move around for a short duration, as stated by Falzon. My research of Indigenous Deaf people entails 25 years of my own study, plus a year-and-a-half in dissertation research duration. I do not move around, but keep track of my research through long-distance video-phone calls, video-messages, and email communication with the same research participants throughout my dissertation research. Each of my research participants gets monthly email correspondence from me. Besides my research participants, I have been referred to other Indigenous Deaf people outside of my research group who are interested in and asking for information on my study.

Background of Previous Research

A collection of 16 published documents focuses on Indigenous Deaf people, looking at different aspects. Beside myself, there are four Indigenous Deaf descendants who were members of Intertribal Deaf Council (IDC): Valerie Dively, Walter Kelley, Tony MacGregor, and Damara

Paris. The rest of the authors on Indigenous Deaf peoples do not have any kinship ties to the Indigenous Deaf community.

Dively (1996) focused on the linguistic portion of non-hand signs of the Navajo signers for her doctoral dissertation. She also wrote a chapter on ethnographic study of two Indigenous Deaf people living in eastern states (1999). Unfortunately, no curriculum, program, or training development occurred as a result of her work, so its impact on Indigenous Deaf communities was minimal.

Kelley (2001) described Pueblo culture among Pueblo deaf people in New Mexico. In his work, he also explains about the lack of social services access for the Pueblo Deaf. He conducted statewide meetings with many tribes in Arizona, and a report of the tribal groups' responses can be found on the 2004 Arizona Commission of the Deaf and Hard of Hearing Project Report. MacGregor (2002) communicated with a Navajo Deaf rug weaver, documenting the weaver's work, and discussing the significance of having art education. Paris (2012) wrote her dissertation on female Deaf Native leaders. As is the case with work of these scholars, there have not been any outcomes from their dissertations that have sparked programming or the establishment of Indigenous Deaf Studies curricula either separately or as a part of existing Native American/Indigenous Studies programs around the nation.

The rest of the authors, who happen to be hearing, like Sharon Baker (1996), Jeffrey Davis (2010), Ruth Fletcher-Carter and Doris Paez (2000), Kathleen Geiser (1991), Susan Hammond and Linda Meiners (1993), and Michelle Sasvari (1995), each wrote about Indigenous Deaf people for dissertations, theses, or journal articles. Often their works are from a Euro-centric perspective (i.e. fact-finding, data, statistics, theories-oriented, and binary-driven research), and as I have seen, lacking in key cultural aspects of Indigenous Deaf Culture.

In my opinion, all of the above works merely superficially describe the Indigenous deaf people's lived experiences and epistemology about their own tribal cultures. These works have not made any impact or led to changes within the Indigenous communities in North America nor in higher education.

Research Questions

To understand the lives of the Indigenous Deaf peoples in different locations in North America, and my role as both an insider and outsider, I will be using a combination of Indigenous multi-sited ethnography, linguistic and socio-cultural study, Indigenous Methodologies, interview/questionnaire/naturally-occurring conversation, and three subfields of anthropology. A more intensive description of this research can be found in Chapter 3 on Indigenous Deaf Methodologies. The study of these Indigenous Deaf People, focusing on the cultural significance of the Indigenous Deaf people, will contribute to the body of knowledge within and among the wider Deaf community, tribal communities, and academia, which have long overlooked the lived experiences of Indigenous Deaf peoples. The idea of a holistic approach in research, meaning different questions based on applicable methodologies: 1) What is the uniqueness of Indigenous Deaf people, their culture, language, values, and tribal knowledge; 2) How do current Indigenous Methodologies apply to Indigenous Deaf people; and 3) What types of kinships do Indigenous Deaf peoples possess?

To seek answers to these research questions, I applied Indigenous Methodologies used by genealogical researchers of hearing Indigenous scholars since the 1990s and Deaf Epistemologies from a decade of my own research and other researchers who studied Deaf epistemologies involves, Deaf Culture, Deaf Education, bilingual (ASL and English), bicultural

(hearing and Deaf), and Deaf entities. For linguistic anthropology, I used naturally occurring conversations (Ahearn 2017), linguistic fieldwork (Bowern 2008), and folk linguistics (Albury 2014; Field and Kroskrity 2009; Garrett 2010; Niedzielski and Preseton 2000; Preston 1993a, 1993b, 1986; Woolard 1998), looking at each within the Indigenous Deaf communities represented in my sample.

The Significance of Being an Indigenous Deaf Researcher

Growing up at the Oklahoma School for the Deaf, I have been among many Indigenous Deaf students who have dealt with cultural deprivation. While there, we were exposed to the majority's stereotypes of Indigenous peoples in the form of remarks, behaviors, and treatment. OSD is far from the only Deaf residential school where this has and does happen.

I have always wanted to become a researcher and storyteller, like my mother and matrilineal grandmother. Outside of my biological family, I became fascinated with the many older Deaf people who provided me with signed narratives on different subjects, especially the Oklahoma Dust Bowl, "Indian" stories and mostly Deaf School stories based on lived experiences, OSD history, and a bit of gossip about other classmates. I frequently visited many older generations of Deaf people in my hometown, which fed my interest in Oklahoma Deaf history, as well as American Indian history. I was encouraged to attend Gallaudet College (which later become Gallaudet University) in Washington D.C., the only liberal arts university for the Deaf in the world. My professors saw the potential and skills that I possessed, which led to me being a researcher—but they saw a need for a Deaf researcher to study American Indian Deaf people. Because of my background as a Cherokee and my study interest falling with Indigenous culture, language and history, this work has been a natural fit for me.

My parents are Cherokee descendants, coming from a long line of Cherokees who migrated from the southeast portion of the US, especially Alabama, Georgia, Tennessee (Cherokee word, Tanasi --ᏔᎾᏓ) and Kentucky to Arkansas. My father is a descendent of the Chickamauga Cherokee, while my mother is from the Overhill Cherokee group. I am an enrolled member of the Sovereign Nation of the Chickamauga Cherokee Tribe. A brief little-known history of the Chickamauga Cherokees in Arkansas is commonly omitted within the well-known federally recognized Cherokee groups: Cherokee Nation of Oklahoma (CNO), United Keetoowah Band (UKB) and Eastern Band of Cherokee (EBC) because, it, like many other "Cherokee" organizations are "not federally recognized" and viewed as fraudulent groups. However, the United Keetoowah Band provided a statement in support of federal recognition for the Sovereign Chickamauga Cherokees of Cherokee Nation West (Jamie Thompson, Assistant Chief of UKB, letter dated April 21, 2017). The historical information regarding our tribe is often overlooked by American History textbooks and in today's conversation. Obviously, there needs to be an explanation about my tribe. Per the United States government, we are known as The Cherokee Nation West (CNW). By contrast, the status of the tribe as a sovereign nation was historically recognized, as evidenced by the Treaty of 1817. The 1817 Emigration Roll was created to allow for the US government's plan to provide annuities for those who decided to migrate to Arkansas. The Treaty of 1819 provided boundaries of lands in Arkansas created for the CNW. It is important to note that Tah-lon-tee-skee, the Chief of the Western Cherokees, and his brother, John Jolly, had agreed with the US government to migrate to Arkansas. In 1808, he became the Chief of the Dardanelle (AR) Cherokees. The Arkansas Cherokee Indian Agency was located on the Point Remove Creek, so we are a federally recognized tribe in Arkansas territory (Al McKay's notes, current governor of CNW; Markham 1972). In 1819, the count of

Cherokee population was at "least 6,000 Western Cherokee occupying the formal Cherokee Nation West lands in Arkansas" (Royce 1975, 90). After 1820, the number had increased dramatically and also gained numbers of newborns in Arkansas (Royce 1975).

After the Treaty of 1828 was signed between a Cherokee delegation and US government, but without the full council members' vote or agreement, the CNW "found the delegation guilty of fraud and deception and declared the treaty null and void" (Cherokee Phoenix, November 12, 1828). The CNW Council disapproved the Treaty under the premise that the delegation did not possess any authority to sign or approve a treaty, but wanted to send another delegation to solve the problem of misuse of the treaty voting rights (Sub-agent David Brearley's letter from Secretary of War, September 27, 1828; Hoig 1998; Logan n.d.; McLoughlin 1986). This historical disaster caused another migration to Oklahoma. Some of the Cherokee, especially the Keetoowah group, opted to move to Oklahoma, and that is where they are located today. At the same time, hundreds of Arkansas Cherokee rejected the Treaty of 1828 and chose to remain in Arkansas, but spread out in hiding in Arkansas, Missouri, southeastern Kansas, Oklahoma, and Texas (Anderson and Lewis 1983; Cantrell 2009; Eno 1947; Hoig 1998, 1995; Markham 1972; McLoughlin 1986; Royce 1975, 1887; Sabo 1992; Starr 1917). Today, a coalition of many Cherokee descendants in Arkansas, Missouri, Oklahoma, and Texas has joined together to return as members of the CNW.

The more detailed history of the Chickamauga Cherokee can be found in many books and journals (Anderson and Lewis 1983; Bolton 2005, 2003; Cantrell 2009; Carter 1953; Conley 2005; DuVal 2006; Eno 1947; Hoig 1998, 1995; Logan n.d.; Markham 1972; McLoughlin 1986; Perdue, 1998; Royce 1975, 1887; Sabo 1992; Smithers 2015; Starr 1917; Walker 1993; Washburn 2013). The Chickamauga are also known as Western Cherokees; some of the families

moved to Oklahoma in the area known as Lovely's Purchase, and eventually blended with the Oklahoma Cherokees, who were forcibly removed to Oklahoma during the Indian Removal Act (in other words, the Trail of Tears; in Cherokee, Trail-That-Cries). As both of my parents, I am also of Cherokee descent. Besides my Cherokee ancestry, my ancestors come from many different places, including Irish-Scots, German, Dutch, and English ancestry. I was told by family from my patrilineage possess some measure Choctaw heritage as well.

Besides being a Cherokee Deaf, I have a long-term connection to Indigenous Deaf communities in North America. Beginning from the time I enrolled at Oklahoma School for the Deaf and on to the establishment of Intertribal Deaf Council in 1994, I have immersed myself in the Indigenous communities, interacting with hearing and Deaf Indigenous people. At the University of Arizona, I conducted research on North American Indian Sign Language, especially the Plains Indian Sign Language (Northern Cheyenne, Arapaho, Kiowa, Crow, and Lakota) and Southwest Indian Sign Language (Navajo, Pueblo, and Apache). To broaden my study with different tribes through a socio-cultural lens in different locations in North America, I began my research employing metalinguistics with regard to Plains Indian Sign Languages, and conducting social-cultural analyses of the Indigenous Deaf communities.

My position as an accepted member of Indigenous Deaf community has its advantages because of my long-term knowledge of some tribal epistemologies and approaches to sharing knowledge with research participants and vice versa, which means I have an access to information those outsiders would not know. I value participants' signed narratives, which demonstrate a consensus of Indigenous Deaf people's preference to learning through doing. Menzies (2004) explained a new focus steering toward community involvement, which has been a very important evolution in anthropological research, a major shifting from "research on

subaltern peoples to research with communities of people" (2004, 15). There had not been any true anthropological research on Indigenous Deaf people in the past—most works are from different disciplines, like psychology, social work, rehabilitation, education, and linguistics, but hardly any extensive anthropological research. This is where my research comes in, to look at the wholeness of Indigenous Deaf communities through both socio-cultural and linguistic lenses. My immersion in hearing and Deaf Indigenous communities has taught me how to become a good researcher and incorporate our interdependence and interconnection in my work. The signed narratives, which shaped their roles in the communities and their worldviews, need to be recognized as a whole, which has not been described in past research. Their stories become my written words in this dissertation, which is for the academic and the hearing Indigenous communities.

The research participants and I had a good collaborative relationship by focusing on community-based research and setting goals for the solutions to communal needs. As a researcher, I have a responsibility to provide accurate and truthful data related to my research questions (Kovach 2009; Menzies 2001; Dyck 1993), but at the same time, it could mean I would not record certain information from the data that could result in harmful treatment to the research participants (Cove 1987; Lambert 2014; Menzies 2001). I have shared my concerns with the participants before they made decisions, even with consent forms. I felt it best to discuss with them such conditions that could affect them, and they appreciated such consultation.

From an academic standpoint, my research *on* and *with* Indigenous Deaf people began at the University of Arizona, Tucson, with the emergence of Indigenous Deaf Studies by early researchers. I had an opportunity to absorb their ways of doing research, but I noticed there was a big gap in research on Indigenous Deaf people's culture, identity, and communication—our ways

of doing and being. Throughout my academic career, I have honed my research skills with each of the works I have participated in. I have over 25 years of doing research among the respective group. To quote Menzies' (2001) approach, "research with, for and among Indigenous Peoples"... this is what I am doing with this doctoral study.

The Complexities of Indigeneity Research

There are complexities of Indigeneity that require exploration of the multi-layered situations in which Indigenous peoples live. Per literature, within Indigenous communities, some have favored the term "indigeneity," while other tribes have contested it. First, I will discuss what it means. According to the Oxford dictionary, it means, "collective rights based on the indigeneity of the community," and, "originally or occurring naturally in a particular place; native" (Oxford dictionary online; Tlakatekatl 2014). This terminology originated in 1972, from the United Nations Working Group for Indigenous Peoples, but due to the lack of restrictive policy, it was amended in 1983. That definition discussed the Indigenous peoples as descendants of groups from an original territory before another group arrived (read: invaded). The group practices and preserves their Indigenous customs and the traditions of their ancestors (Tlakatekatl 2014). There are different definitions of what it 'indigenousness,' 'indianness,' and a combination of 'indigenous' and 'identity' (Tlakatekatl 2014). Tlakatekatl makes a point, "Who defines it? A government, a group of people, an authoritative individual (2014 n.p.)? Another scholar, Ludlow, et al., provides the key features of indigeneity—contestation over rights, livelihood security, and self-determination (2016, 1 of 19). The authors of this article suggest some scholars argued the status of Indigenous peoples are not helpful in terms of indigeneity because it "contains perils as well as benefits" (Ludlow, et al 2016, 3 of 19). It is also a new

study of social movement (Escobar and Alvarez 1992 in Ludlow, et al 2016), which impacts international legal recognition of Indigenous peoples for their land, culture, and self-determination—from this level, it is for the global recognition of Indigenous peoples.

Uddin, Gerharz, and Chakkarath explain that the discourse does vary from country to country, and region to region. For example, in North and South Americas, the Indigenous people are victims of "settler colonialism," while at the other side of the world, South and Southeast Asia Natives have experienced cultural politics, so you get many different kinds of situations related to indigeneity (2017, 5). Uddin, Gerharz, and Chakkarath provide the meaning of indigeneity:

> "The concept of 'indigeneity' and the various understandings of its meaning have had an impact not only on how social scientists think about the interconnection of identity, space, language, history, and culture, but also on how they describe the increasingly complex interplay of diverse players and agents within dynamic global socioeconomic, and political realities and the rhetoric that accompanies it" (2017, 3).

Indigeneity has become a more popular topic of discussion in today's literature; tribal communities and academy promote identity politics and in the sense of "deep belonging" for Indigenous people bond to place, culture, nation, territoriality and ancestral rights. Uddin, Garharz and Chakkarath emphasize that, "Indigenous people represent themselves at every level of society – locally, nationally, regionally, and globally" (2017, 4), and this also applies to Indigenous Deaf people (see chapter 3 of this dissertation).

After a thirty-year span of Indigenous research, scholars have provided different terminologies on this particular topic. Recently a list of new terminologies appeared and expanded the study of indigeneity. Uddin, Garharz and Chakkarath describe:

> "It is woven together in an intricate web of concepts such as ethnicity, identity, hybridity, authenticity, autochthony, diaspora, nation, and

> homeland, and the ways in which these ideas are formed, developed, and "owned" (2017, 3).

Exploring Indigeneity in the Indigenous Deaf Community

An important issue that needs to be brought to our attention is the complexities of blood politics, which has to do with the three federally-recognized Cherokee groups (Cherokee Nation of Oklahoma, United Keetoowoah Band and Eastern Band of Cherokee) and those who are "non-Cherokee." I am aware of the existing controversies about the Chickamauga Cherokees, and many other eastern tribes, because they do not possess federally recognized status.

Personally, the topic has to do with my status as Chickamauga Cherokee, which were separated from these three federally recognized tribes who, under force, marched to Oklahoma in 1828. At this point in time, I am aware that the three groups will question me because of my descent from the Chickamauga Cherokee group who migrated to Arkansas prior to the Indian Removal Act—my tribe does have federally recognized status according to Treaties of 1817 and 1819, though the tribes themselves may not see it that way. At the same time, I have met many fraudulent "Cherokee tribes," and so has my father, who fought against them as well. In my defense, my family departed their homeland in eastern Oklahoma, to move to Sulphur, Oklahoma (the home of the Chickasaw Nation) because a childhood disease caused me to be deafened. I attended the Oklahoma School for the Deaf in Sulphur. This was a great sacrifice that my parents made in order to provide me the ability to live at home while attending school, instead of sending me away to another town, which is what they would have had to have done had they not moved to Sulphur. So, my situation was unlike many Cherokee Deaf people, whose hearing parents remained in their Cherokee communities and were/are citizen Cherokees.

It is important to note that Cherokee Deaf people do not participate in blood politics or have problems with labels, pointing fingers like, "you Chickamauga Cherokee," or, "you

Oklahoma Cherokee"… these discussions do not occur in our discourse. We have an interconnectedness and interdependence with each other for support, mainly due to our communication needs and ability to share knowledge among ourselves, regardless which of the Cherokee Nations we belong to. See more about the special connections between Native Deaf people in chapter 8.

Our relationship as people who are both Native and Deaf has nothing to do what Sturm (2011, 2002) and Tallbear (2013) described in their books. I borrow from Sturm's "whiteness, mixedness, and newness" (2010, 15), describing racial shifters, about non-Cherokee who falsely claimed Cherokee heritage all of sudden, becoming an "instant Cherokee" (my term). Let me say this: I have met my fair share of racial shifters during my 25 years of studying the Indigenous Deaf population. I can relate to this concept—it is not just claiming Cherokee heritage, but included other tribes as well. In many cases, Indigenous Deaf people married spouses from the same (or different) Deaf residential schools, typically people who are non-Indigenous or of mixed heritage. Unlike citizen Cherokees, who encouraged marriage within Cherokee communities, one has to see from our Indigenous Deaf standpoint, the biggest factor in every relationship we have is *communication*. So, often, Cherokee Deaf people married another Deaf spouse rather than keeping with the traditional 'Cherokee-marry-Cherokee' paradigm.

Complexities in Blood Politics

It is important to bring up the issues intrinsic to blood politics within the Cherokee context, like Sturm, Tallbear and Garroutte, and many others have. The Cherokee Nation is a large tribe with membership/citizen to descendants who possess Cherokee blood, and their ancestors are registered with the governmentally assigned blood/tribal rolls. The complexities have to do with "Indian blood," "genealogical," "identifiable by Cherokee people," "white-

Cherokee elite," "card-holders," and "Indian DNA," all of which made their appearance in Sturm (2002) and Tallbear (2013). This kind of politics is about racial measurement in terms of "blood" versus cultural identity and tribal citizenship. Sturm explains that with the federal policy from the nineteenth century, the goal was to detribalize through blood fractions and through bloodlines, to contribute to the dilution of "Cherokee blood," which means loss of tribal lands. Tallbear (2013) and Sturm (2002) view phenotypically white people as having a "sense of racial, spiritual, and cultural emptiness" (Tallbear 2013, 134). On the opposite side, non-Indigenous people manipulated the rolls by "playing Cherokee" or some perpetrating fraud, which injured the good Cherokees who struggled to progress through the appropriate processes to get federal recognition.

In 2011, the federal-recognized Cherokee tribes, Cherokee Nation (Oklahoma), Eastern Band of Cherokee (North Carolina) and United Keetoowah Band of Cherokee, established a Cherokee identity protection committee after the 2008 Resolution Opposing Fabricated Cherokee 'Tribes' and 'Indians" (Resolution #14-08), developed by the first two groups. Cherokee Nation had identified 212 "fabricated groups claiming to be Cherokee tribes" (McKie 2011, 1). Their purpose was to protect their history, culture, and traditions from the fraudulent Cherokee groups who have no tie to three federally recognized Cherokee tribes as result in cultural appropriation, economic and commercial purpose. The previous year, 2010, Sturm had documented 238 self-identified Cherokee organizations. In addition, Sturm called it "spread of Cherokee neotribalism" (2010).

While I support the reasons for the Resolution, such as combating fraudulent "Cherokees," I also want to mention some flaws in the Resolution. From my own personal experience, I have encountered a few full-blooded Cherokees who grew up in Cherokee

communities in Oklahoma, but who are not enrolled because of their ancestors refused to sign the Dawes Roll. Because of this, the Cherokee Nation rejected them. It is worth considering that it is possible that they may have some tie to Cherokee Nation West without realize it. Secondly, the Resolution documented the desire to "protect the Cherokee tradition, history and culture." Ironically, I have met hundreds of enrolled and assimilated Cherokees who are clueless about the traditions, history and culture, including many enrolled Cherokee Deaf people. The Resolution has two sides of the coin: strengths and weaknesses. From my perspective, me and other Cherokees like me are still being made to pay for the sins of our ancestors.

However, tribal sovereignty, which means each tribe has authority to self-govern, by organizing their own constitution and by-laws, is a consideration. Cherokee nationalism is another way to say loyalty to the Cherokee culture, history, language and homeland, and that idea is centralized on social construction within the Cherokee community. Within the Cherokee community, as Sturm writes, Cherokee people who take their time and study people who come into the community will decide who is Cherokee and who is not based on their behaviors, language usage, and how much Cherokee knowledge that person has. Sturm's *Becoming Indian* exposed the behavior of racial shifters who "reclaimed their Cherokee heritage," but many of them were clueless about the Cherokee traditions and practices, and this caused resentment within the citizen Cherokees. The remarkable ethnographic study of two sides, racial shifters and citizen Cherokees, is described in this book, but do these groups have similarities with Cherokee Deaf? One must ask and examine this type of question when dealing with the topic of blood politics. From my experience socializing among the Cherokee Deaf in Oklahoma, we are more accepting of each other as compared to "Cherokee" outside of Oklahoma, where there is always an air of skepticism. We do not have our own resolution or even know of the Cherokee

Resolution being circulated in the community; we base our acceptance of others as Cherokee on how we perceive the person by their behaviors and words. Here is an example of one Deaf woman who is of a Southern Cheyenne descent, as she explained how proud she is of her heritage through her mother. She showed me the wall decorations she bought, pointing to them (Deaf people are very visually oriented and tend to do 'show and tell'). Unfortunately, she was clueless about her Cheyenne tradition, culture, and history obviously, because the wall decoration displayed items "Made in China," or store-bought ceramics in Southwest design. This behavior is a blend of cultural deprivation, mistaken representations of her tribe, and traditional knowledge that has not been taught to her and her mother who is also Cheyenne Deaf. My point here is that the Cherokee Deaf people are either clueless about their culture or fall into a stereotypical learning about "pseudo-Indian ways."

From my own experience, there are zero self-identified Cherokee Deaf organizations, but I have encountered many Deaf people with whom I had private conversations, and during my presentations about their unidentified heritage, they usually named "Cherokee". Most of the knowledge they acquired is from their hearing parents or relatives who could have provided mistaken identification of "Cherokee". I encouraged them to not use "Cherokee" as one tribe but to explore farther in long-term research to find the actual tribe from its original homeland. Several Deaf people met me again some years later and shared their findings, which was not "Cherokee". Again, this coming from culture-deprived Deaf people searching for the truth about their family, but, basically, it is not their fault for misidentification.

I challenge the concept of 'indigeneity' through the lens of an Indigenous Deaf person. I aim to bring up this argument for the sake of discussion, because many Indigenous Deaf people (specifically in North America, for the purposes of this research) do not speak their tribal

languages, have access to limited cultural knowledge, and have departed their homelands for better services as a Deaf person, especially better communication… so does that mean they are not "Indigenous," "Cherokee," "not Native enough," as claimed in indigeneity literature? Are we not Indigenous people because our hearing Indigenous families and communities failed to include us?

There is something to consider when it comes to community-based accountability: in hearing Indigenous communities, the tribes have their own set of rules, such as who does the teaching, who is a disciplinarian, and other such ways of doing. There are large numbers of resources talking about it such occurrences in hearing Indigenous communities, but what about Indigenous Deaf peoples? How do we view accountability in our own community, and is it distinct from what we know from hearing Native communities? Instead of being excluded from Native communities because of lack of access to communication, the Indigenous Deaf people who have had the opportunity to be fully immersed in our own communities since the establishment of the Intertribal Deaf Council, have become the key people to go to, as they are viewed as having more credentials. On the other hand, Indigenous Deaf people who have never experienced this type of interconnection would likely have different attitudes, and would probably lack awareness of the accountability system set by the Indigenous Deaf people who have intentionally set about forging these types of connections.

Indigeneity has not been part of the discourse in the Indigenous Deaf community; the research participants in this study and community members rarely bring up such topics in discussion. Cherokee Deaf people from all three federally recognized Cherokee groups are not made aware of the Cherokee identity protection committee, nor do they know about the

Resolution made, public in 2011. None of them talk about it at all. If you ask them about "Blood Politics," they will give you a puzzled facial expression.

Cherokee Deaf people from three federally-recognized groups, and myself, as a Chickamauga Cherokee, do not have any problem with blood politics, because in our eyes, it is non-existent. All of us have a common situation, which is access to communication, and omission from any tribal community meetings, events, and dances. Usually interpreters were not hired for years, but that has recently changed, with American Sign Language classes taught at Northeastern University, in Tahlequah, and video-relay interpreting service devices installed at the Cherokee Nation hospital (as local Cherokee Deaf people have informed me). Our Indigenous Deaf group is very small, and our need for interdependence and interconnection is of much more value than blood politics or racial measurement.

For as long as I can remember, many Indigenous Deaf people showed no interest in going into the complicated mathematical fractions of blood quantum. Even among those who have a Certificate Degree of Indian Blood (CDIB) card, revealing numerical factions of their blood quantum, many do not understand the purpose of their "Indian card". Tallbear (2013) provided an extensive description of 'blood,' 'Native DNA,' and 'blood quantum' in her book. I could not put down the book, because it has so much information that is not and has not been explained to Indigneous Deaf people; they could benefit from this type of information(!). The general community talks about decolonization, blood politics, and the like, but do Indigenous Deaf people truly understand the meanings of these things? A more detailed expansion on this topic can be found in Chapter 6.

Indigeneity in Academic Research

I take on Garroutte's work in building bridges between tribal communities and academy (2003, 110). She coined the term "Radical Indigenism" based on her research and, I found it compatible to my research. Radical indigemism has to do with the definition of identity as "survival of Indian people," and what we can teach the academy about the philosophies of tribal knowledge (2003,107) (and in my case, the Indigneous Deaf people's knowledge). Radical Indigenism, in her words, reminds researchers that we are required to enter tribal philosophies (currently similar to Indigenous Methodolodies) and to include tribal relations. Garroutte explains that the researcher is encouraged to look at tribal philosophies through the lenses of traditional ways of knowing (2003, 108). She also stresses that the researcher must be willing to seek answers through tribal philosophies, to be guided by the community members, and to honor them.

In a second approach, the researcher enters tribal relations, maintaining respect and community values when seeking knowledge. The researcher is required to have a goal of real commitment, and put aside prior attitudes, because such research goes in-depth, requiring real sacrifices of the research participants who practice tribal knowledge. Garroutte recommends important key features: 1) respect for Native communities and observe the community's decision and values in what is discussed publicly; 2) community members regulate any kind of knowledge being circulated outside of the community; 3) the communities may prohibit researchers/scholars from researching and writing about specific subjects; and to handle tribal philosophies in a proper and respectful way when doing research (109-10). She also cautions researchers should not manipulate the Indigenous "communities for the exclusive benefit of those who do not belong to them" and these scholars who exploit it for their own purposes (111). This topic of discussion can be seen robustly in chapter 3.

Indigeneity in Academy

Garroutte suggests that Indigenous scholars who support Radical Indigenism and who work in their own universities can ask to protect tribal sacred lands, teach Indigenous history in classrooms (Native American/American Indian Studies programs are already in place in many universities nowadays), and invest programs that promote "cultivation of our languages and cultures" (2003, 150). Sadly, you will not find any curricula on Indigenous Deaf Studies in theprograms in many universities. The protection of American Indian land, languages, history, and culture has nothing to do with political claims at all, exclude religious or legal, because such belong to epistemological claims (150). For my case, a preservation and protection of Indigenous Deaf languages, history and culture is a must.

Significance of the Study

The main theme throughout this work is Indigenous heritage signed language, its origin, development, and present-day expression among Indigenous Deaf people through folk linguistics and language socialization. It is important to recognize the intergenerational transmission of ancient signed language and carry-over to present day signed language.

On an archaeological note, I have always been interested in Rock Art depicting sign lexicons which were documented by ancient signers who used rock/picture writing as their primary language of expression—this is related to my linguistic anthropological study of signed language; it is a connection between ancient and current signs in Plains Indian Sign Language, which I have studied since 1994. To study this particular aspect of my research, I worked with

Dr. Patrick Livingood, an archaeology professor at OU who expressed interest in mentoring my research about rock/picture writing, and alongside Dr. Carol Patterson, a cultural anthropologist specializing in rock arts and tribal sign language. Coming from a linguistic anthropology and socio-cultural anthropology background, I use semasiography and semiotics analysis of the language use on two rock panels for my dissertation. This study could benefit the archaeology program at the University of Oklahoma and other universities.

The archaeological study commences with rock art, building on the work of LaVan Martineau, a fluent Paiute signer who is also a cryptanalyst, and Dr. Carol Patterson (-Rudolph), a professional rock art specialist and cultural anthropologist. In their research, they have explored the interconnection of tribal sign language, rock writing, linguistic transcription and tribal culture. Martineau, by applying techniques of cryptanalysis to rock art, has discovered ways that what was formerly thought of as simple art can be interpreted as writing that represents Paiute signs: idioms and signs from Plains Indian Sign Language (PISL). Patterson later joined him in this research, and has independently verified Martineau's theories. Martineau and Patterson agree that 'rock writing' better describes these artifacts than 'rock art', because the writings have grammatical structure, describing a story or historical event on one full panel.

Although not necessarily linear, the pieces are pictographic narratives. This work provides a historical anchor to which Deaf Indigenous people can look back for a sense of connectivity to the past. The site of study for my work on rock art is located in northeastern Utah, with the Uintah and Uncompahgre bands of Uintah-Ouray Ute, who are speakers and signers of the Numic branch of Uto-Aztecan language (Patterson and Duncan 2016).

Besides the ancient signed language documented on the rock panels, it is important to emphasize the intergenerational transmission of the tribal signs among several tribes and to make

a linguistic comparison of tribal signs from rock writing of the mid- and late-1880s to 1920s, and on to current PISL signs used by PISL signers who are hearing and deaf. King stressed the importance of narratives through oral tradition, "an ethnocentric stumble that imagines all literature in the Americas to have been oral, when in fact, pictographic systems (petroglyphs, pictographs, and hieroglyphics) were used by a great many tribes to commemorate events and to record stories" (98). I visited rock-writing sites in Utah in the summer of 2017. I worked with a Uintah-Umcomphrage Ute filmmaker, and rock art archaeologist to record some of the findings showing sign language on rocks. The findings of this particular study of ancient sign language will be a major contribution to archaeology programs, linguistic programs, Indigenous Deaf communities and various Deaf Communities.

From the perspective of linguistic and sociocultural anthropology as the second aspect of this dissertation, especially folk linguistics, I will go on to examine language attitudes, sign choice and heritage sign language among the Indigenous Deaf population. Understanding of linguistic anthropology helps to interpret the group's face-to-face interactions during fieldwork and web-based communication, their construction of social networks, and the ways in which they share knowledge.

The third part of this dissertation focuses on a sense of social kinship that has developed among Indigenous Deaf, due to their shared experience of deafness, lack of communication at home with their families, double (or more) discrimination, and negative misconceptions and mislabeling by non-native authors, resulting in an identity crisis. This is a special type of non-shared-ancestry kinship that has developed to supplement the lack of connection provided by shared-ancestry kinship. Since the founding of the Intertribal Deaf Council in 1994, they have met regularly and defined themselves as Indigenous Deaf people, adopting each other as kin.

Although they have blood relatives (Morgan 1997) in their own families, this biological connection to hearing family members does not exhibit any intimacy except for some who have family members who sign. Instead, Indigenous Deaf people have bonded to each other, in a fashion that I term "communicative kinship," a unique bond not by blood but by access to communication.

Clarification of Signed Language Terminology

For the past three years, there has been a great deal of confusion and misconceptions of terminology of signed languages other than American Sign Language. The Indigenous Deaf community, research participants, and I continually educate the wider Deaf Communities in North America about our Indigenous Deaf cultures. Deaf communities have created non-existent and not applicable terms, such as: "Indigenous Sign Language," "Native American Sign Language," "Indian Sign Language," "Native American Indian Sign Language," and "Native Sign Language"... in fact, all of these terms are ambiguous and invalid. In other words, the wider Deaf communities do not realize their attitudes in putting forth such terminology are no different than the hearing colonizers who put English above ASL. The proliferation of such erroneous terms serves the continuance of the idea that ASL is superior over other signed languages. North America Indian Sign Language has been used since 1994 to denote a specific signed language family for linguistics research, but in the Native communities, they prefer the use of the term "Hand-Talk" in their everyday conversations, such as those which I personally engaged in with many of the signers. The term "Indigenous Sign Language" is very confusing, because it can mean "East" Indian Sign Language (from India, but they also have different signed dialects), Kenyan Sign Language, Balinese Sign Language, and many other signed languages not from "colonized sign language like ASL, British Sign Language, French Sign Language, and others)".

There is no such thing called Native American Sign Language (Leigh, Andrews, and Harris 2016).

The research on North American Indian Sign Language (NAISL) has been conducted since 1993, with extensive research coming out of the University of Arizona. Personally, I have studied Plains Indian Sign Language (PISL) and SWISL (Southwest Indian Sign Language) for over 25 years. An organizational chart on the signed languages can be seen as 1) North American Sign Language as "Sign language family", 2) Regional signs, and 3) Tribal signs. This is called the North American Indian Sign Language Classification (see below). Southeast Indian Sign Language, is marked as "non-existent" because there is no current signer from Cherokee, Creek, Seminole, Chickasaw, Choctaw or any of the other associated tribes, even through they used tribal signed languages in the past.

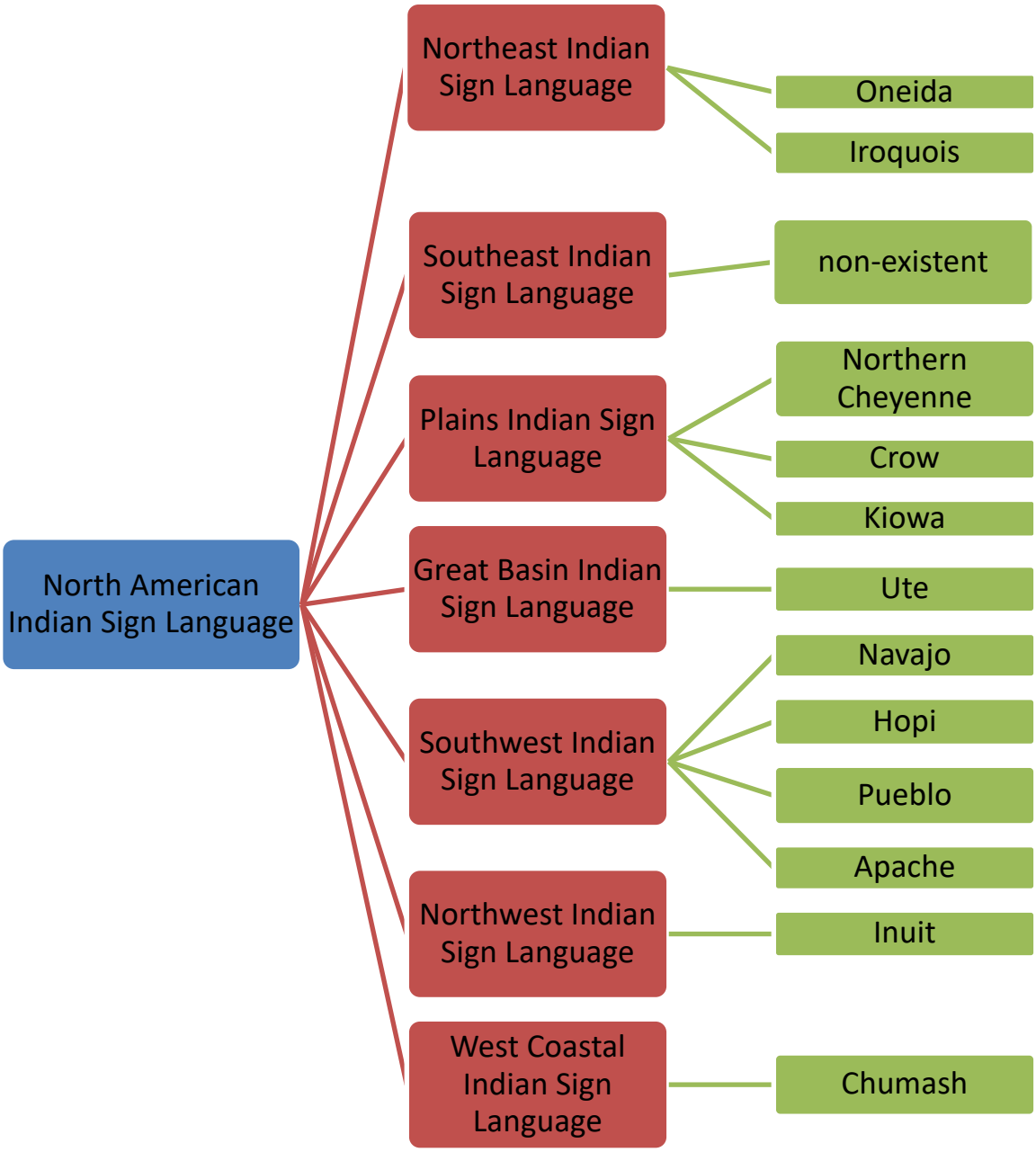

Figure 1: Diagram of North American Indian Sign Language Classification. Designed by Melanie McKay-Cody (Cherokee) March 1, 2019.

The comparison of ASL and Crow Sign Language (tribal signed language) can be seen below. I consulted with Calvin Young, the videographer and creator of "Seek the World," about appropriate naming for tribal signed languages.



Figure 2: Screenshot of a comparison of American Sign Language and Crow Sign Language. Seek the World Video, October 9, 2018.



Figure 3: Screenshot of a comparison of Plains Indian Sign Language and American Sign Language. Seek the World Video, March 19, 2019.

This subtitle of this screenshot reads “Plains Indian Sign Language”, while that is not wrong, it should read, “Northern Cheyenne Sign Language,” as James Wooden Legs states in the interview. The filmmaker, Calvin, did not pay attention to or missed James’ comments “MY HAND TALK OUR TRIBE CHEYENNE” which refers to Northern Cheyenne Sign Language. He then continues, “CROW DIFFERENT ++ TRIBE DIFFERENT NOT SAME,” meaning that Crow Sign Language, which is also in the PISL family (as are several other tribes’ signed languages). This is an example of broader Deaf Community not understanding our signed language. [The transcription system uses English words in ALL CAPS to represent each sign. The symbol ++ means repetition of same sign].

Here are some demonstrations of tribal signs used within the tribe and outside of the tribe. One of many tribal signs that the Indigenous Deaf people use for tribal affiliation can be seen here. These signs for tribes cover North American Indigenous people, starting with Canada, then the United States, and then Mexico.

Canadian Indigenous signers: Krista Belleau- Ojibway Nation, Atikameksheng Anishinabek (Ontario, Canada); Melanie Thivierge – Algonquin Nation, Winneway (Quebec, Canada); and Amy Leween – Mohawk Nation – Tyendinaga Mohawk Territory (Ontario, Canada).

United States Indigenous signers: Flarin Big Lake, Crow Tribe, Apsaalooke (Montana, USA); Steve Brunelle, Turtle Mountain Band of Chippewa Indians, Anishinaabeg (North Dakota, USA); James Wooden Legs, Northern Cheyenne (Montana, USA), Larry Cesspooch, Ute (Utah, USA) and Dane Poolaw, Kiowa (Oklahoma, USA). The last two signers are in Chapter 5.

Mexican Indigenous signer: Leticia Arellano, Mixtec (Oaxaca, Mexico), and Erik Arellano

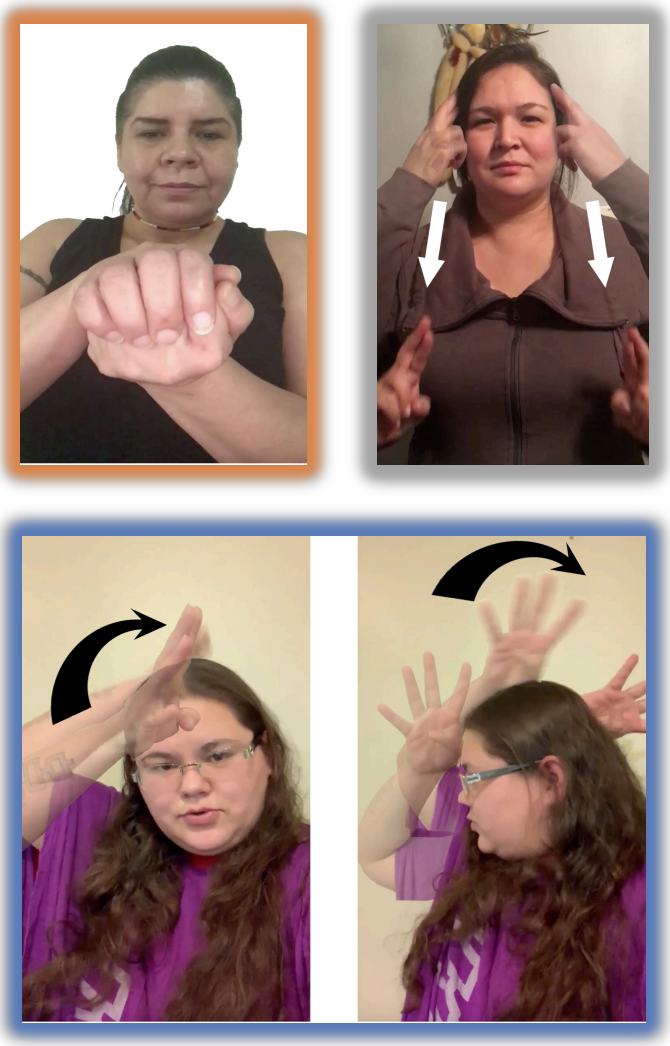

Figure 4: Sign for tribes in Canada: Krista Belleau –**OJIBWAY**, Melanie Thivierge –**ALGONQUIN** and Amy Leween – **MOHAWK**. Multi-media adaption by Shane Dundas, 2019.

The etymological sign means: **OJIBWAY** - style of tribe's moccasin. **ALGONQUIN** - long braided hair. **MOHAWK** - hair standing upright. The sign begins at the forehead and ends at the back of the head.

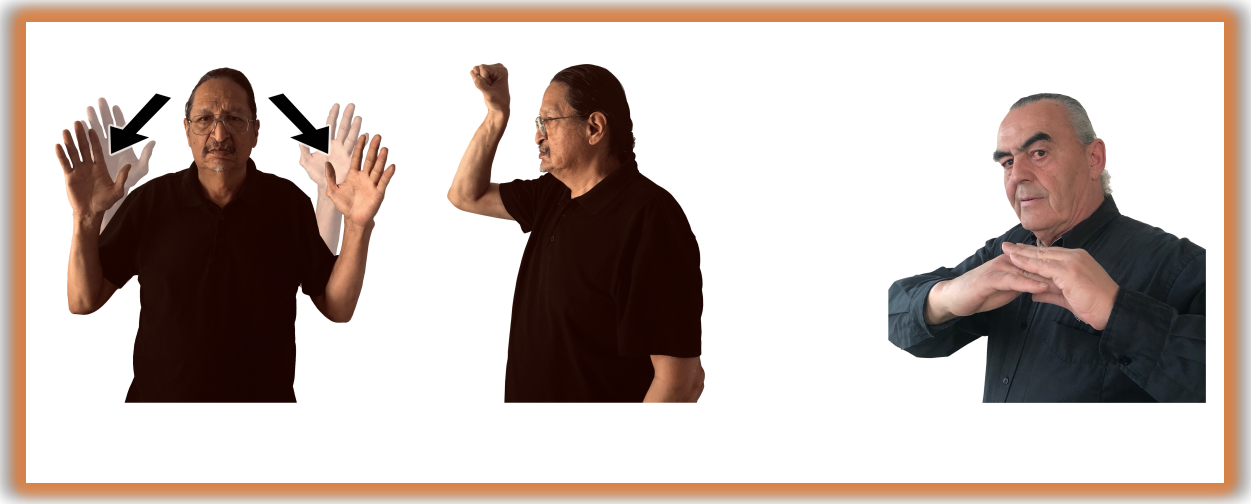



Figure 5: Signs for tribes in USA: Flarin Big Lake-**CROW**; Steve Brunelle - **CHIPPEWA** and James Wooden Legs – **CHEYENNE.** Multimedia adaption by Shane Dundas, 2019.

The etymological sign means: **CROW** (bird), starts with slightly flapping of wings, flap once (similar to Clark 1982, 132; Mallery 2001, 458; Seton 2000, 107) then handshape S, on forehead then moves away from head, small movement outward - representing hair knot tied on forehead (similar to Clark- "hair-straight-upon-forehead" 1982, 134; Seton 2000, 107). **CHIPPEWA** -- representing a design style of moccasin. **CHEYENNE** – "Cheyenne were very poor" (James' interpretation). The old sign for **CHEYENNE** begins at middle lower arm (non-

dominant hand/arm) and index right finger of dominant hand moving from mid arm all way to left index fingers in repeating movement of “cut with knife or sawing”. The etymological means varied per authors: Clark—“cutting or slashing the wrists and arms” and “peculiar manner of striping their arrows” (1982, 98). Mallery incorporates many descriptions by different tribes, but provides meaning “custom of cutting the arm as offering to spirits” while others viewed it as “cutting off the enemy’s fingers for necklace” and other said stripng arms with colors (2001, 464-465); and Seton assumes it means “striped tail of turkey feather” or “finger choppers” as in “chopped their fingers when in mourning” (2000, 107). Signs for **UTE** and **KIOWA** can be seen in Chapter 5.

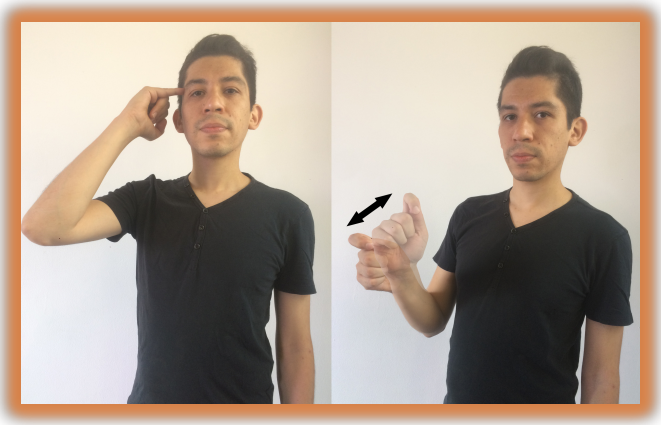



Figure 6: Signs for tribes in Mexico: Lengua de Señas Mexicana (LSM), Erik Arellao – **HUICHOL**; Leticia Arellano – **AZTEC** and **YAQUI**. Multimedia adaption by Shane Dundas, 2019.

The etymological sign means: **Huichol**—use Lengua de Señas Mexicana (LSM) sign: INDIO --"I" handshape stays on temple and use twisting wrist movement, then imitate a sign: shaking musical instrument 3 times. **Aztec** – long feathered headdresses. **Yaqui** – "Y" handshape thumb contacts and stays on temple and with a twisting wrist movement.

It is apparent that tribal signed languages do exist among Native communities, many of these are intergenerationally transmitted signed languages, in use many centuries before American Sign Language and the Language of Signed French made their appearance in North America. There is no reason to create for the general Deaf Community to generate terms for these signed languages; it should be up to the tribes to make the decision on naming their signed languages. People in the broader Deaf community are not aware of "cultural ownership." Hand-Talk is "owned" by the Native communities and the accompanying chart of linguistically studied North American Indian Sign Language is for research purposes, in order to identify tribal signs. More details can be found in Chapters 6 and 7.

Chapter 2

Literature Reviews of Linguistic Anthropology, Indigenous Methodologies, and Deaf Epistemologies

Introduction

For over a century, research on Indigenous Deaf communities has been carried out using non-Indigenous theories and methodologies from the Western tradition. Since the 1990s, Indigenous Methodologies have been widely available in variety academic subjects at mainstream universities and colleges in multiple countries.

For the last 25 to 30 years, the literature on Indigenous Deaf people describes them in the following ways: 1) They have problems that require assistance, such as medical help or rehabilitation (Kelley 2001; Miller 2004; National Council of Disability 2003); 2) They do not receive services in a way that meets their needs (ACDHH 2004; Kelley 2001); 3) The reservations and reserves where they live may lack needed services (ACDHH 2004; Kelley 2001; Lovern and Locust 2013); 4) Indigenous parents of Indigenous Deaf children are not provided needed resources (ACDHH 2004; Kelley 2001); 5) There is a shortage of Indigenous interpreters available to Indigenous Deaf people (ACDHH 2004; Baker 1996; Davis and McKay-Cody 2010; Kelley 2001; National Multicultural Interpreter Project 2000); 6) Research on Indigenous Deaf people is typically conducted by non-Indigenous researchers (Davis 2010; Davis and Supalla 1995; Fletcher-Carter and Paez 2000; Geiser 1991; Hammond and Meiners 1993; Sasvari 1995; Schuit 2012a and 2012b); 7) Indigenous researchers/people have neglected or marginalized Indigenous Deaf people in their studies, especially in the field of Disability Studies" (Lovern and Locust 2013; Schacht 2001); 8) Deaf researchers generally marginalize

Indigenous Deaf People in their research, mentioning them only briefly (Baynton, Gannon and Bergey 2007; Berke 2017; Holcomb 2013; Gannon 1981; Lane, Hoffmeister and Bahan 1996; Leigh, Andrews, and Harris 2018; Padden and Humphries 2005 and 1988); and 9) The majority of Plains Indian Sign Language (PISL) research provides more recognition to hearing, male signers and downplays the importance of PISL Deaf signers and female signers" (Calton 2014; Davis 2010; Kroeber 1958; Mallery 1880; Sherley-Appel and Bonvillan 2014; Tomkins 1969; West 1960)

Up to today, there is no improvement or solutions coming out of the research mentioned above. No action has been taken to improve the services available or interpreter training programs; some of the programs have short-lived trainings, typically one-day workshops with student and community interpreters who are in a need of professional development or to earn hours to meet the requirement of interpreter agencies or universities. Basically, the interpreter training programs never have incorporated cultural context that covers tribal epistemologies or ontologies coming out of our Indigenous communities. Numbers of Native students have dropped out of interpreter training programs due to lack of sensitivity to their needs and cultural ways. It is still true that many Indigenous Deaf children struggled educationally on the reservations/reserves/villages. Parents are still searching for resources; most agencies expect the parents to come to their offices instead of sending trained Indigenous Deaf persons to go to different locations and provide educational assistance.

On the positive side, research from the past consists of 1) Deaf researchers who are Indigenous descendants, using Western-style research methods *on* Indigenous Deaf people (Dively 1999 and 1996; Paris 2012), their research providing educational background, language, and the Indigenous Deaf peoples' lived experiences, but still an extensively thick description of

the Indigenous Deaf culture is lacking and, 2) additionally, scholars have been writing about the language and culture of Indigenous Deaf people (Kelley 2001; McGregor 2002; McKay-Cody 1998-1999 and 1996). While many of the newer research demonstrates remarkable information on Indigenous Deaf people, it consists of lived experiences of one Deaf tribal member, 2) one tribe and one language one in one region. There continues to be a need for research examining more than one person, one tribe, and one region—resulting in this dissertation—to look at the wholeness of Indigenous Deaf people through linguistic and socio-cultural lenses.

A question of central importance for me is how do I make a change from the work others have done—how do I do things differently in my work? How can I make my work more accessible to Indigenous Deaf people, allowing and ensuring their epistemological narratives to be shared and respected alongside other Indigenous people? How can I shape hearing Indigenous people's understanding of their Indigenous Deaf relatives/siblings/children in order for them to be able to share traditionally intergenerational knowledge? My research is intentionally targeted for both academics and lay people, especially Indigenous people, both hearing and D/deaf. My work will describe hearing Indigenous Methodologies and Deaf Epistemologies, and how I blend them into Indigenous Deaf Methodologies to reveal the connectedness of both cultures.

In this chapter, I will describe Indigenous Methodologies and then the Deaf Epistemologies. According to Kovach (2009), tribal knowledge is not Western knowledge. The Indigenous scholars educated in mainstream universities have challenged Western assumptions with Indigenous methodologies, making Indigenous Methodologies the preferred means of study and search for tribal knowledge (Castellano 2004; Hart 2010; Kovach 2009; Lambert 2014; Smith 2001; Wilson 2008). As a Native linguistic anthropologist, it is important for me to emphasize that in Indigenous languages, they do not use an equivalent for the English word

"research" (Lambert 2014; Smith 2001). The term "research" has been thought to be degrading and imbued with an inherent racism that is not typically used in Indigenous ways and it ties to the European imperialism and colonialism (Lambert 2014, 14; Smith 2001); however, in recent years, more and more Indigenous scholars are using the terms "research" and "researcher" in their work. Thus, I will use the term "research" to keep up with the current Indigenous researchers.

Methodological Framework

For my own framework, I link Indigenous methodologies, explained below, and Deaf epistemologies (how Deaf people learn and gain knowledge) to create a well-rounded interpretation of Indigenous Deaf people.

Lambert (2014) highlights that "There is a difference between methods and methodology, albeit some researchers use the terminology interchangeably. However, the methodology is the study of how methods are used. The methods are the tools researchers use to gather data. For example, in the Indigenous model, the method may include individual face-to-face interviews, talking circles, healing circles, and methods of how the data is disseminated to the community." More about this later.

First of all, I will discuss Indigenous methodologies from literature on Indigenous peoples, which has increased by volumes, across subjects, since the 1990s. By comparison, the idea of Deaf epistemologies has been accepted only recently, and as such, there is not yet a large corpus of literature, although it increases by the day. Additionally, there is a very small amount of literature on Deaf People of Color, but it continues to emerge as more work is done by Deaf Scholars of Color.

My study begins with Indigenous Deaf people from the anthropological standpoint by applying a holistic approach, engaging each of the three subfields of anthropology. The non-Indigenous scientific term used by the Plains Anthropological Society, American Anthropological Association, and many anthropology programs is "interdisciplinary," however, I prefer to use the term "Indigenous Deaf Methodologies," clearly meshing to show the continuous interplay of the identities of this particular group.

Background

My graduate study has been comprised of linguistic and socio-cultural anthropology. My academic experience extends over 30 years, and spans multiple topics. Here, I will compare non-Indigenous linguistic anthropological research alongside Indigenous methodologies and Deaf epistemologies. Linguistic anthropologists' research comes with a variety of methods, depending on their research questions or topics. In my case, I am a linguistic and socio-cultural anthropologist studying Indigenous Deaf peoples, specifically focusing on their signed languages (ASL and PISL) and culture. Because I communicate with my participants via signed languages, the use of video recording is a major methodological consideration in my work.

First, I will present the linguistic anthropological documentation tools for research. How do we as linguistic anthropologists collect our data, based on current training style? The field of linguistic anthropology has evolved toward more community-based research, and in terms of the science of research, linguistic anthropologists have availed themselves of research tools to help with the documentation of endangered Indigenous languages (Czaykowska-Higgins 2009; Rice 2006)—this benefits the studied community by preserving their languages, although typically spoken languages. However, documentation of signed languages has become more prevalent

over the last decade. More research on signed languages is being done on reservations, in villages, and in other remote areas (Bickford and McKay-Cody 2018; De Clerck 2012; de Vos and Zeshan 2012; Kisch 2012).

From a linguistic anthropologist's standpoint, as with other types of research, we look at things using either quantitative or qualitative methods. Examples of items we might quantify include the number of pauses, utterances, turn-taking indicators, or the occurrence of specific linguistic features. Qualitative methods require no counting or measurement, instead requiring the analysis of human behaviors, ethnography and simple conversation. Linguistic and cultural anthropologists often spend long periods of time *in situ*, studying the environment, people, languages, and everyday lives in the particular community.

Current Linguistic and Social-Cultural Research

How do we typically do our work? I am going to focus on a list of research methods drawn from Ahearn (2017): 1) Participant observation; 2) interviews; 3) surveys and questionnaires; 3) naturally-occurring conversation; 4) experimental methods; and 5) matched guise tests and written tests.

Participant observation has a long history in anthropology. The method was originally used by Bronislaw Malinowski, a Polish anthropologist in 1913. Every student trained in anthropology in the US is told of his work. Interview questions take on one of three types: structured, semi-structured or open-ended. Structured interviews present questions in a particular order, and the answers are documented. Semi-structured interviews include some structured questions, but are also flexible enough to allow discussion of other topics of interest to the researcher or the subject-participant. An open-ended interview is an informal conversation that

covers relevant topics, as contributed by anyone involved in the conversation. These interviews should not be confused with traditional Western way of asking questions in an effort to ascertain "facts" or "the truth".

There are various ways of recording and analyzing data during interviews. Researchers do everything from in-depth linguistic analysis (e.g. phonology, morphology, pragmatic, and semantics), to exploring language ideologies, analyzing endangered languages, performing language documentation, and developing language revitalization programming.

Surveys and questionnaires may involve different data, such as ... "demographic data such as age, education level, language spoken, income, and so on" (Ahearn 2017, 58). They could also solicit opinion, beliefs, and experience like, "[o]n the scale of 1-5..." (Ahearn 2017, 58). It is common for universities to send out surveys and questionnaires to students, or to professors to gather data to improve the programs. A Gallup Poll Survey or Consumer Survey is another example of this type of data collection.

Naturally occurring conversations can mean long hours of collecting language utterances or signs, documenting storytelling, and recording daily interactions in the community. This type of conversation may be collected in different ways; it may be audio-recorded or video-recorded, which makes data available for preservation and documentation, or potential language revitalization. This is of particular importance in my work, as many Indigenous languages are dying, morbid, or on verge of death. Linguistic anthropologists are always reminded to follow the standards of ethnical research and obtain informed consent prior to audio- or video-recording.

Besides the actual recording time, a very large number of hours are required to transcribe what has been recorded. For example, when doing sign language transcription, it takes me approximately six to eight hours to do a five-minute-long recorded video. The process can be

exhausting, because it requires a lot of mental processing. Given the amount of raw data I have, the transcription process could easily take a year or two simply for the documentation. However, once transcribed, the data could be used for analysis for many different purposes. For example, I could be looking for certain data for one study, then the next study might be a different focus but using the same recorded data. When this happens, the participants are informed of each different study and its purpose so that they will be aware.

Matched guise tests provide the linguistic anthropologist a means of studying language in many different ways. One example is when a researcher "read[s] a short passage in two or more languages or dialects (guises)" and has 4 or 8 people to listen to it, and then rank the passages according to perceived social hierarchies (Ahearn 2017, 60-62). In one of the examples, Garrett (2010) conducted a folk linguistics study of people's language attitudes about other people in certain areas of USA dialect maps. In the same chapter he did a comparison of the English language in different geographic areas, like Australian English, New Zealand English, British English, and U.S. English.

Written texts, which could be found in archives, historical society, museums, even in professors' file cabinets or boxes saved by families in their attics or basements, are of interest to linguistic anthropologists, because, among other things, they provide insight into how languages have been used in everyday communication during different eras. For Deaf people, texts could be from old teletypewriter (TTY) conversations on paper (Mozzer-Mathers 2002), in letters, or email. Ahearn (2017) explains it could be that people use everyday texts such as grocery lists. Other ways to identify written text is by surveying the linguistic landscape via billboards, posters or flyers posted on streets, in yards, or on campus. More recently, students write on sidewalks with chalk, advertising events that range from cultural gatherings to on- or off-campus parties.

Next, I turn to Indigenous research methods in order to compare them to other research methods mentioned here:

In recent years, many non-Indigenous researchers working in Indigenous communities may be familiar with Community Based Participatory Research (CBPR). This method has helped communities to heal from the historical traumatic events of past research ON Indigenous communities rather than WITH Indigenous Communities. However, Indigenous methods of research go far beyond CBPR. In fact, as Lambert (2014, 19) states:

> "In Western models, traditionally, the research project and the data are separate from the researcher. The researcher is an unemotional onlooker. There is no relationship to the data, to the culture of the informants, or to the informants per se. Quite the opposite in Indigenous models, the researcher is included in the research process. The researcher's voice, culture, and story are heard: The "Oneself," if you will, the heart of the research, and the passion of why the researcher wants to do that research."

As S. Wilson wrote (2001), we need to ask ourselves:

> "….how am I fulfilling my role in this relationship? What are my obligations in this relationship? Does this method [of research] allow me to fulfill my obligations in my role? Further, does this method help to build a relationship between myself as a researcher and my research topic? Does it build respectful relationships with the other participants in the research?" (177-178)

Historically, Indigenous peoples have always been "researchers." In the simplest terms, research is observing a phenomenon (problem statement), making a hunch (hypothesis), forming a question (research question), and systematically searching for the answer (methodology). It involves seeking knowledge, learning to hear, to see, to be aware, to use and trust our perceptions, and observing if the observable facts can be repeated. This kind of circular thinking links with the Western scientific method as well (Cajete 2000).

Lambert (2014) remarks that,

> "Our ancestors needed a researched knowledge of math, engineering, and their environment or "Place" to create housing structures. These activities required careful observations regarding the ecology, making hunches, experimenting by trial and error, and they gained knowledge from these activities. They may not have had the word "research" in their language, but they understood if they carefully observed and made hunches or hypotheses, they would be taught with Indigenous eyes how the world worked. However, over time, and through the influence of Western lifeways, the Indigenous research process was abandoned and forgotten by many tribal people as the concept of research became highly Westernized. The purpose of research became a scholarly, theoretical model of pure knowledge acquisition designed for the "Self" rather than shared with members of the community. The research agenda of Western researchers, especially with regard to Native peoples, was often to organize, define, and preserve Indigenous people in the context of Western thought." Lambert 2014, 22; Smith 1999).

Porsanger writes "…indigenous approaches to research on indigenous issues are not meant to compete with, or replace, the Western research paradigm; rather, to challenge it and contribute to the body of knowledge of indigenous peoples about themselves and for themselves, and for their own needs" (2004, 105). Today, Indigenous peoples are beginning to reclaim their research heritage by placing more emphasis on the role of research in ensuring our existence as unique tribal nations.

Indigenous Researchers apply many ways of gathering data. For example, attending a potlatch, a whale or seal hunt, setting up a talking circle where the researcher listens to stories of an event. In fact, there are several types of stories: Creation stories, historical, current day, participatory.

As Lambert (2014) states: "Stories or narratives are the origin of American Indian oral tradition and are the means for sharing knowledge and passing it from one generation to another. Stories build bridges between two interpretations of an event. Although stories are traditionally used to highlight lessons in morality or of confirming identity, in this work stories are used to tell

of peoples' experiences." Since time immemorial, Indigenous cultures and tribal stories have been passed down from generation to generation (Trimble, Sommer, and Quinlan 2008).

The Indigenous research methods I use are similar to that of Kovach's primary research, which "[h]onours sharing story as a means for knowing, conversation is a non-structured method of gathering knowledge" (2009, 51). While this may seem like another way of saying interview, the term interview does not capture the full essence of this approach. That to which Kovach is referring is very much a combination of reflection, story and dialogue (2009, 51). Wilson describes, "I used a combination of methods, including participant observation, interview with participants and focus group discussion, in this research — other authors use techniques used to gather data" (Wilson 2008, 40).

My conversations included open-ended interviews and questionnaires, rendered in American Sign Language. It is very common that the children of the Indigenous Deaf people serve as family interpreters, especially if the Indigenous hearing children have decided to immerse themselves in cultural events and learning as much as they can so that they can share it with their Indigenous Deaf parents.

Indigenous Methodologies from the Work of Hearing Indigenous People

Besides linguistic anthropology, and its way of studying the cultures and languages of different peoples, especially endangered languages, including signed languages, there are Indigenous methodologies that have been used by Indigenous people in different fields, applying Indigenous knowledge about our ways of being to various studies. I draw on different Indigenous scholars who have conducted this type of work since the 1990s, using Indigenous methodologies. What follows are some key components found in the literature.

To better understand Indigenous methodologies, I draw on Margaret Kovach's book, *Indigenous Methodologies: Characteristics, Conversations, and Context.* According to Kovach, "Indigenous" represents Indigenous peoples and culture (2009, 20). Besides Kovach, there are other Indigenous researchers have different ways of calling themselves, like, "American Indian" or tribal affiliation (Deloria and Wildcat 2001; Mihesuah 2005); "Aboriginal" in Canada and Australian cultural context (Kovach 2009; Lambert 2014; Smith 2001; Wilson 2008); "Native" (Keeshig-Tobias 1990; King 2003; Medicine 2001; Mihesuah 1998); "Native American" (Lovern and Locust 2013; Marcle 2008; Mann 2008; Piquemal 2001; Tall Bear 2013); "First Nation" (Schnarch 2004); and "Indigenous" (Smith 2001; Struthers 2001; Weaver 2001; Wilson 2008). As you see there are different names for Indigenous people across the academic literature.

My research aligned heavily on Kovach's Indigenous Methodologies, she explains, "Indigenous knowledge" refers to specific tribal way of knowing (2009, 20). Indigenous knowledges are shared commonalities and diversities of many tribal ways of knowing (2009, 20). Indigenous methodologies, plural, are meant to describe the theory and method of conducting research that flows from an Indigenous epistemology, as each tribe has their specific customs and protocols (2009, 20). This is similar to my research, using multi-epistemologies because of variety of tribes who have Indigenous Deaf people. Kovach emphasizes that, "Epistemology" means a system of knowledge that references within it the social relations of knowledge production and epistemology is not similar to ontology, which is concerned with nature of being and reality (2009, 21). The term "Western" is a descriptive term produced specifically for ontological, epistemological, sociological, and ideological ways of thinking (2009, 21). Indigenous methodologies are situated in a time, place and context (2009, 21). Additionally, narrative style is present, though the writing often shifts shape into other form

(Kovach 2009, 21) like sweet grass, the writing has three braids, comprising three writing styles: expository, analytical, and narrative, and is usually presented in first person voice (Kovach 2009, 21).

Indigenous Methodologies versus Western Methodologies

Recall in Chapter 1 the mention of researchers using Western theories, and appling them to research of Indigneous Deaf people—I would like to examine the differences between Indigenous Methologies and Western Methodologies in more detail. According to Kovach, to understand what Indigenous Methodologies means, requires dissecting a Western analytical lens versus the personally interpreted tribal lens, and comparing the two. My research focuses entirely on Indigenous Methodologies *not* from Western perspective. Traditional Western research consists of fact-finding, data, statistics, theories-oriented, and binary-driven research. These types of Western research are found widely in the vast majority of Deaf Education literature and Deaf Culture literature.

Conversely, we look at Indigenous Methodologies. For example, Kovach hints, "Honoring spiritual knowledge by offering tobacco to participants and to the Creator on a daily basis is an Indigenous tradition not usually found in Western methodologies" (2009, 58; Struthers 2001). In my many years working with universities and grant foundations, their anti-tobacco policies have been a problem for me. The universities and grant foundations base their policies according to US federal laws pertaining to tobacco. Indigenous peoples have a different perspective: tobacco is very valuable, as are other similar raw materials, which are used in ceremonies, prayers, and given to Elders and other honored tribal members.

There is a major need for Indigenous Deaf people to define "our identity, our culture, where we come from, and where we are going" (Cordova, et al. 2007; Garrett and Garrett 2002; King 2003; Kovach 2009; Lambert 2014; Wilson 2008).

The duration of my research has been shifting based on Indigenous Deaf participants' storytelling, experiences, ideas, communications with me, it is similar to other Indigenous research allows projects to be flexible, shifting in purpose over time, as opposed to Western methods of research, which tend to be narrowly focused and rigid (Kovach 2009).

My research work has similarities of Kovach's work, "Indigenous epistemologies emphasize the importance of respect, reciprocity, relationships, protocols, holistic knowing, relevance, stories, interpretative meanings, and the experiential, nested within the context of geographic place and kinship systems" (2009, 67). And Gregory Cajete wrote of "honoring the primacy of direct experience, interconnectedness, relationship, holism, quality and value" (2004, 66; in Kovach 2009, 34).

Another Indigenous scholar, Shawn Wilson, demonstrates four important Indigenous research paradigms, which I will share below. I am including my own ASL sign examples to demonstrate how each component is a way to help Indigenous Deaf people understand what is meant, based on our conversations in ASL. For those who are not familiar with ASL glossing: 1) any lexical item/sign is capitalized (i.e. EXPERIENCE); 2) the symbol "+" between two lexical items means the two signs are compounded into one sign; and 3) the symbol "++" after a lexical item means repetition use of one sign. I will use Wilson's research paradigm with addition of ASL translations, used to provide a meaningful conceptulization to the Indigenous Deaf people who participated in my study.

Epistemology

Epistemology is the study of the nature of thinking or knowing (Wilson 2008, 33). The signs I use for this concept in ASL are "EXPERIENCE + KNOW". Epistemology is how we receive knowledge and what we perceive as "real," based on our worldview, and that perceived reality shapes our thoughts. Epistemology is thus asking, "How do I know what is real?" (Wilson 2008, 33) My epistemological study is based on a mixture of open-ended interview, and natural-occurring conversation, storytelling, lived experiences of each Indigenous Deaf participant. It is based on our Indigenous Deaf worldview through visual mode, audiological mode for some of the participants who are hard of hearing, and non-sight sensitivity for DeafBlind Indigenous people. All epistemologies varied because of different types of education, communication style, comprehension of indigenous culture, and family relationship.

Ontology

Ontology is the theory of the nature of existence, or the nature of reality (Wilson 2008, 33). The ASL signs I chose for this concept is "FACT ++ COMPARE++" There is one "real" world, but we look at the world differently based on our sensual access, and what exists in our own world. Ontology is a way to attempt to discover some beliefs, values, and knowledge that we can agree on. Ontology is thus asking, "What is real?" (Wilson 2008, 33) My ontological study will be based on data collection and literature from Deaf Culture, Community and people along with Indigenous way of doing. The ontological study will be explained in next chapter.

Methodology

Methodology refers to the theory of how knowledge is gained (Wilson, 2008, 34). In ASL, I have chosen to sign "KNOWLEDGE++ STUDY ANALYZE," referring to how one will use knowledge in the examination of what is studied in the course of research. Supposedly, the ontology exists at various places, and so one needs to figure out how to use specific methods to find the various realities and attempt to understand what comprises epistemological information. Methodology is thus asking, "How do I find out more about this reality?" (Wilson 2008, 34). More details of my methodology of research will be described in next chapter.

Axiology

Axiology is the ethics or morals that guide a search for knowledge and the judgment of which information is worthy of searching for. To express this concept in ASL, I have chosen the signs INFORMATION FOR++ SHARE (or) NOT-SHARE. One's view of ontology will be reflected in what knowledge is worth seeking in order to better understand reality (Wilson 2008, 34). Part of axiology is determining whether or not the information should be shared. "What is it ethical to do in order to gain this knowledge, and what will this knowledge be used for" (Wilson 2008, 34)?

As an Indigenous Deaf researcher, I concur with other Indigenous researchers, Lambert writes "Ethics in Indigenous communities is more than human subject protection. It is protection of the cultural ways, ceremonies, language, and relationships with data, which go back to time immemorial in our history" (2014, 63; Castellano 2004; Wilson 2008). Like many Indigenous researchers, we are left with questions: Is the researcher collaborating with the community/ies? What are the agenda set by the researcher and the community equally? The biggest question that

we face, is not what the community can do for you as a researcher/doctoral student but what will our research do to benefit the community (Kovach 2009; Lambert 2014, 64; Wilson 2008)?

In my research, I will describe three important ethics when doing research on Indigenous Deaf people: Indigenous Deaf People Code of Ethics, Research Ethics and Protocol for Sign Language Interpreters working in Indigenous settings. When working with Indigenous people, I draw on Schnarch's work with Ownership, Control, Access and Possession (OCAP 2004).

A Note about My Own Experience

In almost every course I studied in the graduate programs I participated in, they always taught about the ideas of subjectivity and objectivity. From a Western research perspective, I often had trouble satisfying the methodologies as required by mainstream universities. I know now that my experiences in this vein are similar to those of many Indigenous researchers.

Wilson explains, "The idea that knowledge is approached through the intellect leads to the belief that research must be objective rather than subjective, that personal emotions and motives must be removed if the research 'results' are to be valid" (2008, 55-56).

My own experience with the Indigenous Deaf communities in North America do differ than what previous researchers have conducted; I do not write based on the old anthropological method called "otherness" or being "objective". I have long-term experience in Indigenous Deaf communities based on a sense of "subjectivity". My research style reflects that of Gus Palmer, Jr. (2003), a Kiowa anthropologist, whose work with Kiowa storytellers using Kiowa cultural context when communicating with the Kiowa storytellers. While doing *in situ* work, I use an engaging collaborative ethnography. I do a reflection after naturally occurring interviews or lived experiences, and continue with the open-ended conversations, which means participants have an

internal analysis of self-searching their memories by using Indigenous Deaf person to Indigenous Deaf person understanding of socio-cultural and Indigenous cultural contexts, incorporating the style of American Sign Language.

Palmer describes that storytelling would occur around one's closest relatives or a small intimate group, and stories are based on informing or entertaining (2003, xxiii). This parallels with Indigenous Deaf People, who, when sharing stories, usually do so with intimates or those who have an Indigenous-Deaf-Same mentality that is not typically shared outside of the circle.

As an Indigenous Deaf researcher, during interviews or conversations, my instincts will give me a way of asking the right questions and having a flexibility of direction in communication more appropriate to Indigenous Deaf cultures, unlike the researcher-led style of the past, generally performed by non-Indigenous scholars. During my research, I would come up with reading materials and reflect on how the topics might be applicable to Indigenous Deaf people; I am in continual communication with my research participants via video-phone. We have long discussions about what the topic at hand should look like through our socio-cultural lenses. The majority of the time, we had open-ended conversation, using signed language, within a folk-linguistics circle.

I am in agreement with Palmer about the idea that "too many translations of Native American oral stories have been rushed into publication" (2003, 30). I, too, have seen that with Indigenous Deaf people's stories and comments. This causes more harm than good with the work as whole—not just looking at the stories or lived experiences—but sign by sign, linguistically, missing gaps are likely to be seen in published journals. For years, the Deaf people in the broader American Deaf community and researchers have tended to rush me and want quick,

ready answers to what they want to know. It takes years to fully understand the complexitites of the lives of Indigenous Deaf people.

Literature on Deaf Epistemologies

Besides Indigenous Methodologies, I present different views and research paradigms. In this particular work, I am including Deaf Epistemologies because Deaf culture, Deaf identity, and the concept of a Deaf World are part of Indigenous Deaf people's lives on a daily basis; it cannot be separated because most of us were raised in Deaf residential schools. I have read a large amount of literature on Deaf people in general, and specifically about our culture. There are several references to Indigenous Deaf people in different subjects, but they fall mostly into the areas of rehabilitation, counseling and sociology.

Historically, D/deaf people have been and are being misinterpreted, mislabeled, exploited, and academically abused by different types of medical and educational professionals. All of this fall in the category of a negative entity as opposed to a positive entity, based on our socio-cultural and language identity as a language minority group. It is something worth mentioning and keeping in mind that Deaf education and Deaf culture does not always apply to Indigenous Deaf people, as it does not always apply to other Deaf People of Color; I will explain the reasons for this in Indigenous Deaf Methodologies.

I want to take some time to look at Deaf Epistemologies that have come up in recent studies. These are statements from Paul and Moore's chapter in "Deaf Epistemologies," which is discussed in scholarly literature about deafness (2010, 418). Individuals who are d/Deaf are visual learners. Individuals who are d/Deaf learn differently from hearing individuals. Anything based on sound/speech is not appropriate for d/Deaf learners. American Sign Language (or any

sign language) is the natural language of d/Deaf Individuals. The Deaf brain or the Deaf mind is different from the hearing brain or the hearing mind. Mainstream theories and research are inappropriate or not sufficient for understanding.

In the field of deafness (and even in disability studies), it is possible to argue that there are two major paradigms — clinical (medical or pathological) and cultural or sociocultural (e.g., see Paul 2001 and 2009; Paul and Moore 2010). Paul and Moore referred the Deaf Mind versus the Hearing Mind, which provides a point of research that one should not compare research on people who are hearing with research on people who are deaf, because they are two different types of people. The Deaf Mind, employs vision and use of sign language in conjunction with social and cultural factors like parents' status, ethnicity/race, gender and others. It is important to avoid any sound- or audio-based practices or research methods when working with people who are deaf (2012, 12).

Problem with Deaf Epistemologies

Based on my reading of resources on Deaf Epistemologies and other literature, I would like to discuss some issues that seem to be problematic. Deaf education materials are typically produced for white Deaf students. There is a major gap in curricula on ethnic cultures and ways of teaching used by parents of color, including Indigenous parents. Bilingual and bicultural Deaf education has been a methodological focus in many Deaf residential schools since the 1980s, (it is commonly referred to as the "Bi-Bi approach" by those in the field) but it has failed to provide teaching materials outside of Bi-Bi box. What about Indigenous people who speak or sign languages other than English or ASL? Most materials are not inclusive of Indigenous Deaf studies, Asian Deaf studies, Latino/a/x Deaf studies, and others. One of the themes of the chapter

is “Juggling Two Worlds,” referring to the Deaf World and the Hearing World, which may be good for an average person, but this paradigm is inapplicable to Deaf People of Color, who regularly experience juggling four or more worlds, depending on the individual.

Another problem with research on Deaf Epistemologies, from my perspective and through my experience is, to whom does this research refer? Typically, the research on Deaf Epistemologies targets Deaf people on east and west coasts of the US, or cities where a sizable Deaf population resides, but that does not mean the findings should be broadly generalized—they should not be deemed one size fits all. People who attend Deaf residential schools in small towns have different experiences from those in bigger cities. I personally attended the Oklahoma School for the Deaf, which is in a small town, so my lived experiences growing up were very different from the colleagues I met at Gallaudet University in Washington, D.C. Gallaudet is the only liberal arts university in the world specifically meant for people who are Deaf. Again, a “one size fits all” approach should be avoided when doing research in the areas of Deaf education, Deaf identity, and related areas; the findings are not immediately generalizable to Deaf students of color.

Deaf Culture and Deafhood Research

Deaf culture, Deaf identity, and the concept of a Deaf World have been topics of ongoing research. Some of the work has been and is being done by non-deaf researchers, some comes from Deaf researchers, and still others have been and are being conducted by hearing children of Deaf parents. I have been in the Deaf community since the age of five, as a result of a childhood disease, and have been in the community where Deaf culture, ASL, and the idea of a Deaf identity are all a part of the picture.

From the literature, I want bring up the authors who have submitted related chapters outlining some of the key components for Deaf Epistemologies: Deaf identity (a positive entity) and deafness (a negative entity) (McKee and Hauser 2012; Paul and Moore 2012); "Deafhood," introduced by Ladd in 2003, and "Deaf World" are commonly used terminology in the Deaf Community. "Deaf culture" and "Deaf identity" are two other terms (Lane, Hoffmeister and Bahan 1996).

Deaf epistemologies challenge scholars and others to reflect on audism in the production of theory and knowledge (De Clerck 2012, 20); Deaf scholars, particularly scholars from deaf minorities, are still underrepresented in the field (De Clerck 2012, 36); Multiple epistemologies (Ritzer 2001), as in plural — which means different kinds of epistemologies, "... includ[ing] education, familial/home experience, ethnicity, history, sociocultural factors such as the prestige and power associated with various authorities and institutions, and the beliefs and mores connected to a particular geography" (Miller 2012; Parasnis 2012); a metaparadigm, per Wang, is a hybrid paradigm that has boundaries which are intertwined with other paradigms, accepts multiple epistemological beliefs, including various methodologies, and it provides fluidity in research instead of being concrete in one method or paradigm (2012, 210); Deaf epistemologies refer to a Deaf way or ways of thinking or viewing the world (Kelly 2008; Ladd 2003; Wang 2012), drawing similarities with other marginalized ethnic and cultural groups; Audism—coined by Thomas Humphries, "Audism- (o diz m) n. the notion that one is superior based on one's ability to hear or behave in the manner of one who hears" (De Clerck 2012, 25; Humphries 1975, 43); Deaf people need two languages—ASL and English and two cultures (Deaf and Hearing) (Holcomb 2012; Lane, Hoffmeister and Bahan 1996); "Juggling two worlds" (McKee and Hauser 2012); "Deafhood" coined by Paddy Ladd, in his book, *Understanding the Deaf Culture* -

In Search of Deafhood, provides intensive resources on Deaf Culture; *Deaf in America: Voices from A Culture,* by Padden and Humphries, paved the way for a change and steered in the opposite direction from medical entities. There is also a long list of Deaf authors about their own experience and in academia.

In this chapter, I have covered three categories of research: linguistic anthropology, Indigenous Methodologies and Deaf Epistemologies. For the next chapter, it is my intention to combine all three research legs into one unit, called "Indigenous Deaf Methodologies," which serves as a means by which to show that the interconnectedness and interdependence of each research method and to add the types of information that are most-suitable for the holistic representation of Indigenous Deaf people.

Chapter 3

Indigenous Deaf Methodologies

Introduction

This chapter explores how I am crafting new research methodologies that differ from those generally used for research involving hearing Indigenous people or Deaf people in the non-Indigenous Deaf Community. My goal is to explain the purpose of my decision to use Indigenous Deaf Methodologies instead of using the traditional empirical methods that are embedded in the research conducted on Deaf people for decades. In doing so, I envision providing a meaningful research framework based on my relationship with the participants, in order to present an authentic and truthful representation of these people. Indigenous Deaf people express their Indigenous Deaf worldview from lived experience and via their sharing knowledge.

Most of us are responsible to our own Indigenous Deaf communities in different locations around what is known to us as Turtle Island, which is comprised of North America (North America). Historically, Indigenous Deaf people have been marginalized by the American Deaf Community, and therefore, often neglected and devalued in literature. Indigenous Deaf people have faced and continue to face cultural trauma, systematic discrimination, systematic oppression, stereotyping, being mislabeled, being misinterpreted, and a general lack of understanding on the part of the wider world. There is a need to reduce the gross generalization and inaccurate universalization of the lives and experiences of Indigenous Deaf people. This research explores the uniqueness of that particular group.

The proposed research framework has touchstones in each of the three subfields of anthropology and uses existing Indigenous Methodologies models, as described in Chapter 2,

applied to the Indigenous Deaf Methodologies. This research concentrates on participants' signed narrative, knowledge, epistemologies, kinship, linguistic considerations, and tribal culture. It is my aim to use this research for the direct benefit of our Indigenous Deaf community. This research will examine our communal needs in order to maintain cultural survival among hearing Indigenous people and non-Indigenous Deaf people, and discuss the problems which exist within our own, uniquely intersectional community.

This work is produced to meet the academic requirements for research at this level, and at the same time, to provide a reciprocal support to the participants and their tribes.

Why is the Current Study Important to Indigenous Deaf People?

The purpose of developing an Indigenous Deaf Methodologies is that it has never been formerly used. This is the first time an Indigenous Deaf researcher like myself has conducted a study such as this, and it is long overdue. The Indigenous Deaf Methodologies are in parallel with other Indigenous research methods. I identify with some Indigenous scholars (Kovach 2009; Lambert 2014; Smith 2009; Wilson 2008) who discuss the importance of having Indigenous researchers working in their own communities, and the importance of the research producing benefit for the community.

What is in it for the Indigenous Deaf community? It is crucial that my doctoral study has meaningful benefit to the community and to provide reciprocity (Kovach 2009). I quote Wilson when he said his friend told him "If research doesn't change you as a person, then you aren't doing it right" (2008, 83) I can relate to that, because as a researcher, learning about the Indigenous Deaf participants has changed me: the knowledge they shared with me leads me to become responsible for and careful with the knowledge about different tribes.

After my dissertation work, I will continue to work with the Indigenous Deaf community to develop communal solutions to communication barriers, training for Native interpreters, curriculum development, documenting endangered signed languages, and developing different projects that will provide bridges between hearing and Deaf Indigenous people so as to spark effective communication in the community.

Processes of Decolonizing Research

Because of differences in communication, many Indigenous Deaf people are culturally deprived by their tribes. Barriers can occur in the typical learning about their tribal knowledge shared orally by their elders and family members. It is rarity of Indigenous Deaf people to be raised with access to tribal knowledge regarding culture, customs and history. The luckiest Indigenous Deaf persons would be those who have one or both parents who can sign in order to communicate with their own child, thus sharing the traditional tribal knowledge with them. The majority of the participants in this research does not possess tribal knowledge and were likely to have learned Euro-centric curriculum at schools (Deaf residential schools and mainstreamed public schools), with the majority languages being English and American Sign Language.

Developing Meaning-Making in Our Community

Since the establishment of the Intertribal Deaf Council in 1994, the participants who attended many conferences are the producers of Indigenous Deaf meaning-making. Many culturally specific signed language lexical items had been created and incorporated into American Sign Language over the years, as many ASL signs are borrowed from Plains Indian Sign Language and other signed language varieties. The majority of the conference attendees

brought signs home to their local communities, spreading the signs among their surrounding Indigenous Deaf people who did not attend, which was like domino effect.

Historically, all of the meaning-making vis-a-vis terminology has usually been decided on and accepted by the IDC members before being shared with other Indigenous people. But something different has been happening the last three years, where several Indigenous Deaf people decided on one lexical item that is not based on consensus agreement among Indigenous Deaf people in United States and Canada. This has been a problem in the American Deaf Community, with non-Indigenous Deaf people intentionally causing a colonizing attitude and exercising oppression on Indigenous Deaf people. This is a violation of the Native American Languages Act of 1990 and Native American Indian Languages Reauthorization of 2014. At the same time, the majority of Indigenous Deaf people are not aware of these laws, which is information I have provided during the course of this research, to make others aware.

While doing my research, I engage my role as a linguistic anthropologist for endangered languages, providing my knowledge and support for the Indigenous Deaf community, by bringing up laws and policies that are embedded in the body of Indigenous hearing community and research. At the same time, I have interpreted what these laws mean, and how they apply to our signed languages. Many people are not aware that the laws protect our signed languages, too, and that the American Deaf community should respect our sign choices as Indigenous Deaf persons. I also have a role as an Indigenous Deaf elder as a part of the Council of Native Deaf Elders — a newly founded group meant to provide support and protection to our Indigenous Deaf community, with our goal of seeking peace and unity, and recognizing our responsibility in teaching of our tribal knowledge to our younger generations of Indigenous Deaf people.

Is Writing Important to Indigenous Deaf People?

Anything related to writing has been known as problematic issue for people who are Indigenous Deaf. Let me say it plainly: writing is the most difficult task that Indigenous Deaf people have. After reading hundreds of resources, I was thrilled when Linda T. Smith (2009) touched on the topic, asking, "Is writing important to Indigenous people?" Smith's section in her book, *Decolonizing the Indigenous Methodologies,* fits our Indigenous Deaf people. "Writing has been viewed as the mark of a superior civilization and other societies have been judged, by this view, to be incapable of thinking critically and objectively, or having distance from ideas and emotions (2009, 30)."

American Sign Language (ASL) is the primary language both of the American Deaf community and Indigenous Deaf peoples (in North America), and it is neither linear nor written, so our way of expressing our epistemologies is an oral tradition using ASL. ASL is a visual language and we use it to communicate everything about our tribal knowledge. Therefore, to be the most accessible, tribal materials written in English must be translated into ASL. Indigenous Deaf people prefer to tell their own stories through ASL, teaching and sharing with other Indigenous Deaf people who have no other way to learn tribal epistemologies. I must emphasize that relying on the written word can be perilous for some Indigenous Deaf people because they may not fully understand what is being written about them in academic articles, journals, and books.

For that reason, many non-native scholars, who tend to write in advanced academic terminology and jargon, making no sense to Indigenous Deaf people, can use that fact to their advantage, knowing that many Indigenous Deaf people will not be able to find out about any falsified information that has been written about them. LT Smith mentions in her book that

Patricia Grace describes how dangerous books can be because: "(1) they do not reinforce our values, actions, customs, culture and identity; (2) when they tell us only about others they are saying that we do not exist; (3) they may be writing about us but are writing things which are untrue; and (4) they are writing about us but saying negative and insensitive things which tell us that we are not good" (2012, 36). Indigenous Deaf people have experienced this type of colonized writing by white hearing and Deaf people. I have personally witnessed a handful of white researchers who used advanced academic terminology which is useless to the participant community and that does not contribute to our communal needs.

While doing research and having conversations with the participants, I have always endeavored to use everyday language, in ASL, rather than using advanced academic terms in English, and risking belittling participants. It is best to relate with participants on their own language levels, which means the researcher must have language competence themselves in order to adapt to participants' language needs. Smith stresses that,

> "Writing can also be dangerous because we reinforce and maintain a style of discourse which is never innocent. Writing can be dangerous because sometimes we reveal ourselves in ways, which get misappropriated and used against us. Writing can be dangerous because, by building on previous texts written about indigenous peoples, we continue to legitimate views about ourselves, which are hostile to us. This is particularly true of academic writing, although journalistic and imaginative writing reinforces these 'myths'" (2009, 37).

Some of the past and current literature has presented harmful texts about Indigenous Deaf people, resulting in misconceptions about and misappropriation of the real lives of this particular group. Some examples reveal that Indigenous Deaf people expressed themselves mainly through

the arts, a stereotypical myth reinforced by hearing scholars. One online deaf journalist mentioned that Plains Indian Sign Language uses only one-handed signs, which is linguistically ridiculous. I came across some signed narratives by the research participants and community members describing their experiences when past researchers questioned them excessively and they did not have the answers, but instead the researchers fabricated information that did not come from the Indigenous Deaf people. Several researchers have written about Indigenous Deaf people in their books and articles without actually consulting such people. These works all are based on assumptions that are never innocent.

My data collection has all been conducted in ASL and Plains Indian Sign Language (PISL). My notes are written in ASL gloss and imperfect English. My transcriptions from the video-recorded conversations are all documented in ASL gloss, without intensive linguistic-specific features. For the uninitiated, a gloss is as close to a word-for-word (or, in this case, a word-for-sign) equivalent, with little-to-no ASL influence by English. This type of rough translation is frequently used by many signed language linguists in United States (Liddell 2003; McKay-Cody 1996; Supalla and Clark 2015; Valli, et al. 2011) and around the world. Using a glossing technique contributes honors and values our primary language without having to think in English—the language of the colonizers, in other words, 'The Hearing Mind' (Paul and Moore 2012).

Writing in ASL syntax comes naturally to me, as it is the language I grew up with and valued the most with my Deaf Mind (Paul and Moore 2012). Additionally, I do not follow the linear or step-by-step rules of Standard English when I make my field notes, video notes, and you may have noticed that about half of the time our communication is in imperfect English through text messages and emails. In contrast, I am required to use academic English for my

dissertation. For me, and for my research participants, English expressions are not as rich in some aspects as those of ASL, which contributes to loss of meaning when ASL is translated into printed English. Both ASL and PISL are highly visual languages, and as English is not, there is the tendency for a lot to be lost in translation.

Methodology

In the field of anthropology, I am to find something applicable to my non-Indigenous research study. There are different types of anthropological researches; for my research, one of few methodologies is multi-sited ethnography (MSE). This methodology of study began with George Marcus in 1995 when he submitted his work to the *Annual Review of Anthropology*, he brought up the new way of doing the research through multi-sited ethnography on global economic comparison (Falzon 2009; Marcus 1995).

Marcus proposes that multi-sited ethnography had to do with the study of social phenomena that can't be "accounted for" by doing research on single site (Cook, et al. 2009; Falzon 2009; Gatt 2009; Marcus 1995). Marcus's framework is based on sites that are conceptualized and compared from globalization, transnational studies (Falzon 2009; Gatt 2009). Falzon explains that it does not mean 'location' or 'place' but it is also a "perspective', just some kind of "some form of (geographical) spatial de-centredness" (2009, 2). There are many research works that talk about multi-sited ethnography and the Malinowskian framework (single-sited participant observation). In that book, some researchers agree with MSE while the others disagree with it because it does not provide an extensive field study. All different topics were discussed related to MSE (i.e. economic, religions, geography, etc.).

In contrast, my MSE methodology is not similar to many studies conducted by hearing researchers because my research participants reside in spreading directions in U.S. and Canada. Most Indigenous researchers (Kovach 2009) focus on one community at a time, while others do two communities in different countries like Canada and Australia (Lambert 2014; Wilson 2008). Due to the fact that many Indigenous Deaf people are isolated in their own communities around Turtle Island, unlike hearing Indigenous people in one community that made a difference. It has nothing to do with "global economic" "religion comparison" or "transnational", this work is from different perspective. It is uncommon to find several Indigenous Deaf people in one site. During my research, there are only two sites that have more than one Indigenous Deaf person in the same location. During my research and field trips, out of 37 participants, seventeen were in-person interviewed on site (to where I have traveled to meet them), while the rest of the twenty participants communicated with me through videophone, which requires no travel.

Data Collection from My Research Participants

My research for this dissertation began in March, 2017. I contacted a total of 63 Indigenous Deaf people throughout the research but only 37 were interviewed. Eight people I contacted declined to participate; another eight people I had emailed but never respond (seven are past IDC members); and ten people communicated several times with me then stopped afterward.

I focused on the 37 participants: the age ranged from the youngest at 26 years old and the oldest at 80 years old. Twenty-five participants I already knew from IDC and other places, three I have known by name but never had the honor to get to know until now. Nine participants are new faces to me. The results show twelve states, two Canadian Provinces and the District of

Columbia as my sites, with twenty-six tribes represented. Besides my research participants, I have communicated with many other Indigenous Deaf people about their lives, and, wanting to know their Indigenous culture, I did not hesitate to consult with them as side work in my role as a community member.

During the research stage, three participants of the same tribe requested my assistance finding a language instructor to teach them their tribal written (not spoken) language. I contacted two language instructors, one never responds and the other one took a few months to respond then stopped after I introduced three participants to this language instructor. Having no luck on both instructors, I contacted the tribal office via language and culture program, they never respond.

A couple of participants contacted their parents for more information on their tribes' culture, history, and others. The parents expressed puzzlement as to why they wanted to know all of sudden. Nevertheless, they were obligated to help by providing information to their daughters and sons, which assisted participants in learning more about themselves and their culture. In all, I communicated with twelve participants on a regular basis, consulting with them on their search. We also discussed folk linguistics, sign language use in the community since IDC and variety of other topics. Certain participants and I communicated in PISL; they would test my knowledge of PISL and to keep me practiced, so I would not lose my PISL signing skills.

While MSE is a good reason to do research with different Indigenous Deaf people, the biggest challenge I faced with this current research was overcoming distance between my participants and me. Fortunately, we are in an era where I am able to meet this challenge via technology, and I conducted my interviews and conversations by videophone. I and some of my participants live in rural areas, which sometimes affected our conversations due to poorly

operating internet systems. Sometimes, our connection would get cut off or interrupted, or worse, our signs were unintelligible due to the low-powered wireless connection. This led to frequent repetition of our messages, requiring patience in dealing with technological difficulties in small towns.

Scheduling videophone dates and times for our conversations was sometimes tricky. There were times when I borrowed my community library's MiFi (mobile hotspot) device, which was a blessing, but its use is limited to one week, and then my name had to go back on the waiting list. Because that library's hours are very limited, there were certain times that I had to sit in my vehicle and use the videophone on my laptop — which was connected to the library's Wi-Fi signal. Other technological assets include the Glide and Marco Polo apps.

Sadly, with a rural connection, the video transmission is often intermittent or ceasing, and we were left to watch choppy and jerky signs that made no sense to us. Regardless, I was able to persist and gather the needed information. My home town finally made a minor improvement in internet systems after almost a year, which assisted my communication with participants while using a videophone and apps.

Insider and Outsider Relationships

What does it mean to be an insider/outsider? Being an insider reflects my role in my Cherokee Deaf community, and Indigenous Deaf community. As well I have a role in the Deaf community.

As an outsider, I will socialize with people outside of my tribe. I am an outsider in the Indigenous hearing community having no role or a limited one. As a researcher, I am an outsider to other tribes; usually I do not enter the community without accompanying certain tribal

member(s) of specific tribes. I usually visit places where I am invited to and if the community members wish for my presence then I will make an appearance for research or as friend/"sister" to some hearing or Deaf tribal members.

Many Indigenous Deaf people (research participants, community members, and I) are hesitant to participate in tribal events due to lack of communication access/no interpreters, and our understanding of how to fit in certain positions within the tribal circle, be it at meetings, dances, or any other type of event. As a result, this, we have been excluded from political discussion, and were not taught to be dancers. At one time an Indigenous deaf woman video-recorded herself, saying that I am not a dancer. She is correct because I was not brought up within the Pow-Wow environment, just as many others, who, like myself, went to Deaf residential schools and were not taught cultural ways of our people. Indigenous Deaf people are intimidated to participate in hearing events, and typically are bystanders, with only limited communication interpreted by family members who may know a few signs. There are certain times, when an interpreter hired by the tribe, without knowing that the interpreter does not know or understand tribal spoken language nor have the cultural knowledge to interpret. This lead to mistranslation of cultural information announcing by Pow-Wow master of ceremony (or announcer) to the Indigenous Deaf people. On the other hand, many Indigenous Deaf people who are taught the ways of their tribes, would know what is being said even though the interpreter mistranslating the information. This representing the "far outsider" of this particular situation. A more detailed way of hiring accurate interpreter can be found in Appendix A: Protocol for Sign Language Interpreter.

Hence, Cherokee and other southeastern tribes, which performed at stomp dances, and naturally dance at Pow-Wows, there is always a choice about which dances to go to. Even

though I am a Cherokee, I have never participated in a stomp dance; neither have many Cherokee Deaf tribal members (included three federal-recognized Cherokees). There are a small number of Indigenous Deaf people who are involved in Pow-Wows, because they were brought up in that environment (so they are considered insiders).

There are times when Deaf tribal members have invited me to witness certain ceremonies. From my personal experience and trained by different hearing tribal members, I intentionally request permission to be at the ceremony from hearing tribal members in charge or head female clan/society tribal members. This is a show of my respect for other tribes. If permitted to attend, I would sit and observe, but not participate unless asked to do so, because in instances such as these, I am still an outsider.

Being an insider would mean that I am heavily involved in Indigenous Deaf communities, and have intimate relationships with my communicative relatives (the detailed discussion of Indigenous Deaf kinship can be found in chapter 8). It also means I am a liaison between hearing and deaf tribal members, providing communication accessibility through translation, or assisting them with information that they receive from their tribes but do not understand. Indigenous Deaf people express their comfortable behaviors when mingling with other Indigenous Deaf people, because communication tends to be very fluent and much more extensive than when with hearing tribal members. In an insider position like this one, we can have debates, participate in the interdependence of shared knowledge, teach others, mentor others, and conducting ceremonies in visual ways different than how ceremonies are performed in hearing Indigenous communities. At the same time, it is likely that hearing tribal members would feel awkward participating in Indigenous Deaf events, meetings, and so on, if there were no interpreters (they would then become outsiders, too).

In another example of being insider, my Native colleagues (classmates or faculty members) and I were able to have extensive conversation using Indigenous cultural contexts through a designated interpreter who is familiar with the terminologies and signs that I use to provide effective communication without pauses. As opposed to getting an interpreter, who is clueless about our cultural context and would typically have pauses and interruptions to ask for explanation—such an interpreter would be an outsider.

Acquiring information is based on whether I am in my role as an insider or outsider. There are certain times where my roles blend. For example, during my fieldwork, one of my Native Deaf sisters (of another tribe) invited me to the Coming of Age ceremony with her tribe—we all were involved with berry picking and crafting. I was not excluded at the ceremony, because we are "kin." Our Deaf and Indigenous cultures link us as insiders.

Signed Narratives from Indigenous Deaf Ways of Doing

An important comparison of Indigenous storytelling styles is discussed here. According to Wilson (2008) sacred stories have specific ways of being analyzed: content, context and structure. Sacred stories can be told at different levels, depending on the listener (98). He emphasizes in Indigenous (hearing) ways, the first level includes the chosen ones being trained, tested and given permission as a storyteller to tell stories based on their people or tribe. The story should not be changed or vary in the telling (98). Then the second level refers to Indigenous legends as you read in books or have heard about. There are certain morals, lessons, or events that taken place within storytellers' experiences, and they are allow to shape the story based on their experience and the person who listens to the story, but the story and context must remain the same. And the third level is the story based on the first-person experience or another person's

experience. Typically, Elders will do lived experience or other's lived experiences, in order to provide counsel and teaching to other person(s) (98). Indigenous Deaf people who tell stories, do so in a manner that is not necessarily linear (98).

The style of Indigenous Deaf storytellers is a bit different than the hearing ones; some are sacred, but most of the stories are based on lived experiences, and include visual descriptions of any events related to the spiritual experiences. Most of them are not "trained, tested, and given permission" from their own tribes to allow such storytelling. Only a few Indigenous Deaf people are able to sign their stories in PISL or another form of tribal sign language; the majority of Indigenous Deaf people have converted their stories into ASL. At certain times, some Indigenous Deaf persons possess the communication competence of code-switching between PISL and ASL in their story. Some use sign language blending or just pure ASL, so it all comes in different levels, depending on the background of the audience, including educational levels and ages. The stories will vary but the context and content of the stories remain the same.

Methodologies I Used in Research

From the linguistic and socio-cultural anthropological standpoints, I used a mixture of naturally occurring conversation, questionnaires, interviews, ethnography, and data gathering and categorizing. While using Indigenous methodologies from Indigenous people who are hearing, this is the first time I have applied them to the Indigenous Deaf people, developing this study, and using our own tribal epistemologies to extend information through consultation and exchange of tribal information. All of my participants are members of shared-signing communities (Bickford and McKay-Cody 2018; de Vos and Zeshan 2012; Kisch 2012), which means both a general Deaf community *and* an Indigenous Deaf community.

While discussing with the participants, we shared and analyzed our Deaf epistemologies, but at the same time, blended Indigenous epistemologies, which were more, like a knowledge exchange between both groups. On occasion, we expressed our Native spiritual epistemologies, and some participants struggled to describe their experienced spiritual events because they did not know what others around them called it, meaning they had no name for it.

When I use my Indigenous knowledge and provide an explanation, a typical participant response would be something like, "yes, that-one, what name?" I then would fingerspell the word or provide cultural-specific signs that they could connect with the concept and then use. Due to the fact that these participants did not have access to training in Native spirituality from their tribal people, they have more memories of different experienced events, no terminology by which to name the experiences, so now they can match the puzzle pieces of these unnamed memories together with their newly learned names through their ethnographic process.

This is especially important, because as People-Who-Can't-Hear (the terms use in Native communities), we are all visually oriented and prefer to see objects, pictures, or videos over language-oriented explanations.

There are certain times hearing Indigenous people wondered about the show-and-tell style display, as they found it very fascinating, and started to participate in video-messages like the previously mentioned Glide or Marco Polo to illustrate signs in Plains Indian Sign Language. Indigenous Deaf people are not the only people that are visually-oriented, but hearing Indigenous people are, too. After beginning the ethnography of each individual who participated in it, a bridge emerged between hearing and D/deaf Indigenous people due to sharing cultural information. The participants went home to do more analysis of their tribes, began reading literature, and participated in some events more than before. Mihesuah (2003) explains her

coined term, "commonality of difference," where "a variety of solidly identified Native voices are needed to make certain that we are heard in fields that are dominated by non-Natives (31)." This applies to Indigenous Deaf people; my research has a "commonality of difference," where the participants shared their concerns and epistemologies, even though most of them were each representing different tribes with different goals and without facing some kind of intervention by non-Indigenous people. Kovach (2009) states that methodologies as a plural are used to refer to many tribal or Indigenous epistemologies within research interchangeably (20-21).

Due to the fact that my research falls on variety of tribes who have Deaf tribal members, the methodologies are more compatible with different tribal epistemologies and that is it not of Western worldview. I relate to Kovach's three long braided sweetgrass with weaving three writing styles: expository, analytical, and narrative (2009, 21), my research is similar but in signed languages rather than writing. There is a lot of similarity between hearing and deaf Indigenous people – we all use environmental elements to describe ourselves.

Relation, Responsibility, Respect, and Reciprocity

The importance of having these four R's in the Indigenous Deaf community must not be overlooked in the researcher-participant relationship. This is much lack among Indigneous Deaf people because of their usually life-long cultural deprivation, and so as a group, we are currently processing learning and practicing the 4 R's (relation, responsibility, respect, and reciprocity). This is when we shared lived experience, storytelling, and our experiences with oppression, colonization, marginalization, and kinship. We have responsibilities to ourselves and to other Indigenous Deaf people in our communities based on the four circles that illustrate where we come from and where we are going.

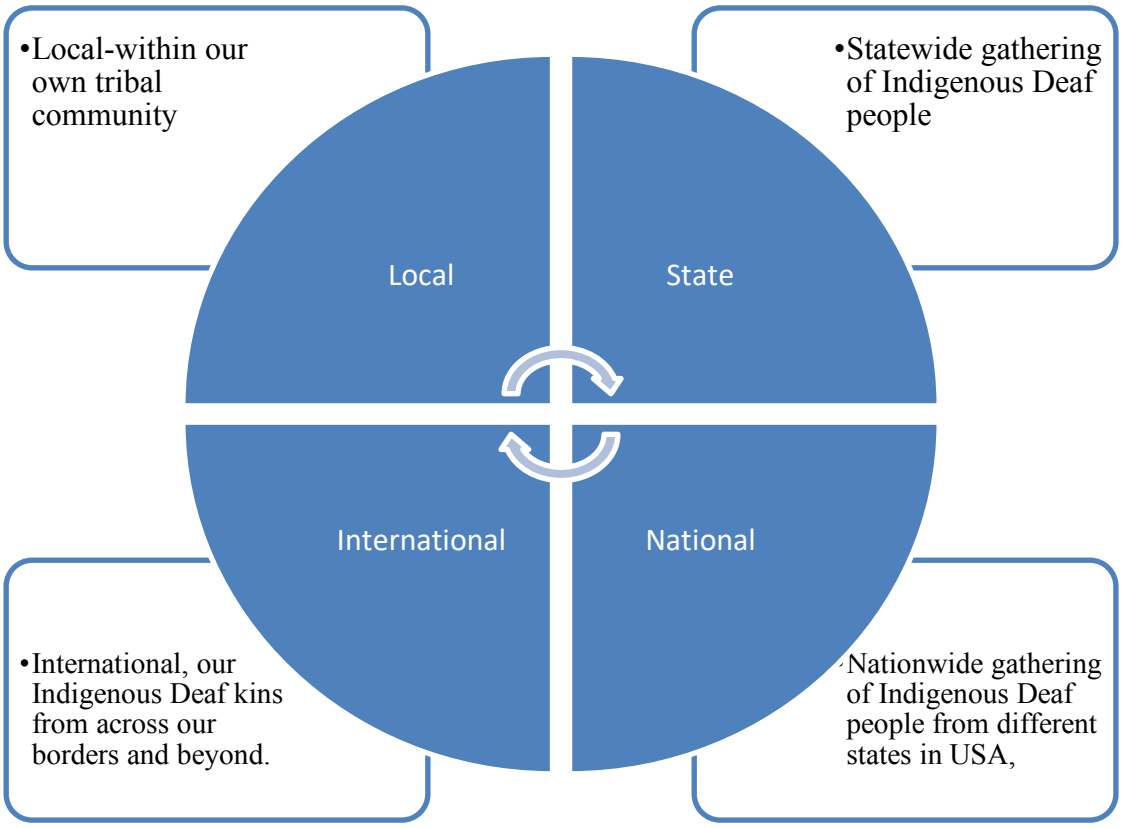

Figure 7: The four levels of connection

Respect for others is important—just like many other ethnic groups, we have four categories within our Indigenous Deaf community according to participants' preferences which group the feel comfortable in sense of belongings. In the past, at the national level in IDC, the problems within the organization were caused by political disagreements, cultural disagreements, and disagreements over our signed language, spiritual conflicts, racial measurement, and colonialization, among others. As stated earlier, many of the Indigenous Deaf people are culturally deprived within their own tribes, and are not taught the accurate traditional ways. This means they are often times strongly influenced by hearing and Deaf colonizers and American Deaf culture. It took years for the Indigenous Deaf people to cast aside certain American Deaf culture traits and to take up more Indigenous traits and develop respects for other tribes. This

transition of behavior leads to a feeling of cohesion as compared to 20 years ago, when Inter-tribal Deaf Council was established, sparking our learning about ourselves through often tumultuous decolonizing procedures.

Indigenous Deaf reciprocity is a bit different from that of hearing Indigenous people. Indigneous Deaf people, unlike hearing Indigenous people, usually take care of tribal members who live with different disabilities within our communities. Besides that, being deprived of our tribal culture, customs, and other knowledge has contributed to our emotional turmoil, leading us to desire rediscovery of who we are. Starting to decolonize the educational knowledge learned growing up, and replacing it with Indigenous ways of knowing was a beginning. Being who we are now, many of the older Indigenous Deaf people have absorbed tribal knowledge, and communicated with family members to learn more about themselves. And not only through family members, but we also have sought knowledge from other Indigenous Deaf people who have shared their epistemologies, and through reading literature. The older generations are now performing reciprocity by teaching younger Indigenous Deaf people within our own communities.

Epistemology: Deaf Epistemologies versus Indigenous Deaf Epistemologies

To examine these two groups, remember the discussion from Chapter 2 regarding the excessive use of binaries within the American Deaf Epistemologies: Hearing–Deaf, English–American Sign Language, and Bilingual–Bicultural teaching in Deaf education. Deaf residential schools typically overgeneralize Deaf children with bilingual and bicultural, by which they mean ASL and English, and American Deaf culture and general American culture. But schools for the deaf have failed to include multilingual and multicultural Deaf Education in the schools. Only a

handful of schools have Deaf teachers of color teaching in classrooms around the nation. It is no secret that curricula typically apply to White Deaf students, and are standardized by the state department of education in every state. Deaf children of color, including Indigenous Deaf students, are forced to assimilate to bilingual and bicultural but usually do not receive resources on their own tribal history, customs, and culture.

American Sign Language is the primary sign language taught at many Deaf residential schools but, historically, Deaf residential schools in the nation have discouraged the use of minority signed languages (Plains Indian Sign Language or tribal signs) in favor of the majority national languages (English and ASL), which has caused cultural trauma for many Indigenous Deaf people. Additionally, white Deaf instructors and staff members need to stop making decisions on tribal signs, and avoid bullying Indigenous Deaf staff and students about their own signed languages. This age-old behavior of destroying tribal signs needs to be halted; the state of this sign language loss is currently morbid according to the data on The Ethnologue.

Deaf epistemologies frequently repeat the term, "audism (see description in Chapter 2)." The audism talked about by the general Deaf community in America does not always apply to us in the usual way discussed as Indigenous Deaf people, but some of us definitely have experienced it in the family. Because Indigenous people experience oppression from different angles, as Deaf people, as Indigenous people, *and* as Indigenous Deaf people, it is unfair to use this term on hearing Indigenous people. In the Indigenous Deaf community, the term audism rarely appears in our discourse.

Disabilities Studies

During my 30 years of doing this work, I have experienced many awkward situations. For example, I have met some hearing Indigenous people who had a strong belief that their Indigenous Deaf relatives or children were born deaf due to someone in the family violating a tribal taboo or witching (Lovern and Locust 2013). Some people still believe that the wrong doings of their ancestors caused their deafness, as well as other disabilities. At a meeting in Oregon, some Indigenous Deaf people, including me, attended a gathering where a Navajo hearing elder regretfully commented about having a taboo about deaf people.

He told us, "I picked up a phone from an agency asking me if I would come and give 'a talk to dead people'." When he showed up at a room full of Indigenous Deaf people (and hearing interpreters), he had a bit of culture shock because he had never conducted a talk or prayer ceremony for us. To add to the misunderstanding, he was puzzled about the idea of talking to dead people, but nevertheless, he had committed to showing up, so he did. This is not an isolated case; it happens often in different places, and has been witnessed by some of the Indigenous Deaf people (and me) during the course of this research.

From my experience, I have noticed that much research about Indigenous people in disability studies usually neglects or only briefly mentions people who are deaf, and they do not show Indigenous Deaf people to be "disabled." Native professionals who work in Native communities have different descriptions of Indigenous Deaf people than science-based research generated by fields such as psychology, sociology, counseling, or data collected by vocational rehabilitation workers. Please be aware that there are people who have become more sensitive to issues facing the Indigenous Deaf population, and have incorporated native traditional ways in their work. The National Council on Disability (2003) has a document on "deafness" and the

"deafblind" in the American Indian Community. In 2004, University of Arkansas, Rehabilitation Center had a task force of "American Indian Deaf" committee members none of whom are enrolled members of any tribe (most of them are descendents of certain tribes) and do not represent the majority of the authentic Indigenous Deaf people. These documents were sitting on websites, or printed on paper, gathering dust. Many Indigenous Deaf and Indigenous hearing people are not aware of the existence of these documents. As mentioned before, written documents are not the best way to get the message across to most of the Native population. Such documents are only really useful to the rehabilitation programs.

On the other side of the culture, Indigenous people view differently from vocational rehabilitation. According to Dr. Carol Locust, there is no word for "disability" or "handicapped" in many Native spoken languages (Locust 1986; Lovern and Locust 2013). Disability is currently a Western terminology while handicapped is used in some communities, it depends on the discourse in different times (Lovern and Locust 2013, 75). When it comes to Indigenous Deaf people, in the past names were given to individuals like John Clarke (Blackfeet) 'Cutapuis' (Blackfeet word for 'the man who talks not') (Gannon 1981, 108), Jéehkal (Navajo word for loss of hearing (deaf or hard of hearing) (https://navajowotd.com), Tsuliena (Cherokee for Deaf) (www.thepeoplespaths.net); Ojibwe words: gaglibishe (deaf) and gagiibiingwe (blind) (Anishinaabemowii—Ojibwe Language webpage —weshki.atwebpages.com), in most Plains Indian Sign Language–HEAR + NO, or DEAF, and some tribes use the phrase "people-who-can't-hear." So you see, there are names but not anything denoting disability or handicap.

Beside, people-who-can't-hear, there is something to consider, which is called "Split Feathers," coined by Dr. Locust, it means Indigenous people who have been adopted or fostered outside of the Native community. There are some Indigenous Deaf people who are "Split

Feathers"—adopted by non-Indigenous families. Sasvari's master thesis described an Indigenous Deaf woman adopted by a non-Indigenous woman who is a Child of Deaf Adults (CODA). I know a few Indigenous Deaf people who are Split Feathers, and they have an emotional struggle with two worlds, which is known as "between worlds" or "two worlds walker" (Lovern & Locust 2013, 210-211).

Certain tribes are overprotective of their disabled members. To the Indigenous communities, each individual has a task and can become a functional member of the society. The description of disabled people serving their communities can be seen in Lovern and Locust, 2013, on pages 104-105, with developmentally delayed people ("slow learners" as in Indigenous communities). While living on the reservation in the summer, I witnessed Indigenous Deaf people who are well respected in their community. My experience is with one Deaf elderly woman was that she contributed quilts for fundraising, she made beaded moccasins for her family members, and she served as consultant for PISL and tribal historian. She has quite a wealth of tribal history that benefit other hearing Indigenous people.

Unfortunately, other tribes do not recognize the skills of each Indigenous Deaf person. In these cases, that is why they decided not to return to their tribal communities after graduating from Deaf residential schools. They may still visit their tribal communities when necessary, but often times without an interpreter, so communication is limited.

Axiology: Ethical Responsibilities

Prior to beginning any research, researchers who want to do research on Indigenous Deaf people must ask themselves what is in it for them, and how will it benefit the community—is it for their personal gain or for attention from the academy? What purpose will it serve the

Indigenous Deaf people? What are the real axiological ethics from Indigenous methodologies? Axiology that reflects ethical means does protect the cultural ways, values, ceremonies, sign languages, history and ways of being and doing of the Indigenous Deaf people. The researcher must decide whether certain behaviors will be a good or bad decision (Castellano 2004; Lambert 2014; Wilson 2008). Whenever a researcher is working in Indigenous communities, a Native protocol has to be in place and followed. The protocols are usually developed by the tribes or community to benefit their communal needs (Lambert 2014). From my experience, Native protocols can be found by contacting the Tribal Historical Preservation Office or Tribal Chair Office.

Because the Indigenous Deaf people do not have protocols set in place, there is a major need for protocols and codes of ethics. There are included in this dissertation three ethics developed by the Indigenous Deaf people, and Indigenous/Non-Indigenous interpreters, because it is lacking in the literature and there seems to be none in existence.

It needs to be left up to Indigenous Deaf people to make our own decisions. Kovach (2009) and Wilson (2003) reveal the importance of Indigenous methodologies: is the community collaborating with the researcher? Satisfying community needs should be strongly prioritized, not the needs of a researcher who want to earn a degree. This is an ongoing problem within the Indigenous Deaf communities, just like any Indigenous communities, where researchers do not work for the community, but need something to write about in order to get degrees. This is not helping the communities at all. For this purpose, three sets of ethical guidelines have been applied or developed, the first set of ethical guidelines is OCAP, and the others are found in appendices A and B.

Ownership, Control, Access, and Possession (OCAP)

Brian Scharch introduced this principle of Ownership, Control, Access, and Possession (OCAP) when he did his research with First Nations communities in Canada. It was created by the Steering Committee of the First Nations Regional Longitudinal Health Survey. This research accompanied the critique of past colonial research and noted that contemporary research should provide a meaningful procedure of doing research with the health of the Aboriginal people. For my research, I have applied their Health analysis as our Indigenous Deaf people analysis.

Ownership

Ownership belongs to the Indigenous Deaf People who possess the signed language, culture, knowledge, and ways, which means the community owns the information individually and collectively. As for the Indigenous Deaf researcher who also is a community member, she/he also owns her/his signed language, culture, and history, and is also able to share information cross-culturally.

Control

This provides for the rights of the Indigenous Deaf people "to maintain and regain control of all aspects of their lives and institutions, extending to research, information and data (Schnarch 2003:81)." Indigenous Deaf people have the right to oversee the research and information conducted by researcher(s) because the information will impact them. Control also involves resources, and how the data is managed within the research.

Access

The Indigenous Deaf people must have access to the data and information collected and recorded by researchers who write about the communities, their lives, history, and the like. Authorizations should be required from the appropriate Indigenous Deaf communities concerning decisions connected to the data, in an effort to ensure tribal protocols are followed.

Possession

Possession is different from ownership. Ownership is connected to the relationship between the studied people and the information that the researcher collected, or stewardship of something belonging to the community. Schnarch emphasizes, "possession (of data) is a mechanism by which ownership can be asserted and protected (2004, 81)." When the data or research materials owned by one person/party is in the hands of another, this could lead to breech or misuse of the data, resources, stories, and experiences of the subjects. That means that the possession portion of this formula is an important agreement between the researcher and the participants based on trust. This Indigenous Deaf People to become aware of the data available to them, so that they can ask more questions before accepting their involvement in research.

Do No Harm

I must emphasize this situation, which was my experience with some previous researchers. It is important to discuss the "Do No Harm" clause in consent forms and any written documents. I have debated with some non-Indigenous professors and Institutional Review Board office people regarding "Do No Harm" — the term, per se, is generally applied in a very vague way regarding the description of "Harm"... most of the items listed have to do with medical

harm. But these no-harm statements have always failed to understand or respect the spiritual harm that has occurred in Native communities, which some of my research participants and I have witnessed during prior fieldwork. Luckily, at my current university, the IRB office has IRB consultants from each tribe in Oklahoma. This is what is lacking in many universities: the respect of spiritual practices among the Indigenous people. I and other Indigenous Deaf people have repeatedly witnessed intentional harm during spiritual ceremonies by a non-indigenous researcher and some Deaf community members. Many times, the unintentional behaviors by non-Indigenous and Indigenous Deaf and hearing people during the ceremonies were taken care of by traditional Indigenous Deaf people through teaching and through communicating the seriousness of their behaviors with discipline.

It is important to have these three ethics in place to protect the Indigenous Deaf people, and there is a need of educating with the tribal administrators about the past research exploitation. There is also a need to work with the universities on our Indigenous Deaf people vulnerability and to make sure harm does not come to them.

Chapter 4

Our Ancestral Linguistic Landscape and Sign Language

> I understand the assumptions: first, that stories, in order to be complete, must be written down, an easy error to make, an ethnocentric stumble that imagines all literature in the Americas to have been oral, when in fact, pictographic systems (petroglyphs, pictographs, and hieroglyphics) were used by a great many tribes to commemorate events and to record stories.
>
> (King 2003, 98)

Introduction

Chapter 4 explores the ancestral linguistic documentation found in rock art (petroglyphs engraved on rock surfaces), that goes farther back than what has been recorded in the writings of explorers' journals and books as mentioned in Chapter 2. My study is not based entirely on an archaeological perspective, but instead, is also inclusive of an art history perspective. I will discuss the research conducted by Elizabeth Hill Boone and James Elkins, art historians who understand the visual representation of pictorial images in their work as writing that has challenged other scholars to look at the meanings of "writing" and "not writing." Ideas of what constitutes "writing" and "not writing" applies similarly to the work of LaVan Martineau, rock art cryptanalyst, and of Carol Patterson, archaeologist/cultural anthropologist. Besides the work of these researchers, I aim to introduce the ideas of "linguistic landscape" and "ancestral linguistic landscape" when discussing rock writing in this chapter.

In the next chapter, I will contrast this with Indigenous peoples' worldview (hearing and Deaf) based on non-glottographic, and non-alphabetic ways of knowing and methods of doing research. Our Indigenous spoken and signed languages are a part of our intergenerational transition from the time of arrival at different North America sites to current time. The current

time is our present, according to our Indigenous Deaf people's worldview. The Indigenous Deaf peoples' transition into the future will naturally lead us in our language revitalization.

Besides the natural expression of sign language, I will discuss sign language as also being depicted in "writing" (in spite of the fact that most signed languages do not have a corresponding orthographic system). For the purposes of the present study, "rock writing" will be defined as rock art that possesses semasiographic features — it is designed to convey meaning, as well as structure, grammar, and/or syntax.

This study will address one of the many rock art panels on the Northern Ute Indian Reservation in Utah as well as the Kiowa rock panel in Texas. A panel is a composition of petroglyphs, which are images that have been pecked or engraved on a rock's surface. I use semasiographic coding systems to identify what is on the panel for archaeological purposes, so that archaeologists can relate to it, because many are not familiar with sign linguistic research. Thus, I hope this chapter will construct a bridge between archaeology, art history, and sign language research.

Recognizing the difference between rock art and rock/picture writing relies on information from various perspectives. The necessary information comes out of archaeology, including those who specialize in rock art, geologists, art historians, and Indigenous people. I argue that at least two other important perspectives have been overlooked or dismissed: there is no existing information about rock writing from either an Indigenous Deaf or non-Indigenous Deaf perspective, for example, sign language linguists or linguistic anthropologists who are intimately familiar with signed languages.

Signed languages are the most valuable form of communication to Indigenous Deaf people. During the course of this research, a discussion was brought up about the origins of the

signed languages carried over by our ancestors. It is Indigenous Deaf people's desire to explore the past by communicating with descendant communities of the original rock artists, because their descendants should possess tribal stories. It is important to understand the creation of rock art in the context of transliteration from a story expressed through a signed language into a semasiographic form, in order to change the mindset that writing is inherently glottographic. Indigenous Deaf people and non-Indigenous Deaf people are immersed in visual modes of communication, and everything they see around them may be encoded visually (as opposed to orthographically). Therefore, the analyses of visual narratives by people who are Deaf is not equivalent to those hearing people, who rely heavily on orthographies and phonological of spoken languages. It is possible, though, for hearing people who grew up in Deaf (read: highly visual) environment or hearing Indigenous people who were taught the traditional ways of Indigenous storytelling to have the ability to apply their knowledge of tribal signed language and tribal spoken languages to the analysis of rock art and rock writing.

Historically, in North America, signed language linguists have based their studies on non-Indigenous worldviews and directed their attention to European countries for the origins of signed languages, typically neglecting the origins of Indigenous peoples' signed languages here. For my case study, I am focusing on a historical period that can be supported by ethnographic literature: AD 1700-2000.

During my research on signed language representation in ancient rock writing, I discovered a gap in the existing literature. There are thousands of petroglyphs and pictographs in the western portion of the United States, which drew me to that area for my research. I am interested in locating tribal signed language symbols depicted in the petroglyph panels, as described in the studies of Martineau (1973) and Mallery (1881).

Patterson's (2016) study of Ute rock panels with Clifford Duncan, a hearing Ute elder, resulted in a wealth of knowledge pertaining to Ute history. Duncan also used Ute sign language while working with Patterson (pers. comm., Feb. 2018). Duncan's skills were of great benefit in identifying signs depicted on the panels that were not recorded in either Martineau's or Patterson's work before that.

Scientific-Based Western Worldview

To understand rock writing from the perspective of scientific research, it is important to understand what "writing" is. In ancient times, Indigenous languages were expressed using writing systems through picture writing (Mallery, 1881,1889; Martineau, 1973; Patterson-Rudolph, 1993; Rajnovich, 1994; Tomkins, 1969). This leads to the question of how these scholars analyze languages and how writing fits into their perspectives. Sampson (2015) explains that, to him, writing is defined as way to "... communicate relatively specific ideas by means of permanent, visible marks" (2015, 18). This is important, because he continues to say, "The term 'permanent' is included in this definition because we would not normally count, for instance, the sign language used by the deaf and mute as an example of 'writing'". Boone emphasizes that this statement by Sampson embraces semasiographic and non-verbal communication systems, equivalent to other spoken languages, even though Sampson goes on to state that writing represents spoken languages (2015, 18-19).

Figure 2 is a diagram provided below to describe two different systems for looking at languages: one is semasiography (signs, pictures, or icons) and the other is glottography (words,

sounds, speech) (Boone 1994, 14). In Sampson's description, glottography has to do with logographic (based on word units and morphemes) and phonographic (syllabic, segmental, and featural) writing systems (2015, 20-6). Boone (1994, 15) notes that Sampson and Gelb coined "Semasiographic systems." The term combines the Greek word "semasia" meaning "meaning" with a "graphic" presentational style to indicate those graphic systems of communication where marks communicate meaning directly, and within the structure of their own system. According to Sampson, semasiographic systems are able to provide communication equivalent to, but separate from, spoken language. (199, 14-15).

A glottographic writing system is used for most languages while semasiography describes a more "full-scale writing system [that] is a theoretical possibility rather than an actually occurring type of script" (Sampson 2015, 22). In Sampson's words, glottographies are true writing systems while semasiographies could theoretically work, but are not used in actuality. I disagree this because semasiographic studies of rock writing reveals intentional use of pictorial language including signed languages—it is visual transliteration, not a contrived orthography based on a spoken language. Due to their visual-spatial natures, American Sign Language, North American Indian Sign Language, and other signed languages are documented in writing using a glossing system (notation), which is a mixture of semasiographic and glottographic (excluding all acoustic phonology and replacing it with manual phonology and manual morphology) methods. Sampson's work did not consider these linguistic facts as possible parts of semasiography, because his concentration was on glottographic analyses as seen in the chart below.

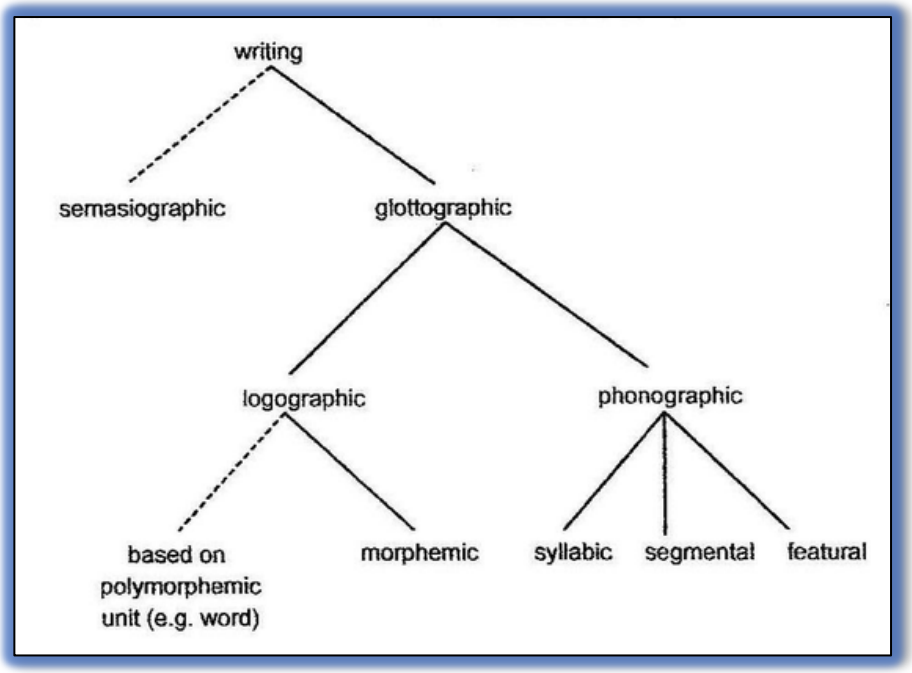

Figure 8: Diagram according to G. Sampson's Writing Systems.
Bristol, CT: Equinox Publishing, Ltd. (2015, 24)

I will focus on the semasiographic aspect of communication in my study and apply it to what has been traditionally regarded as merely rock art. The lens I use for this dissertation is that rock writing is a semasiographic act, and is a subset of rock art.

The work of Elizabeth Hill Boone (1990) challenges many scholars of writing and literature in the field. She details her dealings, not with writing, but with things that have been historically considered non-writing. Although difficult, she asks us to change our focus from glottographic and alphabetic writing to more graphic systems developed by other groups of people who possess culture-specific pictorial languages, which they use for recording their own histories. These graphic pictorial notation systems are types of communication divorced from speech, but used for documentation of information in order to satisfy both record-keeping and epistemological ends (2004, 313). Boone, who is an American art historian, studied Mexican pictography, especially the Aztec, Mixtec, and Zapotec groups, from their pre-Columbian period.

Through their pictorial histories, almanacs, and pictorial folding sheets she found representation of historical information, personal names, rituals, communal events, ceremonies, and clothing of that period.

Semasiographic System

There are many kinds of semasiographic systems that are non-alphabetic. For example, Boone states that "semasiographic systems that support the sciences, mathematics, logic, music, dance, and statistical analysis" are widely used (2004, 314). Many fields routinely use non-alphabetic writing, which we refer to as "notation." Boone mentions earlier researchers (Derrida 1976; Harris 1995; Wrolstad and Fisher 1986), whose work suggests that "writing should be recognized and studied as a graphic communication system rather than solely as a speech-recording system" (2004, 315).

She mentions a need to avoid a false dichotomy of words versus images, where an unfair judgment has been made in favor of alphabetic writing (2004, 334). The same applies to comparative research on rock art images and signed languages—as long as this kind of study falls under semasiographic research not the glottography. There is a large literature of rock art research coming from the glottographic view, but the literature on semasiographic rock art is rather small so far. For example, Martineau (1973) and Patterson (1993 and 2016) have struggled in their attempts using semasiographic codification to identify pictorial images on rock panels.

In contrast, many rock art specialists pursue glottographic research on pre-Columbian Maya glyphs because of their focus on sound-based analyses of hieroglyphic scripts, which represent logographic and syllabic phrases and sentences studied by archaeologists and linguists. At the same time, other Mexican Indigenous pictorial languages such as Aztec and Mixtec were

neglected until Boone's work on Mexican pictography. Boone uses ideas of spatial syntax involving the creation and direction of structure, and the principles of sequence, proximity, inclusion, and exclusion. It is evident that the semasiographic systems represent two-dimensional or three-dimensional spaces, instead of relying on the linear, unidimensional nature of auditory and verbal channels, to be accessible through sight, and to allow for the interpretation of whole narratives of visual events. Vocal language has a one-dimensional sequence, so the two fulfill distinctly different functions. Boone explains that what the mind sees directly, though momentarily, is encoded into memory, and the mental visual concept of the events offers "structural equivalents to all characteristics of objects, events, and relations" (2004, 318).

For the present research, I use only examples from the known historical period because there is supporting documentation.

Elkins' Tripartite Model

Boone follows James Elkins' work with a tripartite model of "writing," "notation," and "picture." Elkins stresses that the "purest sense" of writing is alphabetic. But there are different types of writing besides alphabetic writing; there are notation systems like algebraic notation, and picture as the "image" of word-and-image (1999, 85-98). Boone applies Elkins' tri-lobed model as a heuristic device for analyzing graphic systems. She continues to say, "its three lobes – writing, notation, and picture – are natural realms that reflect the way we interpret graphic" (2004, 334). If you take this three-part model, then, "[b]etween picture and notation are diagrams and models, charts, and graphs, although these may also have a smattering of writing." In her study of Aztec and Mixtec pictography, Boone finds that they possess more use of picture than diagrams, and fall within the area that overlaps with writing (2004, 335).

What is Rock/Picture Writing?

The scientific literature on rock art contains hundreds of publications about rock images worldwide. The rock art reveals the lives of the people, and depicts flora and fauna of the eras of creation, as well as recording the languages of their associated regions. My research took me to Utah, where I analyzed several historic Ute rock panels. Before I delve into the analysis, I will explain how rock art specialists have conducted their fieldwork in different locations around the world.

For this part of my research, which leans heavily on linguistic anthropology, I used semiotics and pictography, analogy and iconography, and functional analysis.

I am not an archaeologist. My expertise is in North American Indian Sign Language (NAISL), or "Hand Talk," as it is known in the Native community. Plains Indian Sign Language (PISL) is one of the language varieties of NAISL, and I have studied it since 1994—I have immersed myself in several Native communities where PISL is still in use. Rock/picture writing is the term I will use throughout the rest of the chapter. This term is commonly used in the Native Community in English. R. Freeman (Eastern Shoshone, socio-cultural anthropologist, pers. comm.) explains that each tribe may have their own term for rock/picture writing based on their own tribal spoken language, and in some cases a tribe may have a gesture that refers to the use of their tribal signed language. It is also important to recognize the communal understanding from the descendant communities who acquired tribal sign language from their elders. Shanandoah Anderson (daughter of LaVan Martineau) states, "Some people were experts at writing the signs in shorthand because it was the simplest form or chiseling on the rocks, saving

both time and energy, while others chose to carve more elaborate, full pictures, depending on how great or important the history, legend or topic was." (2018, 16)

Reading rock writing proves challenging, and is not always possible. It takes a long time to analyze it, and to understand it within the context of the culture and the people who created the pictorial histories on rock panels. Anderson described the toughest task that her father had to do, "Some panels were harder to read, almost like going from print to cursive, and that is why my father had trouble deciphering some panels, as it was a completely different style of writing" (2018, 16).

Indigenous people produced rock/picture writing for centuries that referenced their own tribal signed languages, before they were forced into boarding schools and made to learn and use linear, alphabetic writing, in the languages of English, French, and Spanish, depending on where they resided.

According to Keyser and Klassen, "all rock art is a system of visual communication similar to a language," and they suggest that it can be understood in linguistic or semiotic terms (2001, 31). The authors emphasize that each image has symbolic meaning and "recognizable patterns" in order to record a combination of signs (in signed languages, some concepts require more than one sign, routinely used in a recognizable pattern, in order to communicate the concept in full; therefore, it stands to reason, that when creating such concepts on rock, a similarly recognizable pattern of symbols would need to be used). They caution that, when doing a study, one needs to be mindful that "without information about the meaning of the signs themselves, however, semiotics cannot provide direct evidence of what the images communicate. Semiotics assumes that all pictorial images are organized on the same basis as verbal language" (2001, 31-32). Keyser and Klassen lightly describe rules of grammar and syntax when they say,

"symbols are arranged in sequence to convey information and pictographic systems use readily recognizable symbols, so they can often be loosely translated by people outside the culture which produced them" (2001, 32). This statement may be true; the knowledge of the grammars of signed languages helps us understand the images we see on some rocks. For instance, LaVan Martineau and Carol Patterson were able to record rock images with sign language equivalents in their work, which is not found in other rock art literature. Unfortunately, Keyser and Klassen, as well as most archaeologists, make no mention of tribal signed languages in their written materials. This lack of recognition of the contribution of signed languages to rock/picture writing is problematic.

If one asks visually-oriented people (such as Native or Deaf people), they would have a different perspective on iconic images. As an example, Shanandoah Anderson, who is Paiute, understands iconic images and the signed language interconnection, and states, from her Indigenous epistemology,

> Any picture writing system based on this sign language would therefore have to be similarly universal. If you signed for a deaf Indian child to draw a picture of something he wanted, such as a drink of water, would not that child draw himself drinking with a water sign/symbol? If his name was Bear, he would draw a bear drinking from a stream. Most people find this writing concept hard to believe because they do not understand the Indian mindset" (2018, 16).

This is because the knowledge and use of signed language brings one's expression alive in a three-dimensional narrative. Such a visual lens allows signed language users to notice the representation of language within the images, not just the lexical items. As I have mentioned before, many archaeologists are not trained in sign language; some are unaware of its existence or are ignorant of its authenticity, and therefore do not have the proper lens with which to interpret such images.

Scientific-Based Western Archaeological Studies

Who are Rock Art Specialists?

It is important to note that contributors to rock art studies are not just archaeologists, but specialists that come from many different disciplines. They are geologists (who analyze the mineral components of the rock surface), geo-chemists (who analyze the paint material of rock paintings in the laboratory), ethno-botanists (who identify plants depicted in the rock pictures on the site), ethnologists, linguists (who focus on the languages of the people of the past) and cultural anthropologists (who study the cultures of the past), along with the archaeologists (who study human and materials remains on the site). All of them have expertise that contributes to our understanding of rock writing.

Rock Art Dating System

How do we know how old a rock carving is? Archaeologists recognize that it is nearly impossible to know when a rock was worked, and this poses a challenge for all of them. James D. Keyser, an archaeologist, believes that reliably determining the age of petroglyphs and pictographs poses a major challenge unlike that of assessing the age of other types of artifacts and deposits, which can be identified through radiocarbon dating methods, soil tests, or other chronometric techniques. Most archaeologists agree that petroglyphs cannot be dated, but pictographs can, with paints dated by radiocarbon or other types of testing (2001, 126).

Keyser notes that rock art specialists often use a method commonly referred to as relative dating, which tracks the development of styles and drawing techniques, providing a general chronology for a large corpus of related rock art. So while absolute dating can be done for the

painted pictographic rock images by analyzing the carbon bearing deposit from binders in the painted images on the rock panels, pecked or carved rock images cannot be dated absolutely, because there is not any carbon from an external source present in rock mineral surfaces. New techniques such as x-ray diffraction are mentioned by Keyser as a potentiality to one day provide more dating information on surfaces not bearing carbon from an external source.

For example, we know that the spear-thrower/atlatl was present from the early Archaic through the Formative periods in Colorado Plateau, 6,000 BC–AD 400, which lets us date images with those weapons to that general date range. The bow and arrow were introduced and eventually replaced the atlatl around AD 400 in Colorado Plateau. The gun appears around AD 1750-1800. Depictions of these artifacts serve to provide a relative chronological sequence for dating the rock art. The changing historic periods introduced many new technologies, people, fauna, such as horses, cows, and guns, all of which appear in rock art and serve as chronological indicators.

Comparison of Modern and Ancestral Linguistic Landscape

Modern Linguistic Landscape

An important concept in understanding rock art is the notion of a *linguistic landscape.* First, we must take a look at the epistemologies of people who live in modern times. I am referring to Backhaus' linguistic landscapes (LL) studies, and how he defines *linguistic landscape*. He writes, "Exploring the semiotic background of written language in public space, it will be held that language on signs is a specific type of language use distinct from most other forms of written and spoken communication in everyday life" (2007, 4). Landry & Bourhis state this as "the visibility and salience of languages on public and commercial signs in a given

territory or region. The language of public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings combine to form the linguistic landscape of a given territory, region, or urban agglomeration" (1997, 25; Backhaus 2007; Gorter & Cenoz 2007).

We live in world full of signs (placards), no matter where we are. This can provide valuable insights to the linguistic situation of a given place — the patterns of how signs are posted for people in the community to see, ranging in size from small signs to large billboards. From the semiotic standpoint, signs reveal meaningful information, allowing for quality interpretations. All signs are either for a non-specified group or for one specific language group. Gorter & Cenoz describe this by saying, "the study of the linguistic landscape focuses on the analysis of the written information that is available on language signs in a specific area" (2007, 2). Such study can provide a "different perspective on our knowledge about language" (2007, 2).

Backhaus draws on the theoretical framework of the Swiss linguist Ferdinand de Saussure (1857-1913), and the semiotics study of US philosopher Charles S. Pierce (1839-1914). All signs involve a system of icons, symbols, and indexes. The information and knowledge cannot be separated; they must appear and be perceived together to provide meaning. The semiotic mode of conveying a message must use either a "means of written language (symbolic), pictograms (iconic), or arrows (indexical)" (2007, 8).

From Backhaus' (2007) and Landry's and Bourhis' (1997) research, there are many different kinds of public signs:

Guidance Signs—those that use a referent in semiotic: 1) directions to get to a place, 2) call your attention to the sign.

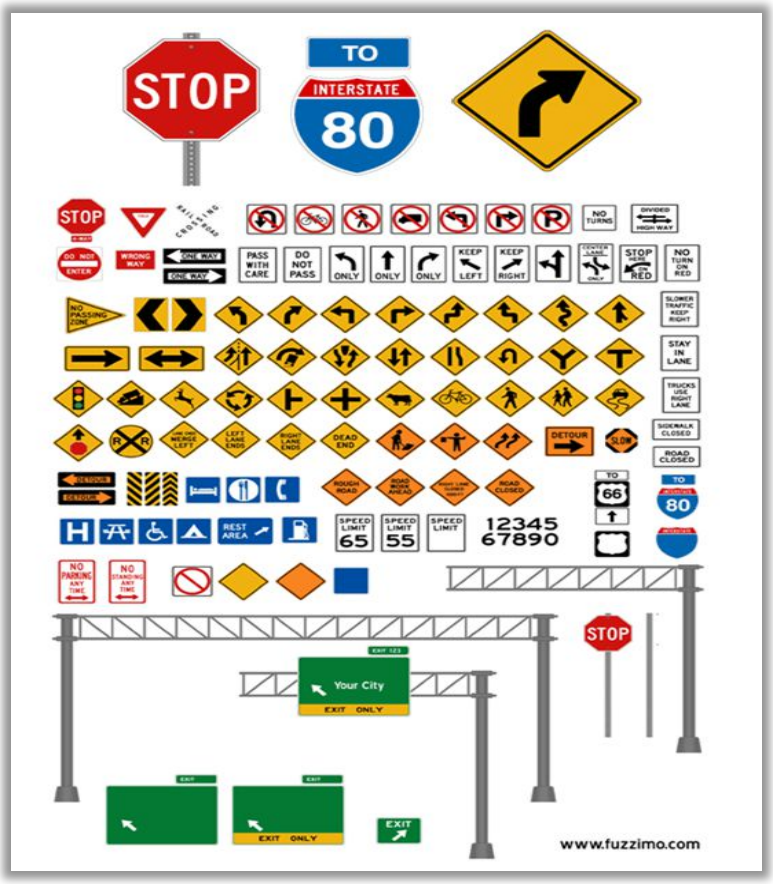

Figure 9: Guidance Signs from Slideplayer.com/slide/5977673/

Public Signs—1) commercial (marketing and advertising) which draw attention for company/ies, business and the sale of products, such as Billboards, real estate signs, etc.; 2) important messages like topographic information, directions, warnings (fire warning signs, park rules, swimming pool rules and many others you see in public places. 3) Non-written pictorial signs like gender designated restrooms, water, phone, deaf (with anti-ear sign). Some icons rely on postures and gestures to have meaning to communicate across language barriers as shown in Figure 5.

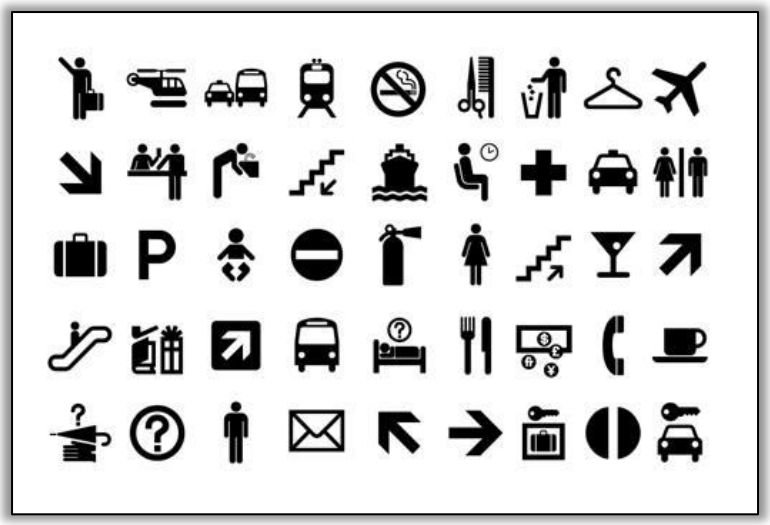

Figure 10: Public Signs from Roger Cook (graphic designer)
American Institute of Graphic Arts (1974). www.aiga.org/symbol-signs.

Other Signs—1) clothes (pictures, logos, written words); 2) electric appliances (symbols, instructions, and watts); and 3) everyday commodities.

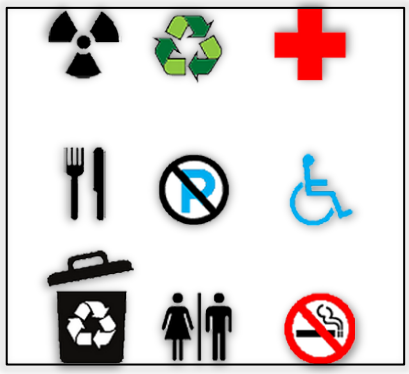

Figure 11: Other Signs from www.next.cc/journey/tools/symbols.

From recent years of study about linguistic landscapes, I find there is a large amount of literature about the diversity of public signs posted at such sites as colleges, schools, government buildings, hospitals, and others. Research on linguistic landscapes appears popular today. There

is an intention behind the use of public signs and Backhaus asks a relevant question, "By whom and for whom was the linguistic landscape written?" (2007)

Ancestral Linguistic Landscape

This section is shifts focus to a discussion of linguistic landscapes of the past. Here, I propose that the emergence of semasiographic writing systems in ancient times can be understood as creating an ancestral linguistic landscapes (ALL). Symbolic rock images on the rock panels in different sites, theoretically, are a recording of historic language. It is where early peoples created visual, linguistic markers on rock panels, which were, to contemporary people, similar to the ways in which our current signs are to us.

Landry and Bourhis emphasize the two functions of linguistic landscapes, which are the *informational function* and the *symbolic function*. The first "serves as a distinctive marker of the geographical territory inhabited by a given language community" (Landry & Bourhis 1997, 25; Bourhis 1992). It covers the names of places, similar to how Basso's (1996) work with the Western Apache describes place names. The second, symbolic function, fits rock/picture writing because it is, "salient in settings where language has emerged as the most important dimension of ethnic identity" (Sachdev & Bourhis 1990 in Landry & Bourhis 1997, 27). What do these two functions and their definitions mean for the present study? They mean that the linguistic landscape positively contributes to the social identity of an ethnolinguistic groups (Landry & Bourhis 1997). In other words, rock art is a treasured connection to a tribe's history, culture, and, most of all, their identity.

Keith Basso (1996) studied the importance of certain place names to the Western Apache in Arizona. Much of his description fits the ideas of the importance of a linguistic landscape

because of the Western Apache's use of spoken language and their purposeful naming of places based on their ancestors' personal events. He described it as "congenial pieces of experimental terrain: the terrain of one's youth, perhaps, or of where one's forebear lived, or of decisive events the altered the course of history: possibilities are endless" (1996, 3). Basso's work gives many reasons for studying place names, including indicators about the passage of time or where prior events occurred, names of clans who migrated to the location and settled, and the fact that Indigenous peoples exhibit a tendency to map large areas of land (Basso 1996, 44). Additionally, Indigenous people inherit their language from ancestors in specific places and pass it on to modern descendants. Probably most importantly, the sense of place gained through place naming provides a tribal history and a sense of themselves that are inseparable (1996, 35). Place naming bolsters a tribe's identity and makes that identity at least somewhat apparent to society at large.

When doing work in the vein of linguistic anthropology, one must think of the language of the land, and its metaphors, as Basso reminds us (1996). He emphasizes how historical events are understood by the Western Apache and how they came about through the place names, which have been passed down from their ancestors. These place names live on among the people who are still a part of the culture; those who have left and assimilated into the White man's world would likely not know such place-name history. Basso states that the tribe does not use the modern way of preserving the past through documentary archives, photographic files, or recordings such as those used linguistic anthropologists today. The Western Apaches' way of naming is by no means an academic process or discipline but occurs in the everyday conversations among the tribe members (1996, 7). They are "doing human history, [a] way of constructing social traditions [and] personal social identities" (1996, 7). They are conducting communicative acts of topographic representation. He suggests the meaning of "representations

may be fashioned from a variety of semiotic materials (gestural, pictorial, musical, and others), few are more instructive than those which are wrought with words" (1996, 73).

In Basso's work, he references Mikhail Bakhtin's (1981, 7) use of the term "chronotope," which suggests "points in the geography of a community where time and space intersect and fuse." This idea includes people plus space plus time, where everyone is "responsive to the movements of time and history and the enduring character of a people" (1996, 62). A chronotope is a space and time defined by a community. It symbolizes how the members of a specific group could imagine themselves (1996, 62). Besides the chronotope, the Western Apaches use metaphors in their place naming, based on their beliefs and their epistemology of the land. So, to connect linguistic anthropology to a linguistic landscape, one must have culturally specific language usage knowledge as to how they arrived at certain locations. Rock/picture writing provides information as to the identity of the ancestors who arrived in the area, as well as what their lives looked like, including their languages, their environment, and their tribal knowledge.

When doing research on an ancestral linguistic landscape (ALL), one must first look at the entire region where any rock writing occurred during the same period, and then select only those rock panels that demonstrate historical information of that period, e.g., ceremonial attire, animals, band emblems, kinship, and the like. A rock panel can be likened to one chapter in a book, telling pictorial narratives in a visual and non-alphabetic form. In some cases, also including signed language transcriptions, because the rock/picture writing creators used signed language themselves in ancient times, and transmitted their signed languages from generation to generation, just as with any other natural language. It is possible that representations of signed languages on rock panels can be understood by those who have learned to use the tribal signs

from descendants. Today's Indigenous youths are not acquiring tribal signed languages as happened more frequently in the past; this contributes to the loss of knowledge regarding the signed language-rock writing connection.

In ancient times, concepts and ideas were recorded in rock/picture writing, but unlike the modern linguistic landscape, the visual symbols on a rock panel are not always linear in composition. Linguistic landscapes can be found in Martineau's demonstration of iconic images on rocks, that he calls 'locators,' which indicate where to find waterholes and springs, trails through canyons, and dangerous, flash-flood-prone areas. These writings were left on the rocks for ancient Indigenous people to read and use to match this information to the landscape.

In May 2017, while visiting Nine Mile Canyon with Dr. Carol Patterson, I saw the plumed serpent icon on the canyon wall, which represents a rough flash flood in the area. The landscape supports this interpretation, as it is known to be conducive to flash flood events. These locator petroglyphs occur at the confluence of two or more side canyons throughout the whole Nine Mile canyon area (Patterson and Hadden 2018, in review).

In viewing rock/picture writing as part of an ancestral linguistic landscape, Vogt states, "It seems that much of the rock art there is situated in very visible spots and these places must have been of special significance." He cautions that it may be difficult "for a foreigner to understand the context" (Vogt 2014, 45) of rock/picture writing. Ancestral linguistic landscapes filled with "rock art's visual, permanent expressions could have been binding together mythological landscapes, physical landscapes, political landscapes and their oral, unwritten and collective tradition" (Vogt 2014, 45). Like Martineau and Patterson, Vogt notes that "symbolic structure was active back in prehistory; any person would know the code that the petroglyphs signify—it was part of the common knowledge in the society" (Vogt 2014, 45). These people

were the silent messengers of all codes, specifically chosen persons created the symbols to record their lives, identities of persons in prehistoric time, food and animals from the region.

Semasiographic Analysis

Semasiographic analysis is rooted in several different academic disciplines. Recall that Sampson (2015) defines semasiography as the study of meaning and graphics, as in rock/picture writing, without depending on any linear (glottographic) writing system. Haas (1976) agrees with Nöth (1995, 252) that semasiographic writing is a "system, which indicate[s] ideas directly." This means that other things besides linguistics need to be considered, like material culture, such as food and clothes, and image representation. Two social science disciplines that are especially helpful in study of rock/pictorial writing are social anthropology and linguistics. Boone uses a semasiographic description in her study of Uto/Aztecan glyphs in Mexico. I will use a semasiographic analysis on the Ute rock images within this paper, and two Kiowa pictographic rock panels, which display sign language equivalents of two graphic signs.

I also want to make it clear that there is confusion with the word "sign," which has at least three distinct meanings that all apply in this study; the word needs to be used carefully to avoid misunderstanding. In one sense, "sign" is used as a referent for "meaning" or "symbol" by Saussure, Pierce, and other writers. In another sense, a "sign" refers to a lexical item in a signed language. In a third sense, "sign" refers to public signs that are posted, as described in the section about linguistic landscapes.

With regard to semiotics, I draw on Saussure's *signifier* and *signified* methodology, and Vogt, who points out that semiotics is a "systematic, extensive and comprehensive analysis of communication phenomena." One has to take a close look at how one communicates within our

society, depending on social and cultural conditions (2015, 41). Looking through the linguistic anthropological lens, I use semiotics, which allows the application of the anthropological study of rock/picture writing and the study of the linguistics and culture of signed languages. This means my study on rock/picture writing does not stay within the purely archaeological vein of "Rock Art." But, it will lead me into language ideology in another chapter, which serves as an interconnection between rock/picture writing, current language usage, and our social behavior, all of which are interdependent.

Semasiographic Elements

My research with rock/picture writing will examine these semasiographic elements: 1) iconic; 2) metaphoric; 3) deictic; and, 4) beats (McNeill 1992) to see if any of these four elements are applicable to the images on the rock panel. Before sharing my approach for analysis, it is wise to understand, in this chapter, what these elements mean, and how each can be applied to pictorial figures in the drawings. The semiotics aspect of my research is beyond the scope of this dissertation at this time.

Starting with Saussure's model, that a "linguistic sign is not [a] link between a thing and a name, but between a concept (signified) and a sound pattern (signifier) (Saussure 1983, 66; in Chandler 2002, 14). Instead of sound patterns, I will use lexical items from signed languages. Because I am a Deaf linguistic anthropologist, I am most interested in signed lexical items related to iconic images. I am looking at signified concepts documented on rock panels where the signifier is a sign (a signed language lexical item) that is depicted by certain rock images using tribal signed language.

The patterns and designs/symbols in rock/picture writing analysis are important; we should look for the reduction, deletion and addition of the things like huts, tipis (and other tribal housings), houses, churches, trains, people, and other items, which will show the patterns of certain styles and periods. It is also important to note when similar designs used on pottery, artifacts, weapons, and tools. What emerges, on a macro level, is a pattern of time and space when certain artifacts made their appearance on the rock panels and times when certain items have been omitted.

Another component to be considered is codes. They organize signs into meaningful systems, and use pictorial images to interpret the signs with reference to the matching codes. Chandler interprets codes as not only simply 'conventions' of communication, but rather procedural *systems* of related conventions, which operate in certain domains. He believes that codes are part of the *metalingual* function of signs.

There are three key types of knowledge within these kinds of codes that interpreters are familiar with: "1) the world (social knowledge); 2) the medium and the genre (textual knowledge); 3) the relationship between (1) and (2) (modality judgements)" (Chandler 2002, 149-150). Social codes are communicated through *verbal language* (phonological, syntactical, lexical, prosodic, and paralinguistic subcodes), *bodily codes* (bodily contact, proximity, physical orientation, appearance, facial expression, gaze, head nods, gestures, and posture), *commodity codes* (fashions, clothing, cars); and, 4) *behavioural codes* (protocols, rituals, role-playing, games). (Chandler 2002). As for textual codes *[also called representational codes]*, the only one that fits this study is *genre, rhetorical and stylistic codes,* which includes narrative, and encompasses plot, character, action, dialogue, setting, exposition, argument and the like. Interpretative codes, which include a) *perceptual codes*: e.g., of visual perception (Eco 1982;

Hall 1980, 132; Nichols 1981, 11ff) (note that this code does not assume intentional communication), and, b) *ideological codes*: more broadly, these include codes for 'encoding' and 'decoding' texts—dominant (or 'hegemonic'), negotiated or oppositional (Chandler 2002; Hall 1980; Morley 1980) are also applied in the current work.

In addition to codes, we see another symbol type, which is an emblem. An emblem is a heraldic device or symbolic object as a distinctive badge of a nation, government, or family; it could be an image, figure, mark, symbol or sign. Layton discusses clan emblems in Hopi and Zuni culture, based on Nancy Olsen's ethnographic study (Olsen 1989). The clan emblem representing a single ownership of a farm field from the Anasazi farming culture goes back to A.D. 500 (2001, 323). Many examples of emblems can be readily viewed, such as Scottish tartan plaids and family crests, English Coats of Arms, and, for ranchers, they have cow and horse brands with which to show ownership. In this study, Ute band signs act as emblems to identify their band and brand signs to claim ownership of their horses.

Metaphoric analysis is used when analyzing the semantic meanings of figures in rock/picture writing. It involves comparing signs used in Plains Indian Sign Language or other language varieties in the North American Indian Sign Language family. For example, the sign for HUNGRY or STARVING in the Indigenous people's signed language represents "cut-in-two" or "cut-in-half" at the stomach. (Clark 1982; Cody 1970; Fronval & DuBois 1978; Mallery 1880; Martineau 1973; Tomkins 1969; and several personal communications with Indigenous people -- Big Lake, (Rising Sun) Grinsell, Poolaw and Rhoads-Connywerdy and Wooden Legs). The hourglass human figure in rock/picture writing made of two triangles (one pointing down, one pointing up) with their tips in contact metaphorically means "cut-in-two", separating the body.

There are different types of sign elements in NAISL/PISL. The deictic elements consist of: 1) hand or finger pointing, 2) spatial positioning, 3) proximal arrangement and placement on the rock panels and person-to-person communication and their behavior. The descriptions follow:

Index-finger pointing is inappropriate to use in Native communities. The only time they would use an index finger would be to indirectly indicate a person, a group of people, or things. But in gesture and sign language literature, what we in English refer to as "this" or "that" serves as a modifier of a noun like when you say this or that table; in signed language, you refer to people and things by "point[ing] to [a] particular object" (Preucel 2010, 72).

Spatial positioning is a category that considers the placement of pictorial elements on the panel, relative to invisible horizontal and vertical axes. This contrasts with alphabetic writing that conforms to a linearly defined space. Spatial positioning utilizes the horizontal axis, for example, left-to-right, left-of-center, right-of-center. This axis defines time, from the past to the present to the future. Time and space are defined by spatial positioning. This is typically exhibited in signed languages, with the left-hand side representing what has already occurred and is a sign for an agreed-upon point of departure (in the past) and the right side representing the new (in the present) (Chandler 1996, 112; Kress & van Leeuwen 1996). Time and space are represented in the Buffalo Hunt panel, based on Martineau's analysis. On the left side he interprets, "the Ute people leave their old ways for new life" (Martineau in Cesspooch video 1986). This particular petroglyph elements depict the white people on the right side and the Ute people on the left side.

Moving on to the next aspect of analysis, in rock/picture writing, *beats* represent the intensity or frequency with which a mark is made on the rock panel. For instance, on the Buffalo

Hunt panel, there are many slashes across the front of the lower torso, which coincide with the repeated strokes one would make while signing HUNGRY. Another reason to consider beats is whether the meaning is connected to a variance in signing which is intended to show intensity. The beat can mean a movement in a lexicon such as is documented in American Sign Language research literature.

The study of rock/picture writing has, historically, lacked attention in academic research, discourse, and literature. However, the semiotic aspect of rock/picture writing is emerging in recent research, and come to bear on my work. The pictorial narratives expressed on such panels are based on the photographic memories/visualizations of the structuring of history in a two-dimensional form, marked by the original creators of the rock art. Some rock/picture writing indicates personal names and place names (Basso 1996; Boone 1994; Martineau 1976; Patterson and Duncan 2016). McNeill (1992) provided the gesture classifications: iconic, metaphoric, deictic and beat. During this research using semasiographic analyses, Patterson came up with a better definition for rock/picture writing research: iconic pictographs, metaphoric ideographics, indexical deictics and textual beats.

I developed a chart based on two sets of data from Ute and Kiowa panels. Boone describes "structuring history," which is compatible with my study, as each of the histories involves participants, event(s), location(s), and time. The framework of the action establishes consequential actions – causes and effects of the pictorial narrative, sequentially (1994, 54).

	Ute	**Kiowa**
Iconic	Thing, object, Person, Place, Event, Tribe, Culture, Ceremony, Codified numbers: Codified Gestures/Sign Language	
	people in blankets = Utes family in wagon = Ute family Buffalo, = object of hunt gun = hunting new way bow = hunting old way Ute man riding bareback = old style hunting buffalo with bow man carrying peace pipe = offering peace whiteman (hat) Mother and Child with pinched waist cradle board <u>Codified gestures:</u> Family traveling in wagon mother and child with pinched waist = HUNGRY Ute man with whiteman's hat and Ute feather 'offering' peace pipe = with whiteman (for rifles) Whiteman kneeling to shoot = new way to shoot buffalo.	<u>Bodily codes = Signs:</u> pinched waist = HUNGRY headless Snake = WATER Snake rattler = OFTEN/REPEAT Upside down body = DEATH tribal sign = KIOWA (person) Tilted = STOP or WAIT Mexican grip objects = HOLD Mexican's legs knocked back = TAKEN BY SURPRISE <u>Horse codes:</u> 1) Horse = rocky cave/canyon (place) 2) hump on back = top of hill, 3) line entering front foot = Cave entrance 4) distant from top of hump = FAR UP on hill (place/environmental landscape) <u>Head-body movement of the Kiowa warriors-codes:</u> 1) arrow in knee = too dangerous to climb 2) Arch symbol above head = HIDE 3) Head higher than raised hand = caution when "peek over" 4) body tilted = waiting to find time to escape <u>Bodily appearance:</u> Cubby Mexican with hat = FAT and not hungry Thin Kiowa man = very hungry Tall Mexican = Mexicans outnumber Kiowa (number)

Metaphoric Ideographic	Mythic, supernatural, spiritual, strength, ferocity, prowess, etc. Culturally codified	
	Peace Pipe; make peace with whiteman, (for trade for rifles). Rifles = new way to hunt Give up traditional ways of hunting; but keep Ute culture= Feather on hat (old ways) Dark Skin on hand= tribal name for 'Ute'. Woman with child are hungry = Ute families were hungry Ute emblems (codified bands)	Kiowa with "furry tail" = LIMP (ready to die) (strength) Tribal identification = KIOWA (culturally codified)
Indexical	Directional, speaker location in *time/space* repetition, elevation, diminished or enlarged size indicates Time and Distance, Unidirectional/ open	
	Left-Right, Ute cultural direction Past (left = wagon) to Present (right = larger horses)	Right-Left, Kiowa cultural direction Time/space (right to left. Historical narrative marked at same site where the war happened (HERE/place) Escaped out of cave (directional)
Textual Beats	Intensity, emotion, reverence, condition, volume, scarcity, scratches and gouges in repetition=intensity, peck-mark density = light or darkness, wet or dryness,	
	Woman/child with slash marks across her stomach = VERY HUNGRY Dense pecking of skin around a gloved hand (dark skin) and (dark) horses (belonged to Ute) = UTE	Many warriors (volume) Kiowa = starved and thirst, tried to escape from Mexicans (condition) Snake rattler = OFTEN (time)

Table 1: Ute/Kiowa Pictograph (Picture Writing) Classification. McKay-Cody and Patterson, 2019.

Western Interpretation of the Buffalo Hunt through Codes

For my linguistic research, in addressing petroglyphs that convey visual narratives, I refer to Elizabeth Hill Boone's work with Mesoamerican glyphs and the study of semasiographic systems in *Writing without Words—Alternative Literacies in Mesoamerica and the Andes*. Her analysis can be applied to the Ute picture writing given in the examples that LaVan Martineau has identified in the "Buffalo Hunt" from the Northern Ute Indian reservation. I will first

describe the rock/picture writing material I use as my data and then I will discuss my findings through data analysis.

Before I begin the discussion of my analysis of the Ute rock panel, it is important to become familiar with the ancestral linguistic landscape (ALL), in order to get a better picture in our minds of the location of the Ute bands and their settlements in certain areas of the western United States.

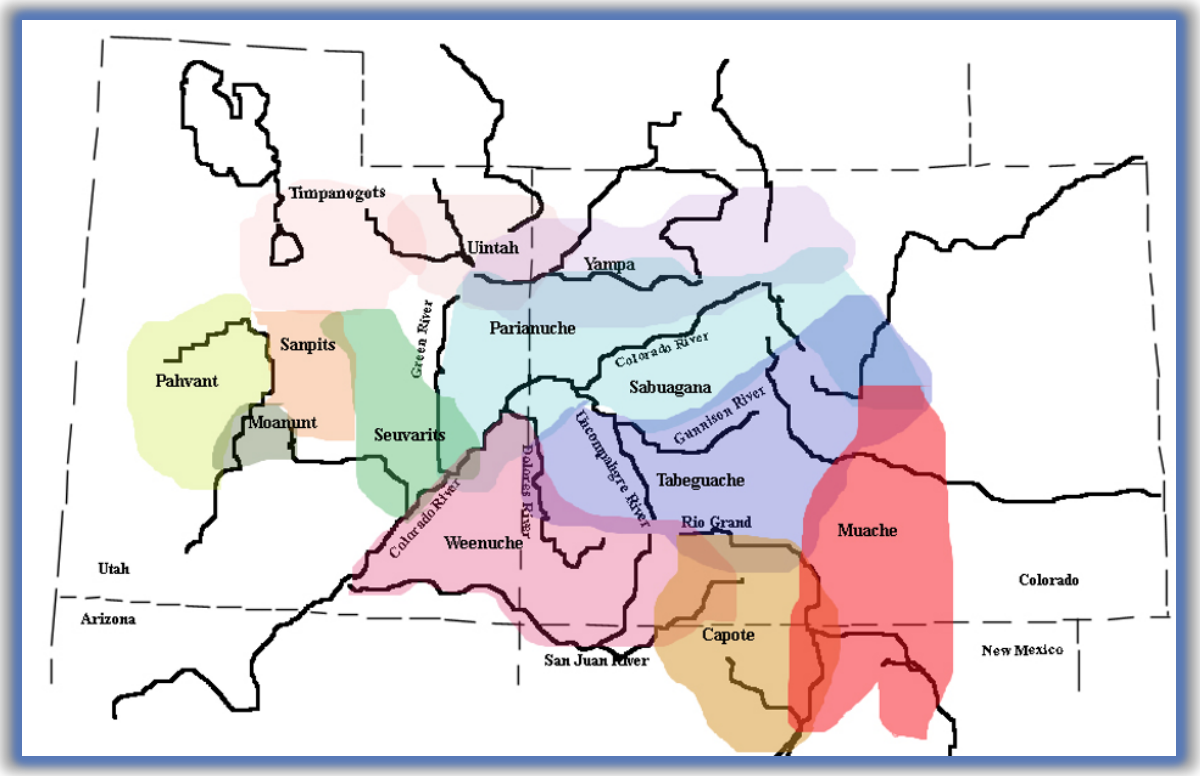

Figure 12: Ancestral linguistic landscape map of Ute bands sites of residence.
(Patterson 2016, Figure 2. p. 6; adapted from Simmons 2002. Figure 2, p. 4).

Buffalo Hunt Rock Panel

My first data set presented here is called the "Buffalo Hunt rock art panel," and is found in Willow Creek, on the Ute Indian reservation. It was made circa 1900 through the 1920s. This

panel contains all of the elements discussed so far, so I will be using a semasiographic analysis on certain parts, as shown in Figure 13.

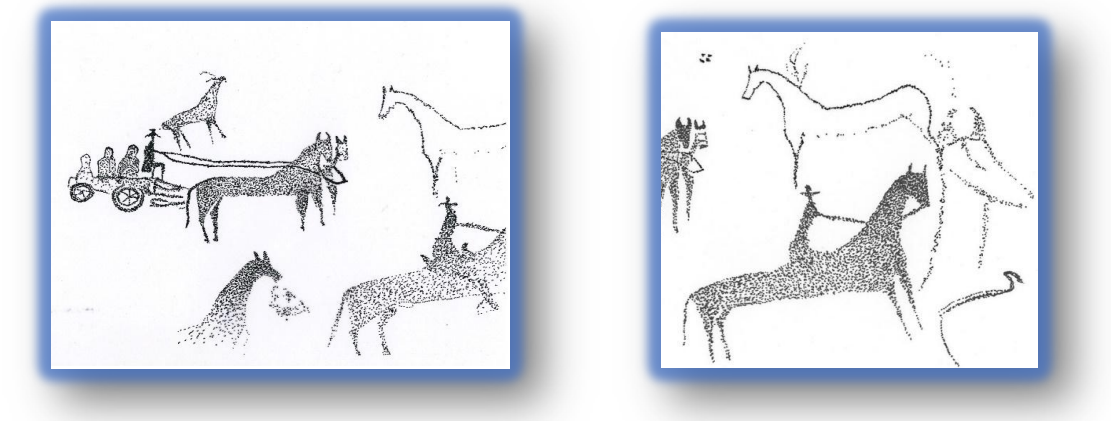

Figure 13: *Drawing of 'the Buffalo Hunt'* in Willow Creek on the Northern Ute reservation.

From the Buffalo Hunt panel example, we can identify each element within a semasiographic system. In a film by Larry Cesspooch (1986), LaVan Martineau explains every element in this panel. I visited this panel in 2017, and have analyzed each figure in terms of all of the above-mentioned elements. It is historic, so it is possible to know the meaning of each element, from ethnographic references in Ute culture and from talking with Ute informants.

This panel exhibits a system of relative placement, by placing the Ute people on the left side, the buffaloes in the middle, the white man on the right side, and a Ute woman with a baby on the top-central area of the panel. This is not random placement. It is purposeful, and done within the context of Ute cultural preferences for use of spatial positioning to convey meaning. Ute and other Numic language speakers prefer a left–to-right directionality for representing semantic relations, such as, for example, a timeline in a narrative. This dictates syntax within a spatial arrangement, as is the case with signed languages. Patterson-Rudolph defines spatial

syntax as having a non-linear format that is unique to its own pictorial language and signed language; it does not follow the syntactic patterns that spoken languages have.

The elements within this rock art panel fall into the categories of iconics, which includes things like a wagon, a buffalo, or a rifle, and metaphors, such as Peace-pipe (make peace with white man), Ute with white man's hat on (accepting white man's ways), or a figure with something on its back (woman and child). The spatial positioning exhibited shows people entering from the left and moving right. The spatial positioning of each element on the panel is purposeful. Distance is shown with elevation and size. The horses are smaller and higher up on the panel, because as something gets farther away, it appears higher in elevation and smaller in size. Distance also requires time to arrive from a distant location. Temporal and spatial concepts are indicated by the spatial positioning of each element on this panel.

The 3-D position is the inside of the curved wall and outside on the flat part of the panel. Larry Cesspooch's video shows the spatial positioning and how the shape of the rock surface gives it 3-D context. Here are photographs of the actual panels:



Figure 14: Time and Space begins with people in wagon and ends with assimilation of Whiteman's way.



Figure 15a: Full panel of the Buffalo Hunt on the rock panel.



Figure 15b: Sketch of the full panel of the Buffalo Hunt.

Here is a close-up of pictorial rock images (Figure 16) displaying different symbols that I analyzed in my research, discovering different codes in one rock panel. I will break down three different data sets: band emblems, and two divided syntagms involving timeline and

metaphorical symbols, with additional information on sign language within each of these three linguistic analyses. The first linguistic data set is band identification, using band emblems of the Utes.



Figure 16: Similar to Figure 15b with details of Ute wearing a whiteman's hat, carrying a peace pipe, and band signs.

There are many panels on the Northern Ute reservation in Willow Creek that exhibit the Ute band signs of the three bands that live there now. The band signs are emblems. They identify, at a glance, which Ute band members participated in this buffalo hunt. They represent the Yampatika and Uinta bands, as seen in Figure 17. More emblems on panels can be seen in Figures 17 and 18.

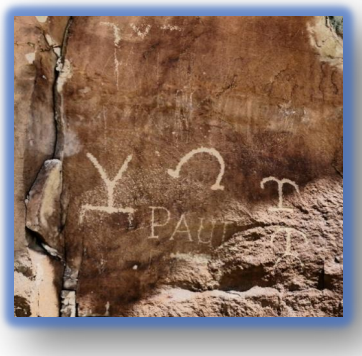



Figure 17. These panels contain **Iconic codes or emblems** that represent Bands and later Brands from family names and ownership of the cattle that the white man introduced to the Utes.

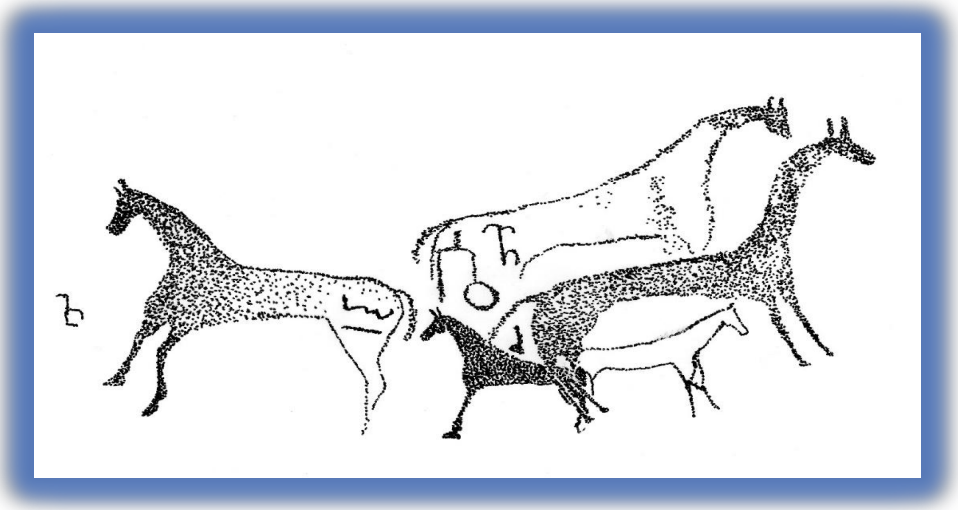

Figure 18: Emblem – Uncompahgre (red earth water) or Redlake people Uintah and Yampatika (White Rivers) (Uncompahgre with wave and underline, Uintah has a 3-sided square with line on top, Yampatika: wild carrot plant)

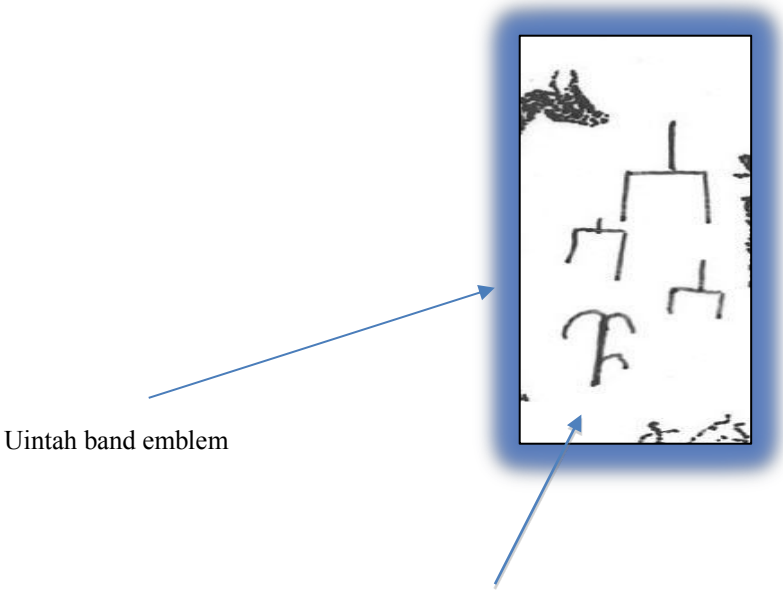

Figure 19: The Yampatika (looks like a Yampa plant) and Uintah bands.

The Gestures Displayed in the Rock/Picture Writing

Gestures that can be identified in this panel are also codified. They are known as codified gestures in signed language studies. Per Isabella Poggi's research with gestures, there are two types of gestures: codified and creative. Codified gesture means the speaker's (in my case, signer's) mind will see a lexical item from a gestural lexicon. The signal represents motor and perceptual features of the gesture, and provides semantic information. Gestures will influence the interlocutor with a gesture-meaning pair, such as emblems. In contrast, a creative gesture does not come from any stored list of gestures in our minds, but will suddenly come up as a new gesture that had not been used before. This, Poggi says, is "one we invent on the spot." (2001a, 1-2).

Boone describes dance in semasiographic terms, using written notation that has meaning, but is not words, rather, codes for concepts. The coded information in this panel, according to Martineau and Cesspooch are:

- 'shooting bow and arrow"—representing Ute culture and old-style weapons.
- Ute on horseback riding 'right to left,' anti-Ute direction signifies an unsuccessful kill of the buffalo.
- Dismounting (horse with empty saddle and dots representing 'tracks' leading up to the rifleman)–the trail shows a connection between the white man and his horse.
- Kneeling to shoot—Ute learn how to shoot from whiteman's way to get meat.
- Shooting a rifle—Assimilate to follow the whiteman's way
- Starving woman—positioned above provides the context for following the whiteman's way "because the women are starving."

Syntagms

The Hunting panel can be divided into syntagms, which are a combination of interacting signifiers and iconic codes, that, when taken together, form a meaningful whole (Chandler 2002, 262). Syntagms are often used as sequential or temporal chains. Spatial relations are also called sequential (sequence) syntagmatic relations, showing before or after. However, spatial syntagmatic relations (in painting or photographs) includes the comparisons of above/below, in front of/behind, close/distant, left/right (which can provide sequential significance), north/south/east/west, and/or inside/outside (or center/periphery) (Chandler 2002, 111).

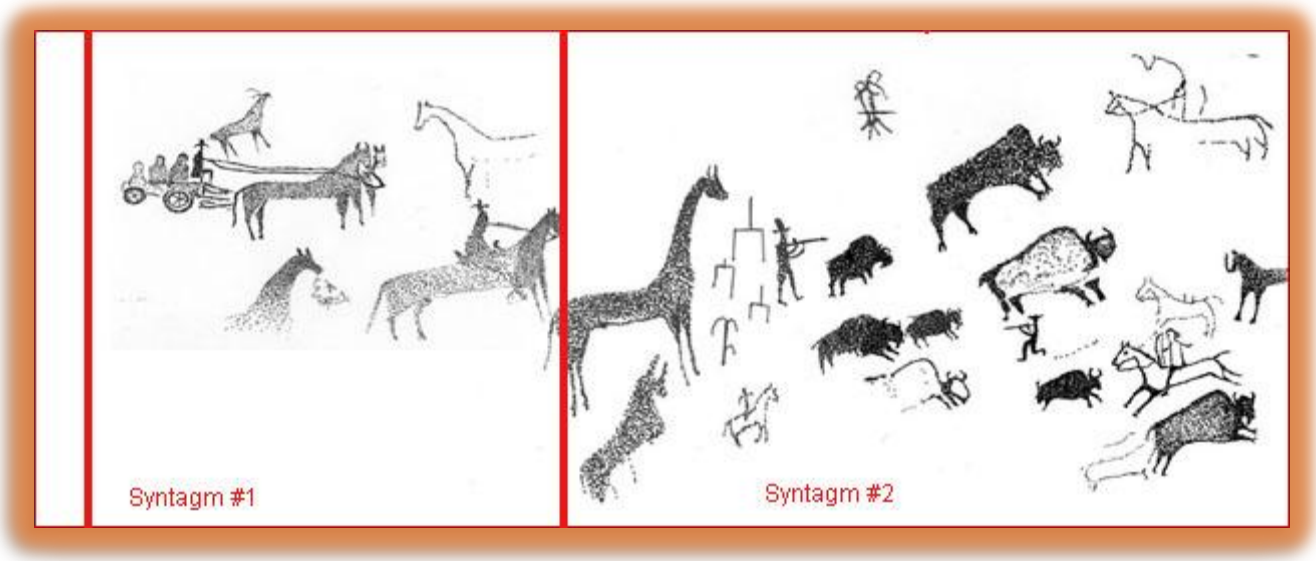

Figure 20: Buffalo hunt panel divided into two syntagms for comparison of two syntagmatic analyses

Syntagm #1—Timeline

Syntagm # 1: 1) It shows a high spatial positioning on the top left corner of the rock panel, showing a past historical event; 2) for the PISL signer's timeline space, the past is signed "to the past," that is, all signs go behind the signer. The present is shown right in front of the signer, then the immediate future or farther into the future will be signed out away from the signer's front. The PISL signing time lines can be seen below:

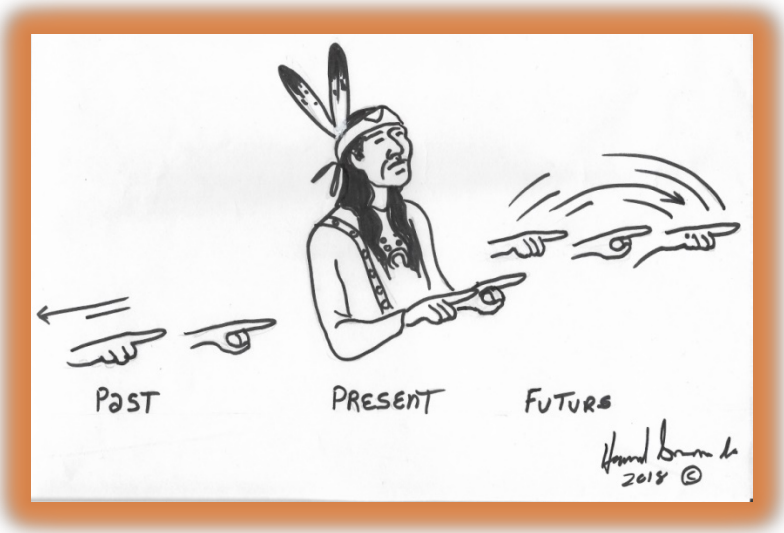

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Figure 21: Plains Indian Sign Language timeline. Artwork by Howard Gorman, Navajo Deaf artist, 2018.

Comparing linguistic elements of Figure 22 and 23 demonstrates a linguistic landscape and an interconnection between signed language and rock images. It is important to recognize that the PISL signing timeline resembles the movement of Ute historical pictorial narrative via a left to right direction, which is interpreted as a past to present movement.



Figure 22: Close-up look at Ute Buffalo Hunt



PAST>>>----------->>>PRESENT

Figure 23: Time and Space — Past and Present of Ute people's history from left to right direction.

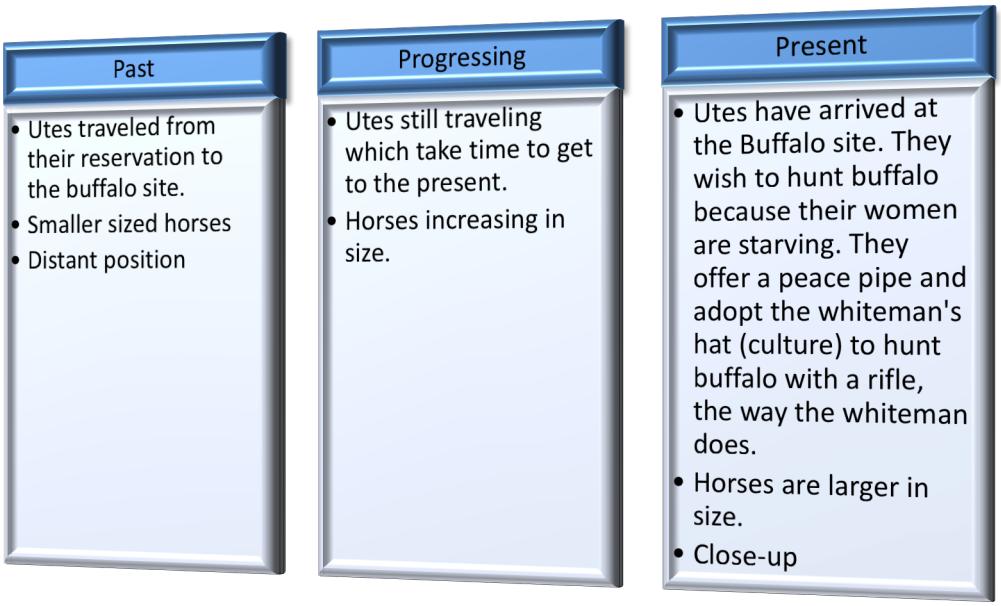


Figure 24: Timeline of Ute people's assimilation from past to present.

Syntagm # 2—Metaphorical Symbols of Ute Convert to Whiteman's Way

Syntagm # 2: It provides a combination of three elements: iconic, metaphoric and spatial syntax 1) Hungry woman on top central of the rock panel contains the gestural-iconic codes: woman, starving, and carry a baby in cradleboard. 2) Iconic and metaphoric within the context of buffaloes that were killed by the whiteman, therefore disappearing from the Ute's food resources. The government taking away the Ute's rifles made hunting buffalo with bows and arrows more difficult (see "Ute giving up their rifles" in Patterson 2016, 63, fig. 50). That led to their starvation and abandonment of old ways in order to accept government-provided food resources including cattle and agriculture. Note: that the whiteman kneeling and shooting is part of codified gesture; 3) Iconic-tribal emblems include band symbols of all the bands that were gathered and placed on the reservation; and 4) Ute man wearing a whiteman's hat with feather are two emblems representing two cultures. 5) He is carrying a peace pipe, symbolizing his acceptance of the white man's culture but still retaining his Ute (feather attached to the hat). It is also a codified gesture.

This is the Uto-Aztecan language family, of which the Numic (Ute, Paiute, and Shoshone) share the same preference for left-to-right cultural representation of the passing time and in sign language. In the pictorial writing, horses are often pecked in solid to indicate that they are 'black' and therefore are Ute horses. A metaphoric symbol can be seen in Figure 19. Martineau explains that the Utes went hunting with the white man and offered him a peace pipe to show their intentions to accept the Whiteman's way. He is wearing a white man's hat but also feathers to show he is still a Ute.



Figure 25: The Black horse is an iconic code for "Ute" or Black people. A Ute is offering a peace pipe, a gesture of peace. And wearing a white man's hat, a metaphoric symbol that he is trying to imitate the white man. Ute band signs for the Uintah and Yampatika are placed here too.

The Utes noticed that the white man dismounts from his horse and kneels to steady his rifle before he shoots. The reverse direction of the Ute riding a horse with a bow indicates he was not successful (Figure 26). It is 'anti-Ute' cultural direction and is used to show failure or surrendering (Greene 1996; Patterson 2016). In Figure 25, the kneeling white man, (identified by his hat and is a non-Ute) is approaching from the right, (anti-Ute direction), that immediately indicates he is not a Ute. Compare him to the peace-pipe carrier, who also has a white man's hat (Figure 24), but is facing left-to-right that identifies him as Ute.

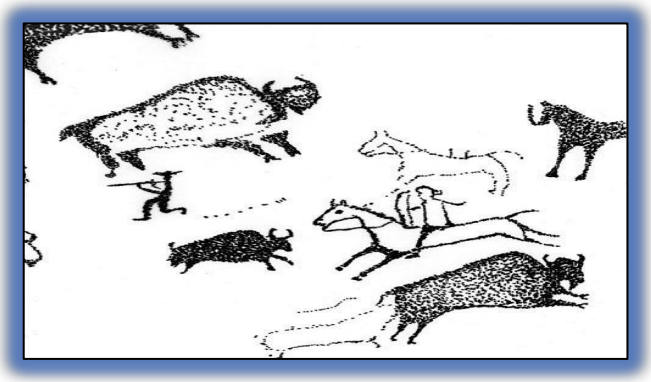


Figure 26: This panel shows the white man dismounting from his horse and is kneeling to shoot. The Indian shoots a bow from the horse and is riding bareback. His old ways of hunting are not as effective as the Whiteman's method.

At the very top of this panel, is this petroglyphic image is of a hungry woman with cradleboard on her back. (Figure 27)



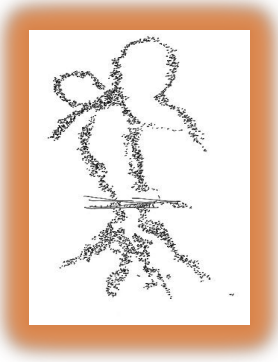


Figure 27: “A hungry woman” (actual petroglyph on left and sketch on right).

The slash across her waist represents ‘hungry’, or ‘starving’ from the concept, “cut in half” or “cut in two.” (Cesspooch 2017; Clark 1880; Mallery 1880; Martineau 1973; Patterson and Duncan 2016; Seton 2000; and Tomkins 1969). This panel is located above the ‘buffalo hunt’ panel to provide the context of the Ute’s physical condition. At that time, many Utes were starving because their rifles had been confiscated by the government, and they were not able to hunt buffalo except with bows and arrows, that are not as efficient as rifles. They reasoned that if they made peace with the whiteman, and accepted their ways, they could get rifles and provide food again for their people (Patterson 2016).

The petroglyph of ‘hungry’ is similar to the pictograms of ‘hungry’ in Tomkins 1969, and is demonstrated by the sign for ‘hungry’ in Seton’s 2000 publication. See figure 28.

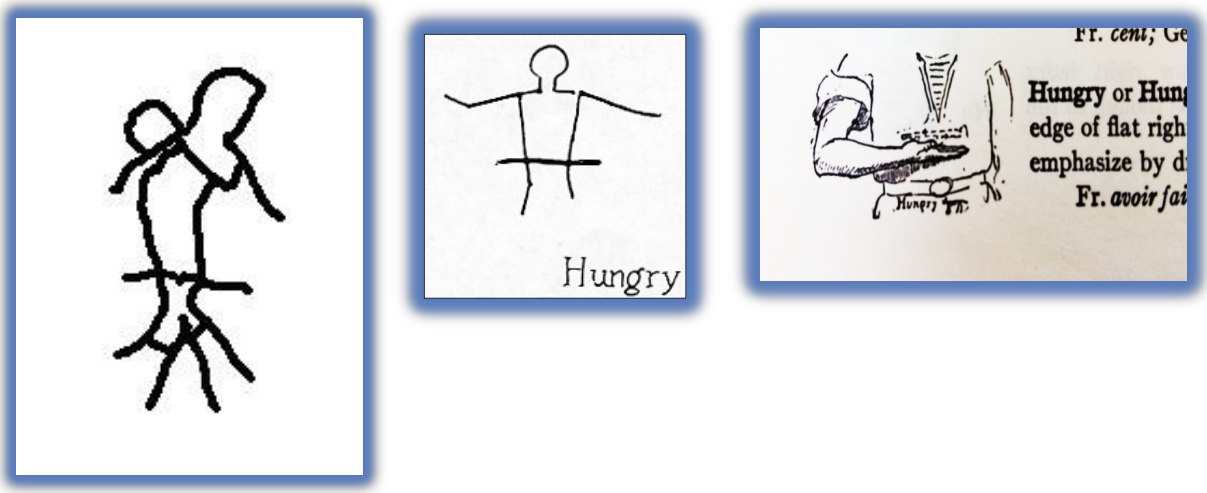


Figure 28: Compares the Ute petroglyph depicting 'hungry', the pictograph for 'hungry' from Tomkins, 1969, and the sign for '**HUNGRY** or (cuts one in two) from Seton. Draw the lower edge of flat hand, back down, across the stomach; emphasizing by drawing back and forth. (Seton, E.T. Sign *Talk of the Cheyenne Indians and other cultures*. Dover Publications 2000, 102)

In summary, picture-writing as described above conforms to Boone's definition, "Such semasiographic systems can be understood outside of language once one understands the logical system (a system comparable to a grammar) that drives and orders them" (1994, 16). As I have described, Martineau (1973), and Patterson (2016), were able to understand these semasiographic systems, without needing to learn the spoken language(s) to find meaning and identify a visual narrative. Both sign language and rock images contain identifying codes within the cultural context as they appear on the rock panels. Some Indigenous readers like Northern Cheyenne, Crow, Kiowa and other PISL using tribes are readily able to understand these coded systems. Boone hints that we need to understand these systems from Indigenous people's interpretations

of images in order to achieve knowledge of their meaning through the interplay of images, abstractions, and sequence.

Boone writes that people of all languages can look at visual graphics in public places and understand the meaning without knowing the common language spoken there. These include arrows for directions, washing machine icons, hand washing and drying instructions in public restrooms, gender figurines for restrooms, and so on.

Martineau has argued that these graphic symbols, like locator symbols, were used by Indigenous people to find water, locate trails, food resources, and other useful information (1973). Maps were etched on rocks to show the directions in the area.

Whether rock/picture writing or signed language happened first, or both sprang forth at the same time, we will never know. It is safer to say that the spoken and signed languages and rock/picture writing were developed and evolved simultaneously. Rock panels function as the ancestral linguistic landscape with elements comparable to Indigenous signed language, as well as to tribal spoken languages. For this research, I have focused on semasiography, which means signed language is separate from spoken language.

In review, the rock/picture writing include codes that represent signed language, not the verbal language, thus, one must visualize the concepts mentally from the hand signs not the spoken word. Evidently, there are interconnections between rock images and signed language, as seen here:

Chart 6 (Continued) **Symbols and Sign Language**

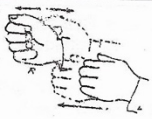
Grapheme	Description	Contextual meaning	Sign language equivalent	Description
	many short lines	"many" of something, people, plants, game, etc.		
	short lines on a line	"growing up,""standing," referring to people or plants, "grass"		**Grow up**: Hold hands, backs downward, fingers extended, separated and pointing upward, then raise hands by gentle jerks.
	lines descending from a horizontal line	"many" falling, like rain, "many" falling in battle, people		**Rain**: (Falling from clouds or sky). Start with fists in front of head; slowly lower them while opening hands. Repeat.
	two dots with a line in between	"canyon," "gorge," "gap"		**Canyon, Gorge, Chasm, Gap**: Hold fists in front of face, several inches apart. Then take left hand and pass the right, as if through a chasm.
	arrow	"kill,""wound," "damage"		
	opposing arrowheads	"war"		**War, Fight**: Bring loose fists, palms toward each other in front of the body, at height of shoulders. Move back and forth.
	circle with radiating lines	"surrounded by many,""sun"*		**Sun**: Form an incomplete circle with index finger and thumb of right hand. Hold hand toward east.
	circle with four radiating lines	"four directions,""moon"*		**Moon**. Make sign for night, then with curved thumb and index finger form a segment or quarter moon.
	crossed lines	"stars"*		**Star**: Make sign for night, then form a small incomplete circle with right thumb and index finger, raise hand toward sky. Snap index finger against thumb to denote twinkling.
	two lines touching at one end	"meet"		**Meet**: Hold hands opposite each other, pointing upwards; bring the hands towards each other until tips of index fingers touch.

Figure 29: Patterson-Rudolph's Rock Images and Sign Language
Chart 6. 1997, 121, one out of 5 charts on page 118-122.

It is important to recognize that Indigenous signers, both hearing and Deaf, are visually-oriented people, and can decipher the meaning of drawings or directions in today's world, like the use of hand gestures to go left or right and top or bottom. The visual information on the rock panels is similar to how symbols are made in sign language. For example, imagine you are looking at a gigantic calendar in front of you; you as a signer would sign from the left side starting as the calendar appears to you, with Sunday the furthest left to Saturday at the furthest right. Recall from the earlier discussion of ancestral linguistic landscapes that the informational function of signs includes the representation of distinctive markers in territories of a language community; visual rock images and signed languages share a visual component, as well as physicality (representation of a corporeal form) and spatiality.

Again, the outcome of the analysis of the rock/picture writing parallels Boone's definition of semasiographic systems in that we do not need to understand the spoken language of the people but rather the underlying system of logic that structures (1994, 16) the images. Martineau and Patterson were able to use semasiographic systems to provide probable interpretations, based on sign language symbols found in the rock images. This method identifies the codes and the cultural context as they appeared on the rock panels. Their methods correlate as well with Indigenous readers who are able to understand and interpret these rock/picture writings (Cesspooch 2017; Duncan in Patterson 2016).

In summary, this chapter has shown how semasiographic analysis pairs with semiotic analysis from a non-Indigenous, scholarly paradigm. Along with Indigenous knowledge of signed languages, such analyses are applicable to rock art panels containing rock/picture writing. Using an Indigenous signer's perspective, I support the idea that some images found in

rock/picture writing appear to have a strong, direct connection to the tribal signed language of the tribe who created the particular rock art panel(s).

Chapter 5

Ancestral Rock Panels and the Linguistic of Sign Languages Research

> The spirit is within the rock art and it shows a story that is talking to us. So you listen to the rock art. You listen with your soul and you listen to it with your eyes barely scanning the panel as you look into it. What you are receiving is this…. After you have pulled it out, there are other things attached to it. So you are actually trying to break it down into smaller bits that you can understand.
>
> Clifford Duncan (Ute) (Patterson & Duncan 2015, 142)

Introduction

Some Indigenous people have been curious about my work, and have asked whether the images I studied were created for deaf or hearing Indigenous people. This is hard, if not impossible, to answer. Who were the creators of these rock/picture writing images about historical events? Who was their audience? From my interaction with present-day hearing and deaf Indigenous people, they share the same sign language; the only difference is that Indigenous Deaf use their tribal sign language as a primary language while Indigenous hearing signers uses it as an alternate language (McKay-Cody 1996). It is reasonable to assume that the same situation existed at the time the rock panels were created.

The research reported here adds to scientific knowledge on how Indigenous people communicated and recorded their histories in rock/picture writing. It demonstrates how identifying sign language symbols and documenting the cultural context can improve our interpretation of these written records. In the spirit of our Indigenous Deaf people, those of us who are immersed in Plains Indians Sign Language can see from where and when our signs have originated. Indigenous Deaf peoples' aim is to discover our past through our signed language, and to understand who we are as we use it today, in order to pass it on to the next generations.

Sign Language Studies on Rock/Picture Writing

Throughout my own years of research, and in talking with archaeologists at conferences, I find most have not recognized any interconnection between "Rock Art" and signed language. There is not much literature on signed language symbols in rock art [including an 863-page Handbook on Rock Art Research edited by Whitley (2001)], because many archaeologists do not discuss it in their scholarly publications. Here are a few reasons: 1) many archaeologists do not know a signed language, 2) signed language is not taught in anthropology courses at universities, 3) archaeologists have shown no interest in it, and thus, 4) it is difficult to prove a connection by independent scholarship like Patterson's and Martineau's. Ironically, the *Iconographic Encyclopedia of the Arts and Sciences: Prehistoric archaeology* has a paragraph on rock writing and signed language or "gesture-speech." It also said that some of the rock inscriptions have been deciphered in accord with symbolic systems in signed language (1885, 76).

There are only four scholars who have conducted much work on signed language symbols depicted in rock art panels — Henry Schoolcraft, Garrick Mallery, LaVan Martineau and Dr. Carol Patterson (-Rudolph). Grace Rajnovich, and William Tomkins quote Mallery's work but do not provide an intensive study of signed language symbols in rock art. However, people who know tribal signs and their tribal context would be able to translate the information from Rajnovich's and Tomkins' books correctly.

The most widely-recognized work in North American Indian Sign Language is provided by Garrick Mallery, a colonel in the U.S. Army in the mid-1850s; he was recruited by the Bureau of American Ethnology to do an extensive study of Plains Indian Sign Language, pictographs, petroglyphs and gesture (including gesture from European countries).

The main focus of the present work on rock art and signed language studies relies on the work of LaVan Martineau (1973). Dr. Carol Patterson (1993, 1997, 2014, and 2016) has referred to many of Martineau's symbol charts in her books. There are a handful of researchers who reference Martineau's work, but he is generally ignored by many archaeologists. Martineau was raised in Paiute culture with signed language used for daily conversation alongside spoken Paiute. During the Korean War, he was drawn to cryptanalysis (a tool to decipher codes) and trained in it. After the end of the war, he returned home and started to analyze rock images, which led to his 50 years of research on rock/pictorial writing and signed language. He never had a formal university education, so for years, many archaeologists rejected his research because they felt it was not scholarly or scientific.

Martineau conducted analyses of thousands of rock panels. His intellectual merit comes from his cryptanalysis training and his ability to speak several Numic languages (including Hopi, Ute, and Paiute) (1997, 52). His book, *The Rocks Begin to Speak* (1973), is very rich in tribal knowledge of symbols and signed language, which he collected from the elderly signers and tribal historians through their stories. His 1992 book, *Southern Paiutes — Legends, Lore, Language, and Lineage* is a testament to his close relationship with dozens of Paiute and Ute informants, who provided an insight as to the meaning of symbols in the rock art of the Great Basin and Colorado Plateau.

Martineau found codes, symbols, and many other features that are similar to the morphology in American Sign Language (ASL) used by the Deaf Community in the USA and Canada, and Plains Indian Sign Language (PISL) used by hearing and deaf signers in the community. His work shows the morphology in tribal signs, with cultural context. His descriptions of the petroglyphs concerning signed language are in English and do not show any

pictures of the signs. However, with my experience in PISL/ASL linguistic work, I was able to understand what he was explaining. I could also verify signs with other PISL signers. Most of these were Deaf signers who are bilingual in PISL and ASL, and we were able to discuss the signs and rock/picture-writing without any difficulty. This is similar to some hearing PISL signers who learned it from their ancestors and current tribal members.

Dr. Carol Patterson is a professional archaeologist living in Colorado who travels to different sites within the western United States of America, Australia, and China to study petroglyphs and pictographs. She accompanied Martineau to many sites to analyze the rock panels from the 1970s until his death in 2000. Martineau mentored Patterson when she began her research and studies in rock-writing. They conducted hundreds of trips into the field to rock art sites to analyze the symbols. She also learned some basic PISL. She went on to get her PhD in Sign Language and gestures depicted in Rock Art, to independently verify Martineau's theories. I would like to mention her recent book*, Petroglyphs of Western Colorado and the Northern Ute Indian Reservation as Interpreted by Clifford Duncan* (2016). It contains many stories told by Duncan, the Ute cultural historian, with signed language and rock writing depictions of many historical events, especially the Bear Dance, which is popular among the Utes. Her writing is an example of respect to the integrated Indigenous worldview that emphasizes understanding the interconnectedness and sacredness of the rock/picture-writing, signed language (PISL), and storytelling. Patterson expanded on Martineau's work, with more charts of symbols and their signed language equivalents, found in the appendix of the book. Their contextual meanings come from within the indigenous culture. This is an excellent example of how Indigenous Methodologies rely on cross-cultural understanding by sharing interdisciplinary perspectives

from both archaeology and Indigenous story telling. Much of Patterson's research involves Indigenous people.

Martineau and Patterson agreed that "rock writing" would be a more suitable term than "rock art," because the phenomenon under discussion and study has structure, grammar, and syntax like a written language, describing a story or historical event on one full panel.

To preserve tribal knowledge, Clifford Duncan (Ute) educates us by saying "that it is important to pay attention to what the rock art has to 'share' and listen carefully. It has to be interpreted from the point of view of the author or the people putting it there" (Patterson and Duncan 2016, 57). He emphasizes that, "Those people were not just ordinary, they had some kind of special experience or background to produce these drawings. You can't just draw something like that just for the sake of drawing. Only the trained people oriented to the spiritual aspects can make the rock arts" (Patterson and Duncan 2016, 57).

There are other important comments by Duncan who encourages us to listen to the rock art because of the stories it has to tell. The rock art provides a description of the people who were here, and provides tribal identity. He encourages respect of the sacredness of rock art and its testimony that the landscape belongs to the Ute ancestors. Everything around it is sacred (Patterson and Duncan 2016, 57).

My contribution to this work is to break the message of the rock writing down into smaller bits. That is what is presented in this chapter.

The narrative category of rock writing could be linear or non-linear. Patterson's research on Uto-Aztecan (Ute and Paiute) people, language and culture, indicates that rock writing falls into seven categories of symbols: 1) Cartographic: maps of trail systems, diagrams of game drives and hunting strategies; 2) Schematic or Diagrammatic: Signed language symbols used to

diagram how something is used, or acted out. Parts of animals or humans are exaggerated to emphasize their attributes or aspects of their condition or behavior; 3) Narrative: of an important event, that always involves Time and Space – these includes battle scenes, political events, courtship and marriage, etc. Ledger art is narrative, as are winter counts, and codices; 4) Iconic: Codified and Conventionalized symbols – include religious icons, tribal emblems, codified symbols, locator symbols that indicate the location of springs, dwellings, caves, passage through canyons, or around impassable areas, and locators of food resources and game animals; 5) Metaphoric: cultural symbols specific to each tribe, some are shared, some not; 6) Proxemics: The spatial positioning relative to other elements and placement on the panel; and, 7) Beats: grooves, scrapes, dots, gouges, abraded surfaces, re-pecked images are diagnostic techniques to express emotions, repetitions, quantity, and intensity of danger or evil, as well as goodness, and appreciation (Boone 1994 and 2004; Greene 1996 and 2009; Hall 1959 and 1966; Martineau 1973; Patterson 2004 and 2016).

Rock writing is a pictographic narrative, something like a single frame cartoon, with symbols and icons describing a story from the narrator's perspective. Some narratives read from left-to-right, and others from right-to-left, depending on the culture. (Plains Indians read right-to-left, as do Ancestral Pueblo, while Uto-Aztecan and Numic speakers read left-to-right) (Patterson 2018b, 2016, 2013). Historic narratives depicted on hides by Plains groups are drawn in spiral form usually starting in the center and spiraling out.

Prehistoric panels are not created in a spiral form, but rather use a symbol of a spiral along with other symbols in the composition. The spiral is a reference to 'time' in the narrative configuration (Patterson, pers. comm.).

Martineau emphasized that symbols and signs, typically nouns (cultural emblems) belonging to Southwestern tribes, for example "Kiva," "Kachina," and 'prayer sticks' would not be used by Plains Indians who instead would signify "travois," "tipis," "horses," etcetera. These cultural diagnostics help identify which tribe it belongs to, along with oral traditions. Martineau also explains symbols representing modifying words, like "high," "low," and "rugged," which can be found in petroglyph panels. There is a separate class of symbols (called "locator symbols") that give directions to locations of springs, food sources, act as warning signals of dangerous flash-flood areas, or show canyon crossings. In his view, rock writing is a language that can be interpreted by tribes when they apply signed language equivalents to each symbol. This format can be described in linguistic anthropology, according to Saussure's model, with the *signified* being a picture or petroglyph image, and the *signifier* being the sign/word equivalent.

Author William Tomkins mentioned in his book, *Indian Sign Language,* that petroglyphs or rock carving, were created by "savage and barbarian tribes… and connected them to supernatural beings" (1969, 74). He states that, "authorities disagreed as to whether sign language, which is closely connected to picture writing, preceded articulate speech" (1969, 74). He commented that the picture writings documented on skins, bark and pottery, are more readily interpreted than those on rocks. As for pictographs, he emphasized that they are not just curiosities but rather represent the intellectual remains of the earliest inhabitants and bear significantly on the evolution of the human mind. Tomkins believes the knowledge of Indian customs, costumes, histories, and tradition are possibly accessible because of the availability of existing Native people who could interpret the curiosities, while rock writing could not be interpreted because the ancestors are long gone (1969, 74). I disagree with his comment. Rock writing can be interpreted by current descendants of the rock-writing creators because of the oral

traditions that have been passed down across generations. There is evidence of descendants discussing these narratives, people like Clifford Duncan and Larry Cesspooch, who are Ute historians. Pottery, ledgers, buffalo hides, and other marked items can be translated by current descendants who have been trained by a long line of ancestors who passed the information on to them.

My criticism of Tomkins' book, though it is written for the general public, is that it is not an academic description. His chapter on Sioux and Ojibwa pictography and ideography is not representative of the petroglyphs and pictographs that were carved and marked by many tribes. He uses the cultural evolution terminology of the savage and barbarian stages that was influenced by Lewis Henry Morgan's (1877) Ancient Society, a then-popular theory. Although he mentions Henry R. Schoolcraft (1851), who recorded Minnesota tribes, especially the Ojibway/Chippewa rock-writing in Minnesota and Canada, he was not able to give a scholarly description of the rock art/rock writing. The problem in his writing was that it is more of summary of what he read and cited from people like Mallery 1886, Morgan 1877, Schoolcraft 1851 and 1853, and other written materials from nearly a century earlier. He was limited in his experience, but he did offer some valuable information regarding Plains Indian Sign Language and rock art.

Evidence of Rock Writing and Signed Language Connection

Linea Sundstrom, also an archaeologist, studied the petroglyphs of the Dakota/Lakota/Sioux people. Her work can be seen in *Storied Stones*. In her book is a rock art image from the Black Hills, South Dakota called, "Cried for Vision" (95). It is a female figure, identified by the vulva mark carved on the rock between her legs. The petroglyph image belongs

to an undetermined tribe, but Sundstrom thinks it is from the Lakota because of the facial marks (email correspondence, September 13, 2016). The rock image from the Track-Vulva-Groove Rock Art style in Black Hills dates between Late Prehistoric (1500 BP) to Historic Eras (150 BP), which means AD 500 to 1800 (1500 to 1200 years ago).

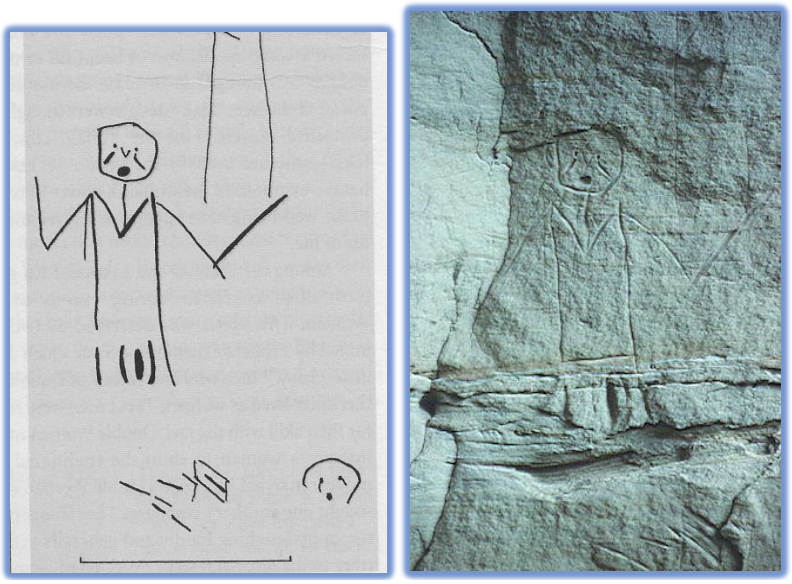


Figure 30: Photo of "Cried for Vision" rock writing and drawing by Linea Sundstrom. (Used by permission from Linea Sundstrom). *Storied Stones*, p. 95.

But she missed the importance of signed language symbols on the rock panel. The Dakota/Lakota, as well as many other tribes, use a certain sign for PRAY/PRAYER. This sign can be seen on this particular female image having hands and arms upraised. It bears an interesting similarity to one in Alex Patterson's book *A Field Guide to Rock Arts Symbols of the Greater Southwest*. In his book, the symbol for a "praying person" is pictured as an anthropomorph with both hands upraised (1992, 161). Both this book and Rajnovich's (1994) book reference their source of information on PRAY from Mallery (1863). Use of the sign

PRAY/PRAYER can be found among current PISL signer, which shows intergenerational transmission of the same sign.

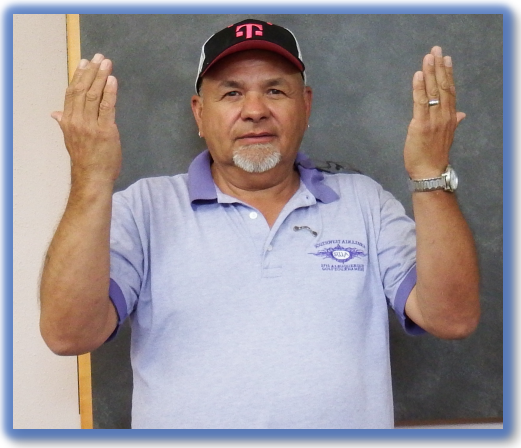


Figure 31: James Wooden Legs (Northern Cheyenne) signing PRAY/PRAYER

Rajnovich's work includes many petroglyphs and pictographs from Canadian Shield areas, and I caught myself identifying images to PISL signs. For me, these examples provide evidence for the Saussurean model using '*signified'* as the image and PISL as the *'signifier'* as a link. As an experiment, I contacted two PISL signers through a computer-mediated mode and video-phone. I showed them the images and asked them what they thought of the images... if they had any sign associated with them.



Figure 32: Pictograph on Canadian Shield and James Wooden Legs signing "ELDER"

As I had predicted, they linked the images with PISL signs with no difficulty, because of their knowledge in PISL and of cultural context. Such obvious associations would not occur with people who are not fluent in PISL (or other tribal language varieties) or familiar with the cultural context. Looking at a Uto-Aztecan language, Eastern Shoshone speaker Renalda Freeman explains that in her spoken language there are gender specific identifiers with "elders"; a male elder would be zoogoopah while a female elder is hivizoh (Renalda Freeman, pers. comm.). There are also spoken words for female and male grandparents. The linguistic information shared with me by Renalda would benefit Indigenous Deaf people if language revitalization programs created a pedagogical curriculum specifically for Indigenous Deaf people, because it is precisely this type of socio-linguistic information to which people who are Indigenous Deaf do not have access. At the same time, hearing Indigenous people could learn tribal signed language and could then use that knowledge to perceive and understand the interconnection between signed language and rock writing.

The problem stems from the fact that the corpus of research has been and is mostly conducted from a European perspective, in which published documents have more credibility than oral traditions. Typical signed language researchers also rely heavily on written literature, but lack the application of archaeological studies of language development. My research acts as a wedge to fill the gap in the chronological time line by doing more archaeological research with a tribal member of the descendant community. In conjunction, I am supported by a professional archaeologist who has worked with numerous tribes in several Western states in the US.

Colwell-Chanthaphonh and Ferguson coined the term "descendant communities" because they felt it is the best term to use to match all of the groups that link themselves intensely to ancestral sites because of their cultural, social, and historical affinities. These communities do

not necessarily have more rights (legal or otherwise) to the past revealed by archaeology, but often have more complex and compelling interests than other communities, including the archaeological community itself (2008, 8). My goal is to locate Hand Talk/tribal signed language as a visual language of the descendant community.

Rock/pictorial writing on ancestral lands across Western states and in Mexico is an authentic documentation of iconic symbols going back as far as 6,000 B.C. Martineau (1973) was able to discover signed language in pre-historic times; Olmec glyphs are the oldest sign language documented on this continent (C. Patterson, Email direct message to author, January 23, 2018). Martineau conducted research comparing different ancient glyphs in countries such as Mexico, Australia, and Europe. He was able to decipher paleolithic glyphs, as provided in his work titled *The Rocks Begin to Speak* (1973, 147-158). According to Patterson, in archaeological findings in this country, she estimates the time depth goes back to 2,000 B.C. with the Basketmaker II style where rock images with signs made its appearance, but Martineau read certain samples of rock images and symbols in Nevada to be early Archaic Great Basin Style, which identifies back to 6,000 B.C. (Patterson, Email direct message to author, January 21, 2018). These findings provide consideration that sign language is depicted at a much earlier time than was identified by Spanish explorers in the 1540s usually in written reports. Álvar Núñez Cabeza de Vaca (1542) documented different Indian groups that communicated with signs. Another Spanish explorer, "clearly distinguished which groups spoke the same language, which spoke different languages but understood others, and which groups did not understand others at all, except through the use of sign language" (Davis 2010, 18-9; Wurtzburg and Campbell 1995, 154-5). Another Spanish explorer, Pedro de Castañeda from the Coronado Expedition in 1541-2 witnessed the same encounter with Indian groups. (Davis 2010; Wurtzbery & Campbell 1995).

Martineau's 43 years of unpublished work is being progressed by his daughter and Carol Patterson, developing a dictionary of all incorporation symbols of rock writing and sign language equivalences is work in progress. This work will prove the antiquity of the interconnection between rock writing and sign language.

Linguistics of Signed Language Research

Linguistics of signed languages around the world has been readily documented since 1950s, including Plains Indian Sign Language. American Sign Language has been a recognized signed language, not just in the United States and Canada, but also serving as an international lingua franca for people who attended Gallaudet University, the only liberal arts college for the Deaf in world. Thousands of Deaf students learned ASL and brought it to their home countries after they graduation. But many countries also possess their own signed languages. The point is that signed languages from different countries use signs that are applicable to, and sometimes, unique to, their linguistic landscape. Take, for instance, signs for foods, animals, cultural attire, houses, historical events, and anything else under the sun. Including the Deaf people of each country to participate in this type of study would remove all the centuries-old barriers from early Europeans' and Americans' influence of marginalizing and preventing Deaf people from being included in studies about their own language and culture.

I bring to my work an extensive background in linguistics of ASL and PISL. My research spans decades, beginning in 1994, and including my collaborative work with Dr. Carol Patterson since 2013. Our methodology is a combination of archaeology, linguistic anthropology, and socio-cultural anthropology, as well as Native ethnographic knowledge, semiotics, PISL and

ASL. The purpose of our work is to search for and then elaborate on an interconnection between signed language and rock images.

First, an archaeological work using semiotics will be analyzed to show the symbols, iconicity, and indexicity present in the piece. Second, I will mention some of the linguistics of ASL research and discuss how such applies to PISL. From the whole of ASL linguistics, I have chosen to focus on these aspects: signing space, classifiers (which are also called depicting verbs), referents in space, signer's perspective, and parameters in lexicon.

Gloss Writing Systems

Since the 1970s, a system called "gloss writing" has been used to record individual signs appearing in signed languages. Gloss writing (also known as "glossing") is used by a great many signed language linguists and linguistic anthropologists around the world. ASL, in particular, has developed this system to document its signed lexicon, non-manual markers (grammatical rules expressed on the face representing moods, adjectives, adverbs, and questions) and morphology (Baker-Shenk and Cokely 1991; Liddel 2003; McKay-Cody 1996; Supalla and Clark 2015; Valli, et al. 2011). The transcription system uses English words in ALL CAPS to represent each sign. For example, HUNGRY is used to represent a sign equivalent to the English word "hungry." Glossing is a way of documenting signs as they are signed by the signer. The term "writing" in this way was hard for many scholars to accept, and many archaeologists question it as well. Boone mentioned in her book that writing is somewhat difficult to use when it comes to semasiographic research. American Sign Language and Plains Indian Sign Language are not linear (written) languages, nor are many signed languages around the world. They are multi-dimensional and non-linear languages. As a fluent ASL signer, when doing storytelling,

lecture, or conversation, language can be produced using a variety of movements—timeline (past to present or vice-versa), downward or upward, circular, center, left to right or right to left, outward, inward, or two hands with different signs simultaneously signing. It is not expressed in a linear manner, like reading a book. Visual storytelling does not have an equivalent meaning in the English language; many signs are not translatable to English because meaning is unavoidably lost.

Historically, PISL has been translated into English for over a century, but was not translated exactly as it was signed like it would be using a gloss writing system. In 1994, I began my PISL transcription for my master's thesis using glossing, and I have used it ever since that time. In my chapters here, I use capitalized letters of an English word to represent a PISL sign.

Below is an example of using a gloss writing system, from an interview video with a research participant, where Elkins' model blended into one: writing—English words for ASL signs notation—use of symbols with use of hands and the placement in signing space, non-manual markers (facial expression), and picture.

_____Wh-Q
Melanie: HOW YOU COMMUNICATE WITH INDIGENOUS DEAF LIKE

EVENT [(2h) 5: "large group gather together" (1h) left, (1h) right to center]

Participant: MEXICAN INDIAN TEND (2h alt going in 4 directions)

TAKE+APART ++ [(2h) alt, going in different directions) ONE ONE]

____Head tilt right _____Head jerk
ISOLATE GET+TOGETHER #RARE WHEN

[(2h): 5 COME "come together"(1h) left, (1h) right to center] ALWAYS

_____ah. Shoulder lend forward__ _have
DESPERATE CHAT++ BUT HAVE INDIAN

_____mm _____mm _____oo
ORGANIZATION ESTABLISH NONE

Proving Elkins' tripartite model, this transcription covers all three lobes at once, writing, notation and picture (video). This model is used in the rest of this chapter.

Lexicon in Signed Language

Recall the discussion about Elkins' tripartite model: writing, notation and picture. What is a notation? Crystal (2008) explains in his book *Linguistics and Phonetics*, that it is a system of graphic representation of speech... a transcription, and is widely and preferably used. In linguistics, it applies to generative grammar with symbols and rules in languages called notational devices, but this term is used specifically when studying a spoken language, for signed languages, we have to consider a mixture of semasiographic signing (ASL and PISL) and glottographic (English) wording.

The Stokoe transcription system (currently called "Stokoe Notation") was named after William Stokoe, who did research on ASL starting in the mid-1950s. Stokoe Notation is based on ASL chereology, which consists of five parameters: handshape, location, movement, palm orientation, and non-manual markers (facial expressions), using Latin letters and numerals for the notation devices. The chereological transcription of his system can be found on page 28-32 of *Linguistics of American Sign Language: An Introduction 5th edition.* (Valli, et al. 2011). More information on PISL chereological analysis can be found in my Master's thesis (McKay-Cody 1996). Spoken language has a combination of vowels and consonants, intonation and others, while signed languages has chereological parameters. In addition to using Stokoe notation to describe PISL signs, I include pictures in the analysis.

For the dissertation, I focus entirely on ontological study of chereology of PISL (similar to Elkin's model-Notation) to compare the signs from the past (from Ute rock panel, 1890) down to the present. The morphological narrative of the Buffalo Hunt panel will be analyzed in the future. I use only the chereological study from Stokoe ASL linguistic research and apply them to PISL signs.

Data Collection of Rock Panels

In this chapter, I analyze two rock writing panels, one is of a Ute historical event describing a Buffalo Hunt and the other one is of a Kiowa historical event related to Kiowas captured by Mexicans in an area near El Paso, Texas. These are two selected samples from the many dozens of petroglyphs I visited in Nine Mile Canyon, Zion National Monument and Willow Creek on the Ute Indian Reservation.

I am by no means studying the entire corpus of petroglyphs in a specific area. It is my intention to demonstrate tribal sign language and the linguistics of Plains Indian Sign Language, which has never been done before now. I use linguistics of ASL and apply those features to the findings within the signed rock images. There were signs in the images that caught my eye, because of my long-time research with PISL. After the visit, I conducted my analysis with Dr. Patterson, using drawings from the pictures taken of the rock panel, photos and Ute sign language. I am using the Indigenous methodologies in my research, which applies ethnographic conversation and personal experience, to get a sense of the environment and to use data from an Indigenous perspective.

Methodological Study of Rock Panel from Indigenous Worldview

The following is a description of what happens in the field, when observing Indian rock writing. My Northern Ute colleague, Larry Cesspooch ceremonially prayed to his ancestors to let them know of our research and sought permission to study their ancient sign language and their stories. We thanked them for their permission. I will only use one rock panel for my dissertation research because it provides easily recognizable signs. As mentioned, my focus is on the intergenerational transition of sign language, and I use ontological comparison of tribal signs to symbols from rock/picture-writing, then to sign language books, and other petroglyphs with similar symbol of one sign and finally to identify signs that are currently used.

Indigenous and Sign Language Interpretation of the Buffalo Hunt
From Cesspooch, Larry. *Sacred Images: Ute Rock Writing with LaVan Martineau on the Northern Ute Reservation*, 1986. Video. 16 min.

(All photographs and drawings are from a rock art panel in the Northern Ute Indian Reservation, called the "Buffalo Hunt" with band symbols of Uintah & Yamparika (White River) (Patterson and Duncan 2016, 66—used with permission from Dr. Patterson and Duncan).

Per Clifford Duncan's historical description, that all of the panels document around the Ute site, Willow Creek Canyon are created between 1881 and 1908. Martineau's interpretation of the Buffalo Hunt from the 1986 video is documented by time code system with description (e.g., numbers are documented alongside Martineau's explanations). The story is not about an actual buffalo hunt, but rather, it is about the Ute "condition," at that time-period during 1890-1910 (Patterson and Duncan 2016).

The Ute reservation in northeastern Utah where the panel is located, specifically in Willow Creek, is very dry, and desert-like with canyons. The buffalo hunts were conducted, not

in this area but out on the Plains, and in South Park. The Utes were forcefully placed on the reservation and they had few rights to go out hunting buffalo on the Plains. Basically, they were imprisoned on their own reservation (1880-1930s Reservation era) and were in seriously bad living conditions. Because of the removal of their rifles by the whiteman, their hunting was greatly restricted (See Patterson 2016, petroglyph in Willow Creek of Utes 'giving up their rifles'.). The woman with child 'cut in two' from hunger reinforces their "condition", because the women and babies were suffering from a lack of abundant food supplies. The Ute figure is offering a peace pipe as a gesture of peace to the whiteman, so that they might be allowed to hunt buffalo with rifles to feed their families (Patterson, pers. comm.).

During my visit to Willow Creek site in May 2017, I witnessed the environment; farming in this particular area is impossible, there is not even anything to hunt for the Ute people. The United States Government provided them with whiteman's trade goods, dried ingredients, and domesticated animals like sheep and cattle as their food supply. There is some misunderstanding with archaeologists and non-archaeologists (non-indigenous) people who are/were misled that "Rock Art" is all about hunting events. When studying a rock panel of petroglyphs, one must not assume its meaning. Every symbol is a metaphor for a *condition* or a character, or a personality. The spatial positioning on the Buffalo Hunt has metaphoric meaning. The left side represents the old ways and past that included hunting with a bow, their starvation from lack of food and deciding to offer a peace pipe with the acceptance of whiteman ways. The right side reveals new ways to assimilate into the whiteman's way in order to feed their people. The Ute men adjusted to the whiteman's life by wearing "cowboy hats," a sign of change into cattle ranching, which they were very successful. Many of them lead a life of cowboys and cowgirls.

There are many historic pictures of them all dressed up with scarves, gauntlets, big hats, boots and fringed chaps. While I visited the Ute reservation in 2017, nearly every house had horses.



Figure 33a: Full Rock Panel of 'Buffalo Hunt'.



Figure 33b: Drawing of 'Buffalo Hunt'

6:16 Cesspooch: As more and more non-Indians came into Ute country, they began to settle in the best hunting grounds. The Utes had their horses and were known for hunting and fishing.

06:27 Martineau: [Title: Between Worlds] This panel represents the time the Utes still lived in Colorado in the Rocky Mountains. They were noted (known) by the Plains Indians as really Mountain Indians. (It was) one of the ways they referred to the Utes, alongside the symbol for '*black*'.



Figure 34: Signer: Larry Cesspooch (Ute) BLACK, 2017



Figure 35. Ute sign: SKIN (slightly move from mid arm to wrist), 2017

Per Cesspooch's description: The sign for **UTE** is **BLACK** + **SKIN** because in old days, our people were very dark-skinned people, almost black.

McKay-Cody's linguistic description: The sign for **UTE** is a "*movement epenthesis*" sign with the same handshape "closed 5", rub on hair (black hair) **BLACK** and touch the mid-arm

then down to the wrist **SKIN**. Using the symbol "+" means compound according to sign language linguistic research/Gloss Writing System. This sign is a compound sign meaning two signs produce a very flow movement to make it look like one sign.

Besides one rock panel, there are several if not many rock panels provided an ontologically evidence of rock image of Ute people displaying pecked dots on their bodies representing Ute people and it match the sign that Larry Cesspooch displayed the sign for BLACK.



Figure 36: Pecked bodies (BLACK) representing Ute people on the rock panel.
Photo used by permission of Carol Patterson.

Per Martineau's interpretation above, Figure 35 shows the solidly pecked bodies of White River Utes on rock panel indicating for the sign, INDIAN, using one non-dominant hand serve as a base and the dominant hand making rubbing in a circular manner. This pictorial narrative with pecked bodies representing a tribe, and can be understood by people who use tribal sign language. It can be overlooked in meaning if the outsider who observed the rock panel. (1973,

59-61). Interestingly, the pecked bodies of White River Ute on this rock panel has similar meaning between rock image and sign for UTE (BLACK + SKIN). Note: Larry Cesspooch pointed to horse mane (Figure 50) and pecked hand (Figure 51), they are almost solidly pecked which means BLACK.

Here is a comparison from sign language books with the sign BLACK:

BLACK—The sign for color with many tribes is used for Black, but the safer way is to point to something black in color Clark, W.P. *The Indian Sign Language*, University of Nebraska Press 1982, 67.

UTE--Make the sign for BLACK, and rub the face as in RED. Clark, W.P. *The Indian Sign Language*, University of Nebraska Press 1982, 386. No illustration of any signs are documented in Clark's book.

UTES**--**"Rub the back of the extended flat left hand with the extended fingers of the right, then touch some black object. Represents black skin." Mallery, G, Sign *Language among the North American Indians.* Dover Publications 2001, 475.

BLACK: Sign COLOR and touch the hair or eyebrow (45). COLOR–with the fingertips of right hand (thumb crooked under) rub circularly on the palm of the left hand as though rubbing color (44). There is no sign for UTE in this book. Seton, Ernest Thompson. *Sign Talk of the Cheyenne Indians and Other Cultures*. Dover Publications, Inc. 2000.

In McKay-Cody's fieldwork with the Northern Cheyenne signers, the Cheyenne sign for BLACK is similar to Larry Cesspooch's sign, tip of fingers of one hand rub sideway on topside of hair.

The Lakota sign displays a similarity in the signs BLACK (17) and UTE (59). Tompkins, W. *Universal American Indian Sign Language*, San Diego, CA 1968.

The Kiowa sign for BLACK—"Make the signs for *night* and *similar*, or extend the hands in front of the forehead and close the eyes. To indicate this color, the Indians very often point to something black such as their hair or eyebrows" (52). UTE—"Make the signs for *Indian* and black," INDIAN—"Extend the left hand, palm down, and rub the back of it with the right fingertips, from the wrist to the fingertips. Do this at least twice" (17). Fronval, G. and D. DuBois. *Indian Signals and Sign Language*. Wings Book 1994.

Comparison from PISL/NAISL books and with current PISL signers:



Figure 37. James Wooden Legs -- Cheyenne sign: BLACK = COLOR then pointing to something black or touch something black. Photos taken by Leslie Mostenbocker, 2018.



Figure 38: Flarin Big Lake -- Crow sign: BLACK = COLOR and touch something BLACK.
(The BLACK rub on the hair can be a lexical item, (one sign).
Photos taken by Nancy Big Lake, 2018.



Figure 39: Kricket Rhoads-Connywerdy – Kiowa sign: BLACK (circular movement around the face), 2018. Multimedia adapted by Crescenciano Garcia, Jr., 2018.

The comparison of signs BLACK and UTE are displayed in "Indian sign language" books and the existing PISL signers; some have similar signs, while others have different signs, which represent different dialects within PISL. This is evidence of intergenerational transmission from ancient signs to today.

Returning to Martineau's description of the rock panel:

06:45 Martineau: You notice this rock incorporation where these horses are situated up high. [camera zooms in to horses as he points to them] [camera pans left to where he is pointing] This shows the buffalo that used to roam up into the parks in the Colorado Rockies. There used to be buffalo there. [camera zooms in] These are symbols of deer that the Utes used to live on. Over here [camera pans left to woman symbol] you'll find a symbol of a woman carrying a baby on her back. And the line across her stomach is one of the ways you can say "*hungry*". You are cut in two, in the sign language (Figures 40 and 41).



Figure 40: Woman and HUNGRY sign

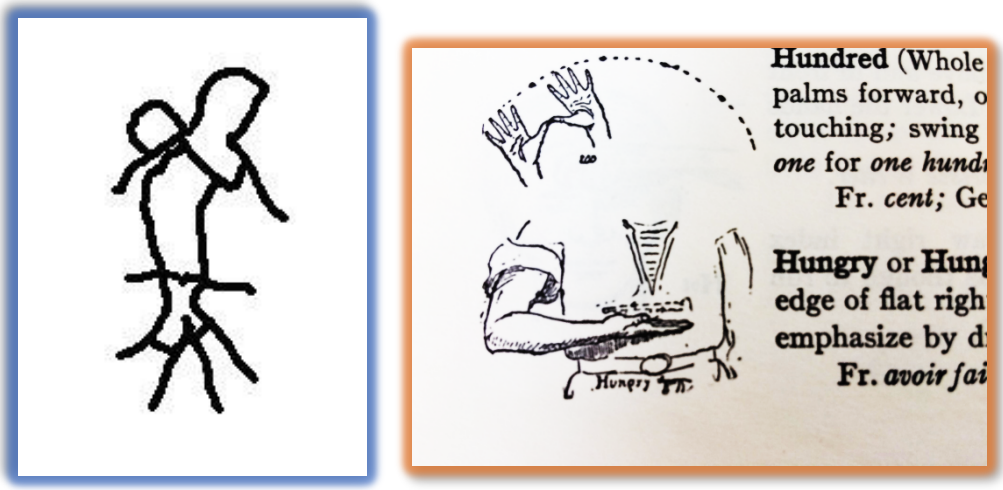


Figure 41**: HUNGRY** or Hunger, (cuts one in two).
Draw the lower edge of flat hand, back down, across the stomach; emphasizing by drawing back and forth.
(Seton, E.T., Sign *Talk of the Cheyenne Indians and other cultures.* Dover Publications 2000, 102).

07:13 Martineau: The reason they're hungry, is because down here on the plains, which is indicated by these buffalo being positioned lower (on the panel). The plains were lower than the Rockies. You see many buffalo down there. And you see the Indians hunting the buffalo, but along come the white man. And he dismounts from his horse and runs over here (on the panel) and he is shooting the buffalo. [Camera zooms in on white man with rifle.] And pretty soon, the buffalo, they are all gone. And the Indians became hungry. They no longer were able to maintain

their old way of life (The white man with a rifle. He dismounts to shoot, while the Indian shoots from horseback, Figure 42).



Figure 42: Whiteman with a rifle

07:47 Martineau: So, at this time, you see the Indian beginning to follow the white man's way. Here he has a hat on with his feather to show that he's following the white man's way. And here he's offering the (peace) pipe. He's offering peace. (Indian with a hat on offering the peace pipe, Figure 43).

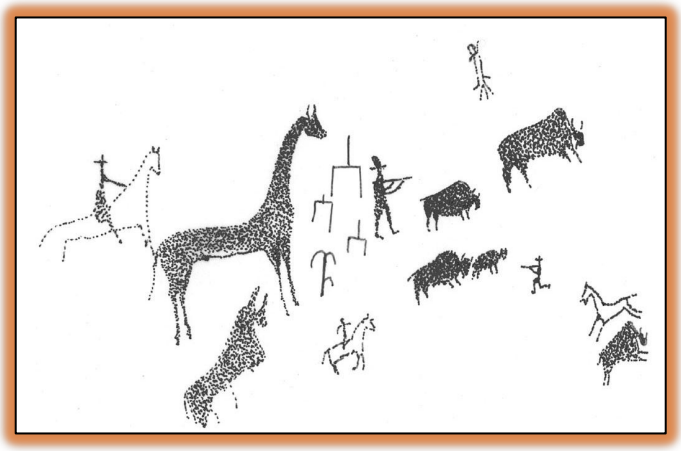


Figure 43: Ute man carrying Peace pipe

Now this is exactly what happened up on the White River Reservation, when Meeker came in and became the agent. The White River Utes offered peace and allowed the white man to come in and to set up a reservation.

08:13 Martineau: And here again you have the symbol that might possibly represent the name for the "Yamparikas" [pronounced Yumpa'tuhkuts in Southern Paiute language], the Wild Caraway (carrot family) people or the Wild Carrot Eaters, now called, the White River Utes, (Figure 44, 45). So, after a while they became disillusioned with the white man's Indian agent and reservation life and that's what caused the Meeker massacre, the White River Uprising (more information: see Martineau, *Southern Paiutes* 1992, 169).



Figure 44: Yamparika symbol

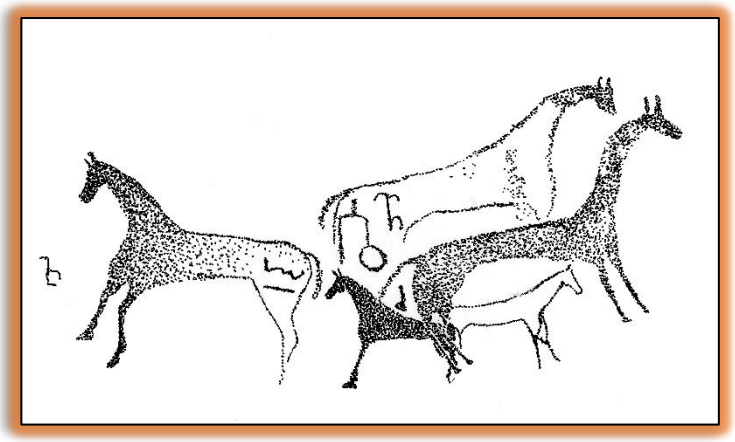


Figure 45: Band names on horses

08:37 Band names used as brands: Uncompahgre; Uintah, and Yamparika,

The following chart shows the three original bands that were brought together on the Uinta-Ouray Reservation.

Band Name	Symbol	Meaning
Uncompahgre		Red earth water place
Yampah River (Yamparika)		Wild caraway or yampah
Uintah		Uintah or White River Utes

Table 2: Band/Brand signs. (Patterson & Duncan, 2016:85) Used with permission from Dr. Carol Patterson.

McKay-Cody: from the HUNGRY woman petroglyph/rock image seen here. I aim to show the historical figurine of Ute woman of that era. This is to show the non-Indigenous/Native people who do not know the history of women carrying babies in cradleboards; here is one of

many examples of what it looks like in old days. It is a Ute woman, so you know it is specifically relate to the Ute history.

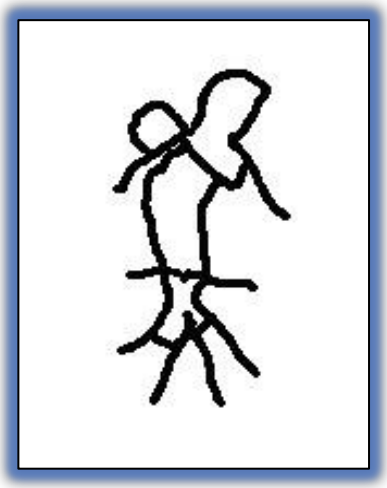


Figure 46: This image is from the "Buffalo Hunt," it is at the top-center of the rock panel.



Figure 47: Ute mother and baby in cradleboard, circa 1900s Colorado History. Public Domain. Pinterest.com; ba4762f3d162a9062ae4d27563435faf.jpg.

How do we know if it is a sign or not? We can use a Plains Indian Sign Language written and photographed corpus to help us. I examined the rock image of HUNGRY woman from the Buffalo Hunt rock panel. To bring that to the attention of people who are not familiar with PISL, a comparison of two images was analyzed, one without a sign and one with a sign for HUNGRY. The goal was also to convince the archaeologists who had doubts of the existence of the sign language on rock/picture writing (petroglyphs and pictographs). I will demonstrate the difference in iconic images. Figure 48a. My own drawing of a woman with baby in cradleboard without the line/slash. Compare the two figures 48a and 48b.

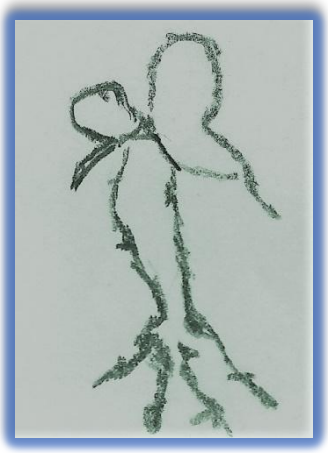


Figure 48a: Woman with baby in cradleboard

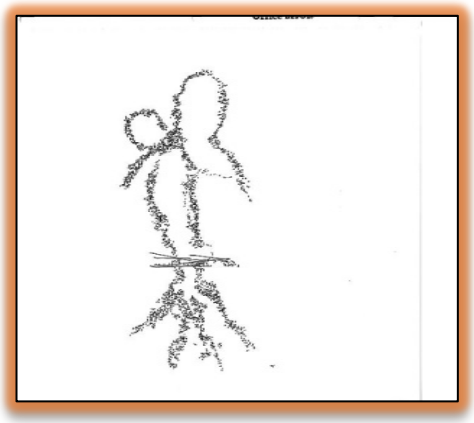
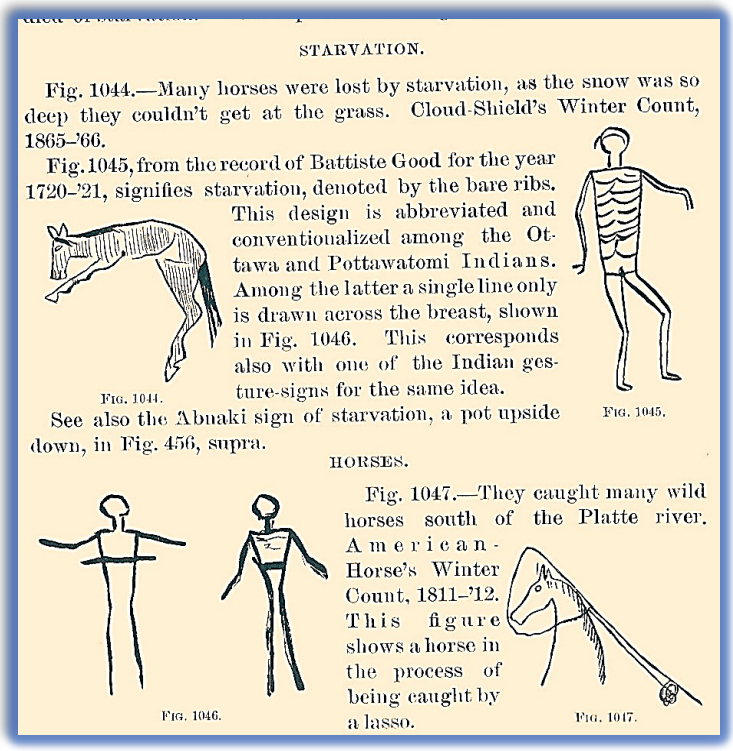


Figure 48b: Hungry woman with baby in cradleboard and slash

Note the difference with and without the slash/line, one means just a Ute woman with baby in cradleboard (figure 48a) but she is not hungry. So, the meaning is different from the Ute woman with baby in cradleboard who is hungry depicted by the slash/line across her stomach (figure 48b). So that provides evidence of the sign HUNGRY. Any fluent PISL signers can identify with this rock image in a glance. To support this argument further, I turn to the work of Mallery. Mallery documented the pictographs of starvation in his report showing line/slash across the stomach. It is similar to the HUNGRY-WOMAN rock writing with two lines/slashes

representing the sign for HUNGRY with matching movement of Plains Indian Sign Language/Hand Talk.

See Mallery's pictographs here:



STARVATION.

Fig. 1044.—Many horses were lost by starvation, as the snow was so deep they couldn't get at the grass. Cloud-Shield's Winter Count, 1865–'66.

Fig. 1045, from the record of Battiste Good for the year 1720–'21, signifies starvation, denoted by the bare ribs. This design is abbreviated and conventionalized among the Ottawa and Pottawatomi Indians. Among the latter a single line only is drawn across the breast, shown in Fig. 1046. This corresponds also with one of the Indian gesture-signs for the same idea.

FIG. 1044.

FIG. 1045.

See also the Abnaki sign of starvation, a pot upside down, in Fig. 456, supra.

HORSES.

Fig. 1047.—They caught many wild horses south of the Platte river. American-Horse's Winter Count, 1811–'12. This figure shows a horse in the process of being caught by a lasso.

FIG. 1046.

FIG. 1047.

Figure 49: Mallery's Picture-Writing of the American Indians. Vol. 2 1972, Page 656 (Figure 1046).

To make an ontological study of other rock-writing sites, here are two other rock images showing the sign for UTE, using BLACK, which means, the horse owned by Ute. Note the pecked marks. There are two black horses in the Buffalo Hunt panel; it means they belonged to Ute riders. Pecked marks on horse mane means BLACK



Figure 50: BLACK (pecked) horse mane. Photo is the property of Larry Cesspooch, taken June, 2017.



Figure 51: Petroglyph of gloved hand and band sign, Ute reservation, near Buffalo hunt panel in Willow Creek, (photo and drawing by C. Patterson). Depicts a pecked hand, from a rock panel near the "Buffalo Hunt" site. It may represent the Utes by the color 'black' for the skin, and the Ute band sign for Uintah. It may also indicate habitation of Utes, now on this land, their reservation.

Kiowa Rock Panel in Texas: Indigenous Analysis

The following is another example of historic picture writing found at a cave in Hueco Tanks, a desert east of El Paso, Texas, authored by what is believed to be the Kiowa, as told to James Mooney by a Kiowa informant. James Mooney was an anthropologist who was sent by the Bureau of American Ethnology in the beginning of 1892 to record Kiowa culture (NMNH website). He remained with them for a decade and a half, gathered drawings on the ledgers, culture, and many other things while with the Kiowa people, including the Fort Marion days and

in Oklahoma. The story can be found in *Seventeenth Annual Report of the Bureau of American Ethnology (1895-6)*. More information on the geographical and historical events can be found in Kirkland and Newcomb, *The Rock Art of Texas* 1967, 173-177). It is reprinted in Martineau (1973) and interpreted by Martineau as an event that depicted a conflict with the Kiowa and Spanish soldiers entitled "Konate's Ordeal of 1893". When you study the full rock panel, you will see the lower number begins with 1 in the center and it moves left with numbering 2, 3, etc. then it goes right with the remaining large numbers. This type of panel is multi-directional. An intensive study is needed to see whether it is "cultural direction" that applies to the Kiowa in this narrative. The full deciphered translation with Kiowa signs and historical event can be found in Martineau, *The Rocks Begin to Speak* (1973, 69-79).

In the center and on the right side of the panel are depictions related to the sign HUNGRY. It is shown by a pinched waist or shrunken stomach. This time it is not a line/slash across the stomach; it is an actual sign for **HUNGRY**.



Fig. 43.

Figure 52: Right side of the Konate's Ordeal rock panel

Martineau deciphered and annotated this panel numbering each symbol, but I will be focusing on three figures only, and use arrows to show the symbols: no 3, 4 and 6 that illustrate the sign **HUNGRY**. What follows is an extract from Martineau's description: Symbol 3 and 4 – Mexican with hat on right side (Symbol 3) "*having a firm grip on the Kiowa's ability to get around them."* See the curved line on his right hand, meaning, *"veering around,"* the clutching hand with *"firm grip".* The left hand provides a sign for **HUNGRY** by holding his stomach.

On the left side of the panel, other signs were identified by Martineau as the sign for **KIOWA** and trying to starve the Kiowa. Another indicator to show, is that the Mexican is fat while the Kiowa is skinny (Kiowa symbol 4, standing next to Mexican). Symbol 4 is a Kiowa figurine signing **HUNGRY** (Martineau 1973, 74).

"Symbol 6: Kiowa figurine had his head cut off because s/he was severely punished and in pain due to hunger and thirst. The middle of the torso is squeezed and representing 'cut in two,' which is how it is signed as **HUNGRY** (curved left arm holding stomach) etymologically appeared" (Martineau 1973, 74).

Another sign appears on the left side panel, which is not **HUNGRY** but the sign for **KIOWA,** see figures 18 and 19 of Martineau 1973, page 74.

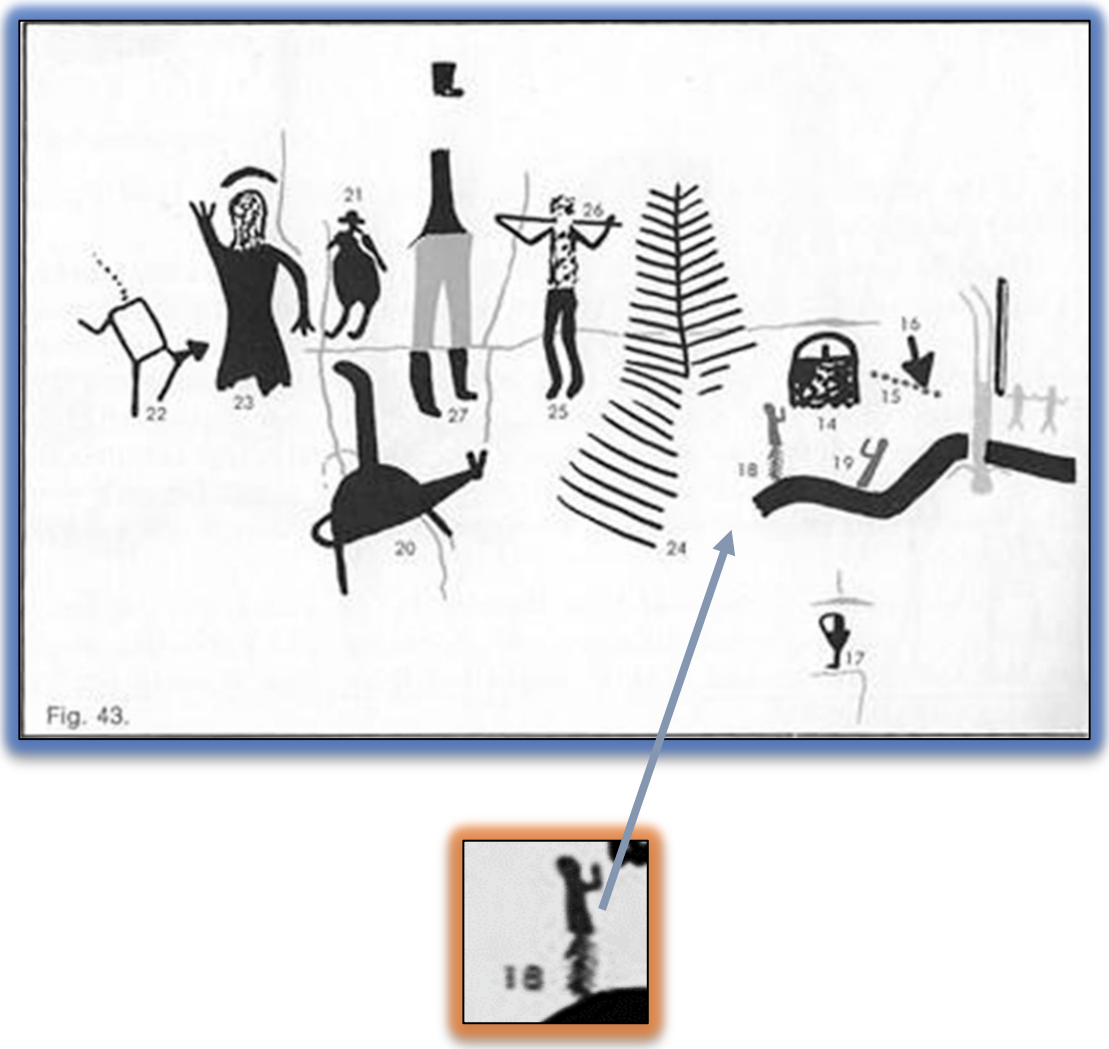


Figure 53: Left side of the rock panel of Konate's Ordeal of 1893 (Martineau 1973, 74) Per Martineau's translation the figures 18 and 19 possesses a sign for **KIOWA.** The next one on right figure 18 is **LIMP** (see note)

Martineau incorrectly uses the phrase "sign language symbol for Kiowa," in linguistics; it is actually a lexical item or lexicon (sign) for **KIOWA,** not a full sign language. Sign language means a full, grammatically structured language. The sign is from Kiowa's tribal sign within the Plains Indian Sign Language, to be more specific.

The sign **KIOWA** is still used with the Kiowa people today; a photographic description of signs can be seen here:



Figure 54: Dane Poolaw, Kiowa sign: KIOWA, 2018.
Multimedia adapted by Crescenciano Garcia, Jr., 2018.

Martineau interprets what is shown in the figure 18 pictorial image as a “furry tail” standing on water (to die of thirst) which conveyed the Kiowa sign for “LIMP, hence “ready to die” (1976, 77).” The translation from the sign LIMP may not be the appropriate English, word because, at times, PISL signs do not have a direct equivalent in English. I read the historical event description and consulted with a fluent PISL signer. I explained in ASL exactly what the historical event was about. He code switched into PISL and gave me the sign SHAKE, which aligns with the pictographic image and the sign.



Figure 55: James Wooden Legs, Kiowa/Cheyenne Sign: SHAKE, 2018.
Multimedia adapted by Crescenciano Garcia, Jr., 2019.

In a full PISL grammatical structure it would be expressed as: HUNGRY EAT/FOOD DRINK/WATER NO SHAKE. (English translation: "The Kiowa men were shaking because they had nothing to eat or drink.")



Figures 56, 57, and 58: PISL signs: HUNGRY FOOD WATER.
Multimedia adapted by Crescenciano Garcia, Jr., 2019.



Figures 59 and 60: PISL signs: NO SHAKE.
Multimedia adapted by Crescenciano Garcia, Jr., 2019.

Linguistic Analysis of Plains Indian Sign Language

Now that you have seen the past, which involves rock/picture writing and semasiographic analysis of the rock panels, the next step I took was to examine the ontological study of different tribes' signs through Plains Indian Sign Language with existing PISL signers. This shows the intergenerational transmission of ancestral signed language that has been passed down to current signers. The future of the tribal signed languages is in the hands of the tribes, depending on whether they want to preserve their tribal signed languages or not through attempts at language revitalization. I have already begun helping some tribes with their signed languages. I have contacted a few existing PISL signers and they believe in preserving tribal signed language for future generations.

What follows is my linguistic study of the sign HUNGRY, using phonology. It is important to notice that all of the participants are Native Signers.



Figure 61: James Wooden Legs, Northern Cheyenne sign: HUNGRY.
Photo taken by Robert Cody, Jr. 2017.

ASL Stokoe Notation
Location: [] √ (Torso and elbow in motion)
Handshape: B (Flat hand)
Palm Orientation: α (palm is facing upward)
Movement: z (moving sideways)

Figure 61: James Wooden Legs from Northern Cheyenne displays a sign for HUNGRY, the movement is likely to move across the stomach two or three times. The intensity can also be shown, there are three different types of intonations: 1) just one movement moving across, meaning, “Are you hungry?”; 2) a smaller movement with same sign, meaning, “Are you really that hungry?”; and, 3) when moving in a slightly jerky and quick semi-circle across the body, meaning, “YES! I am VERY hungry!” When analyzing the petroglyphs with slash(es), more than one slash represents repetitions of the sign.



Figure 62: Flarin Big Lake, Crow sign: HUNGRY. Photo taken by Nancy Big Lake, 2018.

ASL Stokoe Notation
Location: [] √ (Torso and elbow in motion)
Handshape: B (Flat hand)
Palm Orientation: α (palm is facing upward)
Movement: z (moving side-way)

Figure 62: Flarin Big Lake demonstrates the sign for **HUNGRY** in Crow/Apsáalooke.

The sign shows a similarity with the Northern Cheyenne sign. The difference in the Ute sign for HUNGRY can be seen here:



Figure 63: Clarinda Weston, Ute sign: HUNGRY. Photos taken by Ranessa Tsinnijinnie, 2018.

ASL Stokoe Notation:
Location: [] √
Handshape: B (flat hand)
Movement: @

Location: U
Handshape: B ŋ (flat hand and bending action)
Movement: I (move slightly inward/outward)

Palm Orientation: N/A **Palm Orientation:** ɒ (palm downward)

Figure 63: The Ute sign for HUNGRY starts with the stomach in circular movement then moves up close to the mouth to show EAT/FOOD. This is a phonological process sign showing what is called a *movement epenthesis*—when signs occur in sequence with a movement between the ending of the first to the next sign segment (Valli, et al. 2011, 47). For non-signers, it can be described as two signs becoming one sign, as the first sign flows smoothly into the second. Lastly, other HUNGRY signs coming from Kiowa signers can be seen here:



Figure 64: Kricket Rhoads-Connywerdy, Kiowa sign: HUNGRY, 2018. Multimedia adapted by Crescenciano Garcia, Jr., 2018.

ASL Stokoe Notation:
Location: [] √ (Torso and elbow in motion)
Handshape: B (flat hand)
Movement: ⊥ (move away from signer)
Palm Orientation: α (palm upward)

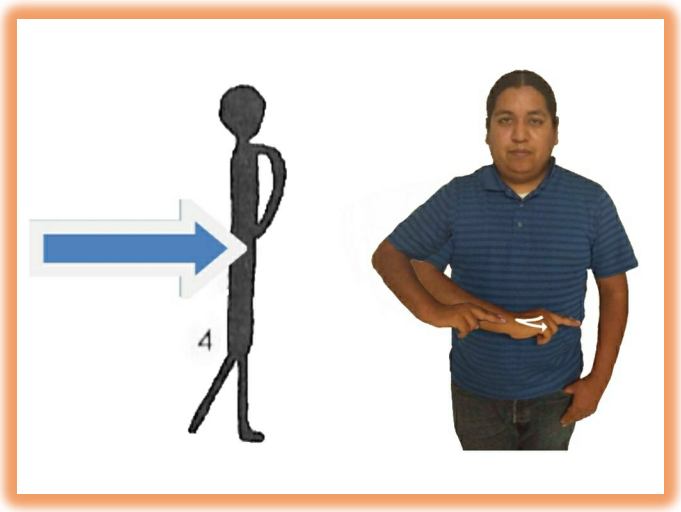


Figure 65: Dane Poolaw, Kiowa sign: HUNGRY, 2018. Multimedia adapted by Crescencciano Garcia, Jr., 2018.

ASL Stokoe Notation:
Location: [] √ (Torso and elbow in motion)
Handshape: H
Movement: z (moving side-way)
Palm Orientation: ɒ (palm downward)

Conclusion

In closing, considering the ancestral linguistic landscape, and using all evidence found within the panels discussed, the interconnection of signed language and rock/picture writing has been proved. To answer questions as to the informational functions of rock/picture writing, recall the Ute panel, the Buffalo Hunt, which exhibits some similarities to panels in the same canyon and at other sites, in many of which we see a pattern of Ute rock writing that employs a large corpus of pattern of symbols. The panels discussed herein have also been shaped by the ethnic identities of the creators, which is a symbolic function. Vogt described that the documentation of Paiute legend on rock panels is still in use; according to Anderson, the Paiute youth are being brought to the rock panel and told Paiute legends of ancient time. This shows us that such panels are of special significance to the creating tribe, as well as other tribes who value the preservation of their own tribal signed languages. Vogt is correct that some of these panels are public, like in

national parks or state-operated parks, and some are on tribal land, and are a part of those people's linguistic landscape,

From two rock panels, I have provided two examples of the sign for **HUNGRY** as seen in the rock art from two separate cultures. The Ute rock panel has a woman with a baby in a cradleboard with slashes/lines across her stomach representing **HUNGRY**. The Kiowa rock panel pictures a person making the actual sign for **HUNGRY** (and **KIOWA**). The signed lexical items provide evidence that signed language and rock/picture writing are connected. There is thus evidence of intergenerational transition of Plains Indian Sign Language/Hand Talk, from ancestral signs documented on the rock/picture writing to today's signs. PISL circulates in certain Native communities, where it is signed among the tribal deaf and hearing elders; it used to be strongly used, but it is now dying out. It is one of countless Indigenous languages that have been destroyed by boarding schools, mission schools, and Bureau of Indian Affair schools.

However, Deaf PISL signers, who experienced language loss to ASL in Deaf residential schools, have begun reversing the language shift and have returned to their PISL/Hand Talk. The interconnection between archaeological findings from rock/picture writing and linguistic anthropological analysis goes hand in hand. There are hundreds if not thousands of petroglyphs and pictographs scattered about the linguistic landscape, ready to be studied with Native consultants, tribal elders, archaeologists, and linguistic anthropologists who could develop many educational materials for classrooms and language revitalization programs for hearing and deaf people to recapture the past.

Chapter 6

Our Indigenous Deaf Community: Who Are We?

We need something that defines us as Indigenous Deaf people.

Terry Vinson (Comanche/Aztec)
Research participant

Introduction

Indigenous Deaf people are unique. We are often called "People-Who-Can't-Hear" by some tribes, or, "Keeper of the Tribal Sign Language," because we aim to learn about our tribal signs from hearing and deaf ancestors, by any means necessary, in order to maintain our tribal identities.

Many researchers and Deaf communities undervalue the wealth of Indigenous Deaf people's epistemologies and their heritages. Some Indigenous Deaf people are immersed in their own tribal communities and cultures, but the majority of them are culturally deprived due to being placed in Deaf residential schools or mainstreamed in public schools. In the old days, Indigenous Deaf people were given names that attached with "hear" or "ears" and "no." In Plains Indian Sign Language, HEAR + NO or "DEAF" (closed 5 handshape touching the ear, or moving in a circular motion near the ear). Indigenous Deaf people have also shared their own culture and identities since the first Intertribal Deaf Council was established in 1994.

But who are we? I aim to describe our Indigenous Deaf communities and our ways of knowing, being, and doing through sociocultural study. My study focuses on multi-sited ethnography, which means that I communicated with Indigenous Deaf people from 26 tribes in North America. They provided a wealth of authentic epistemologies and lived narratives. Our time was well spent, with signed narratives about our tribes, Indigenous Deaf people, past experiences with the Intertribal Deaf Council, and meeting new Indigenous Deaf people I had

never met previously. All of us joined in one circle to expose our culture, knowledge, and strengthen our Indigenous Deaf communities. This chapter focuses on the selected Indigenous Deaf methodologies of ethnography, lived experience, and turning to our tribes to finding resources to quench our thirst for tribal knowledge. At the same time, we have shared what we found and have enriched our understanding of our identities and what makes us, as Indigenous Deaf people, unique.

Most of the work conducted by the past researchers had contributed to the study of various Indigenous Deaf communities in different subjects, such as linguistics, counseling, social work, education, and rehabilitation. While the existing research is all ontologically valid, there are still missing pieces, such as the spiritual connection, social and cultural interconnection, and most of all, our Indigenous-Deafness (in ASL: NATIVE+DEAF+SAME mentality). There is a lack of intensive description of Indigenous Deaf people and our needs.

As my research had progressed, the fact that "memory comes before knowledge" made its appearance from time to time during detailed and open-ended conversation between Indigenous Deaf research participants and myself. Most but not all of my research participants are cultural deprived; several of them were able to talk about their memories through visual description in different ways, usually in American Sign Language. The description would begin with the participant signing, "YOU KNOW" prior to their explanation of what happened to them or their participation in tribal events. So, my research for language socialization focuses on what the Indigenous Deaf communities need and how we can move forward with future plans. First, one must understand who we are as Indigenous Deaf. The participants relied on profound memories, leaving them with trauma, and struggling to convert those memories into something that they want to know—something with meaning.

Our Community and Who We Are

Indigenous Deaf people are culturally deprived, because their Indigenous cultures, signed languages, histories, customs, and other pieces of who they are were removed from them at Deaf residential schools and public mainstream schools.

I asked the participants about whether their family members or community members have shared or do share any tribal information. Fourteen participants had learned from their parents mostly because their parents can sign, either in ASL or a tribal signed language. Twenty-three participants had no communication at home, so tribal information has not been transmitted. This also includes no communication with their tribal elders who could have share stories, history and advice. Out of curiosity, I assessed their knowledge of their own tribal Creation stories: three out of thirty-seven participants were familiar with their tribal Creation stories. Many Indigenous Deaf people shared with me that their tribal community members do not sign and typically communicate by gesture, pointing, or pen-paper writing. During my research, I asked if their parents had attended Indian boarding schools. Several participants responded with a yes, so that means their parents either could communicate with them easily or their parents lost their own tribal culture due to attending Indian boarding schools, and therefore were and are not able to share the tribal culture, customs, and history.

Historically, the Indigenous Deaf people are a highly marginalized group in the Deaf Community in many areas. The Deaf Community has treated us as invisible people within the community (McKay-Cody 1998-1999). I want to bring up the concept of the "gravity of oppression" which has happened to most Indigenous Deaf People. What does that mean, exactly? First, we encounter the dominant group, usually hearing professionals, hearing educators,

hearing parents, and hearing people in general who have oppressed and still do oppress Deaf people (audism). Next, Deaf people, usually the non-Indigenous and Deaf elites oppress the multi-ethnic (Deaf and hearing) groups, who then, in turn, oppress Indigenous Deaf people. Take for example the dominant/non-Indigenous expression of a hegemonic attitude toward Indigenous people, which in turn contributes to hearing Indigenous people oppressing their Indigenous Deaf people. I wish to emphasize that not all tribes or dominant people are like that, but it happens all too often, intentionally or unintentionally. Near the end of my dissertation work, I was given a video by an Indigenous Deaf woman who expressed her feelings about the White Deaf people asking Indigenous Deaf people to get involved with the preservation of signed languages in Canada. She emphasizes that while it is good, the White Deaf Canadians have not respected and do not respect Indigenous Deaf people, something that has been ongoing for hundreds of years. The point is, regardless of the country the hegemonic White Deaf "colonizers" continued to uphold the belief that their signed languages are better than Indigenous signed languages. That attitude has not changed, even today.

Memory Comes Before Knowledge

While searching the sources for Indigenous research, I came up with Eber Hampton's (Chickasaw) article talking about researchers remember their research motives (1995). The article hits home! It is perfectly suited for our Indigenous Deaf people. The article talks about research about learning, the creation of knowledge, our motives, and interesting conversations with people, the differences between education and brainwashing, and writer's block. He stresses that the researcher learned what is of direct benefit to him or her, and possesses useful information (51). I can say yes to all of that, but that is not the main reason I connected with the

article. The terms “memory” and “knowledge” have been on my mind for a long time. The reason is that I have seen it during my own fieldwork, in communities, and in my research, all of which point to memories of people saw actually happen. Indigenous Deaf people have told me narratives based on their memories, but did not know the names of things... or the meanings of ceremonies, dances, clans, spiritual connections, and other events. They could always describe the events but would ask me “YOU KNOW WHAT CALL” (translation: Do you know what it is called?)? If I was lucky enough to know something about it, I would respond. If I did not know, then I would ask around or search for resources in order to explain to each individual, so that they could gain knowledge about something from the events, dances, about the regalia, or the seemingly endless list of information they need and have a right to know. So, these are the people who have experienced “memory comes before knowledge.” I decided to examine my theory on the idea; I asked eight research participants at a short notice. It was amazing to see that they each smiled and signed “THAT-ONE”; “perfect match”; “very true.” It is the right phrase.

Indigenous Deaf people have an innate understanding of the unexplained sense of spiritual connection to the land and environment. Some of them told me that their families did not teach them about spirituality; they just learned it on their own. Most of the Indigenous Deaf people depended on each other for explanations of the environment or spirituality. The land and environment shape our appreciation of our worldviews and who we are. We view our environment wholly through our visual lens, and not through audiological access. We see spirits through our eyes, and we also describe them to Indigenous DeafBlind relatives. We feel an obligation to help each other by providing resources, information, our knowledge without hesitation, because it was not shared intergenerationally by our own tribal members. Everything we see is from our memories.

Intertribal Deaf Council

The Intertribal Deaf Council played the most important role in the development of our Indigenous Deaf culture and identities. The organization was established in 1994 by three original founders: Walter Kelley, Jerry Hassell and Tony MacGregor. I was called upon to serve as a recruiter because of my network with many Indigenous Deaf people in the US. A detailed description of the establishment of IDC was written by Walker Kelley; it can be seen on pages 4-9 of *Step Into the Circle: The Heartbeat of American Indians, Alaska Native and First Nations Deaf Communities.* As of today, many past IDC members are also my research participants, and we are currently Native Deaf elders. One has to understand that the IDC is the core organization where all mean-making, sense of place, safe space, our identities, and so on have evolved and matured. Sadly, the IDC disbanded in 2009. My research involves fifteen participants who are past members of the IDC, while twenty-two others were not. I asked them if they felt the IDC had benefited them. Eight participants had greatly favored the IDC because they learned so much while attending conferences and networking with other Indigenous Deaf people. One participant said no. Seven participants said it depended on each conference and who attended, which means their experiences were affected by disputes between members, cultural and spiritual disagreements, racial measurement and other issues. Twenty-one participants had never experienced anything with an Indigenous Deaf people connection nor attended any IDC conferences (some of them are younger generations who had no idea of the IDC dissolution).

The research participants and I conversed over a year about the many Indigenous Deaf people who are scattered around North America. We shared the feeling that a new organization is needed to bring back the safe space for all Indigenous Deaf people. Given the fact that is apparently little-to-no improvement in services for Indigenous Deaf people since the 1990s,

action needs to be taken. Some of the participants in our research group had made progress in reaching out to Indigenous Deaf communities to establish an organization resembling the IDC, but with a different structure and name.

Our Past: Deaf Education at Deaf Residential Schools

One must understand where our education and our learning come from. Historically, Deaf residential schools are funded by each state and operated under the institution system. Indigenous Deaf children have been placed in many Deaf residential schools since their establishment. Deaf residential schools are no different from boarding schools for hearing Indigenous children; the only difference is communication. Naturally, their tribal spoken languages for Indigenous hard of hearing children and tribal signed languages for Indigenous Deaf children were forcibly removed, and the students were placed on the assimilation paths. Marcle explains, "The connection between well-behavior and wellness remained unbroken until residential schools, compulsory education, and the outlawing of our cultural practices destroyed the family, clan, and political power structures necessary to pass on this knowledge" (2008, 44**).** This situation is similar to Deaf residential schools that did not hesitate to destruct Indigenous Deaf people's cultures, kinships, languages and tribal histories. Viola Cordova explains that there was an "attempt to eliminate 'the Indian' through total assimilation" (2007, 79). And that is exactly what happened.

The positive aspect of the Deaf Education is access to visual communication. For that reason, it provides Indigenous Deaf children with full language accessibility that they usually do not receive at home. That means more advanced language and communication as opposed to basic communication such as pointing, gestures, and home signs. Unfortunately for some

Indigenous Deaf children/adults who were abandoned to the educational system, they do not possess good communication competency on the reservations/reserves; they are the ones who were sheltered by their family members.

Deaf residential schools are the place where Indigenous Deaf people were educated. I interviewed many Indigenous Deaf research participants about how they were identified as deaf, and sent to their state's Deaf residential school. Most of the older generations, from the era where there was no internet system or no good type of communication system like phones, remembered a "white nurse" or a "white man" showing up at their houses and talking to their parents. Then the next thing they remembered was their parents buying them some new clothes, packing their luggage, and taking them in vehicles for a very long distance to the schools. One research participant said they put him on an airplane to another state to attend the Deaf school there, because at that time, there was no school in their state. Most of them did not have parents accompanying them to schools, but rode with strangers. In other states, Indigenous parents drove their children to schools, and often their aunts also accompanied them. It was typical that female relatives made the trip with the children's parents. I remembered in my school days, I would see relatives in addition to the child's parents. My parents gave up their original home to move to the town where OSD is located so that I would not be separated from my family and siblings. It is uncommon for parents to move to the location where Deaf school is. All of us have different experiences and childhood memories. No two Indigenous Deaf children have the same experience.

Seventeen of the research participants had institutional trauma and still have emotionally traumatic stories from Deaf School days. Some of the older generation of Indigenous Deaf research participants experienced forced haircuts or head shearing, had lice powder poured on

their heads, had their clothes checked, were mocked for being Native, and dorm parents humiliated them in front of the other students, and falsely accused them for some behavior they never did. While the younger generation of participants had fewer traumatic experiences, or to a lesser degree, but a couple of them were pinched and hit by dorm mothers, and those dorm mothers were not disciplined for it. I personally recalled a classmate who was threatened by a white coach, "if you do not cut your hair, you can't play basketball". At Deaf schools, there was no respect for Indigenous culture. Some tribes wear their hair long. A few female participants and I discussed our long hair. When in braids, the non-Indigenous grabbed our hair and used our braided hair as horse reins or wagon reins. They had no respect for our long hair. A few of my research participants experienced being mocked by non-Indigenous Deaf students which resulted in fist-fights because they stood up for themselves as Indigenous Deaf persons. The older generations of the research participants encountered name-calling, cultural shaming, educational colonization, cultural insensitivities, cultural genocide, and linguistic genocide/linguicide, all of which contributed to identity crises.

Deaf education is usually about the binary of English and ASL; English at school and ASL at the dorm, for socialization. Not many Deaf residential schools have Deaf teachers, and on the other hand, when there were Deaf teachers and Deaf dorm parents, they mocked and humiliated Indigenous Deaf children by call them "slow learner"; "pea-brain"; "dirty"; and many other denigrating terms. That should not have happened. Curricula were typically for the general Deaf population, in honor of white Deaf founders, and supporting the English-based requirement for education. Curricula on Indigenous history, culture, and customs are not usually found in schools (Deaf residential schools and public mainstream schools), according to participants.

Another problem at many Deaf residential schools was created competition. This was taught to all Deaf children, whereas in the Native community, they were taught to *not* compete with others. Throughout their education from kindergarten to high school, the schools encouraged competition and pressuring them to achieve educational goals; this caused some drop-outs and struggles with self-confidence, as documented in Eldredge (1999), Eldredge and Carrigan (1992).

Besides themselves, the Indigenous Deaf participants shared with me about many uneducated Indigenous Deaf people who lived on the reserves in Canada and reservations in the US. Many were and are isolated with no education; one Deaf residential school in Canada has been shut down for over 10 years now, and there is no school for these Indigenous Deaf children today. These Indigenous Deaf children are scattered on the reserves with no educational placements. Three participants (and people outside of my research group) shared with me that on one reservation in the US that many Indigenous Deaf children are not sent to Deaf residential schools, but kept at home per parents' decisions. The situation is unbearably worse because many of them have little-to-no language competence, scant understanding of culture, and are not prepared in educational contents. So you see there are two groups: of Indigenous Deaf people: one group who are educated at Deaf residential schools and have better language competence than the second group, who barely have communication at all.

As it was told, most of the Indigenous Deaf children barely make it through mainstream school, because interpreters visit them once a month and teachers neglect the Indigenous Deaf children in classrooms. It is not an isolated case; it is becoming a larger problem in different locations today. Lack of Native interpreters on the Reserves/Reservations is sore; there are not enough to fill the need. A training program is needed to recruit new hearing Indigenous students

to become interpreters. A larger problem is that there is not one university in the entirety of North America that provides such program. There are hundreds of Interpreter Training Programs (ITP) in the US and Canada but the biggest problem is that there is not training to specialize in Indigenous cultural contexts. Many Indigenous students have dropped out of ITPs due to the lack of sensitivity to the needs of Indigenous students, plus there are not many Indigenous Deaf role models that could have improve their experiences. My present question is which university would be willing to provide such training? I have communicated with some but they did not go any further in discussion. As a result, Indigenous Deaf children continue to suffer with cultural deprivation, insufficient education, and other issues related to lack of access. Many teacher preparation programs are not equipped to work with Indigenous Deaf children on the reserve/reservation.

Going back to education at Deaf residential schools, Indigenous Deaf people prefer that teachers do not "represent us nor act like us." How about providing authentic Indigenous Deaf people as paraprofessionals or other staff members to be able to work with Indigenous Deaf children directly? I have not seen much of that in most Deaf residential schools today. Another consideration would be to set up teacher preparation programs that include Native American/American Indian studies with cultural context (including a combination of Deaf Studies/Education and Native Studies/Education). This would assist Indigenous students wanting to earn college degrees, who would then return home to teach Indigenous Deaf children on the Reserves/Reservations; again, no such program has been established yet.

In my experience as an educator, I have come across many issues at Deaf residential schools — but one that strikes me particularly has to do with storytelling and the IEP (Individualized Educational Plan). A few of the participants and I were trained that storytelling

time has an appropriate time — usually from first frost to the last frost (winter), not anytime like traditional Deaf storytelling. I have instructed many Deaf (and some hearing) teachers about this for many years through my presentations and in one-on-one conversations. I have also encouraged teachers to include Indigenous Deaf people as part of curriculum when it comes to "Indian Month" typically happening in November, but this also poses another problem: Thanksgiving. Many Deaf instructors and Deaf Women of Color groups are made aware of the "Thanksgiving"; some tribes celebrate this particular holiday while others do not. The Deaf community are now become aware of Thanksgiving stories, especially the Pequot's' Green Corn Dance Massacre by the pilgrims. The information is distributed through Deaf communities via social media and other form of communication, but not at teacher preparation programs.

About IEPs–for many years now, I have consulted with teachers, counselors, and school principals from all over. Anytime I went to conferences or Deaf education summits, and through contacts like email and videophone conversations, I talked with them. The most common concern they had was what to do about providing "Indian culture" to a certain child and confusion about why many relatives attended the IEP meetings besides just the parents. Many schools do not realize the importance of collective kinship, where the mother's sister(s) and brother(s) or the father's sister(s) and brother(s) played key roles in a child's life, like the "it takes a village to raise a child" way of teaching (that is if the relatives invest their time in learning sign language and include the child in family affairs and tribal events).

Another problem at some Deaf residential schools where populated by large number of Indigenous Deaf children–even with some Indigenous hearing staff members working there, they do not typically share culture for several reasons: 1) they are not of same tribe, so they can't share specific culture; 2) many of them were educated at boarding or mission schools and they

lost their own tribal culture as well; and, 3) they are forbidden to teach Native culture to Native Deaf children. This situation contributes to Indigenous Deaf children's cultural deprivation. As a result, genocide (Lemkin 1944) and linguistic genocide (Skutnabb-Kangas 2000) from their own Deaf residential schools.

"Homelessness"

In 2001, I first learned about homelessness from Daniel Wildcat (Deloria and Wildcat 2001). I was not sure what he meant by having no home at that time. Then the thought came back from my subconscious, and I wanted to examine it with Indigenous Deaf people and see if they found it applicable. All in good timing, I came across Thistle's (2017) work with *Definition of Indigenous Homelessness in Canada*, which provided me with good analysis tools to find out which of the 12 dimensions of Indigenous homelessness developed by Thistle fits our description. To examine these 12 dimensions, I consulted with eight of my participants and a couple of community members about our homelessness. Our discussion concluded with the understanding that four dimensions of Indigenous homelessness match our ways of being and knowing. There is also one dimension that is basically a rare case, but there are actually real homeless Indigenous Deaf people that we know of.

First, I will describe Thistle's work, then expand on the five dimensions that match our Indigenous Deaf people's experiences. Thistle explains that homeless does not come from the non-Indigenous perspective of "homeless" (e.g. poor, no food, no home, no shelter), but it has to do with our ancestral lands, the original places of our birthright. It also has to do with the lost relationship with cultural, spiritual, emotional, or physical connection to people's indigeneity (6). Indigenous people have experienced displacement and dispossession from the early colonial

period and continuance of ongoing colonization (6). Indigenous people were and are colonized by their bodies, minds, and lands with, and many have historical institutionalized trauma. They experience linguicide (McCarty, Romero, & Zepeda 2006; Thistle 2017), and cultural genocide, destructed social and cultural systems, and trauma from residential schools in North America.

It is significant to understand what purpose the concept of homelessness serves as applied to Indigenous communities. A positive, healthy community is needed in order to produce a "sense of place" (7). Many Indigenous (First Nations, Métis, and Inuit per Thistle's work) have faced different experiences. I have listed all 12 dimensions: 1) historic displacement homelessness; 2) contemporary geographic separation homelessness; 3) spiritual disconnection homelessness; 4) mental disruption and imbalance homelessness; 5) cultural disintegration and loss homelessness; 6) overcrowding homelessness; 7) relocation and mobility homelessness; 8) going home homelessness; 9) nowhere to go homelessness; 10) escaping and evading harm homelessness; 11) emergency crisis homelessness; and, 12) climatic refugee homelessness (Thistle 2017).

I turned my focus to communicating with eight research participants. We went over all 12 dimensions of homelessness, narrowing out findings to five dimensions as the major dimensions of homelessness facing Indigenous Deaf people: 1) spiritual disconnection homelessness; 2) cultural disintegration and loss homelessness; 3) relocation and mobility homelessness; 4) going home homelessness; and, 5) nowhere to go homelessness.

Spiritual disconnection homelessness in Thistle's work means "an Indigenous individual's or community's separation from Indigenous worldviews or connection to the Creator or equivalent deity" (10). Remember earlier in this chapter, I explained about Deaf residential schools that assimilated the Indigenous Deaf people and removed their language,

culture, and, most importantly their spiritual connection. Culture and language are based on cosmological and spiritual teaching, knowing and being. All of the eight participants expressed their feelings of loss, but the majority of them resumed their traditional learning after graduating from Deaf residential school. One participant recalled that his grandfather waited until his education was completed, then teaching of traditional ways began. Some of them started picking up on spiritual training through their parents; naturally they wanted to know more at a quick pace, in order to catch up from wasted years at Deaf residential schools.

Cultural disintegration and loss homeless: Thistle explains "homelessness that totally dislocates or alienates indigenous individuals and communities from their culture and from the relationship web of Indigenous society known as 'All My Relations'" (11). It also involves identities, clans, gender roles, knowledge, traditions, and broad community supports (35). This is most important to Indigenous Deaf people who are culturally deprived. Most of them are raised in Deaf residential schools in different states, and have faced institutionalized trauma—cultural genocide, had everything taken away from them and replaced with the colonizers' educational methods, typically English and ASL, which is both the hearing and Deaf approach in education. Their culture has been notably absent in Deaf education. "All My Relations" is a popular terminology in Indigenous communities, and Deaf schools erased that cosmological teaching to the Indigenous Deaf children.

One participant mentioned that she was lucky to have an Indigenous Deaf employee working at her Deaf residential school, and she felt more closely connected to the employee because of their Indianness. Nevertheless, being generally culturally deprived, she resumed her learning post-Deaf School.

Relocation and mobility homelessness as described by Thistle means "mobile Indigenous homeless people traveling over geographic distances between urban and rural spaces for access to work, health, education, recreation, legal and childcare services, to attend spiritual events and ceremonies, have access to affordable housing, and to see family, friends and community members (11). All eight participants attended Deaf residential schools at a distance from home, with a few of them experiencing long hours of driving to and from schools. All of them have jobs in urban cities, which means a lot of commuting for some who live in rural areas. The lack of interpreters and Deaf services on the Reservation/Reserve caused them to migrate to the city. Only one participant remains on a Reserve, making the trip to nearest city for Deaf and interpreting services. Indian Health Centers are always in big cities, and some centers provide interpreter services which means a long drive if living in rural area or on a reservation/reserve. As mentioned earlier in this chapter, much literature talks about the lack of interpreter services, services for Native Deaf people, and their families, which has been a very long struggle to search for solutions, which never come.

Going Home Homelessness, explains Thistle is "An Indigenous individual or family who had grown up or lived outside their home community for a period of time, and on returning 'home,' are often seen as outsiders" (11). He continued to say, "making them unable to secure a physical structure in which to live, due to federal, provincial, territorial or municipal bureaucratic barriers, uncooperative band or community councils, hostile community and kin members, lateral violence and cultural dislocation" (11). The word, "outsider" hit home for Indigenous Deaf people, as they faced that experience, leaving home to attend Deaf residential schools for nine months of the year, with three months at home during summers. Three participants did not face any conflict with their home community. But one participant mentioned that there was no bed in

the house for him because he had a bed at the school. So this participant spent the summer sleeping on floor and kept his clothes in his suitcase. Besides the living conditions, they also had no full access to communication in their home community.

The participants' parents varied from basic signing skills to pretty good signing skills. When there were local Powwow events occurring, only three participants commented that an interpreter was hired to interpret the Powwow because they had several Deaf tribal members. A couple of participants have no intention to go home because there is no communication at home or in the community, so their connections had dissolved; they felt they had no reason to go home because they would be outcast when go home.

The fifth and last reason is called nowhere to go homelessness, which means, "a complete lack of access to stable shelter, housing, accommodation, shelter services or relationships; literally having nowhere to go" (12). Some of the participants shared about some other Indigenous Deaf people that they know, who are actually homeless and on the streets. The participants and I shared stories about the homeless ones who unfortunately had taken the worse road toward destruction from drugs, alcohol, and searching for jobs. Few had walked the "Red Road" to recovery and found better lives.

I want to talk more about historic displacement homelessness, which refers to displacement from pre-colonial Indigenous lands (10). Cordova (2007) explains that the Europeans invaded the homeland, the displaced people were involuntarily emigrated into other territories belonging to other Native peoples, "causing a friction that did not formerly exist in a land that was vast and fertile and fully occupied" (222). On a different view, the Native peoples consider themselves emerging into a specific bounded area. They developed a responsibility to the land and started to produce a "very intimate knowledge and understanding" of their new

homeland (188-9). All eight participants and myself are aware of our own tribes being displaced from our ancestral lands by colonizers. Take for example; many tribes which were forcefully removed from our homelands in Southeastern and Northeastern portions of the US and Eastern parts of Canada to our current tribal lands. It is an important part of the history of our ancestors that cannot be forgotten.

Sense of Place—Our Indigenous Deaf Community

In different Indigenous communities, Indigenous researchers and scholars referred to Keith Basso's (1996) work on "sense of place" based on his anthropological study of the Western Apache language and use of place-names. First, Basso interprets it as "name" that nurtures over time; it can be about "experiential terrain; the terrain of one's youth, perhaps, or of where one's forebears lived, or of decisive events that altered the course of history; the possibilities are endless" (3). He continues to say that it reminds us our connections took place, and "what happened here" (4). It could be landscape, or event, or anything that is closely connected to people members of the society (7). It is a way of constructed tradition with personal and social identities. Regarding "ethnography of place-making," for this research, our "place-name" is determined by our social gathering, like Intertribal Deaf Council conferences and spiritual gatherings. In some situations, talked with the Indigenous Deaf people I grew up with at the same Deaf residential school; we discussed the landscape since it is a very small town and we had a local National Park – many of us frequently walked across the park. So all conversations varied, but most of the Indigenous Deaf people do not fully understand what "place-name" means.

From my interview data, twenty participants grew up on the reservations/reserves/

villages/Nations, while seventeen participants reside in urban cities or small towns, due to those Indigenous Deaf participants relocating from their reservation/reserve/village to cities for better services and communication access with Deaf people. Because of unsuccessful communication at their tribal homelands, sharing of tribal place-names was not transmitted to the Indigenous Deaf people. But, on a positive note, there are places where Indigenous Deaf people meet for social interaction, but such places are not tied to a "sense of place" in urban settings as they are on the reservation/reserve/village/rural town. Indigenous Deaf people would say, "YOU KNOW WHERE...," and then usually describe the landscape but not use the name of a place (place-name).

While doing research, my data revealed that nineteen research participants did not understand the term "place-name" and six participants said "no" but the remaining twelve participants did not understand it at first. I explained with full cultural context, using ASL, about place-name meaning our "gathering places for IDC conferences," like when we pinpoint a certain location using a place and the year then asking, "YOU THERE (translation: "were you there physically?")?" If the person said yes, then they will say, "REMEBER WHAT HAPPEN...?" or, "REMEMBER THAT PERSON SAY…?" then go on with the discussion. The information connected with what happened at certain conference(s) becomes our "place-name," different than what Basso described, or what Indigenous people would use as a specific spoken word or phrase for places on the reservation/reserve. Recalling the fifteen participants who are past IDC members, I could see their faces light up when we discussed "place-name" tied to certain conferences. They responded with stories showing they understood its connection; they were happy to know that "place-name" is what the concept is called. As I mentioned earlier, memories come before knowledge.

Our Identities—The Making of Indigenous Deaf People

Indigenous Deaf people are faced with commonly mislabeled identities; from past literature: "juggling two worlds" (Deaf and hearing) (McKee and Hauser 2012), and, "third cultural orientation – Indian Deaf besides 'Deaf-only and Indian-only'" (Geiser 1991), three characteristics: Deaf, Indian, and hearing white (Eldredge and Carrigan 1992; Eldredge 1999), walking two worlds (Western and Indigenous worlds) (Lovern and Locust 2013). Our identities are more complicated and multi-layered. The research participants and I discussed "who we are" and "where we come from" during our naturally occurring conversation, and left it up to ourselves to interpret our own identities. For this study, I used Indigenous scholars and their worldviews of our Indigenous identities, and how they describe them. In 1994, when the IDC was first founded, many of the new members experienced insecurities, struggles, and institutionalized oppression, which caused conflicts and disagreements among the group. The root of the problem was caused by Deaf residential schools, where the teachers and staff members colonized our spirits, minds, and culture. Many of the members were immersed in the White hearing and Deaf culture, and were not raised with traditional Indigenous teaching, nor had the knowledge or worldview connected to our Indigenous culture. For this research, I examine our identities. I draw on the work of Marylou Awiakta (Cherokee), Hilary N. Weaver (Lakota), and Beatrice Medicine (Lakota).

To understand my own Cherokee identity, I am attracted to Awiakta's description of the interconnection of "Grandmother Corn exemplifies in her calico variety, which is commonly called Indian corn" and the value of Cherokee heritage" (1994, 37). I find it a beautiful description that we as Indigenous Deaf people have calico variety of our own heritages, and we

should be proud of our inter-racial roots, no matter where they come from, and we have every reason to celebrate our heritages, to honor our ancestors and our future generations that we are passing on to them. Awiakta says,

> How the different colored kernels are arranged around the cob, no one more important than the other. How each kernel respects the space of those (82) on either side, yet remains itself---red, black, white, yellow, or combinations of those colors. How the Corn-Mother, in her physical being, exemplifies unity in diversity (1994, 82-3).

During my years of study of the Cherokee Deaf people and other Indigenous Deaf people of various tribes, they all have different skin tones–from light-skinned to dark-skinned. The key point, as I was trained by my mother, who is of Cherokee heritage, was to look inside of that person and to see what is within this person. And with many of my Indigenous colleagues—to look within each person… what does she or he know about Indigenous culture, knowledge and way of saying things? Skin tone does not matter; it is how much information the person has. While conversing with each research participant, I look at them as a person, not skin tone, and let the participants become comfortable with themselves so they can express themselves freely. There is nothing wrong with saying, "Honestly, I don't know." The researcher participants and I are co-learners and engaged in a collaborative discussion about tribal culture and identity.

The past IDC members, who are involved with my research, had already learned about their tribal culture since they joined the IDC many years ago. My interviews/naturally-occurring conversations assisted them to go farther in their ethnographic analyses. It has never been discussed at IDC conferences, so they appreciated learning something new and putting together the puzzle pieces of their memories before knowledge.

In my experience in the Deaf community and during many IDC conferences as a community member, a presenter, and conference attendee, I have communicated with many Deaf

people who do not know where they come from, and joined the IDC without having any ties with their Indigenous communities. They showed up saying their grandmother or grandfather or ancestor is a full-blooded Indian, without anyone in the community they were claiming to vouch for who they are. Past traditional IDC members labeled these people wannabees. This label is evidently found similar to those used by hearing Indigenous scholar Vine Deloria, Jr., who used the terms "wannabees and outtaluck" (1969), and Kent Carter, an archivist at the Fort Worth Branch of National Archives used the term, "wantabees and outalucks" (1988). Garroutte (2003), and Strum (2010) use the terms "Enrollees and outalucks." Even though past IDC members did not use the term, "outtalucks," meaning people who searched the attics, archives, library, or other documents to find out whether their ancestors are really Indians, but came up with nothing. Indigenous Deaf people use the signs, "FIND+NONE INDIAN" as an equivalent to "outtalucks." There are some outtalucks that some past IDC members and I are aware of attending IDC conferences in the past.

Weaver (2010) recounts that Indigenous people have faced "a truly complex and somewhat controversial topic" about their identities (28). She states that identification comes from "common origin or shared characteristics with another person, group or ideal leading to solidarity and allegiance" (28-9). The words in language relies the meaning – *American Indian, Native American, or First Nations* influences identity. Due to many Indigenous people learning English and Indigenous Deaf people learned English and ASL, the word Indian and sign INDIAN is related to old images of movies, old photographs, museum items, and mostly the romanticized past. I have seen some YouTube videos where Deaf people romanticize the past instead of seeing the Indigenous Deaf people in their current state.

Weaver came up with three categories: self-identification, community identification, and external identification. Self-identification is a life-long progress; it will take a long time in order to understand the self and grow in their own cultural awareness as they age. Over time, a person will learn to rediscover their self and accept their Native identity. This concept can apply to those who grew up off-reservation with limited connection to any traditional ceremonies, culture, and history and lead to cultural resistance against any non-Indigenous community (30-1).

Community identification represents "sense of peoplehood inseparably linked to sacred traditions, traditional homelands, and shared history as Indigenous people (31)". Each individual interact with other member of shared society. The shared membership of a group reflects the individual's identity. For hearing Indigenous people who left their reservation/reserve/village/ Nation for a long period of time, they will have an imbalance in feelings and sense of belongings; they will return home to gain balance.

Most of my research participants have similarities with hearing Indigenous people: the need to return home for family visits, ceremonies, traditional events, and for other reasons. Indigenous Deaf people maintain their personhood with their tribal communities and with Indigenous Deaf communities. After the collapse of the IDC, most of the past IDC members have formed a network that keeps us together as one community.

External identification means non-Native people determine who we are. Who decides who is an Indigenous Deaf person, whether they are authentic? The Bureau of Indian Affairs decided whether we are federally recognized tribes or federally non-recognized tribes. The federal government of the United States has a standard to decide our Native identities and status. With our Indigenous Deaf people being labeled by Deaf communities, such labels are usually based on stereotypes learned from Deaf residential schools, movies, pictures, etc. Weaver

mentions that Indigenous people, in general, are viewed as a tourist attraction, as victims, and as historical artifacts. Indigenous Deaf people shared with me their own experience with these stereotypes at Deaf residential schools, tourist areas, and in Deaf community. I have personally experienced this in fieldwork and at conferences. They get to decide who is Indigenous and who is not, with the darker skin being considered more authentic, and saying, "PAH! I MEET REAL INDIAN" (translation: I finally met a real Indian). One of the research participants and I laughed when we remembered this event; we were at the airport, and the person at the front desk questioned me if she is an Indian. The person in question had dyed blonde highlights on the top of her black hair, and she did not braid her hair. That gives you an idea what external identification looks like.

Internalized oppression/colonization happened during IDC conferences and beyond. Weaver explains that "the harshest arbiters of Native identity are Native people themselves" (33). The federal government treats mixed-heritage and those with full heritage differently. Indigenous Deaf people are like Awiakta describes: a variety of colors on one corncob (37). In Oklahoma, we have a rich mixed heritage; Indigenous Deaf people have a variety of skin-tones, from full-blooded to mixed-heritage [Native-white and Native-Black (aka, Black Indian)]. At OSD, I grew up with many classmates who possess blended Native heritages. We rarely asked anyone if they had an "Indian Card"; it never existed in our minds as something to talk about, until much later into our adulthood, and after the IDC established. My best recollection of the varieties of Natives during many IDC conferences and my socialization with Indigenous Deaf communities, was, we are people of "white Indian," "Native," "Albino Indian," and "Black Indian" (Katz 1997; Sturm, 2002; Tayac 2009). Currently, a new hot topic is discussed in the communities and on social media is "racially ambiguous" (Rivera 2017; Smith 2012; Strum

2010; Turriago 2013), which means being unable to pinpoint one's racial background just by looking at them (urbandictionary.com 2015).

My research participants represent the variety of colored corn kernels. In 1996, during an IDC conference in Yakima, WA, there was a consensual agreement to use two labels, Deaf Native or Native Deaf, which I personally coined to reveal our identity: Deaf Native, meaning acculturated into the Deaf community, Deaf education, possessing the Deaf traits and generally focused less on their Native identities. While the Native Deaf, representing the ones that were raised in the traditional ways prior to enrollment at Deaf residential Schools, but identify more with the Native culture, and focus less on the Deaf traits. The researchers from the literature failed to mention the difference between these two labels; they tended to pick one label. I had consulted with a few research participants who are past IDC members recall the vote on these two labels. It is still in use today, including the sign for INDIGENOUS, the sign that two of my interpreters, Amy Fowler, Heidi Storme, and I created it in 2012.

It begins with the right-hand palm brushing from right to left then back to the right, on the back of left hand, meaning, "homeland," then the splayed fingers of the right hand moving downward and meshing with the left hand (which also has splayed fingers), representing our rootedness with our homeland. This sign had been spreading widely in the US.

For the Canadian sign for INDIGENOUS, I was not able to reach the original creator of this sign to get the etymology of the sign. Per another Aboriginal/Indigenous Deaf person in Canada, the fingers mean tribes like Cree, Inuit, Metis and the fourth tribe she could not remember, all of which are rooted in Canada. Like an ocean wave and root on the land, as I understand from the way it was described to me. Several other Aboriginal/Indigenous Deaf people informed me that they do not use that sign, rather, they prefer to keep with the traditional

F-INDIAN sign. This sign for INDIGENOUS has not widely spread across Canada. From my conversations with several Indigenous Deaf people in Canada, they use the signs given by their hearing tribal members representing their tribal identities.

The Mexican sign for INDIGENOUS has an "I" (pinkie) finger that touches the side of the upper head and lightly brushes the temple, representing Indigenous people. It is very widely used in Mexico with Lengua de señas Mexicana/Language of Signed Mexican. It is an initialized sign and Spanish term, “Indio” per Mexican Indigenous Deaf elder, Rosario Garcia from Mexico, who provided etymological description of the sign. It represents the Tarahumara, an Indigenous people from Mexico who wore headbands in the past. (Rosario Garcia, Marco Polo app video communication to author, October 5, 2018)



Figure 66: Three countries' signs for INDIGENOUS. Signers: Melanie McKay-Cody (Cherokee) and Christina Bueno (Aztec/Huichol). Multimedia created by Cresceniano Gracia, Jr. (Aztec and CODA) (2018).

On the negative side, Indigenous Deaf communities have faced struggles with wannabees, outtalucks (Carter 1988; Deloria 1969; Garroutte 2003; Sturm, 2010), ethnic switchers (Garroutte 2003; Nagel 1995), and racial shifters (Sturm, 2010). Garroutte (2003) describes ethnic switching as meaning people who kept quiet about their Indianness for a long period of time, in some cases, for generations and unnoticeably pass as a non-Indian after assimilating into the dominant culture (85). Nagel (1995) elucidates ethnic switching as a person who identified as white on an early census, then switches to "Indian" on the next census (948).

She details another identity, “Individual ethnic renewal,” meaning a person replaced the original identity by “reclaiming a discarded identity in an existing ethnic repertoire, or filling a personal ethnic void” (248).

Our Multi-Layered Identities

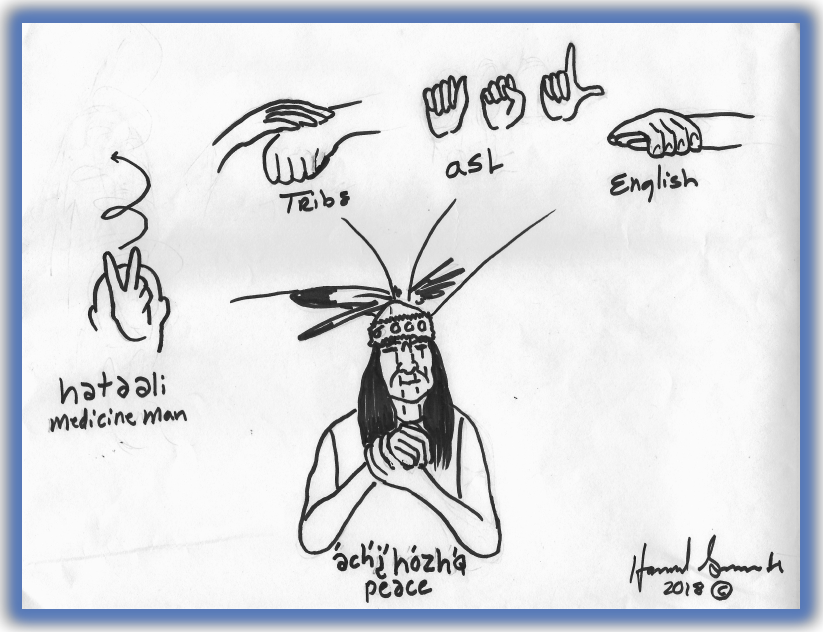


Figure 67: “My four identities—Who I am”. Artwork by Howard Gorman, Navajo Deaf artist (2018)

To understand Howard Gorman’s sketch of the four identities, left to right, hearing Navajo culture, Indigenous Deaf culture, Deaf culture and White/dominant culture. Indigenous Deaf people do not have two identities (White and Deaf), are not juggling two worlds, nor have three identities… most of us have four identities. The first identity is our tribal culture, which means the written language, kinship, history, and spiritual training from our hearing tribal members (through interpreters in some situations); also, by reading authentic resources approved by our tribes. The second identity is our Indigenous Deaf culture, ways of knowing and being through visual and spatial connections, along with using culturally contextualized signs within

ASL. The third identity is the Deaf identity with culture, customs and history, learned at Deaf residential schools and in Deaf communities. The fourth identity is White/dominate/hearing culture because it is there in our everyday lives: going to store, English written resources, use of English in our text messages, writing, etc. For the others who have more than 4 identities, for example, "Black Indian" (Katz 1997; Sturm 2010), "Red and Black" (Tayac 2009), that would be five identities. It goes the same way with mixed heritages. These people who have this type of multi-layered identities are authentic and are not ethnic switchers or individual ethnic renewal people.

Information on the "INDIAN CARD" and Blood Quantum

It is no secret that there was a big dispute within the IDC group for years, and this situation contributed to the downfall of the IDC as an organization. Many of the research participants recalled that they did not have problem identifying themselves as Native until they arrived at IDC conferences where other members questioned their phenotypical appearance and why they were at the conference. I remembered the first day I was at the IDC conference in 1994, an Eastern tribe, Rappahannock Deaf man, Michael Byrd, bullied me about my Cherokee identity. After I read Dively's (2001) chapter, his name appeared, and, it says, his self-esteem and Rappahannock identity thus were severely affected for a long time (401). Michael had a difficult time dealing with his identity while at Deaf residential school. He carries his "certificate card" to show proof of Rappahannock identity. Both of us have a different experience; he struggled with his identity and had to use his certificate card to prove his Nativeness, while I did not, because of Oklahoma having a rich history of over 30 tribes in one state. An example of Deaf residential school oppression and his attitude were basically thrown at me. This is how it happened, many Indigenous Deaf people with "Indian Cards" become insecure and felt

threatened by other Indigenous Deaf people. Basically, it is not Indigenous Deaf people who had low self-esteem; it is the dominant group (hearing and Deaf) who were the root of the problem. Garroutte (2003) interviewed many hearing tribal members about "Indian card," their comments are like: 1) they do not see any importance of getting a CDIB, or "card"; 2) it is like license to be an Indian (Billy S., 32); 3) "if you got a white card (CDIB) and a tribal dress — go out and play Indian then you are an Indian" (Joyce J., 32), and, 4) "those rules and regulations of an Indian card wasn't made by the Indian. They were made by federal government" (Melvin B., 34). So you see many Oklahoma tribes who felt that CDIB (Indian Card) is not as important to them as it is to the federal government, and that you have to have a card to access to anything on Mother Earth (29-37).

Comparing Indigenous culture with Deaf culture, both face complicated situations. If we are required to show our "Indian card" to prove we are "Indians" in the eyes of Deaf White and other people. How come at the Deaf Clubs, Deaf organizations like the National Association of the Deaf, state associations of the Deaf, and many others, have not ask each other to bring their audiograms to prove they are Deaf? If they ask for our "Indian Card," we may have to ask everyone at the Deaf clubs for their audiograms. That would be ridiculous, right? If hearing ASL students show up at the Deaf clubs or Deaf Chat nights, do they need to bring their college transcripts to prove they are taking ASL classes, or asking a hearing person to bring their audiograms to prove they are hearing? Hearing Indigenous people do not ask for our "Indian Card," while Deaf people ask for our "Indian Card"… that is inappropriate.

During interviews, I asked if they possessed "Indian card," and twenty-seven participants have membership cards (there are different names depending on the tribes: "Certificate of Indian Blood," "Certificate Degree of Indian Blood," "Status Card," "Treaty Card," and "ID enrollment

card") while 10 participants do not carry one, especially the Mexican Indigenous, who do not have any certificate system. From my personal communication with Mexican Indigenous people living in Mexico, they said, "you have to live in the village to be a member and if you do not live in the village, you are not a member." But they were able to explain their heritage comes from specific places and names of the tribes in Mexico. I asked all of the research participants if they understood what "Indian Card" means, and what its purpose is. Only sixteen participants responded with a yes–free hospital service, hearing aid service, and it shows proof of Indian Blood. Next was blood quantum. Twenty-one participants did not understand what it is used for.



Figure 68: "Shielded Indigenous Deaf People". Artwork by Marty Two Bulls, Lakota hearing artist (2018). (Note: Marty Two Bulls, a well-known Lakota artist in Native community, his grandfather's little sister is deaf).

On another note, there is some intentional harm done by Indigenous Deaf people who have an insecurity issue and use their "Indian Card' to defend themselves against other Indigenous Deaf people. They use their "Indian Card" as a shield to hide their actual Nativeness (Medicine 2001). Like many hearing Indigenous people who felt that the "Indian card" is useless, meaning nothing to them. What is important knows your Nativeness by participating in cultural events, dances, and be part of the Indigenous community. There are some Indigenous Deaf people who are "card holders," and whether they are full blooded or not, they do not know anything about their own tribes.

Blood quantum (BQ) is a very controversial topic. The researchers (Baker 1996; Dively 2001, 1996; Eldredge and Carrigan 1992; Kelley 2001; MacGregor 2002; and Paris 2012) talk about blood quantum, and how much "Indian blood" a person has. Baker explains "blood quantum is not always an appropriate predictor of living traditional ways and participating in cultural activities and events" (1996, 35). During the conversation, I asked the research participants whether they know what BQ means. Only six participants answered what it means because they were informed and learned it during IDC conferences. Thirty participants were clueless what BQ means and one did not respond to the question. Some participants told me that it means free hospital services, free hearing aids, and other things, but that is actually not what it is.

Wilkins and Hulse-Wilkins (2017) explains that BQ analyzes Indigenous identity through genetic descent, in order for the U.S. federal government's real reason, which is to assimilate and colonize Native people. There is more talk of this in their chapter, *"Blood Quantum: the Mathematics of Ethnocide."* They emphasize the importance of what Deloria said about kinship: blood, marriage, and social (the depth of the kinship can be found in Chapter 8 of this

dissertation). Harjo (2017) targeted the federal laws that caused a downfall of tribal membership. She reports in the 1930s that federal Indian programs were made dependent on a quarter-degree-Indian-blood requirement that promised health, education, land protection and other benefits. Once the BQ dropped below a quarter, the government would stop paying for land, raw resources, and cease their tribal citizenship. The Bureau of Indian Affairs "forced many tribes to codify this slow genocide to a certain level of tribal blood" (78). Weaver (2010) quotes scholars Jaimes and Rose, who "suggest that the federal government has an interest in the statistical extermination of Indigenous people, thereby leading to an end to treaty and trust responsibilities" (33). Garroutte (2003) comments that Oklahoma Natives fought the Dawes Commission for registration on the Dawes Roll, because the government purposely wanted to "destroy indigenous cultures by destroying their foundation—their collective ownership to land" (22). So the BQ is not about how much Indian blood you possess or free services, it is a hidden agency. The research participants were told of it after the interviews and naturally occurring conversations were all completed. They have the right to know what it is since no one in their families will be able to explain it to them.

Mann (2008) clearly indicates that, "All too many Euro-Americans, not to mention 'carded' Natives, mistakenly hallow federal enrollment as THE hallmark of authenticity, rather than revile it for what it is, the trademark of conquest" (87). Lakota anthropologist, Beatrice Medicine (2001) consults about who is an Indian. She explains that an emerging racially mixed group that has some African-American characteristics and "minimize cultural ways, such as language, expressive elements of cultural-rituals, ceremonies, music, and dance." And, others exhibit Euro-American characteristics and also lack cultural manifestations of "Indianness" (329). She explains regardless of the BIA (Bureau of Indian Affairs) definition, one-eighth

Indian blood is not considered Indian. But the community valued people with "identity and loyalty… stronger to their Native American heritage than their physical appearance indicates" (298). TallBear (2013) made it clear that BQ is a problem, when she said, "the difference between biogenetic properties and blood quantum as a semiotic and bureaucratic object constituted through other forms of science, namely, the *social* and *policy* sciences" (54-5). So to end this BQ talk, TallBear says "Blood quantum is a materialist practice only to the extent that it involves paperwork" (54). Sturm (2002) calls it a "eugenic notion of Native American identity tie[d] to blood quantum" (78). You have the biological versus cultural pros and cons of an "Indian card" and "blood quantum". I know many Indigenous Deaf cardholders who are clueless about their tribal culture, history, and many more.

Healthy Indigenous Deaf Communities

Naturally, Indigenous Deaf communities would prefer to have a collaborative relationship with each other no matter where they come from, or their tribal affiliation. This does come with some struggles within the community (e.g. identity, ethnicity switchers, wannabees, outtalucks and outsiders). I aim to align with Indigenous scholars (Berry and De Ramírez 2015; Cajete 2015; Kovach 2009; Lambert 2014; Leon 2012; Wilson 2008), who discuss the four R's (Respect, Responsibility, Relation, and Reciprocity). Other tribes include Relevance; I use Relevance because some issues connect to our visual and tactile needs that are not commonly discussed in the Indigenous communities. These four or five R's are more important in the Indigenous communities than they are in Deaf communities.

Relationship means building a good rapport between researcher and the research participants and Indigenous Deaf communities. The idea of sharing narratives, lived experiences,

and learning from each other as the research moves forward by learning about each person's culture, avoiding the traditional ways of treating the research participants as objects of study, rather ask them what the Indigenous Deaf community needs and how the research can help to find solutions. This is how this research came about, and how I decided to use the first Native voices to give our authentic Native experience, not from non-Indigenous people writing or speaking for us, as it has been for decades.

Berry and De Ramírez (2015) emphasize the importance of factual accuracy, cultural authenticity, and storytelling signification and meaning (173). That is what this dissertation is all about. The Indigenous Deaf people learned from experience while attending many IDC conferences and community interaction what Berry and De Ramírez means "good ways to affect intercultural communication that is grounded in mutual trust, integrative honesty, and honorable responsibility" (173-4). Collective responsibility (Kovach 2009) is what happened with this research; all of us invested our time in developing discussion about our Indigenous Deaf culture. A team of Indigenous Deaf people and I developed *Indigenous Deaf People Code of Ethics* (Appendix B). There was no constructed plan or guideline for our people for a long time. A team of Indigenous and non-Indigenous interpreters, consumers, and reviewers created a *Protocol for Sign Language Interpreters working in Indigenous Settings* (Appendix A) during the research stage, because problems have appeared at different sites for years; it was a much needed protocol. Kovach (2009) stresses that ethical protocols in research work hand-in-hand with cultural protocols, and they signify respect and reciprocity (127).

Respect is another key component in our community–Indigenous Deaf people have experienced bullying from Deaf community at Deaf residential schools, colleges, and communities. Research participants felt they did not get any respect from the Deaf communities

for who they are. Some of the research participants and I have discussed how the non-Indigenous Deaf people behaved around us. For example, when they see us, they will exaggeratedly sign, "OH I-RESPECT-YOU" (I am talking about a much bigger sign than the normal ASL sign for respect).

Another respect is the Elders in our community. Leon (2012) authors a chapter on elders and their duties. She states, "not all elders are cultural leaders and storytellers and not all Elders live good lives." Elders are not necessarily old, but have reached the age where their wisdoms are based on the good life, and knowing cultural values and teachings that could assist others (51). She emphasizes that elders are the heart of the cultural teachings, and they will influence others in two ways: individually and the community, through stories and respectful, wholesome, and spiritual teachings (51). Importantly, the Elders agree to serve the community as whole, which is considered both a gift and a responsibility.

One of our many responsibilities is to take care of our own people in the community. Lovern and Locust (2013) explain that, "if the individual is out of balance, negative or positive energy can overwhelm and create unwellness, which may result in a combination of mental, physical and spiritual issues" (45). This is what Indigenous Deaf people need to analyze themselves and remove serious institutionalized trauma because intentional harm to this particular people from Deaf residential schools has caused unwellness. The Indigenous Deaf people need some kind of healing and wellness retreat and to work with tribal Spiritual leaders and other Indigenous people to help them walk the red road to recovery, using traditional medicine, not psychological counseling. Non-Indigenous Deaf and hearing counselors are not fully familiar with the needs of the Indigenous Deaf people, so it is best to leave it up to Indigenous Deaf people to tend to the unwell Indigenous Deaf people.

Reciprocity signifies our loyalty to the community by giving back. Take for example, research participants and I have invested much of our time in our communal needs without asking for monetary support. Our time, hearts, thoughts, ideas and collaborative work have been invested into this research. How can we help each other? What can we do for our community? We are working together for a better tomorrow and to turn our memories before knowledge into genuine tribal knowledge that has been long overdue. In turn, we share and educate other Indigenous Deaf people. Our paths are diverse but we all are resilient Indigenous Deaf people.

Chapter 7

Folk Linguistics

> For many years I have been in higher education. I know how language evolves, changes, or reverses. You try out something new—if it does not work, then you revert to the old usage. This young woman does not understand the meaning behind the original sign (for INDIAN). "STINK +HAIR"... where did she get that from? She is young and wants to be a leader. When you become a leader, you make mistakes and learn from them. To the Deaf people who are complaining about her: please calm down. One day she will wake up and learn from this (mistake). We cannot afford to fight; we are a very small group. I will wait and watch.
>
> Angelina Ortiz (Aztec and Tarahumara)
> Indigenous Deaf Elder/participant

Introduction

In linguistic anthropology, the phrase "ways of speaking" is used frequently in most literature (Field and Kroskrity 2009; Hymes 1974, 31; Johnstone 2008; Saville-Troike 2003; Woolard 1998, 14). Coming from a signer's point of view of events, acts, and styles (Woolard 1998, 14), instead of using "ways of speaking," I consider the phrase, "ways of signing," as more appropriate for my research. Furthermore the concept of folk linguistics is more suitable for this particular discussion.

For this chapter, I focus on how folk linguistics would apply to the situation of two co-existing signed languages: American Sign Language (ASL) and North American Indian Sign Language. The terminology used in the dialogue within Native communities, "Hand Talk," fits in the folk linguistics category when compared to "Plains Indian Sign Language," which falls in the dialogue among the academics who acquired formal training for doing linguistic research.

Since the 1990s, the research on Plains Indian Sign Language (PISL) has emerged due in large part to a few new faces to research. I, for one, rode on the 1990 wave of PISL study, which was the beginning of my study of Indigenous Deaf people and Signed Languages. I like to

emphasize that PISL is not the `only regional indigenous signed language. There are several tribal signed languages outside of the Plains Region that are on verge of dying. In many cases, for example, among Eastern tribes, signed languages have already gone extinct. Because Euro-American settlers invaded those tribal homelands more than two centuries ago, bringing linguistic genocide to many tribal spoken and signed languages.

This chapter will describe how Indigenous Deaf people, while socializing with each other as a community of signers, use either a tribal signed language or ASL, or both, in their daily lives. There were even some situations where the members of the Intertribal Deaf Council would adopt certain vocabulary items from PISL dictionaries, in an effort to fill in gaps in their naturally developed lexicons. But for investigating folk linguistics in this kind of multilingual situation, I will examine three important factors intertwined in Indigenous Deaf people's interactions: 1) sign language shift, 2) individual's attitude on sign choice/etymology; and 3) community solidarity for preserving sign language heritage.

Since 1990, there have been a couple of tribal signed language works focused on language revitalization. The most recent, a published work of Bickford and McKay-Cody *Endangerment and Revitalization of Sign Languages* (2018), mentions PISL as an example of an endangered language — PISL is on the verge of dying. Because many Indigenous Deaf people are not able to communicate with their grandparents, they are not able to learn about their own Indigenous/Native languages, especially their tribal signs. Bickford and McKay-Cody explain that, "Not all will---placing children in grandparents' homes would obviously not help when the grandparents don't sign" (2018, 260). There are a few research participants who had were exposed to their tribal signs. They are typically the older generation, who are in their 60s at the time of this writing. They had acquired their tribal signed language through intergenerational

transmission. In opposition to intergenerational transmission at home, an alternate plan is that "residential schools may be especially effective in Deaf communities, whereas in shared signing communities (Kisch 2008; Bickford and McKay-Cody 2018, 256), it will be more effective to keep deaf children at home and promote a desire throughout the community to preserve the language" (2018, 261). Unfortunately, the majority of the research participants in this study do/did not have excellent communication at home — some having only a minimum of communication, at a very basic level. Only a few of the research participants possess good language competency, with parents who sign well.

Home Signs in Native Communities

Another consideration of folk linguistics is the concept of 'home signs' (Supalla & Clark 2015; Stokoe 1960) and PISL usage among some families with Deaf children/siblings. The majority of the ASL signing research participants and I acquired home signs in our early stage of deafness, and some of them still use the same signs created and carried over byimmediate family members to use in their own homes. Many families in different tribes developed their own home signs for use within families and relatives, but these signs are not typically used in an ASL signing environment. Several of the research participants' parents learned American Sign Language or Signing Exact English from the schools that their D/deaf children enrolled in. The older generations of Plains Indian Sign Language or Northeast Indian Sign Language signers had acquired the tribal signs at a very young age from their grandparents who used it, and are more advanced in language than those with limited sign language exposure (or those whose *only* means of communication was/is home signs). Currently, with tribal signs not often being passed down to the younger generations of Indigneous Deaf people, the focus on signed language has

steered to ASL. There are numerous Deaf schools and mainstreamed public schools with ASL resources for hearing parents to learn ASL, but unfortunately, there are no such resources or classes for tribal signs, tribal sign curricula, or Indigenous Deaf people as mentors on the list of resources,

Relevance of Folk Linguistics as a Field of Study

Folk linguistics is a study of language in a non-linguistic sense (Albury 2014; Hoengswald 1966; Niedzielski and Preston 2000; Preston 2006). Per Albury's description, a folk linguist is a person who not a professional linguist, and who has no academic training, "nor hav(ing) any experience working in the field of linguistics" (Albury 2014, 94; Wilton and Stegu 2011; Wilton and Wochele 2011). He implies that "folk may sometimes appear like experts and that experts may use folk knowledge" (2014, 94).

Preston describes Hoengswald's study of folk linguistics as a "collection of folk expressions for speech acts and even of folk terminology for and definitions of such grammatical categories as 'word' and 'sentence'" (2006, 521). Hoengswald discovered that folk accounts have included homonymy and synonymy, regionalism and language variety, and social structure (e.g. age and sex), but he especially focused on "folk accounts of the correcting of linguistic behavior, especially in the context of first language acquisition and in relation to ideas of correctness and acceptability" (Preston 2006, 521).

Other important considerations in folk linguistics are, first, folk belief (Albury 2014; Preston 2006) which is a simple belief and knowledge about language. Albury points out that it involves individuals, families, and communities who are tasked to regulate local language affairs (2014, 86). Preston mentions that folk beliefs on folk character is no indication of its truth or

falsity" (2006, 521). In the present study, folk beliefs among the Indigenous Deaf people will be analyzed regarding sign choice, and how they characterize the traditional sign for INDIAN compared to a new sign for INDIAN that seemed to appear out of nowhere three years ago.

Second, "they might express attitudes to specific languages, accents, or dialects, or perhaps evaluations about the desirability of bilingualism (Albury 2014, 87). And, third, based on–Schiffman's (1995, 2006) study, he conceives that the "speakers in a language community as subscribers to a unique *linguistic culture,*" and the language users have a collection of "ideas, values, beliefs, attitudes, prejudices, myths, religious strictures, and all other cultural 'baggage' that speakers bring to their dealings with language from their culture" (Albury 2014, 89; Schiffman 2006, 112).

When talking about students who are specializing in linguistics, rhetoric and anthropology, Johnstone explains that there is meaning in communication between hearers, speakers, and texts, saying that meaning is "socially constructed," or "jointly produced" (2008, 264). It is the people's senses of how language works. In one example, she addresses a dominant Western tradition, "authors and texts are often thought of as the most authoritative sources of meaning," but at the same time, "the idea that meaning is the result of interpretation by audiences has sometimes seemed threatening" (2008, 264). Attitude can be good or bad, positive or negative, deaf or hearing, or native or non-native, depending on the discourse and language competence to express how language works.

When talking about beliefs, Johnstone suggests that "language" and "reality" are related, that how we look at beliefs and tie it to language, and when analyze it in depth, we will see "beliefs about linguistic correctness, goodness and badness, articulateness and inarticulateness on language" (2008, 66). It is the same regarding linguistic correctness in signed languages; our sign

choices, beliefs, and the ways Indigenous Deaf people were brought up in Deaf residential schools are all revealed in analyses of signed languages.

Elizabeth Brandt studied Native American attitudes toward writing in the Southwest. She comments that Indian communities had been in contact with early explorers since the sixteenth century and maintained a literate tradition, at least maybe before that era (1981, 189). She also mentions that many "Native Americans" are opposed to writing because speech, which involves breath and moisture, keeps the language alive. When language leaves the mouth and is documented on paper through writing, it is dead and dry. As it goes, "Writing is violence against the spirit; it is death" (1981, 186).

This is the same principle for Plains Indian Sign Language. In the research I have conducted since 1994, most signers have felt that to write down PISL narratives would be considered putting it into a dead language, and that the spirits would disappear with it. Instead of using a written language like English for documenting sign language, it would be ideal to record on video, to preserve the PISL narratives in their truest form. However, many Indigenous people who are strong believers in traditional ways prefer not to be video-recorded. Throughout my research, while conducting interviews and during the course of naturally occurring conversations, the research participants had varied perspectives on how PISL should be preserved, and for what purpose. Would such videos be used for educational purposes or for grabbing attention on Facebook?

Sign Language Shift

Before the establishment of numerous Indian boarding schools and Deaf residential schools in the United States and Canada in the nineteenth century, regional and tribal signed

languages (Plains Indian Sign Language and other language varieties) were widely used for over a thousand of years. In comparison, ASL is recognized as a colonializing sign language whose history has begun in 1817, when the first school for the Deaf was established in Hartford, Connecticut, which means ASL is roughly 202 years old. I bring up this issue about colonial languages, as much literature talks about language brought to North America by colonizers such as the English, Spanish, French, and many other Germanic Languages—these are known as the languages of the colonizers. Indigenous people had experienced it for over several centuries already, but there is another form of colonization, which I call the *"*gravity of oppression."

The truth is that Deaf residential schools across North America nearly accomplished the erasure of tribal signed languages, which is now known as linguistic genocide (Skutnabb-Kangas 2000). The linguistic genocide of tribal signed languages has been occurring since the establishment of Deaf residential schools and Indian boarding schools in the early 19th century. I would like to bring in one of Johnstone's comments, in which she describes that in "general educational settings (in my research, referring to Deaf residential schools, and Indian Boarding schools) their teaching and use of language are all about correctness, standardness, and appropriateness, and influence how curricula are designed and students evaluated" (2008, 67). It is unfortunately true that Deaf residential schools are like that; the teachers and dorm counselors (employee's titles vary per Deaf school) have practiced and do practice linguistic genocide with the correctness, standardization, and appropriateness in teaching ASL along with spoken/written English; these schools have contributed to the loss of tribal signed languages. The source of language shift in these instances was not indigenous children passively "dropping" their indigenous sign language.

My research shows 8 out of 37 participants in my survey pool to have experienced forced language shift at Deaf residential schools in North America. Among these eight participants are mostly elders in the range of 60 to 80 years old, with Indigenous sign language as their first language, while the remaining 29 research participants are younger and possess lesser traumatic experience in language shift. The life stories among those eight participants included stories about the dorm counselors at the Deaf residential schools who had mocked and humiliated the signed language and home/family signs that students brought with them. The negative attitudes among the dorm counselors were expressed in abusive insults, telling Indigenous students, "You're ugly;" "You're dirty, need bath;" "You are a pea brain;" "You're not smart;" "You're poor;" "Your hair is dirty;" "You whooping-call/ 2-feathers-on-back-of-head." These offensive remarks brought emotional trauma to these people during their younger years.

When it comes to their signed language, especially the tribal signed languages, Indigenous Deaf students were told their signs were WRONG, with a big Y handshape hitting the chin in a "visually rough and jerky movement," accompanied by a hateful facial expression. These PISL signers told me that their signs were considered "inappropriate" or "primitive" by ASL signers at the school. Despite the fact that the PISL signers acquired them at home, and considered them normal signs, they were belittled horribly at a very young age. As a result, Indigenous students never intentionally dropped their tribal signed language; but instead the Deaf residential schools discouraged them from using their tribal sign language.

Then there is a chain reaction to the erasure of tribal signed languages, where there is no longer opportunity for intergenerational transmission. As a result, the following generations of Indigenous Deaf people are no longer exposed to the tribal sign languages through their community members or Indigenous Deaf relatives. Indigenous Deaf people who were forced into

assimilation lost their tribal signed languages, which were quickly removed once they stepped into the schools. Some of the elder participants mentioned that there were certain times when they used tribal sign language in secret with others who knew it. Upon graduation from Deaf residential schools, they were free to reverse the forced language shift and go back to using a tribal sign language.

Despite the language genocide (Skutnabb-Kangas 2000), a positive impact for some Indigenous Deaf people decided to take their own responsibility to re-learn their Indigenous Sign Language. Reversing language shift (RLS) (Fishman 1997) played a big role for some PISL signers. Bianco explains that *language extinction* involves "the entire speaker community and the less extreme fate of one or two or more speaker groups replacing the language with a local dominant one" (2014, 60). He talks about speakers of an abandoned language or globally endangered, like the Indigenous languages in the United States (2014, 60). He considers RLS to be efficient for restoring the endangered language to a healthy level. It may apply to the situation with PISL: one way is to develop a sign language revitalization program to help restore Plains Indian Sign Language (as well as signed language varieties within different tribes, like Oneida Signs within the Northeast Indian population) back to healthy and sustainable levels.

Two of my research participants (and several other Indigenous Deaf people, outside of my research circle) did get motivated to reclaim their original signed languages of origin during the last few years of their education. After graduating from Deaf residential schools, they have spent over 25 years to support the RLS efforts with some success in reviving their tribal signed languages.

One research participant commented, "My grandfather told me to wait until I am done with school, then I can learn the way of our people. My grandfather was a wise man. He believed

that if he taught me now, the Deaf school would destroy the knowledge and exploit the information." This person continued, "Now I understand why he and other community members did not share with me until after my education: they wanted to preserve what is ours and what belongs to us." Today, there are only a handful of Indigenous Deaf people who still practice their tribal signed languages, culture, history and communication, but, sadly, hundreds of Indigenous Deaf people are still struggling with cultural and linguistic deprivation.

Language Attitude and Attitude Toward Sign Choice

Here I will first discuss more on language attitude and then I will discuss language choice–specifically the process within the Indigenous Deaf community for making choices from among possible signs for particular concepts. Literature about language attitudes is based on a large amount of research covering both spoken and signed languages. I start the review of this literature by bringing up Saville-Troike's comment that "[l]anguage attitudes are complex psychological entities. Individuals seldom choose what attitudes to have toward a language or variety – instead, we acquire them as a factor of group membership" (2003; Burns, Matthews, and Conroy 2001, 182). Colin Baker's 1992 work on spoken Celtic, Welsh, and English languages (1992) includes a qualitative approach for making a scalar measurement of attitude. He did a survey of attitudes that demonstrates a community's current thoughts and beliefs, preferences and desires, and the survey helps to see social indicators of beliefs about minority languages. The nature of attitudes can be studied as causes of predictable behavior, whether favorable or unfavorable. Baker explains, "language attitudes may be constructed through inspection of one's own action" (1992, 11). But where did the term *attitude* come from? He says, "Attitude originally meant a posture or pose in painting or drama, as in 'adopt an attitude of

innocence'. Derived from the Latin word 'aptitude' and the Italian 'atto' (Latin = *actus*), its root meaning, however, appears to be 'aptitude for action'" (1992, 11).

Baker also explains that language attitude is shaped by group norms and values, and tends to lean on the "broad perspective on society–a philosophy of life" (1992, 15). To supplement his technique for attitudinal measurements, there is a range of variables to be examined, including gender, age, language background, type of schooling, and ability to use Welsh. For my own research, I have focused on language background, type of schooling, and cultural interpretation as social variables. In addition, Baker used several other methods to analyze effects of certain factors on language attitude. They are: Community Effects, Parental Effects, Peer Group Effects, Institutional Effects, Mass Media Effects and Situational Effects. In comparison, I chose to examine Mass Media Effects for my analysis of sign choice and Indigenous Deaf people's attitude toward signs. A "Mass Media Effect", according to Baker, is an influence on language attitude that provides only a unidirectional flow of information, usually in "a non-active, receiver–only mode" (1992, 110-111). Since signed languages like ASL and PISL are visual languages, people can "gain exposure only through the video media" (Burns, et al. 2001, 204).

Joseph Hill, a Black Deaf scholar, conducted research on ASL signers' attitudes in modern times toward signs, titled, *Language Attitudes in Deaf Communities*. This work described several different modes of communication as used in Deaf Education today, and how the signer's attitude affects communication (2015). Regarding Hill's approach on sign language attitude, I would like to bring in a statement from Burns, et al. (2001), "little has changed in terms of the contribution of the studies of language attitudes toward sign language and Deaf communities" (Hill 2015, 148).

In retrospect, it still holds true that tribal signed languages are neglected, and the language attitudes in Native communities have only changed slightly. But Indigenous Deaf people have been making themselves, their tribal culture and history more visible. Tribal people are starting to see that Deaf members within their communities are getting involved in cultural revival efforts. Although the attitudes expressed in Native communities vary, depending on their exposure to Indigenous Deaf people.

With today's digital technologies, such as apps like Facebook, text messages on personal mobile phones, and video media, more communication can take place between users of signed languages than ever before. Skype and Zoom are video communication means through computers or laptops, while apps like Glide and Marco Polo are heavily used on personal mobile phones by many Deaf people. Video media is in popular use among Deaf people worldwide. Technology has been rapidly changing since 1992 (the time when Baker's work was published); mass media has become a useful way to communicate. Facebook and YouTube have become very powerful tools of communication today, but at the same time, they can cause favorable and unfavorable effects on people who use them, especially the younger generations.

My research has a similar approach to what Garrett uses when he discloses, "[q]uestions aimed at tapping attitudes toward racial, ethnic and religious minorities often are hampered by a social desirability bias" (2010, 44). Social desirability bias represents the "tendency for people to give answers to questions in ways that they believe to be 'socially appropriate'" (2010, 44). So, for my own research, I choose to focus on the online dialogue among users on Facebook for three years, involving discussion on a particular sign that I coined as "V-INDIAN," which entails the use of the handshape V (index and middle fingers, held in a manner which you might recognize as the number two). The fingers contact the front cheek and rub toward the back of the

cheek (as opposed to the "F-INDIAN" which is coined for the traditional ASL sign. The latter, varies per region/state and Canadian provinces, using the ASL handshape F, with the tips of the thumb and indexic finger touching the front of a cheek then going out and moving back toward the back of the cheek, or, touching the tip of the nose to back of the mid-cheek. The discussion about the contrast between V-INDIAN and F-INDIAN has led to hot debate among members Indigenous Deaf community as to who has the right on sign choice.

As for sign choice among members of the ASL community, the research by Baer, Okrent and Rose emphasize that "deaf people do notice differences, both structural and stylistic, among the signing of different ethnic, age, and regional groups" (1996, 1). They go on to explain that the metalinguistic ability to know the difference in language in outlying communities by deaf people has been identified (1996, 1). Their research had several pages of data analysis of signs that provide the information that "[d]eaf people talk about the differences between the language use of their own group and that of other groups, and their own reaction to that language use" (1996, 2).

Barbara Johnstone explains that the differences have to do with whether the interlocutor (a person who takes part in conversation or dialogue) is involved or disconnected with the communication of other people in the community, and such involvement or disconnection affects their behaviors toward each other. Looking at the interlocutor (in the video), we must look at how that person collaborates, or fails to do so, through discursive media involving the community in question. Also, one must look at how folk linguistics is connected to the use of media within the setting (2008, 196-7).

Preston mentions in his folk linguistics literature that we need to look at the speaker's (in my case signer's) metalinguistic behavior (competence, performance, and reaction) (Chomsky

1965, 4 in Duranti 2009, 17). Chomsky's description of language behavior, competence (knowledge of language), and performance (use of language), plus an additional behavior: reaction. Lastly, I aim to bring up Preston's dialectology and regionalism (2000). In this research, regarding sign dialectology, one needs to look at the etymologies of signs in both ASL and PISL to find the true meaning of the signs phonologically. That said, there are over 560 federal recognized tribes and 260 state recognized tribes. For this instance, the research participants and I discussed the tribes in their regions, and to which tribes, if any, face paint applies. Albury brings up that the folk linguistic knowledge and beliefs require a collaboration of "local, shared, operable, socially- and culturally-situated logics, meaning" from the community, not just the "phenomenon of an individual" (2014, 89).

Language Choice

I draw on Saville-Troike's description of language choice—one of the multiple varieties of language that the community uses to determine communication competence through system of rules for decision-making within the group, to express in a specific context (2003, 42). She uses Fishman's concept of *domain:*

> "…socio-cultural construct abstracted from topics of communication, relationship between communicators, and locales of communication, in accord with the institutions of a society and the spheres of activity of a speech community" (1971, 387; in Saville-Troike 2003, 42).

The domain covers different general subject areas like religion, family, or work; role-relationships (mother-daughter, researcher-participant, etc.); and the setting of the interaction (school, home, church, or office) (2003, 42). It is important to know that there is no strict set of the items in the domain; it varies per speech (in this case, signing) community. One must observe by purpose, role-relations, and setting, all of which are cultural-specific (2003, 42).

There are several domains to consider. The first one is *focus,* which includes items such as societal-institutional (family, school, church, government versus social-psychological, intimate, informal, formal, intergroup) (Fishman 1971; Saville-Troike 2003, 42). In my research, the equivalent would be an Indigenous Deaf–Indigenous Deaf relationship in informal settings like social media (e.g. Facebook). The second one is *topic,* which is a "primary determinant of language choice in multicultural contexts" (2003, 42). For those Indigenous Deaf people who are educated in bilingual (and multilingual) settings, they have learned some content in one or two languages. Many of the research participants of the present work were raised in a bilingual environment at schools, using ASL and English. Expression of *Topic* in the English language is not always similar to ASL; English is a language with morphemes arranged linearly while ASL takes advantage of superimposing space and facial expression on manual signs, thus rely more on simultaneous structuring of morphemes for expressing the topic.

A good example is found in the morphology of Navajo language, because even though English and Navajo are both spoken languages, when it comes to something culture-specific, there are differences in their morphologies (Saville-Troike 2003, 43). Navajo history and culture are not expressed well when the topic is expressed in English; the Navajo morphology must be used to demonstrate the culture, religious beliefs, and history in order to gain a full understanding. It is thus best to immerse in the Navajo language to share concepts regarding Navajo beliefs and traditions, because language and culture go hand in hand (2003, 43).

Other domains used to express concepts through language are: *setting* (locale and time of the day), *participants* (age, gender, and social status), and *social and political identity* (regional or ethnic languages). *Choice of varieties* is another one, meaning regional varieties in a given

geographic area and subgroups of that specific population that have similar identity (it also can be gender-specific).

One important domain to consider is *choice of channel,* which takes environmental conditions into account. Indigenous Deaf people visually and tactilely acquire what's going on around them, perceiving little to no audiological sounds. For example, drum beating can be felt through vibration though it is not heard. Another environment can be a Signing Circle (the name I created for signing communities instead of Talking Circles, which is the term used by Indigenous hearing people in various tribes), seeing the mountainous landscape, the forest, the city, and so on. Indigenous Deaf people rely heavily on the visual mode.

Finally, *choice of register* depends on the topic and whether the setting is formal or informal (2003, 44). I found a similarity with Barbara Johnstone, who suggests "[c]ulture-specific language ideology may make purpose more or less relevant to how people produce and interpret discourse in particular situations and settings" (2008, 230).

What follows are descriptions of two videos cited from Facebook. The first example is the video clip as distributed online since April 29, 2015 to users of Facebook who are members of the Deaf American communities. In the video, Sarah Young-Bear Brown explains first about her culture and then comments that we need to "throw away the ASL sign for INDIAN" because it means "STINK + HAIR" (a compound sign made of STINK and HAIR in ASL).

First Video

Topic: Why ASL sign "INDIAN" is not suitable. A change in sign for "NATIVE"
Setting: Mountainous landscape, bison in background, Sarah Young-Bear Brown in foreground
Time of day: Daytime
Participant: Sarah Young-Bear Brown (Meskwaki Deaf woman)
Sign Choice: ASL "F INDIAN" vs PISL "V-INDIAN"
Choice of Channel: very calm commentary about Native past and her reason for change signs to become more compatible with her Meskwaki culture.

Choice of Register: informal – Facebook page.



Figure 69: Still frame from video of Sarah Young-Bear Brown, discussing the sign for "Indian." Facebook, 2015

This video has led to a major public debate on the Facebook page, with Deaf people of different educational backgrounds and different community affiliations (Indigenous and non-Indigenous) getting involved. Many joined in and argued over the sign choice for INDIAN.

As an outsider observing the debate, I became interested in finding evidence regarding the origins for these two signs. I found no evidence whatsoever in any ASL dictionary regarding an etymological description saying "STINK + HAIR". Although there is indeed one printed document giving an etymological explanation for this sign. Higgins in his 1923 book explained that the form of the sign referred to the rings worn on the nose and the ear.

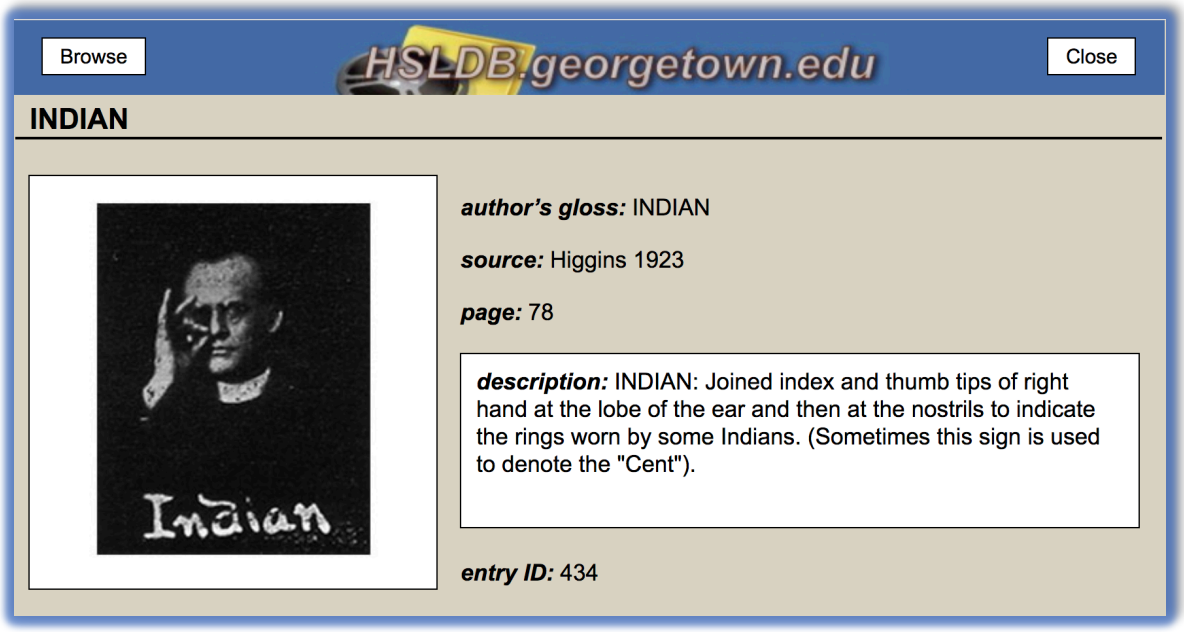


Figure 70: 1923 ASL sign for INDIAN from Heritage Sign Language Database, Georgetown University, Washington D.C.

During the research stage, I have contacted many generations of older ASL signers who are having the knowledge of traditional ASL signs. None of them had ever seen someone in the past creating the compound "STINK + HAIR" as the etymological origin for the sign, INDIAN. So, I realize how it can be possible that Sarah made a proposal on Facebook for a new folk etymology without checking for an accurate reference for the conventional ASL version. First, I show you the second video of Sarah rationalizing the proposed sign form.

Second Video

Topic: A change in sign for "NATIVE"
Setting: Sarah Young-Bear Brown's home
Time of day: possibly at night
Participant: Sarah Young-Bear Brown (Meskwaki Deaf woman)
Sign Choice: PISL "INDIAN"
Choice of Channel: very calm commentary about Native past and signs
Choice of Register: informal and at home



Figure. 71: Sarah Young-Bear Brown pointing to tribal sign V-INDIAN.

From my inquiry among fluent PISL signers and my review of sign language dictionaries, I suggest that it is just a folk etymology as promoted by Sarah for her V-INDIAN sign since it is not found in either an ASL nor a PISL dictionary. From now on, I will review some sign etymologies of "INDIAN" from a variety of dictionaries; I even found there is a common sign as used among the Indigenous people for INDIAN,

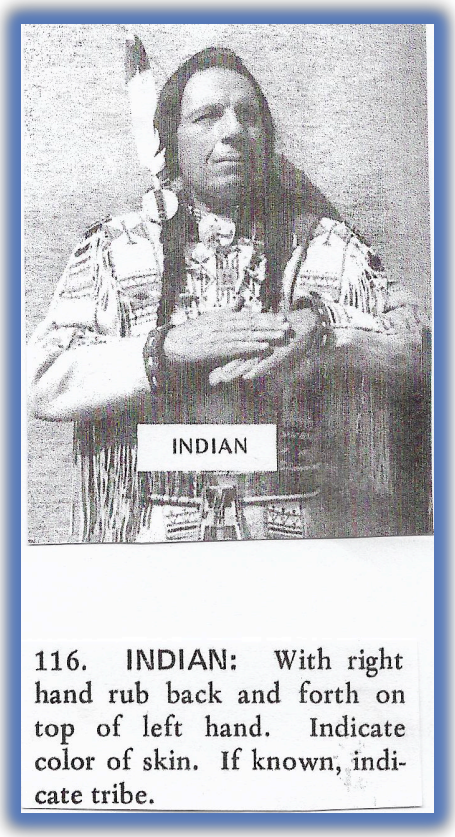


Figure 72: Sign for INDIAN from Cody 1970, 56.

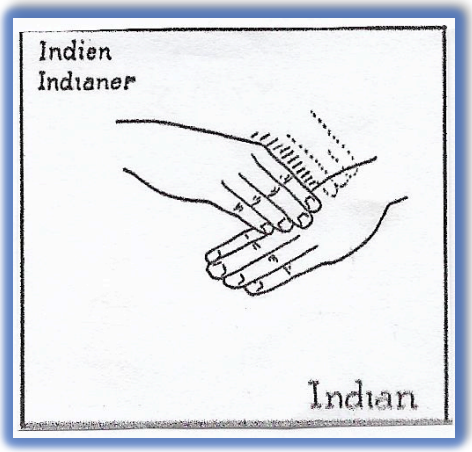


Figure 73: Sign for INDIAN from Tomkins 1969, 34.

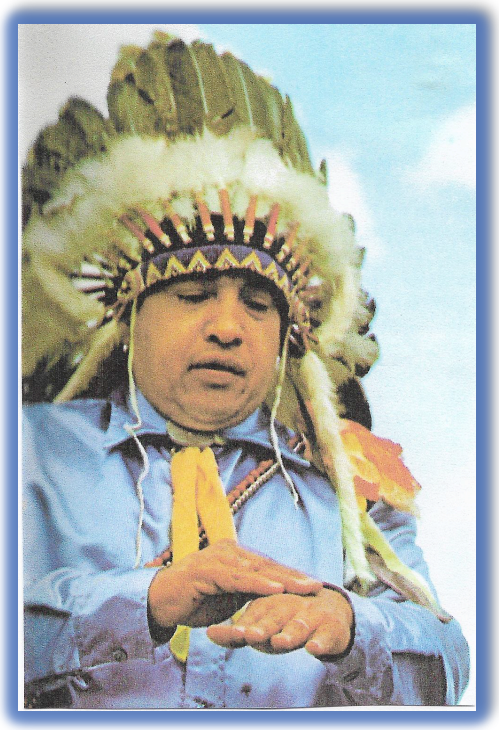


Figure 74: Kiowa signer demonstrates sign for INDIAN from Frontval & DuBois 1978, 17.

I found two other signs as documented in Mallery 2001 (1880) and Seton 2000 (1918).

INDIAN (generically).

Hand in type-position K, inverted, back forward, is raised above the head with forefinger directed perpendicularly to the crown. Describe with it a short gentle curve upward and backward in such a manner that the finger will point upward and backward, back outward, at the termination of the motion. (*Ojibwa* V.) "Indicates a feather planted upon the head—the characteristic adornment of the Indian."

Make the sign for WHITE MAN, viz: Draw the open right hand horizontally from left to right across the forehead a little above the eyebrows, the back of the hand to be upward and the fingers pointing toward the left, or close all the fingers except the index, and draw it across the forehead in the same manner; then make the sign for NO; then move the upright index about a foot from side to side, in front of right shoulder, at the same time rotating the hand a little. (*Dakota* IV.)

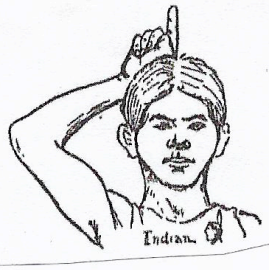
Rub the back of the extended left hand with the palmar surfaces of the extended fingers of the right. (*Comanche* II.) "People of the same kind; dark-skinned."

Rub the back of the left hand with the index of the right. (*Pai-Ute* I; *Wichita* I.)

Figure 75: A written description of sign for INDIAN from Mallery 2001, 469.



Indian. With the tips of right flat fingers, rub the side of the flat left held out back up, in short strokes; meaning reddish, because all men's hands out west are red at this place. Compare *Smooth*.



Indian. Indicate the eagle feather at back of head. (Sheeaka.) Or sign *Man* and *Red*. (Scott.)

Fr. *l'Indien;* Ger. *der Indianer*.

Figure 76: A written description and pictorial signs for INDIAN from Seton 2000, 106.

Further there are some more in other dictionaries that do not display signs for INDIAN. For example, Clark, 1982 (1885) did not show the formation for INDIAN but mentioned on page 223: “Specify the tribe by giving the tribal sign.” Meadows, who authored a book on Hugh Scott’s Fort Sill Ledgers, describes signing, “red man” (2015, 311). I personally did some research on Hugh Scott many years ago; I knew that he showed up signing in some films made in 1930, using signs from the inventory of PISL. One film shows MAN (pause) RED.

With all these details collected from the Hand Talk/North American Indian Sign Language dictionaries, there is no mention for V-INDIAN. I reckon there is a possibility that this particular form may be overlooked by authors of PISL/NAISL dictionaries. Interestingly, one elderly PISL signer informed me that the actual sign is index and middle fingers held together and brushed lightly across the check. This particular sign has been used among hearing and deaf PISL signers who know the sign language fluently, and this sign is an old sign that is used periodically, in some areas.

There is also some thing we need to consider is that the majority of those in the wider Deaf Community (and, arguably, people, in general) are influenced by Hollywood portrayals of what Indians should look like in films in the past. The same can be said of many Deaf residential schools who contribute to the lack of authenticity regarding Indigenous people in textbooks, films, still pictures, and their ideological images, which leads Deaf children and adults to carry on the habitual thinking of such romanticized images of Indigenous people in war bonnets and war paints – such images are embedded in their minds as fact.

During my interviews with the 37 Indigenous Deaf participants, I asked how they would make judgment while analyzing the meaning from their world-views for the V-INDIAN sign. Remember all of the research participants came from many tribes at different locations in North

America. Nine Indigenous Deaf people responded that they consider the sign as "war paint", "going to war", and "the sign representing men", and, "this sign would not apply to women because it refers only to men as only these would have the war paint on (gender-specific sign)." Of all 37 participants, 33 of them preferred to keep the traditional ASL F-INDIAN signs which they learned while attending school. One participant was not interested in expressing an opinion or choosing a side regarding a new sign. The remaining three participants were in favor of V-INDIAN as replacement for the ASL F-INDIAN sign.

Two Indigenous Deaf women were not able to provide a direct answer but instead referred to another Facebook source for their knowledge of meaning for the V-Indian sign. They distributed a video blog about V-INDIAN sign came from "Molly (an Indigenous Deaf woman) from Minnesota" and promoting the replacement on November 30, 2016. Some Indigenous Deaf people responded to this Facebook page and questioned the validity of this promotion, by asking what tribe the particular "Molly" person is from, and inquiring about her background. My perspective of this situation is that it indicates the possibility that there is some skepticism among the Indigenous Deaf on the original source for the new sign since there are often occasions where non-Indigenous people advocated the idea that a traditional ASL sign is offensive and started promoting alternate sign forms to others in the mainstream American Deaf Community who may be more *linguistically gullible*.

I also have a different perspective about the traditional process for resolving sociolinguistic dilemmas. I have interviewed older participants who talked about their experiences of participating in IDC gatherings where traditional ways were practiced. Two of the IDC participants mentioned that Sarah is a young Indigenous Deaf woman who does not understand the Indigenous way of doing things. They suggested that she and the Cree Deaf

woman should go to the inner circle of Indigenous Deaf people and elders and talk it over before spreading a different sign in the wider Deaf Community. They felt that the spread of V-INDIAN sign had caused damage to the reputation of the Indigenous Deaf community.

However one other participant provided an explanation of why one would understand the spread of V-INDIAN yet this participant uses the 'U' (index and middle fingers contact together), brushing across cheek gently. "I feel connected to high cheekbone," and, "it is less harmful and I felt it appropriate for me as an Indigenous Deaf person. This person continued on saying, "no ugliness today, people make no sense… "war," no! In our tribe, the sign for WAR [uses a 'W' handshape to touch the cheek and move downward], and it means warrior."

The folk linguistic debate would go on and on as two IDC participants brought up the question, "why the 'F' handshape for F-INDIAN," and "why the F marks on cheek, face or on nose, who got to decide that?" Then some participants debated with me. "Why the word 'Indian'? We know that it was just a misunderstanding on the part of Columbus, who had thought he had reached India. ASL people decided that sign, and many Deaf Americans don't know about that!" The participants also mentioned about how they had already asked hearing peers in their tribe about the V-INDIAN, and the concept of "war paint." The hearing Indigenous persons told them they disagreed and explained that the mark on face symbolizes protection, so the form of the V-INDIAN does not mean war, but it means aggressive, active, and doing something within their warrior action. The lack of agreement among these Indigenous individuals illustrates how there would be no wrong or right about language/sign choice; it is within each Indigenous Deaf person's folk linguistic insight, which influence how to choose which sign they prefer to use.

I am aware of how it can be a challenge for the mainstream society to learn more of our Indigenous ways of handling situations. This is something that I think the mainstream Deaf community needs to consider as part of building bridges for promoting the Indigenous language rights (see Native American Languages Act of 1990). I found a similar experience as what Vine Deloria, Jr., described, saying, "ask Indians of tender age to give their authoritative answers to problems which an entire generation of Indians is just now beginning to solve" (1969, 85). In my case, "an entire generation means the older Indigenous Deaf generations, mostly from the past IDC group who now are elders.

My experiences as a linguistic anthropologist, community member, and Indigenous Deaf elder working with many Indigenous communities and scholars, tells me it is, as in most tribes, wise to seek the counsel of tribal elders for any change in tribal languages. Tribal elders authorize and approve changes. Garrett (2010) talks about the community dynamics that is relevant to this challenge, which I found very fascinating and readily apply to the behavior of people who rely on Facebook pages for information. Folk linguistics, as suggested by Garrett, "simply to refer to the views and perceptions of those who are not formally trained experts in the area being investigated – here, perhaps, 'non-linguists'" (2010, 179). Hoenigswald explains that, "we should be interested not only in what goes on (in language) but also in how people react to what goes on, and in what people say goes on (talk about language)" (1966, 20; Garrett 2010, 179). It is about getting access in order to understand the attitudes of "ordinary people," or, better known as, "folk" (2010, 179).

I have been observing the conversation involving folk linguistic talks on Facebook pages for the last three years. I have seen how the conversations can turn into chaotic arguments – I see it as what Labov (1966) calls "linguistic insecurity," which means English speakers are not

confident in their speech and are not following the Standard English language. For my research, I applied the same concept to ASL, which refers to the idea that Deaf ASL signers are not confident about their ASL, and are typically confused whether to use ASL or make corrections on any signs that come up that are not within existing ASL vocabulary. For example, one Canadian Deaf woman asked, "What should I do – which sign should I use: V-INDIAN or F-INDIAN?"

Considering Heritage Language Approach as a Possible Solution

There has been a big debate since 1990 whether to use the term "heritage" or "community" languages, according to Terrance Wiley (2014, 19). It is said that the concept of a heritage language applies to immigrant languages, Native American languages, and colonial languages in policy and educational circles (2014, 19). However, they are also known as community languages. It was not until recently that ASL and other signed languages joined the heritage language research. Wiley supplies us with the heritage/community language definition based on his research; he shares three perspectives: "1) the type of educational program and learner; 2) the needs of the community; and 3) the sociolinguistic situation" (2014, 20).

When you put the puzzle pieces of these perspectives together, it helps one to understand the whole sociolinguistic context of a community and its languages (2014, 20).

As part of this context, there is ongoing cultural and linguistic deprivation where schools continue to fail our Indigenous Deaf children; they are not as fortunate as many hearing Indigenous students with access to heritage/community language immersion programs in schools like Navajo, Cherokee, and many other Indigenous languages. But at the same time, "Native American" language researchers, linguistic anthropologists, and community members fail our

Indigenous Deaf people because they make no mention of tribal signed languages in their programs (McCarty 2014; Sims 2014; Warhol & Morris 2014), and many hundreds of programs do not include programs for teaching multiple heritage sign languages.

Here I review language policy which encourage both the public schools and the Deaf Residential schools to use signed language for communicating with deaf children. Unfortunately, this policy often would only concern the practice of teaching ASL only. With such persistence of a colonizer's perspective in the language policy-making, I anticipate the negative impact on Indigenous Deaf children who need to learn their own tribal signed languages. To address this problem, I consider how we can gain by developing policy to support heritage sign language instruction in public schools, Deaf residential schools and tribal schools.

We would all agree there is a natural tendency for any human community to promote a common language for their social network. Indeed, the Deaf people share this social trait as they would pass on their sign language from peer to peer as long as they find each other (Supalla & Clark 2015). My research confirms this pattern as it does happen to many of the IDC members, who continued learning more indigenous signs from Indigenous Deaf signers at IDC conferences, spiritual gatherings, and powwows. With such a historical lens, I knew that the social disruption from disagreement in folk linguistics does not always happen in this community. I am aware of the fact that these members have used code-switching between ASL and PISL among themselves, and use them wisely in certain settings.

In my fourth year (2019) of observing the online dialogue among the Indigenous Deaf people, I reckoned the folk linguistic opinions have divided them into two groups. The debate led to the set-up of an "F-INDIAN" group who supported keeping the existing ASL sign. In contrast, the "V-INDIAN" group supported Sarah. I feel it is unfortunate that such a folk linguistic

division is not healthy, and goes against what past IDC members worked so hard for: preserving harmony in the Indigenous Deaf community since 1996, by sustaining the coexistence of ASL and PISL (and other signed language varieties within North American Indian Sign Language).

Referring to my historical lens, I along with few of the participants recalled the vote during the 3rd IDC conference in Yakima, WA (summer 1996): that past IDC members had a consensual agreement on the use of ASL and PISL signs in specific settings (Indigenous or Deaf communities or Deaf communities) in order to reduce the confusion that ASL signing communities had. That did not stop the Indigenous Deaf people from using our tribal signs, because ASL lacked signs for our cultural context, so past IDC members decided to incorporate PISL signs into ASL when in an Indigenous setting (e.g. IDC conferences, workshops, IDC meetings, and on the reservation/reserve/village).

So, one possible solution is that whenever any change of signs must be made, the process would involve consultation with the Indigenous Deaf elders, not with the younger Indigenous Deaf people. It is the way of the Indigenous people that the entire generations—Indigenous Deaf people on Turtle Island (North America) had arrived at such decisions and abided with our tribal traditions. It is not the Deaf Community or ASL signing communities who make such decisions on our tribal signs; it has to come from our inner circle of Indigenous Deaf people, and mainly our Indigenous Deaf elders prior to any change.

With my experience of investigating the ongoing within the Indigenous Deaf community, I reckon that the way of how one person would demand that the entire Deaf community should "throw out F-INDIAN" and change it to "V-INDIAN" is not efficient for resolving the folk linguistic dilemma; that is not the way of our traditional Indigenous language change-making. The variation in using signs for self-identification reveals our heritage, where we come from, and

where we are going. I consider it possible that if we all use "V-INDIAN," our identities would disappear altogether.

The thing is, the sign "V-INDIAN" sign applies to certain tribes in specific locations, typically the ones who have facial paint marks representing symbols. Not all tribes wore/wear face paint. Keep in mind that there are 567 federally recognized tribes (Federal Register 2018), and there are over a thousand non-federally recognized tribes in the US. There are also state-recognized tribes in the US, Canadian Treaties/Status, and Mexican Indigenous groups. When asking my 37 research participants, they all said no, not all tribes wore face paints. One has to be very cautious when applying signs to certain tribes. Most tribes have their own signs for themselves and also signs for naming and discussing other tribes. The term, "Indian" is ambiguous and typically not used in the Indigenous communities. This shows that the wider American Deaf community is not cognizant of our identities.

These signs represent our identities and our origins, based on sign choice. Our language, our signs, make us who we are. Fishman (1966) coined the term "language loyalty" (Dorian 1980; Saville-Troike 2003, 202), and I think it is the perfect concept to show our loyalty to our home state signs and to our tribes. My heritage sign language comes from Oklahoma, and that makes me a proud Deaf Oklahoman. I inherited the Oklahoma signs from many Deaf predecessors from Oklahoma. During my fieldwork in Indigenous communities, when I used tribal sign(s), sometimes they would tell me, "that sign is not ours—it belongs to (certain tribe)," that gives you an idea of the importance of tribal identity. Identity and sign language go hand in hand, and therefore, signs should not be changed capriciously.

Chapter 8

The Difference in Kinship Studies: Communicative Kinship

> Yes! When we meet (at an IDC conference or other places), there are people of different tribes but we don't think about tribes. We just share our common experiences and communication; we accept each other for who we are and respect the different tribal cultures. We compare our tribal customs and cultures, but the number one key point is that we are all **Indigenous Deaf**. We are unique because we were left out of communication, missed information when with family and native community, but with each other we could share information. When we part, we feel good about ourselves and our experience.
>
> Ivanito (Maldonado) Tauscher (Aztec)
> Indigenous Deaf research participant

Introduction

Indigenous Deaf people have a unique kinship, because there are at least three sets of kinships for them. There are several researches work on kinship signs related to consanguinity and affinity in different signed languages. But to look beyond signed language use, what is the relationship among these Indigenous Deaf people, from a socio-cultural lens? Over the last two decades, kinship studies have changed, from more biological and genealogical research to examining the fluidity of relationships with non-biologically related humans. A problem in kinship studies is that there is insufficient data and research on Indigenous Deaf people and their cultural epistemologies related to kinship. Indigenous Deaf research participants and I conversed about consanguinity and affinity relating to our biological relatives. For most of the participants, their priority lies somewhere else, somewhere that is more valuable and beneficial to them, and discussion of this type of kinship is brand new. Even though there is a long history of this type of relationship among Deaf people, until now, there has been no name for it.

> "We grew up together," said Borden, who referred to his former classmates as his "brothers and sisters."
>
> Brent Borden, alumnus of Clarke School for the Deaf

Daily Hampshire Gazette - January 11, 2019.

My research focuses on Indigenous Deaf people who attended any one of the many Deaf residential schools in North America. I look at the social aspects of kinship, not the biological ones. “Fictive kinship” was the term that a few of my professors used when discussing alternative kinships, but this kinship is not about fictive kin… it is something else. This kinship, which I term “Communicative Kinship,” has been within the wider Deaf community, regardless of other ethnic groups–a social relationship, which does exist. It is worthy of investigation to get to the heart of this social kinship as it pertains to the socio-cultural study of Indigenous Deaf people.

Kinship Studies in Anthropology

For this chapter, I will give a brief overview of kinship studies conducted by well-known anthropologists. Anthropology has historically studied kinship in different ethnic groups for decades; it began as early as 1846. Lewis Henry Morgan, a lawyer turned anthropologist, attempted to understand social organization and gathered large-scale data (mostly questionnaires) on kin terminologies from different cultures—these were collected by different consul (military men, Indian agents, ministers, and others) for his kinship book, *Systems of Consanguinity & Affinity of the Human Family*, published in 1871 by the Smithsonian Institution. His book describes systemic relationships between the “ego,” as a person in the center of all, then the mother and the father, marriage, family—the consanguin (blood relatives), including grandparents (ascents) and grandchildren (descents). Then you have a group of affinal relatives (spouse, in laws, and step-relatives) (Morgan, 1997). Marriages, laws of conduct, males as heads

of the family, and reproduction are tied to religious, economical, and political status within the family with this classification system.

This was the beginning of kinship studies and it continued with other anthropologists, social scientists, sociologists, and others studying different people around the world for decades, and was taught in various departments at universities for decades. It was not until sometime around the 1970s that ideas of kinship changed (Barnes 2006; Goody 2005; Peletz 1995; Strathern 2014). Goody states that ideas of kinship had been deserted in the field by a good many anthropologists, and that there was very limited information of the actual terminologies from the societies gathered (2005, n.p.).

Decline in Kinship Studies in Anthropology

Since the late 1960s and early 1970s, the cultural change in society influenced kinship studies; such studies were reduced in usage in the anthropology classes in many universities (Goody 2005) and 'kinship' hardly appeared on the curriculum (Strathern 2014, 71). Barnes states that the leading study of kinship in anthropology had been abandoned after being declared that there is no such thing as kinship nor kinship theory (2006, 326; Needham 1971, 5).

Why was there a change? It had to do with the changes in contemporary society: heterosexual marriage decreased and homosexual marriage had just emerged. Additionally, it became necessary to include lesbian/gay kinships, feminist kinships, and new reproductive technologies (Barnes 2006; Godelier 2011; Goody 2005; Peletz 1995; Strathern 2014). Godelier's work had steered in a different direction than the traditional system of biological kinship systems in order to fit what today's societies had become in terms of the kinship systems. His argument is that we need to rethink how kinship has evolved and transformed over the years.

Godlier, a French anthropologist who wrote a book called, *The Metamorphoses of Kinship,* had Levi-Strauss as his mentor, who studied structural kinship systems and incest. Barnes notes that Godelier's work is an "ambitious and expansive exploration of a variety of topics" (2006, 326). His book explains the changes in families in most cultures, and how the outdated Morgan system of consanguinity and affinity may not work in kinships because of the rate of marriage declination, the increase in divorce, and the decrease in nuclear family formation. The kinship has a long-standing tradition of political-economic-religious domains that affect the everyday lives of the people (Godelier 2011, 246).

Gone are the days of lines of descent, sexual prohibition, and there are differences in contemporary sexuality. Three things have changed in the West related to kinship: 1) people's relationship with sexuality; 2) gender roles in society; and, 3) the placement of children. In modern times, there are more public adoptions to families not of same consanguinity or to same-sex couples, there are more surrogate mothers, single mothers who had children out of wedlock, and the rise of insemination technologies for same-sex parents or women who are infertile. Godelier presents six fundamental components of any kinship system: filiations and descents; alliance through marriage; residence; terminologies; conception; sexual prohibitions (incest). The difference between filiation and descent is that filiation has to do away with the existence between a person and his parents only, while descent refers to parents and an ancestor, meaning any genealogical predecessor (Barnes 2006, 332).

I would like to focus on Godelier' s argument—not just the six fundamental components, per se, but it is more from the transformation and evolution of the term kinship (Barnes 2006; Godelier 2011; Goody 2005; Peletz 1995; Strathern 2014). I draw on Strathern's analysis of Godelier's work; she suggests that we need to understand from where Godelier stands through

his description of how kinship is constantly changing its forms (2014, 72), and in order to "look beyond kinship in order to appreciate its workings"(2014, 72). What is metamorphosis? It is "a change of form or nature of a thing or person into a completely different one, by natural or supernatural means" (dictionary.com). How does it apply to what I am studying? This work is more than just the biological kinship; it has to get to the heart of the society. Godelier's argument was not to focus on traditional societies but to look at modern societies (Strathern 2014, 75) through a different lens. The change in the kinships of today show a difference from centuries-old kinship; societies change through time and need to break free from the entanglement of biological kinship in order to focus on the modern society as whole. Strathern explains that,

> "Godelier's 'metamorphosis'—concept of 'form' to keep with it, but changing nature of kinship and society. Godelier argues, for one cannot undo the evolutionary processes by which kinship systems have developed: rather, forms develop out of preexisting forms of the same character (notably, kinship out of kinship or one kind of society)"
>
> (2014, 82).

To understand from Strathern's interpretation that "the unexamined 'society,' we must see that such comes in with the description of a society full of 'individuals' and 'group'" from Godelier's fieldwork. She continues that the given society has no genealogical ties, but to find a society that has a collective purpose as humans with lives (2014, 77). Like Godelier and Strathern describe, the Indigenous Deaf people have kinship that exists within a group wherein each individual produces their own social existence and then those individuals collectively form their own group (Godelier 2011, in Strathern 2014, 80).

Godelier has provided a stepping-stone for me to go down that path to study kinship via a different lens. Naturally, we Indigenous Deaf people have consanguinity and affinity through our hearing and Deaf relatives, and there is some literature on this particular line of study. But I want to go farther in kinship studies, to delve into something, which has not been fully researched. It is

something unique that separates from our hearing blood relatives—the transformation of a unique relationship in our Indigenous Deaf society since the Inter-tribal Deaf Council was established… it is more social than biological for us when it comes to kinship.

Consanguinity and Affinity Systems—Are They Important to Indigenous Deaf People?

During the research stage, research participants occasionally explained about their family members, usually either briefly, or at time, more detailed information on each family member usually with their experiences at home and their problems with communication. For some participants, who have Deaf shared ancestry, they were/are more bonded and close to those Deaf family members than those of us who have hearing family members with limited communication. The majority of research participants had/have hearing family members, and shifted their attention immediately to Indigenous Deaf "relatives," and talked about them in detail.

The thoughts of their blood family members were shared intermittently during our conversations, but they were not likely to return to that subject unless the discussion involved blood family members in-depth. I must emphasize that many of the research participants were educated at Deaf residential schools and public schools. Many of them were not made aware of tribal kin terminologies because they learned the Anglo-Saxon style of kinship through ASL, usually with consanguinity and affinity terminologies. For example, they would sign "MY AUNT" instead of "MY MOTHER HER SISTER" (English: My mother's sister) or discussing kin in any tribal written languages.

On the other hand, there is a Deaf shared-ancestry, in other words, a Deaf Kinship. I will provide detailed information on different types of Deaf Kinship in this chapter. First, it is

important to understand tribal kinship within the Indigenous communities in order to understand how some Indigenous Deaf people absorbed traditional behaviors via memories. Again, this goes to the idea of "memories come before knowledge" learning that many, if not all, have witnessed tribal adoption ceremonies, and way of doing things through observation but not knowing what had been said because certified interpreters were not available on site, and there were also not family members, such as siblings or children of those Indigenous Deaf people, available to interpret for them.

Tribal Style of Adoption

Culturally, the Indigenous ways of adoption is different from the non-Indigenous, which requires legal paperwork through contracts. Maine, a legal anthropologist, wrote in his Ancient Laws about adoption and "Fictive kin" as described in Schneider (1984) (who studied kinship for years), that without the biological relationship there is nothing—which means no biological relationship, therefore, such relationships are called "fictive kinship" (Maine 1861, 27 in Holland 2012,7). From a different point of view, Indigenous communities have different ways of regarding their relatives, through social acceptance, not through consanguinity or affinity.

Let us turn to the Lakota and Dakota kinships from Beatrice Medicine (Sihasapa and Minneconjou bands of Lakota Nation), Ella Deloria (Yankton Dakota), and Vivian One Feather (Oglala Lakota). In their tribal cultures, they use the term *tiospaye*, an important term in kinship which means extended family (i.e. parents, grandparents, aunts, uncles, cousins, all married and adopted relatives) (Medicine 2002, One Feather 1995, and Deloria 1944). *Tiospaye* has a combination of two meanings: *Ti* as in tipi for "house" and *Ospaye* representing a small group of persons separated from a larger or the main body of people (One Feather 1995, 12). One of the

headmen becomes a leader of each *tiospaye*, forming *tiospayes (which are* made up of many *tiospaye),* to become one Lakota people. Each *tiospaye* is responsible for teaching children; the responsibility belongs to more than just the biological parents. The concept of this type is similar to Indigenous Deaf people, who are not necessarily of a same shared blood or marriage ancestry, but a strong communal network exists.

Raymond DeMallie (1979), an anthropologist studied two Dakota groups and how they use Dakota terminologies in their communities. DeMaille explained that Morgan's system has missing pieces, so he studied Dakota kin terminologies intensively, learning from elders. Dakota people use the term, "*Wotakuye,*" which is a Lakota term for relationships based on feeling or acting, not biology or marriage—in a sense, all Lakota are relatives. DeMaille also noticed younger Lakota/Dakota generations use grammatical possessive forms of words for relatives by using a bilingual blending of English and Lakota terms. He described that Lakota people have rules for use of kin terms by cultural and social level. Cultural level terminology denotes meaning and understanding, while social level use depends on the language used to interact with any specific relative *and* the context in which an interaction takes place.

Cherokee shares the same principle; Cherokee has the same family types as other tribes. Garrett and Garrett (2002) explain that family "extends well beyond one's immediate relatives to extended family relatives, members of one's clan, members of the community." Other tribes have their own terminology and cultural influences on Indigenous Deaf people who were brought up in traditional ways, and their cultural traits and epistemologies carried into the Indigenous Deaf community through the Intertribal Deaf Council and beyond. After the establishment of Intertribal Deaf Council, a development of communal ties formed throughout our network. Many Indigenous Deaf people reside in different locations in North America, but

our communication continues through videophones, and video apps like Glide and Macro Polo, to keep up with the news of our Indigenous Deaf "relatives." Because of access to these technologies, such cultural behavior remains stronger today.

The tribal custom of adoption influences some Indigenous Deaf people, especially those who were raised in traditional ways on the reservations/reserves/in villages. This cultural behavior is a carry-over from their tribal culture into Indigenous Deaf community through interaction with IDC members, who also acquired these behaviors as they learned and absorbed the traditional way of adopting other Indigenous Deaf people. The result is some kind of intersectional combination of hearing Indigenous adoption, communal acceptance of other tribal members, and Deaf-ancestry (for these who actually have DEAF + FAMILY, which is rare). Cordova explains in the Indigenous community, there are two types of parents, the "raising parent" and the "birth parents" (2007, 195). Taking a look at the Indigenous Deaf community, in rare cases, there are Indigenous Deaf people who accept responsibility as "raising parents" of Indigenous Deaf youth, because the "birth parents" are not able to communicate with their Indigenous Deaf child, and it was felt that the Indigenous Deaf person/parent(s) would benefit the education and cultural teaching to their biological Indigenous Deaf child.

Kin Terminology in Sign Language

Besides the large amount of literature in kinship studies that can be found within anthropology research, there are a few works on kinship signs related to signed languages around the world. It is best to avoid the fallacy of believing in the universality of signed languages; each country has their own signs for kinship, though some are borrowing signs due to contact between Deaf people globally through video communication or in person. That said, there is an emerging

base, research like, Wilkinson's (2009) *Typology of signed languages: Differentiation through kinship terminology*; Geer's (2011) *Kinship in Mongolian Sign Language*; Hendriks' (forthcoming) *Kinship and Color Terms in Mexican Sign Language*; and Peng's (1974) *Kinship Signs in Japanese Sign Language.* Each of these four works studies kinship signs linguistically, and had typological studies of different countries' signs, mostly those regarding consanguine and affinal relationships.

Before I turn my attention to ASL kin terminology, keep in mind that the majority of the research participants were educated and raised at their own Deaf residential schools, in different states, while few others were mainstreamed in public schools and learned ASL as well. The Indigenous Deaf people, like many other Deaf people, in general were taught ASL signs in kinship because tribal signed language had been omitted from their language learning in their growing years. A couple of the research participants possessed the knowledge of their tribes' kin signs but not any corresponding written tribal kin terminologies. The majority of the research participants are unacquainted of their tribal kin terminologies, so ASL kin signs are their primary means of expressing knowledge when conversing about kinship.

The American Sign Language community (USA, Canada, and some areas in Mexico, through contact) possesses their own kin terminology in sign language. For this portion of the paper, I will focus on ASL signs. The old sign for FAMILY from Higgins' 1923 ASL book can be found on the Historical Sign Language Database; there is no picture of a single sign for FAMILY, but the description provides two signs, compounded for FAMILY= "HOME" + "CLASS" (Higgins 1923, 156 in HSLDB entry ID: 922, hsldb.georgetown.edu). The current ASL sign for family begins with both hands in an "F" handshape, thumbs and index fingers touching. The sign starts from the closed fingers of both hands contacting each other, and

moving in symmetrical circle, then ending with contact of pinkie fingers on both side of the hands.

There are two types of communicative kinship that I discussed with all of the participants: childhood communicative kinship (CCK) and ethnic communicative kinship (ECK). All thirty-three (including one from a non-Deaf residential school) have experienced CCK, ECK, or both. How did I come up with CCK? It has to do with the fact that many of us grew up in Deaf residential schools. For the first twelve years of my education, I attended the Oklahoma School for the Deaf. Along with many of my classmates, we lived away from home, so we made our own family as many generations of so-called siblings before, during and after my attendance. Many of the Indigenous Deaf people in this study had similar experiences in their own Deaf residential schools. Ethnic communicative kinship means we share a similar ethnic group, and the feeling of interconnectedness of being "Indigenous-Deaf-Same" (DEAF-SAME can be found in Friedner and Kusters, 2015, and Ladd, 2003); this is our shared ethnic and Deaf cultural worldview. When the participants and I met at past IDC conferences and again post-IDC, our sense of belonging centers on the INDIGNEOUS-DEAF-SAME wholeness.

It is important for non-signers who are not exposed to ASL to know that ASL kinship signs are gender-specific, established on locations on the face. Any male kin signs are formed around the forehead (i.e. boy, father, grandfather, man, gentleman, son, and brother), the only signs that are not on the forehead are uncle, nephew, and male cousin, which are typically performed near the side of the temple. Signs for female relatives are based at the jaw and chin (Smith, et al. 2008 & 1988; Sternberg 1998; Shaw & Delaporte 2015, Supalla and Clark 2015). Besides just one sign for each relative, there are several compound signs, which means two signs become one sign. Valli, et al. (2011), demonstrating compound signs GIRL^SAME = SISTER,

BOY^SAME = BROTHER. There way to do 2 compound signs into one sign: SISTER + BROTHER = siblings. MOTHER + FATHER = PARENTS. GRANDMOTHER + GRANDFATHER = GRANDPARENTS. The older signs that are no longer used among the younger Deaf generation is AUNT, UNCLE, and COUSIN—all of them are in initialized manual alphabet letters like "A", "U", "C"—they are performed near the temple with a twisting hand, and, used together in a compounding manner, translates to RELATIVES. This particular type of multiple sign compounding can be remembered by Deaf people who are in their mid-fifties and older.

Remember the spatial positioning mentioned in chapters four and five—it is the same principle that ASL signers will use spatial position setting, one side will emphasize matrilineal space and on the other side patrilineal space, using your photographic memory of the genealogical chart applied to which sides of signer's frame. The right side would be the matrilineal space and the left side would be the patrilineal space, or vice versa. Then describe the organizational chart with signs like, (my) MOTHER HER MOTHER (in English it means Mother's mother); it could be signed like (my) MOTHER, HER MOTHER, MY GRANDMOTHER. During the signing of family history, it would either move upward or sideways depending on the character of the person. It also could be gender-specific, but more research needs to be conducted to determine that.

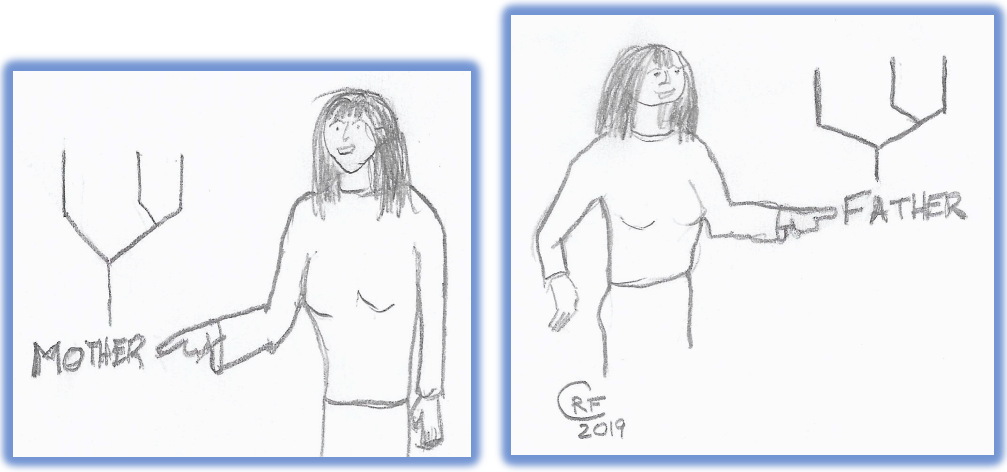


Figure 77a: Matrilineal and patrilineal charts and signing spaces. Sketches by Robert F. Cody, Jr., 2019.

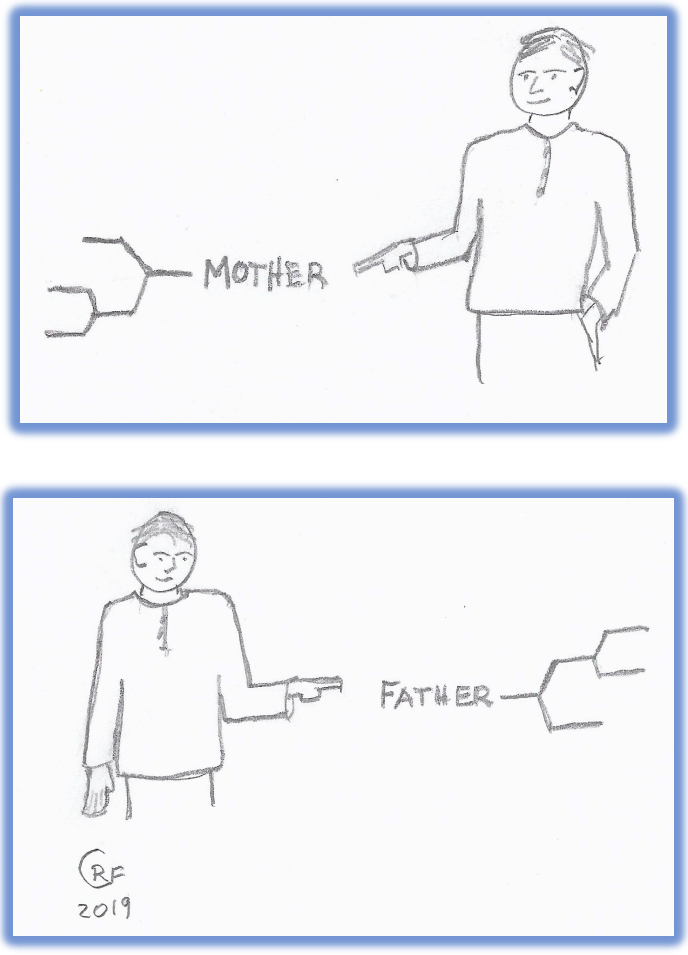


Figure 77b: Matrilineal and patrilineal charts. Sketches by Robert F. Cody, Jr., 2019.

There is no strict set of rules as to which side is matrilineal or patrilineal—it could go either way, but the two separated spaces in a kinship description is commonly used among fluent ASL users. This split space reduces overlapping of signs, which causes less confusion on which relatives goes with which side of the family.

As for "step" relatives, there are three different signs: 1) "FALSE" or 2) bent-wiggle index finger L handshape or 3) a combination of thumb, index and pinkie fingers (also known as ILY handshape). The dialectology (study of dialect, for this study, sign dialect) of sign step-relative kinship terminology. In Oklahoma, we use "ILY" handshape for most of our step-relatives, usually step-mother, step-father, step-sister, and step-brother, but never use step-grandmother or step-grandfather. Instead, it would be signed like MY STEP-FATHER HIS MOTHER. There are certain rules in how to use signed kin terminology. As for the sign for FALSE-MOTHER, and other "FALSE" relatives, the sign FALSE does not have a strict English equivalent… it does not actually mean "false," but it is how ASL signers may sign them, depending on regional signs/sign dialect (States Deaf schools' signs). Leticia Arellano, alumna of New Mexico School for the Deaf, recalled heritage signs for ASL—step-mother and step-father has a bent L handshape with wiggling index finger on forehead for step-father and on the chin for step-mother. She also remembers signs like "second," SECOND SISTER (step-sister), SECOND BROTHER (step-brother), SECOND FATHER/MOTHER (step-father or mother) (pers. comm., January 20, 2019).

It is important to set up possessive pronoun descriptions in signed language for each family member. Another way which has been a challenge for ASL learners is to use a "list buoy" sign (Liddell, 2003). According to Liddell's description, it is the weak hand held in a stationary configuration, while the other hand, the dominant hand will produce sign (2003:223). The list

buoy typically makes a connection with one to five entities, with numbers like ONE, TWO, THREE, and so on. Regarding kinship signing, this buoyed list would demonstrate the rank of siblings; if you have three siblings and yourself, the sign will look like FOUR-LIST floating in the neutral signing zone. Then the signer would tell you which rank, like "I am the 2nd child of 4 siblings, the FOUR-LIST, the index finger would be on the top, and the 2nd sibling would be the middle finger. The problem with this listing of up to five" entities is that it is more from the Euro-American kinship, because ASL is heavily Euro-American influenced. This posits a challenge when having more than 5 siblings. From my experiences as an ASL instructor and ASL native signer (native meaning ASL is my most-fluent language, not Native as in Indigenous), I have come across some ASL students having 8 to 12 siblings, so creating new list-buoys that are not commonly used in ASL is likely to happen, like FIVE-LIST THREE-LIST (the thumb will touch the hand below the pinkie finger), meaning a total of 8 siblings.

Three Types of Deaf Kinship

There are three types of Deaf kinship that I have studied. For the first, I will begin with Deaf-ancestry kinship, which is a shared ancestry based on being genetically deaf. In ASL, it is referred to as DEAF + FAMILY. The second type of kinship is Deaf people who were raised in an otherwise hearing family home environment where communication is completely lacking or severely limited. Deaf people raised in such an environment will eventually make their way to Communicative Kinship. And the third type of kinship is sharing similar ethnic backgrounds (in this case, Indigenous, but the concept is not limited to Indigenous ethnicity) and Deaf cultural beliefs, folk linguistics, and signed language usage, which I propose be Ethnic Communicative

Kinship, and in the case of Indigenous Deaf, Indigenous Deaf Kinship. More detailed descriptions of each of these types are specifically listed here.

Deaf-Ancestry Kinship

In Deaf communities around the world, they exhibit their own type of kinship; usually, it is based on deafness. For years, I have witnessed many people signing "Deaf + Family" in the Deaf community—for as long as I can remember (see Ladd 2003, 317-8). There are different terms like "genetically deaf" and "hereditary deafness" (McKee and Hauser 2012). Lane, Pillard and Hedberg, use terms like "Deaf-ancestry" and "hereditarily Deaf" (2011). It is commonly known in the Deaf community that there are two groups of D/deaf and hard of hearing people (DeafBlind people are often excluded in most literature; they basically stand as a separate group): the ninety percent of Deaf children/adults with hearing parents and siblings, and the ten percent in the "Deaf+Family" category. In medical and research communities, you will see a "90% formula" (Holcomb 2013, 38-40). There is a huge volume of literature on these two groups, and it is frequently talked about in the Deaf community, unlike that of ethnic groups who share biological appearance, such as skin color or other characteristics, based on the biological parents.

For this Deaf Kinship study, I draw on the work of Lane, Pillard and Hedberg, who studied Deaf ethnicity and ancestry, mostly by shared ancestry with deaf genes through biology. The authors describe that a sense of kinship depends on socialization, not a shared ancestry (2011, 29). This statement refers to the 90% of Deaf and Hard of Hearing people who do not have deaf parents. These people's views on the family-like attachment among group members is nourished by language and religion, not by having biological ties to deaf family members; Lane,

Pillard, and Hedberg called it "Deaf-ancestry" (2011, 29-30). What do they mean by that? Their differential description between biological and non-biological kinship can be seen here:

> As we have seen, family-like attachment between ethnic group members are often grounded not on the genealogical facts of shared heredity but on language, culture, and physical traits. Properties of the Deaf World that nourish this diffuse enduring solidarity are the transmission of language and culture down the generations and common physical characteristics (ASL signers are visual people.) (2011:30).

For non-Deaf people who are not familiar with the term "Deaf-World," it is frequently used in, and currently means, the Deaf Community. Something to consider, as the authors point out, is that "[c]hildren are often socialized by kin to whom they are not related biologically; we may call it proxy socialization" (Lane, et al. 2011, 32). They continue, "Deaf socialization is often proxy socialization." In this case, they mean the informal influence of non-biologically related Deaf peers and Deaf adults during Deaf residential school years or mainstreaming public schools with large Deaf and Hard of Hearing programs (e.g., Deaf identity, exposure to American Sign Language, Deaf culture, Deaf values and norms, Deaf history, and the like). Attending schools populated with Deaf peers and Deaf role models/adults who teach the new Deaf enrollees has a major impact on students' lifestyles. Students become more visually oriented with access to American Sign Language, which gives them a positive identity and encouragement for a positive life. (Lane, et al. 2011, 32-33). Unfortunately, in today's education, mainly public schools, as described by the authors, "Deaf children are today predominantly placed in local schools where they are most often isolated from peers and role models" (2011, 33).

I would like to point out the difference between DEAF+FAMILY (Deaf-ancestry) and Communicative Kinship. Back in 2015, while attending a Deaf Women of Color conference, I was asked to give a presentation on Indigenous Deaf people. During the presentation, a Deaf

woman from a “DEAF+FAMILY” got up and ask if there is any DEAF+FAMILY in Indigenous Deaf communities. I was not surprised by her question, given the fact that there is no research on this specific topic, and there has been no real effort at spreading awareness of our Indigenous Deaf-ancestry in the wider Deaf community. I told her that our way of defining kinship is not the same as it is in the wider Deaf community/culture. This particular woman asked the same question several times throughout the conference. It was apparent that she did not understand our Indigenous way of kinship. At the last night of the panel, I explained what kinship in Indigenous community looks like. I explained to the audience that (I pointed to this woman; keep in mind pointing is acceptable in the wider Deaf Community but not in Indigenous communities) a part Cherokee Deaf (she happened to be of DEAF+FAMILY) whom I have known for years as we attended the same Deaf residential school, and therefore are sisters, even though we are not biologically related, we are ethnically related through our shared Cherokee heritage. This was not an isolated situation; it happens often in the Deaf Community. I have long had the feeling that there has been something that needs clarification with regard to kinship studies.

There is a lack of research on this particular type of social kinship, and a lack of awareness in the wider Deaf Community, Indigenous communities, and in the anthropology community. I am not talking about filiations or descents, consanguinity, affinity, and all such ideas mentioned earlier in this chapter. Deaf ancestry exists in every culture, and a high number of Euro-Americans are of the DEAF + FAMILY (Deaf-ancestry) type. I am not saying there is none in other cultures, but it does exist, though often overlooked and neglected by the wider Deaf Community, and Signed Language research. I have interviewed several Deaf People of Color (DPOC) outside of Indigenous Deaf people. There are many DPOC with Deaf-ancestry, (they avoid using DEAF + FAMILY label because it basically belongs to the attitude of Euro-

American DEAF + FAMILY from the east and west coasts). The Euro-Americans with Deaf-ancestry between the coasts do not demonstrate such an attitude, except for cities where there is a large population of Deaf Community (anywhere in the USA), they are likely to have this type of attitude.

Putting aside Deaf-ancestry and kinship terminologies (in spoken and signed languages), there is something that goes beyond, and is often overlooked. This is where I came up with the idea of cultural relationships in social ways of knowing, being, and doing, which led me to coin the term, "Communicative Kinship." This term was deemed appropriate during my ethnographic communication and received unanimous agreement among the Indigenous Deaf research participants and the DPOC who have a similar interconnectedness. Below are my definitions of Communicative Kinship.

Two Types of Communicative Kinship

There are two types of communicative kinship that I have discussed with all of the participants: Childhood Communicative Kinship (CCK) and Ethnic Communicative Kinship (ECK). The ASL expression for Communicative Kinship is:



Figure 78: ASL Signer: Melanie McKay-Cody (Cherokee) Three sets of compound signs: [PEOPLE-GET-TOGETHER] [FEMALE + SAME] [MALE + SAME]. Multimedia adapted by Crescenciano Garcia, Jr., 2019.

Above is a set of three signs representing the meaningful concept of Communicative Kinship. [SASS: “people-get-together”] [female+SAME] [male+SAME]. The first sign on the left is one sign, but it has a morphological incorporation of three signs—Size and Shape Specifier (SASS) (Supalla 1986, 1980): “people-get-together” = relexicalized as GROUP (which stands for a wide variety of meanings: family, team, tribe, group... with some signs sometimes initialized for differentiation’s sake, such as Team, Group, or Family). The sign GROUP can be seen in next section. Then the next two signs are categorized in a complex phrase with two sign compounds in sequence (SISTER and BROTHER, each being a compound for gender+kinship), then put together for the meaning of "siblings". The signs (in center and right side of the pictorial images above) show as phrase: [female + SAME = lexicalized as SISTER], [male + SAME = lexicalized as BROTHER] = 'siblings' (not a conventionalized sign now, but a complex phrase),

The concept of the interconnection between our childhood siblings has a long-standing history. Everyone who grew up in Deaf residential schools anywhere would have a deep sense of the connectedness among Deaf people, and it carries on through adulthood.

The first sign from the Communicative Kinship, the SASS sign “people-get-together” has an incorporation of signs SAME and CIRCLE.



Figure 79: ASL Signer: Melanie McKay-Cody (Cherokee) 'PEOPLE-GET-TOGETHER'.
Multimedia adapted by Crescenciano Garcia, Jr., 2019.

Recall that rock art/writing has symbol incorporation and combinations, Chart 3 (Patterson 1993, 105). The principle of symbol incorporation has a similarity in sign language incorporation—

SASS	Root sign (lexicon)	Sign movement
'people-get-together'	GROUP-of-people, CIRCLE, SAME, TOGETHER	Both hands approaching each other.

Table 3: Sign incorporation for 'people-get-together'.

Three ASL signs can be found below related to the sign incorporation. It is a breakdown of "people-get-together" (one sign). See the signs from ASL Dictionary by Martin Sternberg (1998).

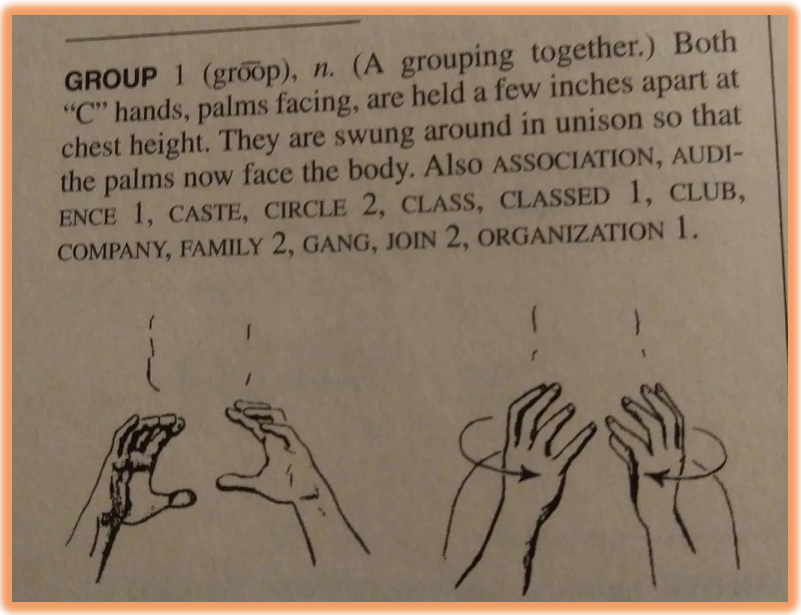
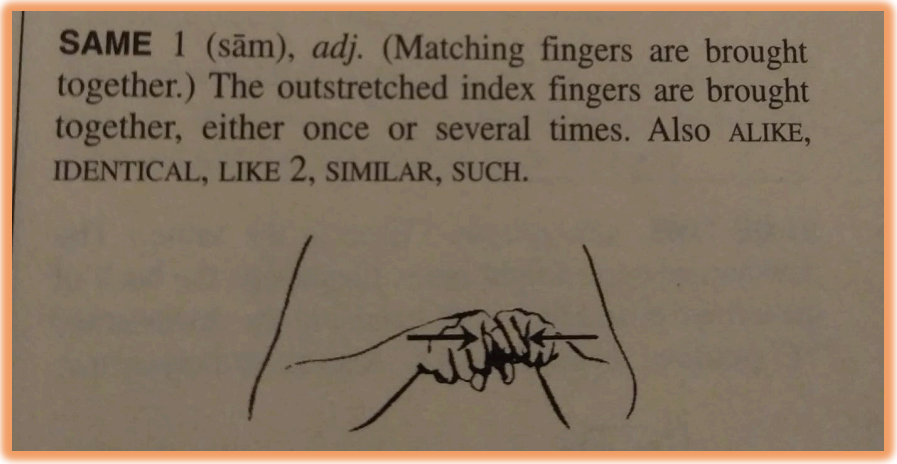
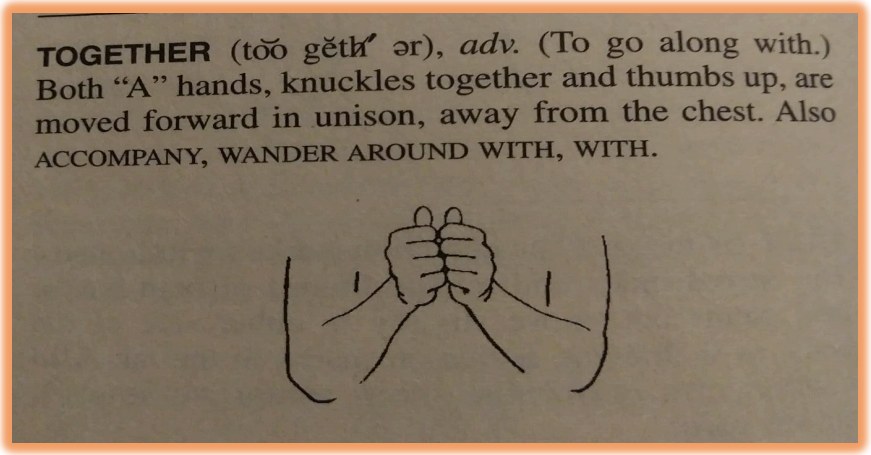


Figure 80, 81, 82: ASL signs" GROUP, SAME, and TOGETHER (Sternberg 1998).





All thirty-three participants (including one from a non-Deaf residential school) have experienced CCK, ECK, or both. How did I come up with CCK? It has to do with the fact that many of us grew up in Deaf residential schools. For the first twelve years of my education, I attended Oklahoma School for the Deaf. Along with many of my classmates, we lived away from home, so we made our own family as many generations of "siblings" before, during and after my attendance. Many of the Indigenous Deaf people have similar experiences in our own Deaf residential schools. Ethnic communicative kinship means we share a similar ethnic group, and the feeling of interconnectedness of being "Indigenous-Deaf-Same" (DEAF-SAME can be found in Friedner & Kusters, 2015 and Ladd, 2003); this is our shared ethnic and Deaf cultural mentality. When the participants and I met at past IDC conferences and post-IDC, our sense of belonging centers on the INDIGNEOUS-DEAF-SAME wholeness.

Communicative Kinship (Childhood Communicative Kinship)

The majority of Deaf children from all ethnic groups have hearing parents (the shared-ancestry), and, "socialization in the parents' ethnicity is hampered by the language barrier" (Lane, et al., 2011, 33). In the homes of spoken-language (English or other) there is often a failure to provide direct communication, which means missing valuable information about family members, instruction, cultural information and many other issues. Lane, Pillard and Hedberg portray an "important part of socialization that is incidental - overheard parental interaction, dinner table conversation, and the like" (2011, 33). From a different perspective, the hearing parents may or may not try to understand from their children's visual point of view. Other authors, McKee and Hauser, provide a parallel similarity by stating, "Incidental learning can be described as informal or unintentional learning" (Marsick and Watkins 1990, in McKee and

Hauser 2012, 51) "that frequently occur[s] throughout the day outside of formal educational or work-related environments. Communication and language barriers can affect how deaf individuals acquire knowledge through incidental learning opportunities" (McKee and Hauser, 2012, 51).

Indigenous Deaf people had and still have a similar experience. The Indigenous Deaf people are left out of cultural knowledge and often experience language barriers at every turn of their lives, whether at Deaf residential schools/public schools and at home. McKee and Hauser explain that, "The deprivation of incidental learning opportunities and poor access to general information are experiences shared by many deaf individuals" (McKee & Hauser 2012:51).

Duration of the research, Indigenous Deaf research participants were given the culturally safe discussion of Indigenous epistemologies from their own folk linguistics, Indigenous knowledge, and Deaf epistemologies, all combine into one interwoven epistemologies. They were provided with bias-free environment to think, understand and present their knowledge without hesitation from non-Indigenous scholars or people. Each research participants were given the rights of self-determination and more control of Indigenous Deaf issues and to define their own perspective on culture, kinship and relationship among each other.

The discussion of consanguinity (blood relatives) and affinity (in-laws or step-) had been brought up during the naturally occurring conversation based on "scientific accepted information" for the anthropological study required for my doctoral study. It was predicted that the consanguinity and affinity was a "floating thought", which means even though they have biological families but it is not that important, the thought of their family will be held in their minds. I am referring to Indigenous Deaf people with shared ancestry of hearing relatives (non-Deaf-ancestry). But most of the Indigenous Deaf people even though with hearing parents

(shared-ancestry), they have many Indigenous Deaf cousins, or Deaf Aunt/Uncle or one or two grandparents who are Indigenous Deaf as well. Few research participants and Indigenous Deaf people outside of the research group have one Deaf parent. Prior and during my research, I have met many Indigenous hearing people who mentioned that they have one or two deaf relatives, like "my grandfather's baby sister is deaf" or "I have a deaf aunt". Exactly the opposite, the hearing Indigenous persons who have deaf relatives would briefly talk about them, and have the "floating thought" about them. It is a feeling of connectedness since I am an Indigenous Deaf person, and bringing up their deaf relatives is very common.

Interesting to note that many of the participants are aware of an existence of Indigenous Deaf relatives with Deaf-ancestry in the group but they too are immersed in the Communicative Kinship, because of residence at Deaf residential schools. While doing interview and open-ended conversation the most popular theme of the conversation has to do with their experience with other Indigenous Deaf people within the community before, during, and after Intertribal Deaf Council. Communicative kinship is about the expression of our togetherness, out of necessity for survival. Recall the amount of literature on "fictive kin" in early part of this chapter with Sir Henry Sumner Maine and other researchers. Since "fictive kin" comes from a legal adoption that requires paperwork, it is a contract. The term "fictive kin" has changed in the research over the years. In anthropology, they use "fictive kin" more often than not. The reason I have rejected the use of the term "fictive kin," is because it is not applicable to our Indigenous Deaf people, and not even in the wider Indigenous communities. We do not do a legal contract, nor should what we have be called "fictive kin." But due to our communication barriers at home, the work environment, and our visually oriented needs, I created this term: "Communicative

Kinship" out of our naturally occurring conversations throughout the research stage. There is no need for legal adoptions, or any biological/genealogical charts to make us written kin.

Ethnic Communicative Kinship (Indigenous Deaf Kinship)

During my 25 years with my IDC siblings, I have witnessed many ceremonial adoptions among Indigenous Deaf people. Like many tribes who adopted another Indigenous or non-Indigenous persons, it is as naturally acceptable to them as it is to us Indigenous Deaf people who learned this behavior from their own tribes.

In the course of this research, I interviewed 37 Indigenous Deaf participants about their experiences with "communicative kinship." Thirty participants had experienced communicative kinship, while seven of the participants had never experienced it, given the fact that they have never been to an Intertribal Deaf Council event. One participant did not answer, but I personally know this person, who has attended the Intertribal Deaf Council a couple of times, but was more of an outsider. Nineteen out of thirty-eight had never been to an IDC conference or gathering. Six out of 38 participants knew their clans; they responded immediately. These six participants are past Intertribal Deaf Council members, and learned about their clans while socializing with other Indigenous Deaf members.

Indigenous Deaf Participants' Signed Narratives

I bring the Indigenous Deaf epistemologies from the research participants, Tina Terrance (Mohawk) remembered when she started out with IDC, "when I first join IDC, I was given 'homework' to learn about myself, my tribe and my clan. This led me to learn about my tribe and who I am" (pers. comm., July 31, 2018). During naturally occurring conversations, I provided

descriptions of *consanguinity*, *affinity*, and my own research with *communicative kinship* (CK). Interestingly, when I described these three, I noticed the 30 participants were excited when discussing the communicative kinship, except for the seven participants who never experienced it… they had a puzzled look on their faces, like, "what is that?" They were not sure what that relationship meant. I would like to say that the seven participants who expressed their uncertainty about ethnic communicative kinship (ECK) was similar to the feeling that many IDC members had before joining the IDC. But five out of these seven participants do possess childhood communication kinship (CCK). After I explained CCK in concept via ASL and my personal experience as an alumna of a Deaf residential school, they comprehended the concept, because they grew up at their own Deaf residential schools. After understanding what CCK is about, they were then able to provide personal narratives of their Deaf residential school experiences. Throughout my research and after a mixture of interviews and naturally occurring conversations, I was able to introduce some of my CCK siblings to three out of seven participants.

Communicative kinship (CK) is more suitable for this particular group; it is better than to be labeled as "fictive kin" because our communication mode is American Sign Language (ASL), Signed English (ASL signs in English word order), and/or in language varieties of North American Indian Sign Language (especially the Plains Indian Sign Language and Northeast Indian Sign Language (Oneida Sign Language fits this language variety category). Due to the lack of communication at home, our incidental learning, as mentioned earlier, is lacking. The knowledge of kinship systems were not readily available at IDC conferences; the participants learned to embrace our CK, and all of the IDC members represented different tribes from North America – but we all have much in common: 1) full communication access is not available in

most contexts; 2) many of the biological parents either cannot sign or know a limited selection of signs; 3) Thirty-three participants attended Deaf residential schools which meant driving for hours from home, while five participants attended local public schools; and, 4) Deaf residential schools destroyed their knowledge and understanding of their tribal kinship system. Hearing Indigenous people faced some of the same experiences, "The connection between well-behavior and wellness remained unbroken until residential school, compulsory education, and the outlawing of our cultural practices destroyed the family, clan, and political power structures necessary to pass on this knowledge" (Marcle 2008:44).

Even in kinship, the majority of the Indigenous Deaf people in my research are attached to their biological parents, to the idea of shared ancestry when visiting home during holidays or tribal events, but the communication and socialization are typically limited during those times. My data shows 28 participants have an interconnection with biological relatives and ECK/CCK relatives. Two participants have all of the ties: biological, affinal, and ECK. Five participants prefer ECK over their biological families. Three participants only relate to their biological relatives because they never acquired CCK. Eleven Indigenous Deaf participants and I have biological family members, either siblings or cousins who are Deaf, while four participants have hereditary-deaf/hard of hearing biological family members and so have shared ancestry.

While having naturally occurring conversations on CCK and ECK, eleven participants nodded in agreement without saying a word, and one said, "EASY COMMUNICATON." Several other comments expressed by the participants:

Eugene Edwin (Koyukon Anthabascan and IDC member), "Before IDC, I did not have any connection. After I met many new IDC members in the early years of IDC, I felt connected with them."

Angelina Ortiz (Aztec/Tarhumara and IDC member), "I did not know about IDC until the state commission of the Deaf and Hard of Hearing sponsored my trip to an IDC conference and spiritual gathering. Wow! I felt connected with other Indigenous Deaf people and have been in contact with a few of them ever since."

Alisha Bronk (Potawatomi) says they "became my 2nd family." I prefer ECK because of the closeness. My biological family had limited communication (with me), but with ECK, I have full access to communication. We shared lived experiences."

Patricia Duran (Picuris Pueblo), "Even though I have never been involved with the IDC, I have CCK—this was the first time I've witnessed a gathering… and I will get involved in the Indigenous Deaf community from now onward."

Christina Bueno (Aztec/Huichol and IDC member), "Due to poor communication with family members, I was left out all my life. But IDC has provided me with full access to communication, and I finally connected with others… I feel whole."

Charlotte Luna (Chickasaw and IDC member), "We are a close-knit family."

Kevin Goodfeather (Dakota and IDC member), "Being the only Deaf member of my tribe I had limited communication. I went to an IDC conference and met many other Indigenous Deaf people. It changed me and allowed my involvement in ECK."

Ron Sanders (Oklahoma Cherokee/Bad River Band of Ojibwa and IDC member), "Even though my mom can sign, with ECK and CCK I have full communication access. I was able to discuss Indian culture at IDC conferences without being criticized, like many Deaf people did (when I tried to talk about it) back home."

Here are two important comments about the uniqueness of ECK and CCK.

Ivanito Tauscher (Aztec and IDC member) whose comment begins of this chapter, is another past IDC member.

Tina Terrance (Mohawk), expressed her thoughts about communicative kinship, saying, "Yes, I am more comfortable with other Indigenous Deaf people, because of the IDC and the Sacred Circle (another Indigenous Deaf group). I feel relaxed within the circle, and able give feedback on tribal issues without communication difficulty. Indigenous Deaf people become a family. I can feel free to call one of the older IDC members my mother, and others my siblings, even though we are not of same tribe biologically." It is important to note that IDC members adopt each other freely. On CCK: "I have many classmates from the Deaf school. We grew up together and we are like siblings; I keep in contact with my CCK siblings more than with my ECK because I know them very well. With past IDC members I remain in contact with them occasionally."

Communitive Kinship is not based entirely on communication. The Indigenous Deaf people have a balance of extended "kin" networks and tribal networks. Since the IDC's establishment, we have kept up with our kin network regarding a lot of information, including the health and celebrations of our CCK/ECK siblings and other generations of such siblings. The network feels they have responsibilities to and engage in reciprocity with other Indigenous Deaf people of all ages. During my research, Terry Vinson (Aztec and Comanche) and I founded the Council of Native Deaf Elders, because the younger generations requested access to Indigenous Deaf Elders (most of the Deaf Elders are past IDC members) for guidance and mentoring. Teaching of existing tribal signed languages from Indigenous Deaf signers has been an ongoing method of instruction since the IDC establishment, and sharing with other Indigenous Deaf people in order to provide the cultural context of Indigenous-themed activities, lectures, and

dances, all of which are lacking in ASL, is extremely important. With all the kinship among Indigenous Deaf people, our obligation is always to help others in need, whether through service, charity, translating from English to American Sign Language to build up others' tribal knowledge that was and is long overdue to them, and fulfilling our obligation to help our DeafBlind kin with visual environmental stimuli so that they have better access to what is going on in Indigenous settings.

As you see, communication is a very valuable tool to learn about cultural knowledge, kinship, and shared information among Indigenous Deaf people. Hundreds of Indigenous Deaf people (participants and non-participants) are dependent on each other for information or help translating found information to suit their educational levels. That is part of what makes us a unique group: communicative kinship fits us to a T, not fictive kinship.

Chapter 9

My Personal Journey

On a positive note, during my research and dissertation processes, I have increased my experiences in both Indigenous communities and academic communities many times over. "Patience is your best friend," I told myself many too many times to count and I realized that the spirits were telling me to wait. I now know that the wait was worthwhile; more Indigenous scholars have presented their works from an Indigenous worldview than when I very first began my studies, which has opened up my academic world. That is the path I had been waiting for.

Since the Intertribal Deaf Council was established, I met hundreds of Indigenous Deaf people (and Indigenous hearing people). I remember the first conference, when I met so many new Indigenous people who eventually became my "Indigenous Deaf kinship" siblings. Since that day, I have studied this particular group for 25 years; I have witnessed the growth as we are building on our own culture. Indigenous Deaf people in North America are all interconnected – no walls or borders can separate us. Indigenous Deaf people work together for our communities and for the future generations. Indigenous Deaf people have faced innumerable counts of discrimination in every direction, exploitation, struggles, and frustrations, but we are resilient people and have remained true to ourselves.

Recall from chapter 2 that there are questions asked of those who research the Indigenous peoples, such as, "'Is the researcher collaborating with the community/ies? Are the agendas set by the researcher and the community equally?' The biggest question that we face is not what the community can do for you as a researcher/doctoral student but how will our research benefit the community (Lambert 2014, 64; Kovach 2009; and Wilson 2008)?" As you see, there is evidence

of the researcher-participant relationship in this work through the lens of an Indigenous Deaf person. It is not about leadership, or researcher versus others, rather, it is about how we can benefit the community through the development of future plans and the establishment of ethics to help encourage harmony in the communities. The list does not stop here, it goes on, and the work needs to continue for the betterment of our Indigenous communities.

Duration of the Research

Applying the three anthropological subfields to my research gave me the benefit of an increased knowledge in each. Starting with archaeology, like many universities, the University of Oklahoma does not have a program in Rock Arts (I prefer the term "rock/picture writing"). I owe thanks to Dr. Patrick Livingood for his support in my work and for allowing me to work with a certified archaeologist and cultural anthropologist, Dr. Carol Patterson, who studied rock arts and tribal Sign Language. I am honored to work with her again, as I did prior to this research. We corresponded day and night on a daily basis for a year; it was like taking a full semester of study. She taught me so much about symbols and classification in rock arts, as developed by Lavon Martineau. My understanding of how symbols work remains to be expanded; I had to put that on hold and finish this dissertation. I had the opportunity to meet LaVon's daughter while my husband, Robert, and I were in Utah. The amount of work that LaVon conducted for over 50 years is nothing short of remarkable. I am still in awe when reading his work; like a spirit speaking to me, it is beyond description. While in Utah, I learned Ute culture from Larry Cesspooch, who is an elder and knowledge of Ute Rock Arts. I am so appreciative of his time and knowledge. Being in the canyon areas gave me a sense of the environment and the way of life for the people who are Native.

Besides the main area of study, Dr. Patterson, Robert, and I traveled to different sites where petroglyphs are engraved. We got to see the difference between two groups of Indigenous: Fremont (the Ancient Ones) and Ute, and how pictorial languages evolved. After we left Utah, Robert and I were caught in a snowstorm in northeast Utah and northwest Colorado – in May! My work with Dr. Patterson will continue after the completion of this dissertation. There is so much to learn and document.

Throughout my life, Deaf people have ridiculed me about my tribal beliefs, and specifically that tribal signed languages were developed thousands of years prior to any contemporary signed language (e.g., American Sign Language, Language of Signed French, etc.). Now that I have evidence of signs on rock/picture writings, they cannot belittle me any longer. With the evidence presented in my dissertation, that will change their views and challenge the presumption of the sacredness of ASL, LSF, and other modern signed languages. I know many Deaf people have been looking forward to such work.

For the linguistic anthropology aspect of my dissertation, folk linguistics, I have had the privilege of communicating with many Deaf people and Indigenous Deaf people regarding signs duration of my research. For the heritage language study, Dr. Ted Supalla spent hours with a good discussion on historical signs; we share many similar perspectives on signed languages. I also had the opportunity to talk to Patrick Clark, who co-authored *Archaeology of Sign Language* with Dr. Ted Supalla, and we shared old signs coming out of ASL. That reminded me of old ASL signs that I had acquired from many Deaf people who have gone on to the Spiritual World, and I thank them for sharing and teaching me over the years.

Dr. Sean O'Neill, the chair of the committee, and I shared a great number of hours corresponding about linguistics, and discussing so many topics. He explained many scholarly

works from hearing perspectives to me, while I provided my findings from Indigenous methodologies and from Deaf perspectives. We spent long conversations in his office going over many studies, and sharing ideas. I value our times together, because they paved my way into deeper linguistic anthropological study.

I must mention that I learned a great deal about Mexican Indigenous people from my research participants, and Crescenciano Garcia, Jr., Paola Morales, Rosario Garcia, Armando Castro, Socorro Garcia and Leticia Arellano, who spent hours proudly describing their cultures and signed languages (Language of Signed Mexican and Indigenous sign languages). My time with them was a reverse role: I became the student learning Mexican Indigenous culture and about their Indigenous Deaf people in Mexico.

Next our neighbors to the north, I had an opportunity to communicate with Indigenous Deaf siblings during video conversation. My learning about my Canadian relatives has grown over the years, starting from past Intertribal Deaf Council members from Canada up to now. I met many new faces during the research stage of the present work. I also learned about some of their signs along the way.

From the socio-cultural perspective, I learned two ways: through the academic lens (e.g. classes, classmates, and professors) and from Indigenous ways of doing (e.g. fieldwork, elders, Indigenous colleagues and community members). For this dissertation on Indigenous Deaf people, I started from scratch – from the ground up – I built my work from raw data, and created a framework of Indigenous Deaf Methodologies. My Indigenous knowledge of the Indigenous Deaf people I have associated with for 25 years comes to fruition through this dissertation. The socio-cultural study of this particular group has never been conducted, so basically, we gathered raw data using a first-person perspective with the research participants.

The conversation between research participants and myself was like lighting a fire, starting with the word kinship, then growing into discussion about consanguineal kinship for some. However, the majority of my research participants immersed into the intensive discussion of Deaf kinship, that is Childhood Communicative Kinship (from childhood experiences and beyonds) (CCK) and Ethnic Communicative Kinship/Indigenous Deaf Kinship (IDK), which is one of the several major contributions of this dissertation. The younger generations of my research participants lacked the INDIGENOUS-DEAF-SAME bond because they never experienced it due to the collapse of the IDC. Now, though, they are more curious about it and want to set up an organization, something, which resembles the Intertribal Deaf Council so they can experience similar things and carry on the traditions of our past IDC people. The older generation of the IDC took different views; they were so thrilled that I came up with the idea of Communicative Kinship and Ethnic Communicative Kinship (in other words, Indigenous Deaf Kinship) and we had long hours of discussion about Indigenous Deaf kinship. In Oklahoma, my CCK and/or ECK/IDK siblings treated me like a family member, filling me in on community happenings. I am closer to my CCK and ECK/IDK siblings than some of my hearing biological family (parents and siblings) because we communicate more with each other… the ability to communicate clearly is what keeps us going. I am happy with the support from all of the research participants on this type of Communicative Kinship.

While doing research I reminisced about several Indigenous Deaf people who have gone on to the Spiritual World; I am honored that they shared their stories with me prior to and during this research. Some of their stories served as guidance and encouragement to me. Sharing stories about their lived experiences allowed me to see and know them as persons. For years, many Deaf people in the Deaf communities have nagged me for information on Indigenous Deaf people, but

they obviously do not understand that the ownership of all stories belongs to these who experienced them. I respected the sacredness of their stories and could only express them with the owners' permission. I highly value the long hours of storytelling, laughter, and spiritual connection I shared with them. Their stories have guided me throughout the research, and through the months of work required to make this dissertation come to life. As I sought spiritual guidance, like many other Indigenous scholars/researchers, to lead me to new people I have never meet before, such as traditional Cherokee beadwork artist, Valerie Kagan, who produced a lovely Cherokee-designed Honor stole for my graduation ceremony. Many books or resources unexpectedly appeared before my eyes while searching the libraries, online, and websites, a gift from the spirits who have guided me from where I came to and where I want to go.

Naturally, many Indigenous Deaf people were and still are lost and wandering around in search of a true identity because of no communication at home, no connection with most people, and no sense of belonging. They can find a home among others with similar experiences, IDK, and by learning more about their tribes.

This is not an isolated problem; I learned that Mexican Indigenous and Canadian Indigenous faced similar problems. Indigenous Deaf people from entire North America have suffered from intrusive researchers for years. That is the reason development of a research ethics was a must.

I did not expect to set up two groups, a team of Indigenous and non-Indigenous interpreters (and hearing and Deaf Indigenous customers) to develop a much need *Protocol for Sign Language Interpreters Working in Indigenous Settings*, because there is no protocol in existence that connects to an Indigenous cultural context when interpreting in Indigenous settings and with Indigenous people in the university/ies. I reached out to people to form an ad hoc

committee to develop such a protocol after being asked by research participants, Indigenous interpreters and Indigenous Deaf people outside of my research group due to the lack of Native Interpreters and inexperienced people used to interpret on the Reservations/Reserves/ Villages/Nations. The demand is so high and we do not have enough Native interpreters (or non-Indigenous interpreters with good (hearts) intention) across North America. How can Indigenous Deaf people receive their tribal cultural information? It is not fair for them to suffer being culturally deprived for the rest of their lives. As for the second group, several research participants volunteered their time to develop an Indigenous Deaf People Code of Ethics, in order to bring harmony within our Indigenous Deaf community. It will also be applicable for the new organization we are about to establish.

During this research, I have met many new Indigenous Deaf people, and many Indigenous Deaf female leaders through Zoom meetings. These people were not research participants, but my role as a community member of Indigenous Deaf communities involves an obligation to serve to the best of my ability. I am truly honored to meet all of them and share stories and resources. I continue to learn information about different tribes that I am not familiar with; I gained knowledge and vice versa. As many people say, learning never ceases; it still holds true for all of us as we exchange our resources, our Indigenous knowledge and our worldviews.

Results from Research Questions

Now to answer my three research questions: 1) what is the uniqueness of the Indigenous Deaf People, their culture, language, value and tribal knowledge, 2) How do Indigenous Methodologies apply to Indigenous Deaf people, and, 3) What type of kinships do they possess?

The first question about uniqueness of the Indigenous Deaf people can be seen in Chapter 3 and Chapter 6. Our culture is based on Indigenous worldviews and visually oriented ways; we see the environmental landscape (with some hearing or hard of hearing research participants) rather than depending heavily on the auditory mode. Our tribal knowledge varied per participant; some have been exposed to tribal knowledge because communication is there with family members and tribal community members, but many do not possess tribal knowledge due to the lack of communication and the influence of cultural assimilation from schools. Some of the participants aimed to learn about their heritage and continued to do so during and after the research.

Addressing the second question, wondering how Indigenous Methodologies apply to Indigenous Deaf people: they are good research tools. I received positive input from the participants saying how they liked the way it is done and that it follows the Indigenous way of doing. The researcher-participant relationship grew during the research stage. We spent hours communicating about many topics that they needed to know in order to understand themselves. Yes, Indigenous Methodologies are a very useful tool in my research

The third question addressed our kinship. All of the answers supported the two Communicative Kinship and Ethnic Communicative Kinship theories; nearly every participant favored the idea of our own kinship system and thinks it is a PERFECT fit for us. While some had never experienced ECK (IDK), they did experience CCK from their Deaf residential schools. They are thrilled to know we now have the names for this particular kinship, different from hearing Indigenous communities. Even though many researchers in Deaf culture/communities have mentioned the Deaf-Deaf relationship as family, no terminology like CCK or ECK (IDK) has come from their work.

I have witnessed many Indigenous Deaf people contact their parents, or relatives about their clans/bands/kinship. I watched with my own eyes as they learned more about their tribal culture. I could see their emotion were fresh and exciting about the new discovery of their own tribal selves. Some of them went beyond, and asked their family members and tribes for more information to fulfill their knowledge that was long overdue to them.

I also consulted with hearing Indigenous people for certain advice and information. I am truly blessed by the many hearing Indigenous people who took the time to explain how things are from an Indigenous worldview. They are currently aware that many Indigenous Deaf people are culturally deprived and struggling to receive Indigenous knowledge. I spent many hours talking to Indigenous people, like my colleagues, Renalda Freeman and Heather Ahtone; they never gave up on me. I especially value my time with Dr. Gus Palmer, a Kiowa professor; we exchanged stories and shared laughter. During class time and my independent study with him, we signed in Plains Indian Sign Language; I have to say this is an extreme rarity because I have not seen any other professors who can sign in PISL. He is truly one of a kind. Also working with a couple of young Kiowa signers, we studied Kiowa spoken language and compared the spoken words and phrases with Kiowa signs; I believe this is one of the highlights of my research. These hearing Indigenous people paved my way into the Indigenous worldview, which I, in turn, shared that with my research participants.

Recommendation for Future Plans

There are many future plans; the results from the present research are so remarkable that nearly half of the research participants created a wish list for much-needed services during late-night conversations, email correspondences, and video messages. Some of our goals are: 1) establishing a Council of Native Deaf Elders, which has been set up since June 2018; 2) set up a

new organization similar to the former Intertribal Deaf Council, but in different name and different way of doing; 3) include hearing Indigenous people in our new organization for different purposes; 4) training and placing Indigenous Deaf people/paraprofessionals in jobs at Deaf residential schools; 5) Developing a curriculum for Indigenous Deaf children to teach them about tribal culture; 6) Set up a Children of Deaf Adults (CODA) Retreat for Indigenous children and young adults; 7) create wellness programs for Indigenous Deaf people in different sites; and, 8) find a university that is willing to introduce a new Native Interpreter Training Program.

Closing Remarks

I was reminded by a 60-year-old Indigenous Deaf elder who learned about her tribe at that age: age has no limitation; it is just that the person must have the desire to know about oneself. Some Indigenous Deaf participants' and I had weaved a beautiful basket together during the research stage; each of them weaving by gaining knowledge of their own tribes and learning about other tribes outside of their own. With the completed basket at the end, we can continually fill them with colored corn kernels, white sage, braided sweetgrass, tobacco, and cedar, which represents our positivity for future changes as we all work together in the years to come.

As we build more baskets, we honor our ancestors, hearing and D/deaf, marking our presence and leading our future generations along the paths. By using colored corn kernels, we plant seeds of hope for Indigenous interconnection and togetherness. May the circle remain interwoven. So be it.

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Appendix A:

Protocol for Sign Language Interpreters working in

North American Indigenous Settings

For all jobs/assignments that Sign Language Interpreters conduct, every interpreter must have credentials for American Sign Language or Lengua de señas mexicana (LSM) and/or Indigenous/ tribal sign language.

American Sign Language requires certification in USA and Canada.
There is no certification for Lengua de señas mexicana nor Mexican Indigenous sign languages in Mexico.

There is no certification for Indigenous/tribal sign language in USA and Canada, the preference given to the interpreters who have years of experience and training with authentic tribal sign language instructors.

Respect:

Approach/Philosophy:

1. Whereas it is typical for an interpreter to approach an interpreting assignment as a means of income and a profession that can be seen as a "job", the Indigenous community asks for a shift in perception and a person-centered approach.

2. The Indigenous community encourages the interpreter to first consider the consumers of the interpretation services and to hold them as sacred; this means to consider both the Deaf and Hearing participants and their life journey, and what they mean to accomplish at this crossroad in their lives.

3. An indigenous event or ceremony is not merely an interpreting assignment. Instead the event should be viewed as an opportunity for interpreters to bridge Deaf and Hearing participants' unfolding life journeys that manifest in Indigenous events and ceremonies.

4. Regardless of intention or lack thereof, an interpreter makes an impact on the settings they work within and the people they interpret for. The Indigenous community asks the interpreter to take this all into consideration; to honor and respect the Indigenous

community, and to have an open approach since Indigenous customs and values may be different than the interpreter's.

5. If the interpreter is in need of cultural mediation, for understanding or clarification, the interpreter should ask the designated Indigenous coordinator or appropriate contact person and not the first person nearby.

6. The Indigenous community thanks interpreters who wish to serve their community.

Indigenous Deaf people:

7. Understand that not all Indigenous Deaf people are knowledgeable (e.g. customs, values, traditions, history) about their tribes.

8. Be aware that consumers may have different signs than what an interpreter may have learned or uses on a regular basis. It is crucial for interpreters to accept instruction on preferred signs from the people they are working with at any given time, and to incorporate and use these signs as best they can.

9. When an Indigenous Deaf signer conducts a sacred ceremony in Tribal sign language (Plains Indian Sign Language, Northeast Indian Sign Language, and other language varieties within the North American Indian Sign Language), and interpreters do not know specific signs, the sign language interpreter should explain to the hearing Indigenous audience that s/he is signing in tribal signs. Furthermore, not all tribes use Plains Indian Sign Language, other tribes outside of Plains region may use their own sign languages.

Indigenous hearing people:

10. When appropriate, talk with the hearing Indigenous people to discuss the cultural and language deprivation that indigenous deaf people experience, beforehand, unless Indigenous deaf people prefer to explain their unique situation themselves (this engages use of their own indigenous Deaf agency).

11. Do not be afraid to ask the Indigenous leader/presenter/teacher/elder and others what terms to use in interpreting beforehand. When in the service of interpreting, an interpreter may encounter the speaker switching from English to their native tongue throughout their communication. A non-Indigenous interpreter may need to switch off with a team of

Native interpreters during this time. Recognize your limitations and respect boundaries in such events, as an interpreter's job is interpreting.

12. Oftentimes, the person speaking will utilize their tribal spoken language. An interpreter can ask them to repeat the word by spelling the words. Most people are open to helping out with the tribal words. This is important as Indigenous interpreters are not universally available (i.e. University/college classrooms, general meetings, or tribal events in urban cities).

13. It is common on the Reservation/Reserve/Nations/Village/and other places to select "any person who know signs" to interpret. These persons (Indigenous or Non-Indigenous) should not be considered "an interpreter" because they are not qualified to translate the message. Failure to provide qualified interpreters can have grave/disastrous consequences (such as wrong placement like jail, educational placement) for Indigenous Deaf people. Tribal offices need to be educated about these problematic issues.

14. Interpreters who interpret sacred ceremonies, need to be aware that American Sign Language or Language of Signed Mexican books do not cover such tribal words that may be spoken. The Indigenous and non-Indigenous interpreters who are well versed in tribal signs would be the best fit to interpret at these tribal events, meetings, and other type of tribal activities.

15. It is best to acquire tribal signs when interpreting for an Indigenous Deaf person. It is recommended that interpreters specializing in Indigenous Deaf interpreting to attend workshops that provide this knowledge and the continuation of professional development in this area.

16. Be aware that even though index-finger-pointing is considered rude and culturally unacceptable in most Indigenous communities, it is allowed to be used with Indigenous Deaf persons by interpreters, and some bi-culturally educated Indigenous people, since ASL and LSM use index-finger-pointing for pronouns and directional purposes etc., while Indigenous/tribal sign languages do not use index-finger-pointing.

17. Instead of index-finger-pointing, as it is generally considered rude among most Indigenous communities, it is more appropriate to refer to the speaker/presenter/signer with full-hand acknowledgement. It is common for Indigenous interpreters to do lip-pointing because it may be part of their culture.

Responsibility:

18. It is the interpreter's responsibility to ask about what topic will need interpretation, and what should not or cannot be interpreted.

19. Be aware that some sacred prayers by tribal spiritual leaders may not be interpreted. At times Interpreters/individuals may need consent to be present where such sacredness is happening. For example, some dancers are to stay silent and are not to be touched. Know your boundaries, and theirs, within the culture.

20. Interpreters may not bring counterparts such as people/family to become audiences within such events to take photos without permission of a spiritual leader. Within certain tribes photography is strongly forbidden, as their ceremonies are not made open to the public.

21. Be aware that there is a difference between a paid service and a gift (usually during community events). Not all interpreting assignment are paying jobs. Do not expect monetary payment for your service unless agreed to beforehand. Conferences, college/university jobs, and some meetings will provide payment.

22. Social media--interpreters are required to refrain from posting anything on Facebook, and any social media format that reveals picture of people, or names from your assignment. This is a viewpoint of self-promotion, it does not address inadvertent (and careless) revealing of client information. Any social media posting, check with appropriate Indigenous people to verify authenticity before you post.

23. Criminal conviction -- Human Resources at tribal office and specific assigned Indigenous Deaf Elders will be in charge of background checking on interpreter's criminal conviction record, if situation raises. It is important that we protect Indigenous people from any harm.

Beliefs:

24. If you are non-native or from another tribe, it is extremely important to recognize and respect others' Indigenous beliefs as distinct from your own. If you feel that you cannot separate your religious beliefs in an Indigenous setting, do not accept the assignment. It is best not to take the assignment if you feel you cannot put aside those personal religious beliefs that counter those of the culture you would interpret within.

Clothing:

25. Sign Language interpreters are responsible to ask the tribal/council people or the Indigenous Deaf people about what to wear at certain events. Generally, typical business attire is worn for conference-type scenarios, and casual clothing for outdoor or tribal events. You do not want to look inappropriately dressed at certain events.

26. Interpreter's garments, if ceremony or gathering participants have colorful regalia/traditional clothes then the interpreter need not come in black clothing as to dampen the spirit of the ceremony, but instead can use a light or lighter color, so long as it is muted and does not detract, overpower, or distract from the ceremonial regalia/traditional clothes.

27. During sweat lodge activity, check with each tribe's traditional spiritual leader(s) on appropriate clothing and conduct within the lodge.

28. When providing interpretation at outdoor events, be mindful of weather, heat, and duration of the cultural event — the community may not have a strict timeline to start and end.

Relationship:

29. Indigenous Deaf people and interpreters are partners in communication at all tribal events. Indigenous Deaf people will choose certain interpreter(s) they are comfortable with and whom they deem qualified, regardless of their certification levels.

30. In colleges/universities, Indigenous Deaf people have the right to choose their designated interpreters because of their knowledge in tribal culture, language, and traditional ways. This practice aligns with standard human resources practices on Tribal lands where they seek to hire Indigenous interpreters.

31. Status and role of Indigenous people: Elders are treated with great respect. The tone of interpreting for an Elder is equivalent to that of interpreting for a person who has a PhD. Spiritual Leaders are afforded the same respect and status.

32. Turn-taking in Indigenous communities differs from non-Indigenous communities, "certain American Indian groups are accustomed to waiting several minutes in silence before responding to a question or taking a turn in conversation, while the native English speakers they may be talking to have very short time frames for responses or conversational turn-taking, and find long silences embarrassing" (Saville-Troike,

2003:18). The sign language interpreter can inform the Indigenous or non-Indigenous Deaf/HH/DB at these times to, "hold, still thinking," which is preferable to "wait in silence."

Relevance:

Gender-Specific Information –

33. Within most tribes, women (including both participants and interpreters) are not allowed to engage in sacred Indigenous ceremonies during menstruation. In tribes that follow this practice, prior to a sacred ceremony, spiritual leaders might approach Indigenous deaf women and women interpreters about this restriction, although it may be assumed this is common knowledge. A replacement by another sign language interpreter during such a time *is a must*. Note: not all tribes practice this belief. This would apply to the Indigenous Deaf person and interpreters who is participating in a sacred ceremony. An interpreter at this type of event would be a shadow, who only interprets the ceremony without participating in it. Remember, an interpreter is an outsider in such scenarios, and one who comes to convey communication of what is voiced or signed.

34. Be aware that certain ceremonies or sweat lodges have gender-specific protocols (female interpreters cannot go near all-male ceremonies or sweat lodges, and vice versa for male interpreters).

    a. At some tribal events, there are certain gender-specific spaces; interpreter(s) need to talk to spiritual leader/elder/community leader about where you need to stand or sit prior to the event.

    b. Be aware some tribal sweat lodges might require one to be unclothed. Interpreters need to be aware of this beforehand. Note: rarely is this a mixed-gendered occurrence.

Interpreter Placement:

1. Make ceremony or signing/talking circle plans for interpreter logistics, depending on the number of sign language interpreters present. If there are many interpreters, a placement of four chairs set in cardinal directions inside the circle would be recommended. If there are only 2 interpreters, it will mean each interpreter should take 2 cardinal directions. A categories of different diagrams is attached to this protocol. Keep in mind, not all tribes have similar ceremonies or signing/talking circles. Talk to the hearing and/or Deaf leader/elders who are in charge, get their instructions, and ask for pre-ceremony preparation.

2. The placement of the interpreters in a ceremony is key and dependent on the participant's preference. A common expectation is for interpreters to be outside the circle yet still in the line of sight to those watching the interpreter. There exist many tribes in Mexico and a standardized interpreting system is not in place because of so much diversity. At this point it is best for an interpreter to take guidance from the local tribe they are being asked to work with.

Awareness:

35. Be aware and conscientious that the Americans with Disabilities Act (ADA) and Registry of Interpreters for the Deaf (RID) standards do not apply to Native Reservations in the USA. The same is true for the Association of Visual Language Interpreters of Canada (AVLIC) for Canada. There is no certification system in Mexico.

36. Eye Contact: It is important to know that eye contact between the sign language interpreters and Indigenous Deaf people is acceptable, but when you are in Indigenous communities, do not ask or demand an Indigenous person/people to make eye contact with you or the Indigenous Deaf person, it might be their cultural protocol to not make eye contact.

Reciprocity:

Dances or Tribal Events –

37. When any Indigenous Deaf or Indigenous hearing person asks you to participate in any event or dance, do not decline the offer, it might be perceived as disrespectful to the Indigenous people.

38. Interpreters can participate in giveaways or blanket dance, which involves a donation to the Indigenous hearing or Deaf people who need the funds to go back home or for a certain purpose.

39. Above all else, it is best to ask an Indigenous person involved with the activity first, and to prepare and provide your service accordingly.

Insight for Non-Indigenous Hearing Interpreters:

Traditional Interpreter Roles –

In general, interpreters in non-Indigenous settings have taken on a role that strives for very little interference, influence, or manifestation of the interpreter's engagement as a separate entity. This stems from a history of ethically trying to do no harm. This has led to the stigmatization of the old role model labels such as "helper," and leads to the more accepted term of "ally." However, the role of designated interpreter (DI) has slowly come to be a mixture of the behaviors of many of these old and new roles, with, perhaps, some enhancements.

Designated Interpreter role:

A DI's role can vary hour by hour or day by day. Each Deaf professional (DP) has different needs at different times, which should be part of the DP/DI team planning. A DI works closely with a DP, so much so, that his/her knowledge of the setting and context of the DP's work is in-depth. Many of the interpreted situations go smoothly because the DI can anticipate or predict what a DP will express before they start a sentence. The DI and DP become a team. The DI can and should interact with the DP's hearing colleagues as a separate individual, showing their humanity. This ensures trust and smooth collaboration between the hearing and DP/DI team. It also allows for the DI (and thus the DP) to understand the contextual culture of the work environment. Rumors, inside jokes, stories about who ate the last donut in the break room, and general information become mandatory interpreter knowledge to convey to the DP. Being a DI allows the power imbalance between hearing colleagues (including interpreter) and Deaf to begin to balance out. A team must be flexible and cohesive. A DI must adapt to situations quickly and smoothly, giving information from the environment to the DP. DP/DI teams save time and lower stress. By showing adaptability, DPs have more opportunity to advance their careers. With professional assigned interpreters of a more neutral role, DPs become frustrated when working with non-designated interpreters who are unfamiliar with interpreting in Indigenous terminology, acronyms, context and cultural norms.

Role in Indigenous Contexts:

The specific cultural and ethical expectations in Indigenous contexts are paramount when considering your interpreting role — behaviors and perceptions. Knowing the complexities of such an assignment discussed in this Protocol, a non-Indigenous interpreter should shift towards a more designated interpreter role: expect that you will be addressed as the person you are, and need to interact on your own behalf, as well as providing constant communication access to whomever needs it, just as in the above role explanation of a DI. This means

preparations are much more than reviewing the text of a presentation or knowing the names of participants. Preparation includes learning that setting's schema. For example, as a field interpreter, you may be expected to participate in whatever type of physical work your DP is engaging in; if all of the women of the family are gathering berries, and your DP is helping, the DI will be gathering berries, too — this is a show of reciprocity on the part of the interpreter. You must also recognize your privilege and the power disparity between some Indigenous Deaf and their hearing tribal members. Deaf tribal members may lack tribal knowledge, understanding, or have misconceptions due to lack of communication and/or education. You must be adaptable, with respect. Respect that you have power that must be used with responsibility to the people. The people and their relationships are more important than the work.

This protocol has been developed by Melanie McKay-Cody (Cherokee), Armando Castro (Mixteca), Tim Curry (Non-Indigenous), Amy Fowler (Non-Indigenous), Ren Freeman (Eastern Shoshone/First Nation Cree), Crescenciano Garcia, JR. (Aztec), Paola Morales (Nahua/Pipil and afromestiza) Evelyn Optiz (San Carlos Apache) and Wanette Reynolds (Cherokee). Reviewed by Kevin Goodfeather (Dakota), Natasha Terry (Navajo), Hallie Zimmerson (Winnebago), and James Wooden Legs (Northern Cheyenne).

Diagrams to be used for powwows, signing circles, meetings, and ceremonies

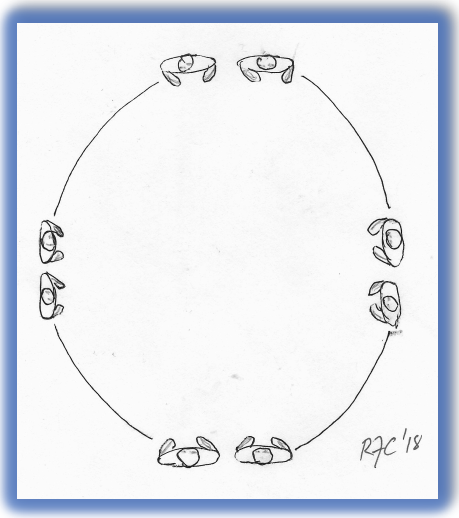

Figure 83: Diagram of Prayer Ceremony Circle. Drawn by Robert Cody, Jr., 2018

This is a prayer ceremony circle created by Melanie McKay-Cody for the purpose of full language access to hearing and Deaf Indigenous (and non-Indigenous) people. The Indigenous Spiritual Leader or Person who leads the Prayer will stand in the middle of the circle and sign the Prayer. There are 4 hearing interpreters who are at the right side of the person signing the Prayer and on the left side will be Deaf "copy" interpreter for the other Deaf people to see.

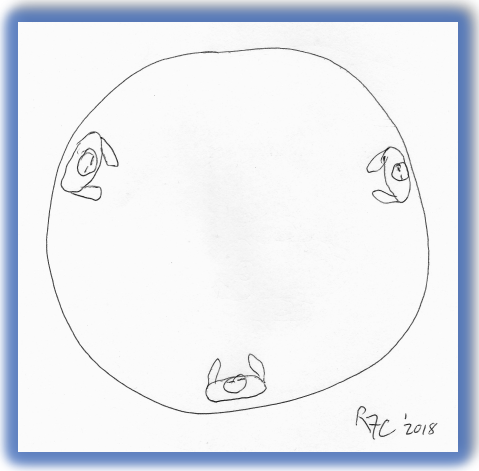

Figure 84: Diagram of Mohawk Spiritual Gathering. Drawn by Robert Cody, Jr., 2018.

The Spiritual gathering circle was created by Tina Terrance of the Mohawk tribe in New York, in 2006. The circle can be used as a Prayer Circle or "meeting" circle where everyone gathers together to talk in the circle.

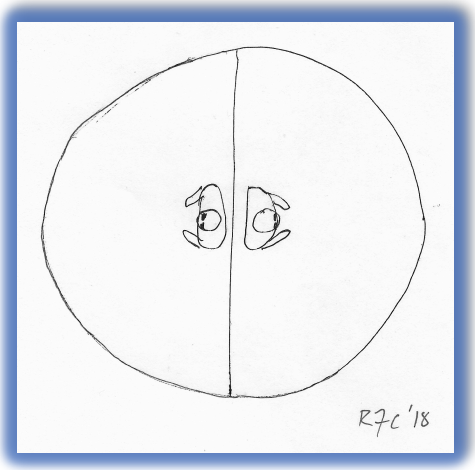

Figure 85: Diagram of Two interpreters in semi-circle. Drawn by Robert Cody, Jr., 2018.

When there are only two interpreters at a site, and if there are hearing participants in the circle with Deaf participants, the interpreters will position themselves within a semi-circle. Melanie McKay-Cody creates this; it can be for a Signing/Talking circle or meeting circle.

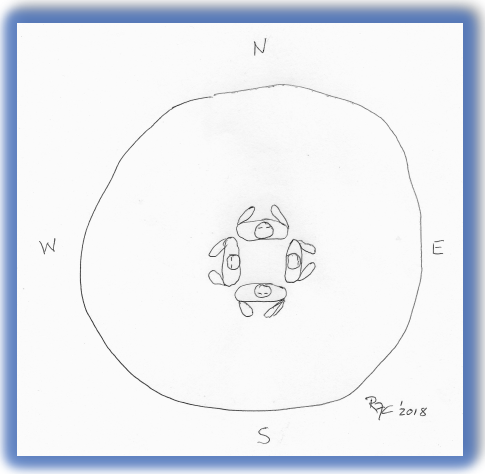

Figure 86: Diagram of four interpreters in Talking/Signing Circle. Drawn by Robert Cody, Jr., 2018.

This is a very symbolic of Indigenous culture, where the four cardinal directions are set in the middle of the Signing/talking circle that involves hearing and Deaf Indigenous participants (it can be use for other purpose in the circle). This is created by Melanie McKay-Cody.

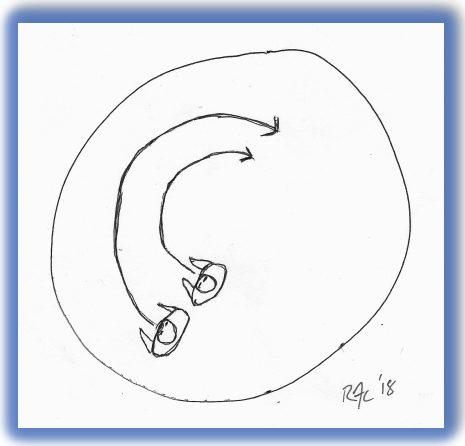

Figure 87: Diagram of interpreter accompanying Pow-Wow dancer. Drawn by Robert Cody, Jr., 2018.

This is an example where the interpreter is involved with the dancer; they dance together and the interpreter will interpret what is being said by the Emcee, or other announcements. This is created by James Wooden Legs.

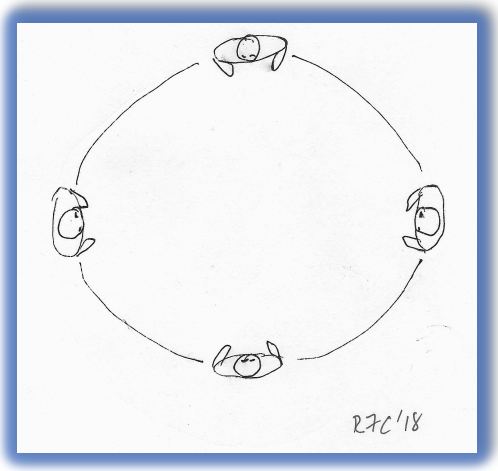

Figure 88: Diagram of four interpreters in cardinal directions. Drawn by Robert Cody, Jr., 2018.

The interpreters standing in four cardinal directions and symbolic of our Indigenous culture, the Indigenous Deaf dancer(s) will be able to see interpreters at their line of vision while s/he or they move around the circle at Pow Wow or any dance event. It is produced by James Wooden Legs.

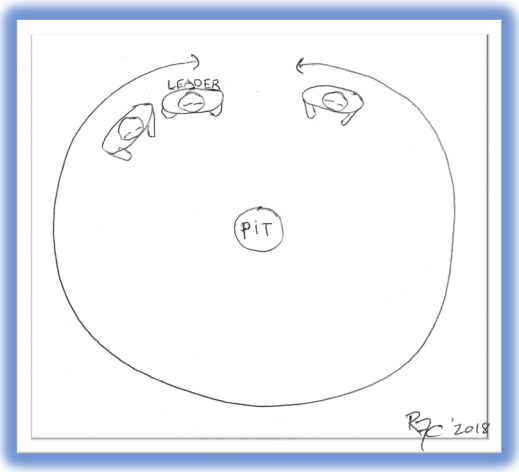

Figure 89: Diagram of same-gender sweatlodge. Drawn by Robert Cody, Jr., 2018.

This is typical sweatlodge where interpreter sits next to the Spiritual leader or at the opposite site of the flap of the sweatlodge. This is developed by consesual agreement from past Intertribal Deaf members. The position of the interpreter can be adjusted depending on the sweatlodge Deaf participant and/or DeafBlind participant. Typicially the DeafBlind interpreter will sit next to the DeafBlind participant anywhere within the sweatlodge.

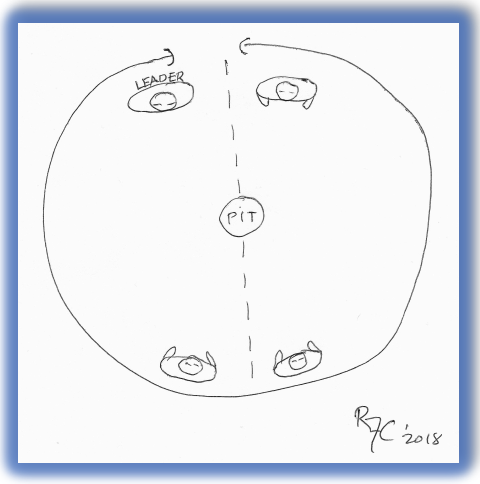

Figure 90: Diagram of all-gender sweatlodge. Drawn by Robert Cody, Jr., 2018.

This sweatlodge postioning was created by past Intertribal Deaf members. The leader sits near the “door” of the sweatlodge. At the back of the sweatlodge, one side is the female side, and

the female interpreter sits in that place. On the opposite side is the male interpreter. The one by the door either follows gendered side or either gender interpreter can sit there. It is important to ask the Spiritual leader which is the most appropriate placement because she or he is in charge of the sweatlodge. If the Spiritual leader has never conducted one with a Deaf participant, the responsibility is transferred to the Indigenous Deaf participant to decide the position.

Appendix B:

Indigenous Deaf People's Code of Ethics

Respect:

Beliefs –

1. Each morning during the day, and each evening, pray alone and give thanks for everything that the Creator has placed on Mother Earth. Pray often to benefit everyone and for guidance in analyzing your past actions. Seek strength to become a better person.

2. Respect other tribal spiritual beliefs. Do not force your tribal spiritual beliefs on others.

3. Be aware that there are two paths: one leads to your positive well-being, and the other leads to your destruction.

4. Negative thoughts cause illness of the mind, body, and spirit. Change your thoughts to more positive.

5. Listen to and follow the guidance given to your heart (e.g., prayers, dreams, quiet solitude, or advice from elders or friends).

6. Respect the teaching and wisdom of the tribal elders and Indigenous Deaf elders; it will benefit you to learn from both to enrich your knowledge. All tribes have their own ways of treating elders. For example, some tribes believe that if elders are conversing, you walk around the elders, not between them.

Environment –

7. Respect all things created on Mothers Earth; honor all crawling ones, finned ones, four-legged ones, two-legged ones, standing ones, winged ones, rocks, water, wind, cardinal directions, and all of the traditional ecological knowledge/kincentricity. They are not for us; they are part of us. Do not pollute Mother Earth: save and defend her by using sustainability, recycling, and leaving tobacco to give thanks for the provision of all of your physical and spiritual needs.

8. Do not remove anything like red ribbons or any cloth that is attached to natural resources like tree, bushes, posts or any things that are hanging; they are there for spiritual reasons.

9. “Do not take what is not yours whether from a person, a community, the wilderness or from a culture. It was not earned nor given. It is not yours” (Inter-tribal News).

10. Respect the wisdom of the people in the council and in the circle. Every discussion in the council or circle is made through a unified decision. Respect what has been decided and do not engage in secret negative remarks outside of the circle or council. Respect the privacy and personal space of others. Do not touch the personal property of others - especially sacred and religious objects. This is forbidden (Inter-tribal News, 1994).

11. Respect the privacy and personal space of DeafBlind persons; there are specific and appropriate areas for contact on a DeafBlind person’s body. Do not pull their hand or arm without an informative warning. Protactile signing and tactile signing are commonly used between trained DB interpreters and DB persons.

Responsibility:

12. Many Indigenous Deaf people are deprived of both their tribal language and culture. Help those who are lost on their paths and searching for connection. Negativity stems from a lost soul. Pray that they will seek guidance. Provide guidance to their spiritual understanding of self and sense of belonging.

13. Indigenous Deaf people value historical sites where ancient signed languages are marked by our ancestors.

14. Indigenous Deaf people have established a long-term connection and they are responsible to support other Indigenous Deaf people, especially when it comes to communicating information.

15. Serve others in the communities (i.e. Indigenous, Deaf, DeafBlind, and others). Do not distract yourself with unnecessary tasks, but focus on important tasks that lead to productive communities. True happiness comes to those who dedicate their lives to serving others.

16. Be responsible for your own actions; whatever you do will reflect on yourself.

Relationships:

17. We have relational accountability to provide full language accessibility to all Deaf, Hard of Hearing, DeafBlind, other disabled and hearing Indigenous people at any tribal events, meetings, ceremonies and so forth.

18. All Indigenous people make mistakes; they can be corrected and forgiven. Seek advice from Elders, community leaders, or parents.

19. During talking/signing circles or meetings, honor tribal members' thoughts, wishes, and words. Every person in the circle should be allowed to express their personal comments, thoughts, and words of wisdom. Listen with your heart to what others members have to say.

Reciprocity:

20. Many Indigenous Deaf people are not taught their tribal cultural knowledge. It is wise for those who already have such knowledge to share with them through mentoring and teaching.

21. Many Indigenous hearing people are not aware of Indigenous Deaf people's needs. Educate them in the way of our Indigenous Deaf people's visual culture.

22. It is natural in the Indigenous Deaf community that a Deaf-sighted person assisting DeafBlind members be provided with best possible interpreting service anywhere, giving them guidance, explaining the to the DeafBlind members anything in the visual environment, including cultural items or cultural information of tribal activities. It is important of leave no one behind; include everyone in the circle of life and tribal activities.

23. Indigenous Deaf/Hard of Hearing/DeafBlind children are our little people and our future. Be a role model at Deaf Residential Schools and public schools. Nurture them with cultural knowledge and tribal sign language. Protect them from misconceptions about our Indigenous culture, history, and signed languages. Plant love and wisdom in them through life's lessons, and give them room to grow at their own time.

24. Indigenous Deaf/Hard of Hearing/DeafBlind children and adults need to be fully exposed to tribal culture and language by tribal members, parents and educators.

Communication –

25. Although always respecting privacy and personal property, especially of sacred artifacts, DeafBlind person(s) may ask whether s/he can touch or have the Indigenous Deaf describe the artifacts without touching them. Always ask permission from the owners of the sacred artifacts to touch, feel or allow descriptions; the purpose of touch and/or description is to accommodate the DeafBlind person's ability to create an image in their mind(s) of what these artifacts "look like."

26. It is important to be aware that hearing Elders, cultural specialists, or community members, who are obligated to provide their tribe's culture and traditional ways of life to hearing younger generations, which is usually conducted in verbal mode, leaves out information for Deaf/Hard of Hearing/DeafBlind children and adults. The chances of a deaf member lip reading and comprehending is approximately 30 to 45 percent, which means a lack of fully accessible language. A sign language interpreter is recommended in order for such members to receive full access.

27. Not all Indigenous Deaf people use the same mode of communication, so it is important accommodate their language preferences. The same thing goes for DeafBlind people, as there is a wide variety of language accommodations in DeafBlind communities.

28. Communicating with and for all Indigenous Deaf people in order to honor their needs during our events, prayers, dreams, and conversations.

People –

29. Showing respect is a basic law of life: treat every person with respect at all times. No one should belittle others by hurting, mocking, or talking in a negative way (whether the person(s) are present or not). These behaviors bring harmful to the community and to the person.

30. "Never speak of others in a bad way. The negative energy that you put out into the universe will multiply when it returns to you" (Inter-tribal News).

31. "Be truthful at all times. Honesty is the test of one's will within this universe" (Inter-tribal News).

Self –

32. "Search for yourself, by yourself. Do not allow others to make your path for you. It is your road, and yours alone. Others may walk it with you, but no one can walk it for you" (Inter-tribal News).

33. "Keep yourself balanced-- Your Mental self, Spiritual self, Emotional self, and Physical self - need to be strong, pure and healthy. Work out the body to strengthen the mind. Grow rich in spirit to cure emotional ails" (Inter-tribal News).

34. "Be true to yourself first. You cannot nurture and help others if you cannot nurture and help yourself first" (Inter-tribal News).

Indigenous Deaf ethics committee members: Melanie McKay-Cody (Cherokee), Kevin Good Feather (Dakota), Angelina Ortiz (Aztec and Tarahumara), Johnny

Reininger (Creek), Terry Vinson (Comanche-Aztec), and Hallie Zimmerman (Winnebago)

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