Towards Indigeneity in Linguistics:

 $Designing\ a\ Self-Assessment\ Tool\ Which\ Seeks\ to\ Better\ Equip\ Linguistic\ Students\ for$

Collaboration with Indigenous Communities

by

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ABSTRACT

This study explores positivist and Indigenous research paradigms as they relate to Indigenous language reclamation. Paradigms, as defined by Kuhn (2012) describe verifiable epistemological approaches that can be utilized in providing solutions for researchers and practitioners. Moreover, in the modern realm of academia, research paradigms are the keystones of research. Nevertheless, when a Eurocentric paradigm such as positivism is utilized in an Indigenous space, it can lead to further colonial trauma. Thus, through an analysis of the philosophical components from the two paradigms this study proposes a paradigmatic pivot in how linguistic students approach research. The purpose of recommending this pedagogical shift is to encourage the academy to normalize the use of Indigenous research paradigms which are intrinsically infused with Indigenous epistemologies and intercultural best practices. Furthermore, to exhibit the expediency and validity of Indigenous research paradigms, this study utilizes Walker's (2001) Medicine Wheel paradigm to create a self-assessment tool which seeks to assist linguistic students in achieving a more relationally accountable sense of cultural awareness.

DEDICATION

To my mother, Sheila.

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With profound appreciation to the Akimel O'otham, Pee Posh, Onk Akimel O'odham and Piipaash communities. To your ancestors, present day community members, and to your future generations; I thank you for your impeccable stewardship and devotion to the lands, your ancestral home, on which I received my education. I would not be here without you. I also wish to acknowledge the Indigenous peoples who were stolen from their lands during the transatlantic human trafficking exploit. May your incredible sacrifice never be forgotten. We all stand on your shoulders.

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CHAPTER 1

INTRODUCTION

The essence of Indigenous peoples are their languages.

- Russell Means (2014)

1.1 Thesis Introduction

In 2016, members of The Permanent Forum on Indigenous Issues stood in front of the United Nations General Assembly to speak out on an alarming global epidemic; the fact that 40% of all languages spoken today are in imminent danger of falling into a state of language dormancy (UNGA, 2017; UNESCO, 2017; IYIL, 2019). This epidemic is particularly insidious, however, as its primary victims are those languages which are spoken by Indigenous peoples (IYIL, 2019). In response to this alarum, the United Nations General Assembly (2017) voted for a resolution which would declare 2019 as the year of Indigenous languages (UNGA, 2017). In doing such, they managed to spark a global call to action seeking to resolve the linguistic crises we are now facing. Nevertheless, while the current state of affairs appears dire, it is important to address why language loss is of great concern.

Languages are inextricably bound to a culture and its people. Kenneth Hale (2001) has noted that, "When you lose a language, you lose a culture, intellectual wealth, a work of art. It's like dropping a bomb on a museum, the Louvre" (as cited in The Economist).

Additionally, the Permanent Forum on Indigenous Issues (2008) state that:

Languages are not only a communication tool, but an intrinsic aspect of identity, traditional knowledge systems of values, world views and traditions.

Consequently, policies of assimilation that lead to the destruction of languages have often been considered a form of ethnocide or linguistic genocide (as cited in Clavero, p. 264).

Moreover, regarding the risk of language dormancy, Dakota elder and educator Eli Taylor (1992) says:

Our native language embodies a value system about how we ought to live and relate to each other... It gives a name to relations among kin, to roles and responsibilities among family members, to ties with the broader clan group....

There are no English words for these relationships.... Now, if you destroy our languages you not only break down these relationships, but you also destroy other aspects of our Indian way of life and culture, especially those that describe man's connection with nature, the Great Spirit, and the order of things. Without our languages, we will cease to exist as a separate people (as cited in Battiste & Henderson, 2000, p. 49).

Thus, when a language falls dormant, a culture, a people, and an epistemology fall silent. It is for these reasons, among many others, that language loss matters.

Although language dormancy has existed since the nascence of spoken words, the current leading cause is often traced back to the legacy of colonization. McIvor and Anisman (2018) write that, "colonialism, linguistic imperialism, and the enforcement of residential schools greatly contributed to the decline of Indigenous languages within Canada's First Nations" (p. 90). Additionally, Māori scholar Tuhiwai-Smith (2012) writes that, "…imperialism and colonialism brought complete disorder to colonized peoples,

disconnecting them from their histories, their landscapes, [and] their languages..." (p. 28). Furthermore, Caribbean scholar Devonish (2010) writes, "In the earliest stages of European colonisation of the Caribbean, indigenous Caribbean languages disappeared as a result of the widespread physical elimination of these languages" (p. 3). Consequently, as these scholars have articulated, colonization has worked to expropriate Indigenous peoples of their mother tongues. However, as Indigenous communities expeditiously work towards language reclamation, they are occasionally joined in their efforts by academic communities.

When Wôpanâak linguist Jessie Little Doe Baird worked towards writing a grammar for her heritage language, she found an ally in Kenneth Hale, a non-indigenous linguist who specialized in endangered Indigenous languages (as seen in Makepeace & McCarthy, 2011). Leanne Hinton, another non-indigenous linguist, has aided in the creation of language acquisition programs such as "The Master Apprentice" model whose aim is to produce more native speakers of endangered languages (Hinton & Hale, 2001). Correspondingly, academies such as The University of Arizona have created establishments like the American Indian Language Development Institute (AILDI) which seeks to assist Indigenous American communities in their language reclamation efforts. Furthermore, many academies hold conferences for language reclamation such as the Symposium for American Indian Languages, the International Conference on Language Documentation & Conservation, and the Stabilizing Indigenous Languages Symposium. As can be observed, the academy has been actively involved in language reclamation efforts. Nevertheless, while it is commendable that academia has sought to support

Indigenous communities in the mission of reclaiming their languages, their efforts are not always as altruistic as they appear.

1.2 Statement of Problem and Research Questions

Academics, often trained in Eurocentric paradigms like positivism, can unintentionally, or worse, intentionally reproduce colonial epistemologies in Indigenous spaces. This is problematic because it furthers the colonial trauma already inflicted upon Indigenous peoples. Regarding this, Scheurich and Young (1997) write:

Our current range of research epistemologies – positivism to post-modernisms, poststructuralisms – arise out of the social history and culture of the dominant race,...these epistemologies reflect and reinforce that social history and that social group and this has negative results for the people of color in general... (p. 8).

Additionally, Kovach (2009) writes:

Positivist approaches, with their propositions of neutrality and their service to a political and economic agenda of capital (more currently globalization), philosophically conflict with Indigenous social values. Furthermore, critical scholars, Indigenous or otherwise, point towards the primacy of 'objectivism' within positivism, which narrows what knowledge can entail (p. 78).

Moreover, Walker (2001) writes, "Dominant Western research paradigms suppress Indigenous Knowledge Research through imposing Eurocentric paradigms on research involving Indigenous peoples" (p. 18).

Furthermore, positivistic methodologies have been deemed so destructive, that Indigenous research approaches such as Kaupapa Māori have decided to embed their philosophies with a "strong anti-positivistic stance" (Tuhiwai-Smith, 2012, p. 189). Thus, Indigenous communities have made it clear that Eurocentric research approaches may not possess the right methodologies for their communities.

The goal then, should be to negate the harmful effects of a research paradigm like positivism, which means academic linguists must move away from such approaches, especially when they concern or involve Indigenous communities. Equally, in order to effect lasting change, a paradigmatic shift should be proactive and thereby actualized during a linguistic student's education before they have partnered with an Indigenous community. Hodge and Lester (2006) found that, "...by linking Indigenous community priorities to research and coursework, conventional (and often unequal) research relations are minimised and colonising tendencies reduced" (p. 41). For these reasons, this study will discuss the creation of a tool which aims to assist linguistic students in gauging their readiness for collaboration within Indigenous communities. By imbuing this tool with Indigenous epistemologies, I hope to encourage a paradigmatic shift which cultivates more culturally aware linguistic graduates.

Having said that, the questions that guided this study are:

- 1. What is a positivistic paradigm, and does it affect Indigenous language reclamation? If so, how?
- 2. What are Indigenous research paradigms, and can they be used in Indigenous language reclamation efforts? If so, how?

- 3. Which types of tools help in exposing Eurocentric epistemologies, especially if they are harmful?
- 4. Can Indigenous research paradigms be utilized to design a tool which would increase cultural awareness within linguistic student populations?

The first section of this paper will address and subsequently answer the first three research questions by detailing the literature on positivism, Indigenous research paradigms, and the efficacy of self-assessment tools in achieving cultural awareness. This will be followed by the body of the study which is where I answer the fourth question. In this section, I will detail the methodology and design of a self-assessment tool that was created from Walker's (2001) Medicine Wheel paradigm, an Indigenous research paradigm. Additionally, I will discuss piloting the assessment as well as detail other uses and possible limitations the assessment presents. It is my goal to, within the contents of this paper, clearly articulate why a self-assessment tool would be helpful both to the academy and to ongoing efforts in Indigenous language reclamation.

Before moving on to the next section, I would like to define a few terms which will be utilized in this paper.

1.3 Definition of Terms

Please note that these definitions are for the purposes of this paper. Additional definitions may exist in other literary works.

Decolonization: Can be described as "...a process which engages with imperialism and colonialism at multiple levels. For researchers, one of those levels is concerned with

having a more critical understanding of the underlying assumptions, motivations and values which inform research practices" (Tuhiwai-Smith, 2012, p. 20).

Eurocentric Paradigms: Eurocentric paradigms refer to the systemization of knowledge that has been produced from a "...particular ontological, epistemological, sociological, and ideological way of thinking and being as differentiated from Eastern thought, [and] Indigenous worldview[s]" (Kovach, 2009, p. 21). It is important to note that Western epistemologies are not "monolithic or static" and can be comprised of diverse ideologies (p. 21).

Indigenous¹: The term Indigenous is used to describe ethnic groups or languages which are "Indigenous to the lands they inhabit, in contrast to and in contention with the colonial societies and states that have spread out from Europe and other centers of the empire" (Alfred & Corntassel, 2005, p. 597).

Indigenous Epistemologies: Describe a robust and systematized knowledge base founded in Indigenous ways of "knowing" which contain social and other cultural mores as related to the production of knowledge (Kovach, 2009, p. 20).

Indigenous Language Reclamation²: The strategic process of halting or reversing the loss of Indigenous languages which were suppressed due to colonization or the decline of an Indigenous population due to natural causes.

² Author acknowledges that language revival and language revitalization are also utilized in this context but has chosen reclamation to reflect the preferred rhetoric of Indigenous scholarship (Davis, 2017).

¹ In this paper the terms, Native American, Indigenous and Aboriginal are interchangeable.

Indigenous Methodologies: Research methodologies which seek to elevate those causes

that matter most to and for Indigenous peoples and their respective communities

(Leonard, 2019a).

Language Dormancy: Used to replace language extinction in accordance with

respecting Indigenous linguistic epistemologies (Davis, 2017; Leonard, 2019b).

Linguist: "An expert in or student of language or linguistics; a person who specializes in

the structure or historical development of one or more languages; a philologist" (Linguist,

2009).

Linguistics: The scientific study "of how language works, how it is used, how it is

acquired, how it changes over time, [and] how it is represented in the brain" (O'Grady et

al., 2017, p. 1).

Sleeping Language: The reclassification of a language which was deemed as *extinct* in

accordance with respecting Indigenous linguistic epistemologies (Leonard, 2019b).

Western: The term Western/Westernized is used to describe those societies and or

cultures which have been shaped by those colonies which originated and "spread out

from Europe" (Alfred & Corntassel., 2005, p. 597).

List of Acronyms

ILR: Indigenous language reclamation

IRPs: Indigenous research paradigms

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CHAPTER 2

LITERATURE REVIEW

2. Literature Review

Men whose research is based on shared paradigms are committed to the same rules and standards for scientific practice.

-Thomas Kuhn (2012)

2.1 An Introduction to Paradigms

In the contemporary world of academia, research paradigms are the cornerstones from which research is constructed. Paradigms describe the positionality of a researcher by propagating a particular set of established epistemological practices throughout the entire scope of a research project (Kuhn, 2012). For this reason, it makes sense to begin the body of this literature review by detailing what a research paradigm entails.

In his seminal work *The Structure of Scientific Revolutions*, Thomas Kuhn (2012) introduces the term "paradigm" as a concept that is closely related to "normal science". Kuhn defines normal science as, "...research firmly based upon one or more past scientific achievements, achievements that some particular scientific community acknowledges for a time as supplying the foundation for its further practice" (p. 10). Kuhn goes on to write that, "By choosing [paradigm] I mean to suggest that some accepted examples of *actual* scientific practice – examples which include law, theory, application, and instrumentation together – provide models from which spring particular *coherent* traditions of scientific research (p. 10 italics mine). Bantu scholar Chilisa (2012) summarizes this further by writing that a paradigm:

...represents a particular way of thinking and seeing the world that is shared by a community of scholars, researchers, or scientists, and also one that is used to represent commitments, worldviews, beliefs, values, methods, and approaches that are shared across a discipline (p. 20).

To put it simply, a paradigm is a body of beliefs which contain the intentions of a researcher or research project. Paradigms, however, can be best understood when they are broken down into their smaller philosophical components of ontology, epistemology, methodology, and axiology. For this reason, an elaboration of these components follows. An ontology is a worldview made up of the way in which one interprets the nature of reality. It was, therefore, an ontological discovery that inspired Descartes to declare, Cogito, ergo sum. Accordingly, ontologies, in many ways, represent the framing and positioning from which a researcher begins their research journey. That now being established, once an ontological standpoint has been determined, axiology is introduced as a way to evaluate those attributes which are significant in the pursuit of knowledge. Axiology can be thought of as the moral compass that directs the ways in which knowledge is pursued and obtained. Regarding axiology, Opaskwayak Cree academic Wilson (2008) writes, "One's view of ontology will be reflected in what knowledge is worth seeking in order to better understand reality" (p. 34). Hence, once an ontological and axiological framework have been established, the journey towards an epistemology begins. Epistemology is where knowledge or the theory of what it means "to know" can be conjectured until it has been transformed into something which resembles truth. Chilisa (2012) writes that epistemology asks, "What are the sources of knowledge? How

reliable are those sources? What can one know? How does one know if something is true" (pg. 21)? Therefore, epistemologies represent a systemization of knowledge which has been produced from a particular ontological and axiological standpoint (Kovach, 2009). Finally, methodology is the way in which truth can be discovered, rediscovered, and thereby verified. A methodology is representative of the formula which, when followed, leads to the production of a particular truth or reality. Subsequently, these are the four philosophical keystones which make up a research paradigm. On account of this, these components will henceforth be entailed in all of the research paradigms described in this paper.

There are many different research paradigms in Eurocentric research approaches. Some of the most well-known include, but are not limited to: Positivism, Modernism, Constructivism, and Grounded Theory. While many of these paradigms share certain Eurocentric proclivities, in this study, I will discuss the positivist paradigm as well as the fundamentals of an Indigenous research paradigm. The positivist paradigm will be described first in the section that follows.

2.2 Positivism: A Surprising History

The primary object, then, of Positivism is twofold: to generalize our scientific conceptions, and to systematize the art of social life.

-Auguste Comte (1848/1908)

Although philosophies which could be deemed as positivistic have existed in different cultures since time immemorial, French philosopher Auguste Comte is often regarded as the "father of positivism" (Dufour, 2011, p. 2081).

2.2.1 Comte

Comte was born in 1798 in Montpellier, France to bourgeois parents Louis Comte and Rosalie Boyer (Pickering, 1993, p. 14-15). Although Comte had aristocratic parentage, it was his upbringing during what Pickering calls the "waning years" of the French Revolution which would leave an indelible mark on the direction of his life (p. 7). After encountering the societal damage caused by the French Revolution, Comte decided to cultivate a kind of social change. This social change, he theorized, should benefit the rungs of French society by presenting positivism as a "unique refuge" which could rescue the French from the primitive notions of "theological and metaphysical obstructions" (Pickering, 1993, p. 14). Subsequently, Comte began to postulate how he could introduce this new more socially cohesive doctrine to French society.

In A General View of Positivism, Comte (1848/1908) writes:

Positivism consists essentially of a Philosophy and a Polity. These can never be dissevered: the former being the basis and the latter the end of one comprehensive system, in which our intellectual faculties and our social sympathies are brought into close correlation with each other. For, in the first place, the science of Society besides being more important than any other, supplies the only logical and scientific link by which all our varied observations of phenomena can be brought into one consistent whole (p. 1-2).

What Comte was trying to accomplish was a universal scientific doctrine through which all knowledge could be ascertained. Regarding this, Dufour (2011) writes that, "Comte described his positivist perspective as an approach seeking to ground theoretical models

on empirical knowledge and observations" (p. 2081). As previously stated, Comte's goal in creating this doctrine was to uplift French society by introducing a humanist dogma erected on positivist ideologies. In this way, Comte believed that individuals could evolve from the jejune principles of fetishism and theology to a more sophisticated and rational worldview. Nevertheless, to better understand Comte's rationale, it is important to breakdown his philosophy of human history.

Regarding the hierarchy of positivism, Comte (1848/1908) postulated that the "philosophy of human history" could be broken down into three states (p. 25). The first state is called The Theological or Imaginative state and is representative of an "inevitable stage in evolution" (p. 25). On this stage, Comte writes Theologism, "...furnished the temporary hypotheses without which observation could not have begun. Its predilection for insoluble problems was useful as a mental gymnastic" (p. 25). What Comte is explaining is how Theologism serves as the foundation for how we seek to explain and understand phenomena. Comte's assertion is that this initial stage is essential because without it, humanity could not have ascended the lofty heights of scientific analysis.

The second state of human history is called The Metaphysical or Abstract. This, Comte writes, is a, "...transitional stage needed between the Theological and Positive States having some affinities with each" (p. 25). Therefore, verisimilitude in the Metaphysical or Abstract state is exemplified by a duality of beliefs both in Theological realities as well as Positive or scientific ones. Atheist turned Christian intellectual C.S. Lewis could be representative of an individual belonging to this stage as he was quite devout in his beliefs in both science and religion. This perhaps was best exemplified in Lewis' Space

Trilogy where he illustrated his thorough knowledge of physics while citing divinity as the source behind such scientific phenomena.

The final stage is the Positive or Real State. This, Comte writes, is where the, "...human mind renounces the impossible search into Things-in-themselves and into causes whether first or final and confines itself to observation of facts either of particular facts (observation proper) or of general laws (classification)" (p. 27). To articulate further, Dufour (2011) writes, "With the last stage, humanity was seen as realizing its full cognitive and political potential with the elimination of anterior, primitive, or chimerical schemes of cognition" (p. 2081). This final stage of positivism, therefore, represents the zenith of humanity's search for truth, as only through empirical observation can knowledge be ascertained. These three stages, Comte theorizes, are essential stages in human philosophical development. However, it is only when one can truly be objective that a state of positivism is achieved. Thus, from this philosophy, the prototype of and paradigm for the objective scientist was formed. Furthermore, as previously described, each paradigm is outfitted with the four philosophical components of ontology, axiology, epistemology, and methodology. As such, a description of those components within positivism follows.

2.2.2 Positivism's Philosophical Components

A positivistic ontology could be described as the belief that knowledge is made up of universal truths that transcends eras, religions, cultures and philosophies among other things. Therefore, a positivist might assert that the reality of humankind is made up of the same material. As such, a positivist axiology is one which has removed all biases, be they

religious, cultural, gendered, or otherwise in order to achieve *perfect* objectivity when pursuing knowledge. A positivist epistemology, equipped with an objective ontology and axiology, must utilize empirical data collection measures in order to examine and substantiate knowledge and truth. For this reason, a positivist methodology requires an objective observer to gather unbiased data in order to prove or disprove a particular theory or inquiry of truth. These, then, are the descriptions of the philosophical components which make up a positivist paradigm.

Since Comte's time, positivistic approaches have been utilized by philosophers who desired to see what they considered the *advancement* of humanity (Dufour, 2011). From "social-Darwinists" like Karl Popper, to the philosophical works of members from the Vienna Circle, positivistic ideologies have survived and evolved for many years since Comte's death in 1857 (Dufour, 2011, p. 2081). Nevertheless, although positivistic ideologies are still being utilized, they have not served their original purposes of uniting humanity under one scientific epistemology. Positivism assumes that humanity in all facets adheres to one objective understanding of truth and that truth can be discovered through the empirical means of the scientific method. However, the philosophy of human history was not, and has never been a singular experience. For this reason, positivism has drawn its fair share of critics and detractors.

2.2.3 Positivism, a Critique

One of the most outspoken critics of positivism was philosopher Paul Feyerabend who was unabashed in his sentiments regarding the notions of an objective truth. Saxon (1994) writes that Feyerabend, "...held that the rationality of science did not really exist and that

the special status and prestige of scientists are based on their own claims to objective truth". Hence, Feyerabend openly refuted the authority of scholars who claimed to have arrived at some form of an objective truth. Correspondingly, in a rebuke of objective methodologies Yankton³ scholar Deloria (1997) writes, "Like almost everyone else in America, I grew up believing the *myth* of the objective scientist." (p. 9 italics mine). Moreover, in the 20th century, social scientists have begun to take umbrage with the notion that social sciences should be conducted in the same manner as hard sciences which heartily utilize the scientific method (Dufour, 2011). Regarding this, Feminist theorists Hesse-Biber et al. (2004) write:

Feminist perspectives in social research question positivism's answers to the epistemological questions of who can possess knowledge, how knowledge is or can be obtained, and what knowledge is. Many feminists conceptualize truth differently that mainstream researchers and assert that women and other marginalized groups can possess knowledge and also recognize that people may now always gather knowledge in the same way (p. 11).

Correspondingly, medical researchers Braun et al. (2013) also call into question the use of positivism in Indigenous spaces writing that researchers should challenge, "the Euro-American ethnocentricity of positivistic and postpositivistic paradigms" in favor of paradigms which would be more inclusive to Indigenous worldviews (p. 125).

Finally, since "history" should include the stories of antiquity from all peoples, a history

³ Most sources cite Deloria as being Lakota/Dakota, however, Deloria (1999b) describes his ancestry as belonging to the "Yanktonais Sioux" (p. 4).

solely born out of Eurocentric thought is incomplete and therefore insufficient. To that end, Wildcat (2005) writes:

Universal "truth" cannot be a domain laid claim to by one small group of people who have an experience of one small place on this planet – Europe. Human beings have a sense of history that is both spatial and temporal because they experience it as such (p. 433).

Consequently, the idea that truth can only be perceived through objective observation is ultimately only inclusive of Eurocentric ways of knowing. On account of this, if Eurocentric paradigms such as positivism are embedded in the traditions of colonization and Eurocentrism one must question if they should be utilized in Indigenous spaces. Ironically, Comte and his positivistic ideologies were in many ways "anti-imperialist" (Pickering, 2009, p. 273). Unfortunately, however, his ideologies have often been utilized to further the cause of imperialistic paradigms.

2.2.4 Positivism in Indigenous Language Reclamation

In recent years, there has been a shift within the field of linguistics to move away from positivistic paradigms and methodologies towards a more collaborative approach. From a new linguistic methodology coined Community Based Language Research (CBLR) to what Myaamia scholar Wesley Leonard has deemed a Native focused linguistics, this section will detail why positivism should not be utilized in ILR.

In the first few pages of *Decolonizing Methodologies*, Māori academic Tuhiwai-Smith (2012) details what a partnership with the academy has often meant for Indigenous communities. In describing the word, *research*, Tuhiwai-Smith (2012) writes that it,

"... is probably one of the dirtiest words in the Indigenous world's vocabulary" (p. 1). As mentioned, Eurocentric researchers and research approaches can be exploitive of Indigenous communities often leaving them empty-handed when the research project has ended. Deloria (1991) writes, "My original complaint against researchers was that they seem to derive all the benefits and bear no responsibility for the way in which their findings are used" (p. 457). Simonds and Christopher (2013) echo Deloria when they write:

Past researchers have disempowered communities, imposed stereotypes that reinforced internalized racism, and conducted research that benefited the careers of individual researchers, or even science at large, but brought no tangible benefit to the communities struggling with significant health disparities. Many tribal nations have provided accounts of researchers who have exploited tribes by coming in, taking information from tribal members, and providing nothing in return. This is not distant history; rather it characterizes much of present behavior (p. 2185).

Unfortunately, this disconnect is often the result of a positivist approach utilized when working with Indigenous communities. To elaborate further, Kovach (2009) writes:

In the traditional period of the twentieth century, qualitative research was largely influenced by positivism. Most prominently, ethnographical research design was employed as qualitative 'objective' studies of the 'other.' Ethnographies of the 'other' in the Americas usually meant depictions of 'exotic' Indigenous cultures (Ladson-Billings, 2003). These early qualitative studies were responsible for

extractive research approaches that left those they studied disenfranchised from the knowledge they shared (as cited, p. 27).

Therefore, while a positivistic approach in research is not uncommon and may be useful in some academic disciplines, it is not the best approach for researchers working with Indigenous communities and thereby ILR.

Thankfully, there have been great strides within the field of linguistics by Indigenous and non-Indigenous scholars to correct positivistic notions. One such approach can be found in the research methodology of Community Based Language Research (CBLR) coined by Czaykowska-Higgins.

Czaykowska-Higgins (2009) understands how the effects of positivism can negatively affect an Indigenous community as she writes:

...in a linguist-focused model of Indigenous language research, the research tends for the most part to be conducted as if the researchers were working outside of the linguistic and social conditions in which it takes place. In this kind of model, rooted as it is in the Euro-American empirical and positivistic scientific tradition, academic linguists see themselves primarily as disinterested observers and recorders of facts (p. 21).

To combat these notions, Czaykowska-Higgins proposes a new methodology which was inspired from the principles that make up Participatory Action Research and Community Based Research. As such, Czaykowska-Higgins (2009) describes CBLR as:

Research that is on a language, and that is conducted for, with, and by the language-speaking community within which the research takes place and which it

affects. This kind of research involves a collaborative relationship, a partnership, between researchers and (members of) the community within which the research takes place (p. 24).

It is important that I articulate here, that collaboration in this model entails fostering mutually beneficial relationships where both the researcher and the Indigenous community are equal stakeholders in the research as well as beneficiaries of the results the research project may yield (Czaykowska-Higgins, 2009). Furthermore, CBLR and other collaborative methodologies promote healthier relationships and are thereby preferred by Indigenous communities who choose to partner with researchers (Garroutte, 2005; Czaykowska-Higgins, 2009).

One aspect of CBLR which is particularly distinctive is its principle of assisting the community with ILR purposes by training them to become linguists, thereby phasing out the academic linguist. This is unique because the linguist is working against their best interest by putting the needs of the community first. Additionally, although there may be those academics who frown upon a model which ultimately leads to their dismissal, an approach like this could help to alleviate some of the anxiety an Indigenous community might feel when partnering with an academic because the academic has no intentions of imposing on their land and culture indefinitely.

Leonard (2019c) also describes the ways in which Eurocentric research approaches have affected Indigenous communities. In *Reflections on (de)colonialism in language documentation*, Leonard (2019c) writes:

...Documentary Linguistics emerges largely from a EuroAmerican colonial tradition that has guided the development of Linguistics (Errington, 2008), whose scope is global but whose actors are concentrated in institutions that follow Western traditions of research. These traditions establish languages as objects to be described in scientific materials (e.g., texts, corpora, technical publications) which can serve multiple audiences, but normally are structured around colonial categories and norms of description (as cited, p. 56).

Moreover Leonard (2019d) writes:

Native Americans continue to criticize how Linguistics privileges Western epistemologies and research practices that "dissect" Native American languages in harmful ways, rendering them objects of analysis whose primary value lies in how their grammatical structures contribute to "our knowledge" (where "our" refers to linguists).

Leonard has thus, suggested a methodological pivot in the way academic linguists approach ILR which will be further discussed in a later section.

As the scholars in the preceding section have articulated, ILR should not be subjected to a paradigm which is harmful and cannot properly serve its purposes. And while Czaykowska-Higgins is proof that the academy and non-indigenous linguists are beginning to understand the detrimental effects of positivism in Indigenous communities, perhaps it is time for the academy to heed the words of Deloria (1970) when he writes, *We Talk, You Listen.* As such, what kind of epistemological and methodological praxis do Indigenous scholars recommend? The answer, I propose, is found within the

epistemological and methodological tenets instituted by Indigenous peoples long ago and more recently articulated by Indigenous scholars. To that end, the next section details Vine Deloria Jr., an Indigenous scholar, who, like Comte desired to see a better more cohesive society for his people.

2.3 An Overview of Indigenous Research Paradigms

In fact, tribal peoples are as systematic and philosophical as Western scientists in their efforts to understand the world around them.

-Vine Deloria Jr. et al. (1999a)

As has been discussed, positivism posits that there is one universal truth, however, Indigenous research paradigms (IRPs) challenge this notion by asserting that there are many ways of knowing and that truth is not a static reality but dynamic and fluid (Battiste & Henderson, 2000; Wilson, 2008; Davis, 2017). Although today there is a growing body of literature dedicated to Indigenous ways of knowing and being within the academy, Indigenous scholar, Vine Deloria Jr., was one of the first Indigenous academics to articulate Indigenous ways of knowing in a vernacular comprehensible to academic communities. For this reason, it is important to discuss the life of Deloria and how his intellectual contributions set the stage for Indigeneity within the academy.

2.3.1 Deloria and the Academy

Vine Deloria Jr. was born in 1933 near the lands which we would today describe as the Pine Ridge Reservation in South Dakota. Deloria is the great-grandson of Saswe, a Yankton chief who was also known as François Deloria. Saswe was also one of seven

other Indigenous American chiefs who traveled to the White House to aid in the renegotiation of the 1858 Yankton treaty (Deloria, 1999b, p. 9). While in Washington, Saswe was given the title of "Chief of the Half Breeds" due to his mixed-race ancestry; a sobriquet which stuck with him throughout his life (Deloria, 1999b, p. 30). After living most of his life as a Yankton shaman and chief, Saswe converted to Christianity as he believed it relieved him from the hauntings of his past (Deloria, 1999b, p. 35). As such, Saswe became the first of four generations of Episcopalian Delorias (Deloria, 1999b, p. 36). Saswe's son Tipi Sapa⁴ was Deloria's grandfather who, like his father before him, went into the ministry as an Episcopalian priest (Deloria, 1999b). Although Tipa Sapa's first language was Dakota, he learned to read, write, and speak English with excellent proficiency ultimately studying Shakespeare to further improve his phraseology (Deloria, 1999b, p. 60). Subsequently, Tipa Sapa's eloquence proceeded him as he was widely respected as a brilliant orator capable of pontificating to both Indigenous and white American parishioners alike (Deloria, 1999b, p. 69). Tipa Sapa's son, Vine Deloria Sr., followed in his father and grandfather's footsteps, becoming a prominent Episcopalian priest who reached national evangelical acclaim due to his role in raising funds for a new church and rectory in Martin, South Dakota (Deloria, 1999b, p. 87). He was also a promising college football star, though he eventually abandoned the sport for the ministry (Deloria, 1999b, p. 81). Hence, this rich tradition of brilliance is what precedes the birth of Vine Deloria Jr., whose propensity for excellence was essentially etched into his DNA.

⁴ Also known as Philip Deloria

Inevitably, Deloria was brought up in the ways of his fathers; with a robust Indigenous American and Episcopalian heritage.

Deloria obtained a bachelor's degree in science and a master's degree in theology during the 1950s and 60s⁵ (Johnson, 2005). However, after obtaining his education, albeit a Western one, he felt compelled to write about his experiences as an Indigenous American. For this reason, in 1969 Deloria's first book, *Custer Died for Your Sins: An Indian Manifesto* was published.

Custer Died for Your Sins is comprised of 11 essays where Deloria (1969) explores, details, and discusses Indigenous and Euro-American relations. One chapter in particular entitled "Anthropologists and Other Friends" details how academically trained anthropologists have used Indigenous communities as an academic commodity to be objectified by Eurocentric intellectuals:

The fundamental thesis of the anthropologist is that people are objects for observation, people are then considered objects for experimentation, for manipulation, and for eventual extinction. The anthropologist thus furnishes the justification for treating Indian people like so many chessmen available for anyone to play with (p. 81).

These words represent yet another unflattering critique of the objective scientist. *Custer Died for Your Sins* was met with critical acclaim becoming the first in a robust Delorian cannon where he ardently campaigned for Indigenous ways of knowing. Deloria has

⁵ Deloria also earned a Juris Doctorate from Colorado Law in 1970 ("Vine Deloria Jr.", n.d.).

since been regarded as a spiritual and intellectual giant as well as a champion of Indian rights (Johnson, 2005). Regarding the contributions of Deloria, anthropologist Don Stull (1999) writes, "North American anthropology can be divided into two ages: BD and AD – Before and After Deloria" (p. 63).

In many ways, Deloria laid the foundation for other Indigenous scholars to asseverate in a vernacular which is endemic to the academy. Academic institutions were not set up for the advancement of Indigenous peoples which can be observed in the academic verbiage that often excluded them. However, Deloria, like his grandfather Tipa Sapa, learned to speak the language of the academy with native fluency. Deloria then utilized this proficiency to explain what it has been like for Indigenous peoples to have their humanity redefined for the sole purposes of objectification and eventual colonial domination.

Because of this, Deloria cleared the way for Indigenous scholars to have the space to articulate their truths and their epistemologies.

Thus, by making a way for Indigenous epistemologies to be included in academic dialogue, a new generation of Indigenous scholarship has arrived. For this reason, new paradigms have been introduced under the umbrella of Indigenous research paradigms. As the next section will detail, IRPs are comprised of philosophies which are for Indigenous peoples by Indigenous peoples. That being said, none of this would have been possible without the scholarship and activism of Deloria. Wildcat (2005) perhaps says it best as he writes:

...throughout his life, Deloria challenged indigenous and nonindigenous thinkers alike to be wary of doctrinaire platitudes and methodologically induced myths. He

did this by suggesting that we think indigenously and spatially and speak honestly. For my generation of indigenous scholars, we can thank Vine Deloria Jr. for reminding us that what we do should be important in the "big picture" (p. 438).

2.3.2 Introduction to Indigenous Research

Like positivism and other iterations of Western ways of knowing, Indigenous philosophies are both venerable and well-established. Additionally, because the term "Indigenous" entails precolonial contact, Indigenous ways of knowing antecede the Eurocentric predefined packages of positivism and philosophy altogether. Nevertheless, in an attempt to rewrite history, colonization found a way to elevate its philosophies over those which did not fit into its Western phallocratic notions of humanity. Thus, the written word was given precedence over oral history, and research paradigms such as positivism were given priority over paradigms which are inclusive of relationality, spirituality, and metaphysics. Regarding this, Stanfield (1985) and Scheurich and Young (1997) write:

When any group-within a large, complex civilization-significantly dominates other groups for hundreds of years, the ways of the dominant group (its epistemologies, its ontologies, its axiologies) not only become the dominant ways of that civilization, but also these ways become so deeply embedded that they typically are seen as "natural" or appropriate norms rather than as historically evolved social constructions (as cited in Scheurich & Young, 1997, p. 7).

Positivism, as well as other Eurocentric paradigms, are so deeply woven into the fabric of Western society that it is easy to forget other standpoints exist. However, as the voices within the academy become increasingly more diverse, it is important to be cognizant of the presence of different worldviews such as those found in IRPs. Opportunely, these diverse paradigms are often described in a similar lexicon as their Eurocentric counterparts. As such, the next sections will detail what qualifies as Indigenous research as well as describe the philosophical components which make up an IRP.

2.3.3 Indigenous Research and Indigeneity

IRPs are inherently decolonial in nature (Battiste & Henderson, 2000; Wilson, 2008; Kovach, 2009; Hart, 2010; Chilisa, 2012). The reason for this, is IRPs must first debunk colonial presuppositions in order to make way for diverse philosophies. Concerning this, Onkwehonwe scholar Forbes (1997) writes, "European philosophers have always been much less concerned about the search for truth than with providing intellectual covers for the exercise of brute power by white rulers" (as cited in Alfred, 2005, p. 102). Thus, since Eurocentric philosophies and societies were created to dominate those who were neither white nor male as Kipling (1899) rhapsodized in *The White Man's Burden*, IRPs are tasked with discrediting this antiquated notion. As such, through this process of philosophical differentiation, the academy has been introduced to a new ideology, the concept of Indigeneity.

Indigeneity has been defined in many ways (Shaw, 2002; Merlan, 2009), however, for the purposes of this paper I will utilize Garroutte's (2005) definition of radical Indigeneity.

Radical Indigeneity is defined as illuminating, "...differences in assumptions about

knowledge that are at the root of the dominant culture's misunderstanding and subordination of indigenous knowledge... [Radical Indigeneity] argues for the reassertion and rebuilding of knowledge from those roots" (p. 170). Consequently, radical Indigeneity calls researchers to first, resist Eurocentric presuppositions of intellectual authority and second, begin the process of "reasserting and rebuilding" knowledge from that posture. The hope then, is that researchers will begin to recover the Indigenous knowledge systems which have been suppressed by the dominant culture. Doing such, will enable Indigenous ways of knowing to be reclaimed, further refined, and expanded upon by future scholars. Therefore, it is opportune that Indigenous scholars have taken up the mantle of Deloria in order to articulate the ways in which Indigenous knowledge systems should rejoin the international academic dialogue. Because of this, the need for a classification like Indigenous research paradigms has arisen. However, what qualifies as Indigenous research?

Indigenous research is research conducted by an Indigenous scholar or an ally to Indigenous peoples for the protection and advancement of Indigeneity. To further expound on what qualifies as Indigenous research, Chilisa (2012) describes its four dimensions:

(1) [Indigenous research] targets a local phenomenon instead of using extant theory from the West to identify and define a research issue; (2) it is context-sensitive and creates locally relevant constructs, methods, and theories derived from local experiences and indigenous knowledge; (3) it can be integrative, that is, combing Western and indigenous theories; and (4) in its most advanced form,

its assumptions about what counts as reality, knowledge and values in research are informed by an Indigenous research paradigm (p. 13).

Though fairly new to the academy, Indigenous research is as effective, complex, and expedient as its Western paradigmatic contemporaries and has every right to be included in the global intellectual reserves. Having said that, IRPs, while wide-ranging, are still made up of the four philosophical components of any research paradigm. Additionally, although IRPs are described analogously to Eurocentric paradigms, per Chilisa's third dimension, they can still be contrastive in nature to Eurocentric thought.

2.3.4 The Philosophical Components of Indigenous Research Paradigms

To reflect congruency with the previous sections, I will begin this section by describing ontology as the first philosophical component. Indigenous ontologies include panoramic worldviews which are founded on the principle of relationality. Relationality is the worldview that all things are interconnected be they physical or spiritual, human, animal, plant, or element. Regarding an Indigenous ontology, Hart (2010) writes, "Since all life is considered equal, albeit different, all life must be respected as we are in reciprocal relations with them" (p. 8). Additionally, The Royal Commission on Aboriginal Peoples (1996) state that Indigenous knowledge and thereby ontologies are transmitted intergenerationally with reference to, "...the relationships of living beings (including humans) with one another and their environment" (p. 324). Just the same, Battiste and Henderson (2000) capture Indigenous ontology succinctly when they write, "Everything affects everything else" (p. 42).

If, then, an Indigenous ontology posits that everything is connected and thereby related, an Indigenous axiology is guided by the principles of responsibility and reciprocity thereby holding the researcher to be accountable to their relations. Wilson (2008) articulates on Indigenous axiology by writing:

An Indigenous axiology is built upon the concept of relational accountability. Right or wrong; validity; statistically significant; worthy or unworthy: value judgements lose their meaning. What is more important and meaningful is fulfilling a role and obligations in the research relationship – that is, being accountable to your relations. (p. 77).

Furthermore, Kainai scholar Littlebear (2009) writes, "...spirituality, relationships, language, songs, stories, ceremonies, and teachings learned through dreams form the axiology of Aboriginal knowledge" (p. 11). For these reasons, the Indigenous axiological lens is focused on ethical, cultural, and mutually shared obligations to Indigenous peoples and their worldviews.

An Indigenous epistemology recognizes two things; that knowledge belongs to everyone and that knowledge can come from or be enlightened by many different areas of inquiry (Wilson, 2008). Chilisa (2012) writes that an Indigenous epistemology, "...is informed by the set of multiple relations that one has with the universe" (p. 41). Moreover, Sturgeon Lake scholar Ermine (2000) writes, "Those who seek to understand the reality of existence and harmony with the environment by turning inward have a different incorporeal knowledge paradigm that might be termed Aboriginal epistemology" (p. 103). What these Indigenous scholars are articulating is the axiom that there are many

ways of knowing and many ways to seek understanding. Thus, an Indigenous epistemology calls a researcher to be open to a more subjective understanding of what it means to know or to arrive at truth.

The final component in an IRP is its methodology. At their core, Indigenous methodologies are determined by and built around the needs of Indigenous peoples (Kovach, 2009). As such, they can be informed by tribal or national epistemologies such as Gross' (2014) *Anishinaabe ways of knowing and being*, as well as globally shared Indigenous worldviews such as *Relationality* (Wilson, 2008). Leonard (2019a) summarizes Indigenous methodologies by writing that they ultimately:

...highlight the importance of knowing and building relationships, emphasize the responsibility that comes with producing and disseminating knowledge, and draw attention to community needs. They also provide tools to disrupt the privileged and often unmarked status of Western ways of knowing (p. 6).

That noted, Indigenous methodologies can be hard to succinctly define because they are fundamentally varied both tribally and internationally. However, what qualifies them as being Indigenous comes down to their origins and their purposes. Hence, they should come from an Indigenous ontology with the purpose of furthering Indigeneity.

Subsequently, IRPs have been created to reintroduce and authenticate Indigenous ways of knowing while also highlighting their worth. This serves to uplift Indigenous peoples who have been disenfranchised by Eurocentric presuppositions for almost half a millennia.

2.3.5 Indigenous Research Paradigms in Linguistics

Since Deloria's time, Indigenous worldviews have become a greater presence in the academy (Kovach, 2009). From the field of sociology (Connell, 2018), to psychology (Pe-Pua, 2006), Indigeneity is quickly filtering through many different academic disciplines. This philosophical pivot is not absent in linguistics, as scholars such as Wesley Leonard and Megan Lukaniec have created a national project entitled Natives4Linguistics. The purpose of Natives4Linguistics is to cultivate a space which puts Indigenous linguistic needs at the forefront of linguistic research in Indigenous communities. On their website, Natives4Linguistics (n.d.) list their primary objectives as:

[Improving] the field of Linguistics by broadening the participation of Native Americans within Linguistics by 1; directly bringing Native Americans to the Linguistic Society of America annual meetings, and 2; by developing and promoting strategies to better integrate Native American needs and values about language into linguistic science.

What Leonard and Lukaniec seek to highlight are the discrepancies regarding positivist or Eurocentric approaches taught in academia. On this topic, Leonard (2019a) writes:

I find that it is common in my professional life that I learn of less fruitful partnerships between Indigenous communities and academic partners, a recurrent trend being that the Indigenous community members feel the partnership in question to be overly dictated by academic interests and Western approaches (p. 2).

While I have great confidence in Leonard and Lukaniec's efforts, I also believe that Indigeneity in linguistics should be introduced on many fronts. While Leonard and Lukaniec are focused on increasing the matriculation of Indigenous language experts and students, I wanted to know if there was a way to better equip non-Indigenous students who wish to partner with Indigenous communities. Thus, the next section details cultural competency and self-assessment tools.

2.4 Introduction to Self-Assessments

Decolonizing research requires constant reflective attention and action, and there is an absence of published guidance for this process. Continued exploration is needed for implementing Indigenous methods alone or in conjunction with appropriate Western methods when conducting research in Indigenous communities.

- Vanessa Simonds and Suzanne Christopher (2013)

One of the topics Scheurich and Young (1997) write about, is the unnerving institutional silence that ensues when scholars of color question whether Western academies and their epistemologies are inherently racist. Concerning the silence, Scheurich and Young (1997) contend that researchers aren't *necessarily* racist, though some undoubtedly are, but that there is, "...a lack of understanding among researchers as to how race is a critically significant epistemological problem in educational research" (p. 4). Scheurich and Young speculate that this posture of misunderstanding comes from modernism which posits only a Eurocentric understanding of the world is deemed as valid (pp. 6-7). For this reason, as individuals are brought up in a Eurocentric educational system, if they do not possess a contrastive epistemology which challenges modernist assumptions, they inherit a

Eurocentric way of seeing and interpreting the world around them (p. 7). Therefore, because of modernist epistemological blinders, a researcher may not understand how a certain epistemology could be deemed as racist. Additionally, and perhaps interestingly, Scheurich and Young describe how a researcher could be vehemently "anti-racist in thought and deed" but still perpetuate a Eurocentric epistemology which would be considered inherently racist (p. 5). This, perhaps, is why Western intellectuals may be lost for words or even confused when asked about the prejudicial notions embedded in Eurocentric research approaches. As such, their silence may be indicative of being unaware of the existence of other worldviews. However, what happens when a researcher becomes aware of the existence of two contrastive worldviews?

There is a term in psychology called *cognitive dissonance* which describes, "...the idea that if a person knows various things that are not psychologically consistent with one another, he will, in a variety of ways, try to make them more consistent" (Festinger, 1962, p. 93). Cognitive dissonance may be another reason Western intellectuals do little to nothing regarding the racism embedded in research epistemologies. Nevertheless, for a healthier epistemological dialogue, a solution must be hypothesized which purports to alert researchers to the racial disparities within research paradigms. Additionally, this solution must also provide an antidote for any cognitive dissonance researchers may experience when they are made aware of such disparities. Consequently, another psychological concept called *cognitive empathy* could be utilized as a way to move away from unawareness, past cognitive dissonance, to the doorstep of cultural awareness. Cognitive empathy, as will be discussed later, is a tool often utilized in self-assessments to aid individuals in achieving a better understanding of diverse worldviews. Moreover,

self-assessments are often utilized as a way to enlighten an individual to an underlying belief they may not have realized they possessed. For these reasons, the next sections will discuss the usefulness of self-assessments as well as detail a few cultural awareness frameworks which utilize the illuminating capabilities of self-assessments.

2.4.1 On the Value of Self-Assessments

Self-assessments are questionnaires which serve to elucidate a respondent, an administrator, or both to qualities which may not immediately be identifiable. For this reason, they are excellent tools which aid in revealing unconscious behaviors such as cultural biases. Self-assessments are widely circulated and highly utilized especially within the medical professions (Pisklakov, 2014). Furthermore, Georgetown University has created an entire department called the National Center for Cultural Competence dedicated to the creation and implementation of self-assessments for cultural competency purposes. In explaining their rationale for self-assessment tools, the National Center for Cultural Competence (n.d.) writes:

Health and human service organizations are recognizing the need to enhance services for culturally and linguistically diverse populations. Assessing attitudes, practices, policies and structures of administrators and service providers is a necessary, effective and systematic way to plan for and incorporate cultural competence within an organization. Determining the needs, preferences and satisfaction of family members/consumers is an essential aspect of this process.

Hence, this rationale clearly articulates the importance of self-assessment tools in measuring "attitudes and practices" for populations which are "culturally and

linguistically diverse". However, the National Center for Cultural Competence is not the only entity which has utilized the efficaciousness of self-assessments for increased cultural awareness. Thus, what follows is a description of additional and related self-assessment tools including how they have contributed to an improvement in intercultural understanding.

2.4.2 DMIS and DMIS Assessments

In 1986, sociologist Milton Bennett introduced a theoretical spectrum which illustrates the ways in which an individual could move from ethnocentrism towards ethnorelativism. This scale, called the Developmental Model of Intercultural Sensitivity (DMIS), identifies six stages which mark an individual's journey towards a more interculturally competent worldview (Bennett, 2017). A detailed description of Bennett's six stages follows.

Denial is described as the first stage in the DMIS spectrum. As such, it is representative of when an individual is wholly ethnocentric either denying the existence of other cultures or dismissive of the need for diversity altogether (p. 4). A person in the Denial stage perceives their reality, and that of their culture's, to be the most *real* and correct form of humanity, thereby concluding that they represent the most highly evolved form of a human being (p. 4). This is followed by the Defense stage, which describes when an individual is confronted on their worldview (p. 4). This stage introduces the contrastive binary of "us and them", where those classified as "us" are dichotomized as being either superior or inferior to "them" (p. 4). The latter belief of inferiority is called Reversal. In the Defense stage, an individual perceives the opposing group in "exaggerated"

stereotypes" which helps in authenticating their confirmation bias as to why "they/them" are in their current societal condition (p. 5). Minimization is the stage after Defense and describes when an individual seeks to minimize cultural differences in an effort to diminish their significance (p. 5). Individuals in the minimization stage often seek to find ways where the "us" and "them" binary can be merged to "we" in favor of a universal understanding (p. 5). However, this sentiment is often acutely superficial due to the fact that the individual is often dismissive of notions of discrimination (p. 5). The Acceptance stage follows, describing the way in which an individual becomes cognizant of the existence of other cultures and worldviews. Additionally, in the Acceptance stage, the individual accepts that these diverse views are not only different from their own, but also "equal in complexity" (pp. 5-6). Nevertheless, although an individual may begin the process of accepting different worldviews, it does not mean they view said worldviews favorably (p. 6). It is, therefore, entirely possible for an individual in the Acceptance stage to accept different worldviews and still be prejudicial towards them (p. 6). Additionally, Bennett (2017) details a particular challenge in the Acceptance stage which he describes as, "the need to reconcile cultural relativity with ethicality" (p. 6). This is where an individual desires to be respectful towards other cultures which can lead them to, "...adopt the naïve and paralytic position of it's not bad or good, it's just different" attitude (p. 6 italics mine). This attitude is problematic, as it continues to exhibit a judgement, albeit a passive one. After Acceptance, the next stage is Adaptation, where an individual may begin to possess cognitive empathy. This enables the individual to both accept cultural differences as valid as well as move between them simultaneously, thus becoming bicultural or multicultural (p. 6). Cognitive empathy can be described as the

ability to understand and process the notion that "someone else's thoughts may differ from one's own" without delving into a state of cognitive dissonance (Hodges & Myers, 2007, p. 297). Lastly, Integration is described as the final stage in the DMIS spectrum. Integration details when an individual possesses a fluid cultural identity that is not attached to any one culture, language, or ethnicity. Integration, therefore, is Bennett's highest realization of ethnorelativism, which concludes his six stages.

Bennett's goal in creating this spectrum was to aid ongoing efforts which sought to bring about more culturally cohesive societies (Bennett, 2017). His model has since been expanded to include intercultural sensitivity self-assessments called Intercultural Development Inventories or IDIs (Lombardi, 2010). Additionally, the DMIS has an entire organization dedicated to its charter called the Intercultural Development Research Institute. Furthermore, since Bennett's model was established, there have been several intercultural competence self-assessments introduced including, but not limited to, the Cross-Cultural World-Mindedness Scale, the Cross-Cultural Adaptability Inventory, and the Assessment of Intercultural Competence (Lombardi, 2010). Another cultural awareness framework can be found in Implicit Bias Assessments which will be detailed in the next section.

2.4.3 Implicit Bias Assessments

In 1998, "three scientists" created Project Implicit, an organization which aims to reveal implicit biases through self-assessments called Implicit Association Tests or IATs (Project Implicit, n.d.). Greenwald and Krieger (2006) define implicit biases as,

"...discriminatory biases based on implicit attitudes or implicit stereotypes. Implicit biases are especially intriguing, and also especially problematic, because they can produce behavior that diverges from a person's avowed or endorsed beliefs or principles" (p. 951). At the time of this paper, there are 14 social IATs on Project Implicit's site, such as a racial IAT, an ageist IAT, and an IAT focused on sexuality. Additionally, there are IATs which focus specifically on both physical and mental health. The Project Implicit site can be utilized by individuals, researchers, universities, and corporations among other entities for measuring the implicit biases of their participants, students, and or employees. To date, there have been several academic research projects which have utilized Project Implicit's services (Arendt & Northup, 2015; Hussey & De Houwer, 2018; Rae & Olson, 2018; Hahn & Gawronski, 2019). Moreover, since Project Implicit's inception, Greenwald and Krieger (2006) write that research on implicit biases have greatly increased. IATs have come a long way since they were introduced in the late 1990s. As such, there is no reason to believe that their staying power will diminish in the near future. The final cultural awareness instruments I wish to detail are cultural competency assessments.

2.4.4 Cultural Competency Assessments

Cross et al. (1989) defines cultural competence as, "...a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enable that system, agency, or those professionals to work effectively in cross-cultural situations" (p. 83). For this reason, the need for cultural competency assessments arose out of the need to understand diverse ways of being. Cultural competency assessments

were primarily found in the medical, legal, and educational arenas (Cross et al., 1989).

Today, however, cultural competency assessments are quite ubiquitous and can be found in just about every professional arena including, as previously mentioned, Georgetown University's National Center for Cultural Competence.

2.4.5 Self-Assessments, a Critique

The aforementioned tools have been helpful in elucidating individuals on the ways in which they fall short on intercultural sensitivity, may possess harmful biases, or lack cultural competency. Nevertheless, these instruments, while commendable, are still constructed from Western paradigms (Bennett, 2017). Additionally, while their purposes may be to educate, they do not *necessarily* represent the voices of Indigenous peoples. Regarding this, Scheurich and Young (1997) write:

...the range of epistemologies that have arisen from the social history of Whites "fit" Whites because they themselves, the nature of the university and of legitimated scholarship and knowledge, and the specifications of different research methodologies are all cultural products of White social history. While scholars of color have had to wear these "White" clothes (be bi-cultural) so that they could succeed in research communities, however sociologically, historically, or culturally ill-fitting those clothes might be, White scholars have virtually never had to think about wearing the epistemological clothes of people of color or even to consider the idea of such "strange" apparel (p. 9).

That being said, the question arose, what might an epistemological wardrobe change look like? First, instead of being informed by Eurocentric paradigms the change must be

informed by an IRP. Second, this new paradigmatic garment must be infused with the voices of Indigenous peoples, values, and cultures. Third, the creation of a self-assessment tool, which is intrinsically equipped with metacognitive "unclothing" properties, could help to facilitate an epistemological change of apparel, thereby cultivating a more culturally aware individual.

With this in mind, some aspects of self-assessments can be retained. One such aspect, namely self-reflection, is highly endorsed by Indigenous scholars. Ermine (2000) writes, "What Aboriginals found in the exploration of the self, became the basis of continued personal development and of Aboriginal epistemology...Individuals and society can be transformed by identifying and reaffirming learning processes based on subjective experiences and introspection" (p. 102).

For this reason, and in accord with Indigenous scholars, this study supports what Snow et al. (2015) have termed as *active reflection*:

Active reflection involves gaining awareness of how individuals involved in the research process are influenced by their culture, other cultures, and power dynamics that shape the relationship of the two. In other words, critical immersion involves being able to see the world through the eyes of indigenous people, to have knowledge of oneself as a cultural being, and to be aware of how one's own cultural experiences affect views of cultural differences. Active reflection extends beyond cross-cultural understanding to refer to ongoing consideration of how researcher presence in a setting may shift power in negative manners for participants and communities (Waiters & Simoni, 2009). Critical immersion also

involves re-experiencing cultures, as to "erase" a dominant lens of knowing a particular construct and learning an alternative conceptualization presented by an indigenous community. In essence, this involves validating indigenous knowledge via indigenous terms (Kovach, 2009) and treating as sacred indigenous rituals, customs, and hierarchies (Hsia, 2006; Lavalle, 2009). Thus, cultural knowledge of indigenous peoples that was previously unknown and invalidated by academics is valued and respected (Dillard, 2008; Dunbar, 2008; Hsia, 2006; Kovach, 2009; Lavalle, 2009). With this re-experiencing and re-learning of knowledge, the researcher has an ethical responsibility to privilege and integrate indigenous ways of knowing into common discourse and understanding in academics (as cited in p. 14).

Although the preceding quote is lengthy, it represents a harmonious chorus of Indigenous scholarship which explicates the posture from which my self-assessment was created. Self-reflection is a powerful tool and its methods are congruent with Indigenous epistemologies and methodologies. Additionally, what sets my self-assessment apart, is its construction from the expressed desires and values of Indigenous peoples through the scope of an Indigenous research paradigm which will be detailed later.

2.5 Chapter Summary

This section explored the literature on two research paradigms; positivism and Indigenous research paradigms. In exploring positivism through its founder, Comte, we discover the pathology of the objective scientist. However, we are also made aware of the fact that this paradigm was not created in the best interest of Indigenous communities and

therefore, should not be used for language reclamation purposes. Be that as it may, this thesis is not a call to end positivism per se, but rather to refine where and how it is utilized. Nevertheless, an alternative to positivism can be found in Indigenous research paradigms which are significantly founded on the extensive work of Vine Deloria Jr. Although the application of Indigenous epistemological and methodological praxis is admittedly difficult, as they are juxtaposed between Western and non-Western ideologies, this section has shown how Indigenous scholars have worked tirelessly to make a way in Western academia for Indigenous epistemologies to be reintroduced. Regarding this, Chilisa (2012) writes:

The goal of theorizing on indigenous research paradigms is to augment the academic discourse on research methods as well as to challenge academics in all cultures and the Western Academy to reevaluate and enrich their perspectives so that research can best serve the interests of the researched (p. 104).

That being the case, another question arises, how do we better equip linguistic students, especially if they are non-Indigenous, so that they do not propagate colonial epistemologies in spaces where they do not belong? The solution, I propose, is through a self-assessment that is designed to aid in improved cultural awareness. While many self-assessments have been created for such purposes, none have been fashioned from an Indigenous research paradigm exclusively for the purpose of better equipping linguists. However, that is exactly what I intend to do within the contents of the following sections.

CHAPTER 3

METHODOLOGY

Knowledge and peoples will cease to be objectified when researchers fulfill their roles in the research relationship through their methodology.

-Shawn Wilson (2001)

3.1 Methodological Positioning

Unlike Western paradigms which are objective and linear in nature, Indigenous paradigms are circular and thereby relational (Walker, 2001). Because of this, part of the methodological process of an IRP includes positioning oneself in relation to the research (Wilson, 2001). Taking this stance, serves to break colonial bonds by conducting research in collaboration with Indigenous peoples instead of on them (Wilson, 2001). This means ensuring that the researcher does not have an objective or positivist stance in their approach as it would cause them to be separated from the research approach (Wilson, 2001). As such, I needed to ask myself how I could remain relationally accountable in this study.

I achieved accountability by answering six essential questions posed by Wilson (2001) and Weber-Pillwax (2001):

How do my methods help to build respectful relationships between the topic I am studying and myself as a researcher (on multiple levels)?

How do my methods help to build respectful relationships between myself and the other research participants?

How can I relate respectfully to the other participants involved in this research so that together we can form a stronger relationship with the idea that we share?

What is my role as researcher in this relationship, and what are my responsibilities?

Am I being responsible in fulfilling my role and obligations to the other participants, to the topic and to *all of my relations*?

What am I contributing or giving back to the relationship? Is the sharing, growth and learning that is taking place reciprocal? (as cited in Wilson 2001, p. 77 italics mine).

Subsequently, being accountable to the questions listed above helped to ensure that my methodological and axiological frames were focused-in on Indigeneity. This, then, ensured that my research approach remained firmly planted within the parameters of an IRP.

3.2 Research Methodology

As discussed, one of the primary arguments against current self-assessment tools was their being constructed from Western ways of knowing (Bennett, 2017). Moreover, one of the purposes of this study was to find a way to imbue a tool with Indigenous epistemologies. As such, this assessment was created using an IRP infused with relationality called the Medicine Wheel paradigm. The Medicine Wheel paradigm was first introduced by Tsalagi⁶ scholar Polly Walker (2001).

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⁶ Also known as Cherokee.

The medicine wheel is a sacred symbol in certain Indigenous American cultures. Its symbolism is meant to denote relationality, balance, and the cyclical nature of life (Wilson, 2001; Walker, 2001). In describing the medicine wheel, Wilson (2001) writes that:

For me, putting ideas in a circle or a wheel implies that the ideas flow from one to the next in a circular fashion. A change in one affects the others, which in turn effects new change in the original. All parts of the circle are equal; no part can claim superiority over, or even exist without, the rest of the circle (p. 70).

Thus, the circularity of a medicine wheel is reflective of an egalitarian ontology, a relational axiology, an inclusive epistemology and a methodology which both recognizes and validates all of these things.

Medicine wheels are typically divided into four quadrants; each signifying "a complex system of knowledge" (Walker, 2001, p. 19). Additionally, each quadrant is generally represented by a color, a cardinal direction, a characteristic, and an aspect. In the following excerpt, Walker (2001) explains the significance of the four quadrants per her methodology:

In the Medicine Wheel methodology, the East represents the Spiritual aspects of experience. In the East, researchers acknowledge their interconnectedness with the research participants and the wider community. Research from the Eastern position integrates a wide range of senses in coming to know. The South represents the Natural World. In the South, researchers honour and utilise emotional experience, speaking from the heart, with authenticity. The West

represents the bodily aspects of knowing. In the West, researchers are encouraged to go within themselves, discovering what is important in relation to the connections between self, others, nature and traditional teachings (Bopp *et al.*, 1989). The North represents the mental processes of balancing intellect with wisdom. In the North, researchers work within the community to find solutions that are balanced and restore harmony to the community as a whole (Huber, 1993, p. 358-360; Bopp *et al.*, 1989) (as cited in p. 19).



Figure 1. Monochromatic depiction of Walker's (2001) Medicine Wheel.

Although Walker does not mention the colors for each quadrant, I utilized the colors from the Tsalagi Medicine Wheel. As such, the East is yellow, the South is red, the West is black, and the North is white.



Figure 2. Colorized depiction of Walker's (2001) Medicine Wheel.

These colors are sometimes representative of the four human races, the four seasons, or the four elements i.e. fire, air, water, and earth (Dapice, 2006). I, however, have decided not to correlate the colors to anything because I feared it might become too convoluted. As an alternative, I am assigning an aspect to each of Walker's (2001) characteristics listed above.

The four aspects I have utilized are a slightly modified version of Kirkness and Barnhardt's (1991) Four Rs of Indigeneity. They include: Respect, Reciprocity, Responsibility, and Relevance. Relevance, however, in many ways could be entailed in Respect, Reciprocity, and Responsibility. Moreover, since the purpose of the assessment is to resist colonial paradigms, I decided to replace Relevance with Resist. I was inspired to do this by Chilisa (2012) who writes that researchers are called to, "Resist colonizer/colonized relationships that embrace deficit theorizing and damage-focused research about the Other" (p. 295). Correspondingly, other Indigenous scholars have adapted Kirkness and Barnhardt's Four Rs such as Harris and Wasilewski (2004) who replace Relevance with Redistribution. Lastly, each aspect was assigned to the

characteristic they correlated with best. Thus, the East which represents Spirituality is correlated with Respect. The South which represents the Natural world is correlated with Reciprocity. The West which represents Knowing is correlated with Responsibility. Finally, the North, which represents Balance is correlated with Resist.

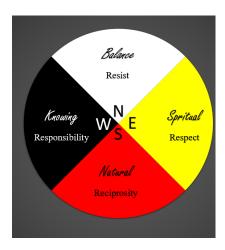


Figure 3. Colorized depiction of Walker's (2001) Medicine Wheel with modified version of Kirkness and Barnhardt's Four Rs

Now that my methodological framework has been established, I needed to find a way to create an assessment which would accurately represent the voices and values of Indigenous peoples. To accomplish this, I utilized three different "best practice" standards published or inspired by the words and desires of Indigenous peoples. The first list of standards comes from the Canadian Tri-Policy Council who compiled a list of "good practices" from diverse sources including the American Indian Law Center (Czaykowska-Higgins, 2009, p. 28). The second list comes from the Six Core Values for Ethical Conduct in Aboriginal and Torres Strait Islander Research. The third list comes from The Indigenous Research Protection Act which was written as a contract template for Indigenous American communities in order to protect them from exploitive research practices. Subsequently, these standards served as the rubrics from which I theorized and

eventually formulated my assessment questions as they represent an ideal researcher. To clarify, by ideal I mean a researcher who understands and respects Indigenous epistemologies and can work in healthy collaboration with Indigenous communities.

Synergistically, these standards also correlated with the Four Rs of Indigeneity. Thus, each question was crafted from the three standards in relation to the Four Rs in an effort to bring Indigenous ideologies to the forefront. Finally, I also utilized Hanohano's (2001) "encircle" theory as a way to verify the dependability of the standards (as cited in Wilson, 2001, p. 101). Hanohano's (2001) encircle theory is described as being adjacent to triangulation as a legitimacy tool, however, instead of demonstrating the ways in which different views or points line up (triangulation), encircle theory demonstrates the ways in which ideas are related (p. 101). Thus, the relationality of each standard is verified by their relation to one of the Four Rs of Indigeneity. Moreover, I further defined the Four Rs using verbiage in the standards. From this methodology, I was able to come up with assessment questions, each associated with the standards as well as the Four R's of Indigeneity. In the next section, I will further detail the design of the assessment.

CHAPTER 4

DESIGN

Many studies done with a post-colonial indigenous approach are committed to developing tests and measures that are culturally sensitive and context specific.

-Bagele Chilisa (2012)

4.1 Introduction on Design

This chapter details how the assessment was designed including how I developed and divided the assessment questions, the ways in which I validated my design, the software utilized to create and house the assessment, as well as the artwork featured on the assessment. Before I get into design details, however, I would like to address my stance on the concept of a pan-Indigenous characterization.

4.2 On Pan-Indigenous Identities

A Pan-Indigenous characterization results in the homogenization of all Indigenous cultures as being generally the same. However, although Indigenous cultures may have shared values or experiences, especially as they relate to colonization, I, like many scholars (Alfred & Corntassel, 2005; Kovach, 2009; Wilson, 2008) do not believe in a global or national pan-Indigenous identity. Instead I believe that all Indigenous cultures whether they belong to different races⁷, ethnicities⁸ or both (i.e. Lumbee and Métis) are complex and unique. As such, although this tool was created for work within Indigenous

⁷ As defined by phenotype.

⁸ As defined by cultural affiliation within one nation i.e. The Han and Hui ethnic groups of China.

American communities, it is not my intention to perpetuate the myth that all Indigenous American cultures are the same.

For these reasons and to acknowledge the complexities of Indigenous American cultures, this assessment features elements from different Indigenous North American nations. The background ledger art, which is detailed later, represents the Sicangu Lakota heritage of artist, Evans Flammond Sr. The words for "Hello", "Thank You", and "Good-Bye" in the body of the assessment are from the Mvskoke nation. The names for the two fictional cocollaborators mentioned in the assessment are Nataani and Pearl. While Nataani is a Navajo name, Pearl was intentionally given a Westernized name. This was to symbolize that not having a "traditional" Indigenous American name in no way negates an individual's Indigenous heritage or identity. Additionally, it also signifies how some individuals wish to use their traditional names only with members of their own communities. The medicine wheel in the final results screen is a collocation of Tsalagi and Cree cultures in recognition of Walker and Kirkness. Finally, I have decided to call this the Mitakuye Oyasin Assessment. *Mitakuye Oyasin* is a Lakota phrase which roughly translates to "We Are All Related" or "To All My Relations". I utilized this phraseology for three reasons. One, Mitakuye Oyasin and its English equivalent continually showed up in my research as can be observed in Wilson and Weber-Pillwax's (as cited in Wilson, 2001) fifth question on relational accountability, as well as the forthcoming quote. Second, it highlights *Relationality* which is a part of the IRP I have utilized. Third, this phrase comes from Deloria's linguistic heritage and it was important for his influence to be reflected in this assessment. Furthermore, regarding Mitakuye Oyasin, Deloria et al. (1999a) writes, "Few people understand that the phrase [Mitakuye Oyasin] also describes

the epistemology of the Indian worldview, providing the methodological basis for the gathering of information about the world" (p. 52). Subsequently, this phrase captures the relational yet diverse nature of what it means to be Indigenous.

To ensure that this design intentionality is not lost on the respondent, I include information regarding the influence from each Indigenous North American nation within the body of the assessment⁹.

4.3 Assessment Question Design

For this assessment, I developed 40 questions which were correlated with, and could be evenly divided between the Four Rs. For respondent reliability, however, these 40 questions were evenly divided a second time between two versions, Assessment A and Assessment B. The reason for this, was because research informs us that for optimal respondent participation, assessments should neither be loquacious nor take longer than 20 minutes (Holyk, 2008; Wagner, 2015). Consequently, each question was designed to be answered in one minute or less which also helps in ensuring the reliability of the assessment score due to optimal participation from the respondent. Additionally, although the assessment has not been piloted, the questions were written with a sample audience of university students in mind. This means that the questions were neither overly simplistic, nor did they include complex jargon. This is important because designing an assessment with your target audience in mind aids in the validity of your assessment tool (Wagner, 2015).

⁹ See Appendix D.

Moreover, the correlation of the questions to one of the Four Rs is to both ensure encircle relationality as well as to confirm a question's validity which is reflected in how the question relates to the idealized form in each category (Holyk, 2008).

For diversity and verifiability, question responses take on four different forms. Some questions have multiple choice responses, some true or false, and there are two types of Likert scale responses. Additionally, for symmetry which also aids in assessment design reliability, all of the questions, except those marked as being true or false, are given four response choices. The purpose of this was to ease the cognitive load of the respondent in order to ensure that they would not be hindered by a burden of choice (Wagner, 2015).

4. 4 Controlling for Bias

Wagner (2015) describes three kinds of biases assessment respondents often possess; prestige bias, self-deception bias, and acquiescence bias. In prestige bias, respondents answer questions in order to improve or augment their positionality (Wagner, 2015). In self-deception bias, respondents often answer the questions as who they aspire to be (Wagner, 2015). Lastly, in acquiescence bias, respondents reply in a manner which would ingratiate them to the assessment administrator (Wagner, 2015). In all of these cases, however, the respondent is presented as being dishonest. Honesty is an extremely subjective concept, so controlling for it is difficult even for the most skilled assessment designer. However, Dreachslin (2007) points out, "...we cannot manage the consequences of our implicit attitudes until they are revealed to us-that is, until we move them from implicit to explicit" (p. 82). Additionally, in the words of a popular aphorism, "We cannot force someone to hear a message they are not ready to receive. But we must

never underestimate the power of planting a seed". Although I cannot guarantee a respondent's honesty, I can at least try to plant the seeds which could grow into an epistemological change for the better. For that reason, this assessment is well worth the time and effort in spite of any bias a respondent might hold.

4.5 Online Software Platform

After the questions were formulated and organized with their respective "R", I sought out an online software platform which would allow me to create and house the assessment. For this purpose, I surveyed various online programs such as Qualtrics, SurveyMonkey, Typeform, Survey Sparrow, and Survey Anyplace. For this particular assessment, I needed a platform which was inexpensive, allowed for creative control, and possessed a user-oriented interface. After researching the above-mentioned companies, and when possible, speaking with their customer service teams, I decided on Survey Anyplace as it best suited the purposes of the assessment.

After signing up for Survey Anyplace's professional license, I was able to upload and import my questions directly from a Word document onto the Survey Anyplace design interface. From there, I assigned each question to one of the four response types previously mentioned. After the responses were assigned, I attached each question to one of the Four Rs using Survey Anyplace's question block feature. Question blocks are a feature which allow an assessment designer to organize and calculate a response according to a specific category. As such, I created four question blocks representing the Four Rs and assigned each assessment question to a block. This way, as the points for correct answers are tabulated for each question, they will also go towards a particular

score which will be displayed in the final results screen. Thus, the results page also includes how the respondent scored by displaying each of the four categories and their respective percentages. Additionally, the definition for each category is also included for the respondent's review after they have taken the assessment.

4.6 Ledger Art

It was important for this assessment to reflect Indigeneity from beginning to end.

Moreover, it was essential for the assessment to visually replicate the beauty of a diverse worldview. Thus, to accomplish this, I utilized ledger art to serve as the assessment's background. Ledger art is an Indigenous American artform which was created in the 1800s. It is often comprised of effulgent images drawn over timeworn American ledgers as a way to juxtapose the dynamics of Indigeneity with Western colonization. Low (2006) writes, "Cheyenne¹⁰ ledger art is at once autobiographic, historic, military, and spiritual; it is written, drawn, and oral. Such biographic and autobiographic books create a complex narrative map for the contemporary readers" (p. 96). Ledger art is therefore representative of this assessment in that it weaves together the old ways of Euro-American documentation with resplendent strokes of American Indigeneity.

The ledger artwork I have chosen is a print created by internationally recognized artist, Evans Flammond Sr. Flammond is of Sicangu Lakota heritage and has been creating art since the age of seven. The name of Flammond's print is *Ready for the Parade*, which depicts a vivid image of a warrior riding on his ornately decorated spotted stallion.

¹⁰ Although Low (2006) is referencing Cheyenne ledger art, the artform itself shares many of the features mentioned across Indigenous American nations.

I purchased this print through the Seven Council Fires Native Art online gallery and have only utilized it because I received permission directly from Mr. Flammond himself. This, after all, is my relational duty to him.

Although the assessment has not yet been piloted, there are links in Appendix A where it can be viewed. Additionally, I have included a few images of the assessment in Appendix D. The next section details how the Mitakuye Oyasin Assessment could be piloted as well as discuss a few limitations of the design.

CHAPTER 5

DISCUSSION

Research for social justice expands and improves the conditions for justice; it is an intellectual, cognitive and moral project, often fraught, never complete, but worthwhile.

-Linda Tuhiwai-Smith (2016)

5.1 Possibilities for Piloting the Assessment

At the writing of this paper, the Mitakuye Oyasin Assessment has not yet been piloted. Nevertheless, it would need to be piloted before it could be effectively and reliably administered. As such, if I were to pilot this assessment I would do so in seven cycles. In the first two cycles I would submit this assessment to my colleagues in an effort to ensure readability and question comprehension (Wagner, 2015). Once I'd received and corrected any feedback from my colleagues, I would submit it for their review a third time for increased reliability. If, after the third iteration more edits are suggested, I would attend to them accordingly. However, if my colleagues agree that the assessment is comprehensible, I would begin a second pilot to my target audience, undergraduate linguistic students.

To recruit students, I would request a call for undergraduate linguistic students at a local university. The sample size for the pilot would be relatively small (eight to ten students) and include diverse participants. The first two student pilot phases would function much like the pilots for my colleagues. The students would take the assessment and provide their feedback on question comprehension. The next two phases would include discussions on whether this assessment aided in illuminating a new epistemology or

worldview. If the majority responds, *yes*, the assessment would be ready for administration. If the majority responds, *no*, feedback would be accepted, and adjustments made accordingly. Once these phases have been completed, I would release the assessment for administration.

5.2 Administration of the Assessment

For now, the Mitakuye Oyasin Assessment is intended for a linguistics course that aspires to develop increased cultural awareness within their students. As such, students could take the assessment at the beginning of the semester in order to introduce the concept of diverse worldviews. This could also be enlightening to students who may discover that they are not as culturally aware as they may have believed. Students could then take the second version of the assessment at the end of the semester in order to see how they score and where they may have grown. Additionally, I would recommend that instructors schedule a discussion time after the assessment has been administered. This will give students a chance to ask questions in order to gain a better understanding of the concepts introduced in the assessment.

An instructor could also use this tool, and their students' subsequent results, to gauge the cultural competency of their class. If the students scored low at the beginning of the semester but produce higher scores at the end, it would indicate that the students' understanding of cultural awareness has grown. To reiterate, although this assessment is unable to control for honesty, once a seed has been planted who knows when it could bloom.

Additionally, the Mitakuye Oyasin Assessment could be repurposed and utilized in Indigenous communities who are interested in obtaining the assistance of a linguist who might be non-Indigenous or not from within the community. For this purpose, the assessment could assist an Indigenous community in evaluating a prospective linguist's cultural proficiency. Moreover, this tool could be utilized and adapted for other academic disciplines that desire to be more culturally competent, especially concerning partnerships with Indigenous communities.

A final use for this assessment, is as part of an entire curriculum model created to introduce students to Indigenous worldviews thereby preparing them to work with diverse communities. This assessment could be a component within an entire academic unit which is designed to better equip students with the tools needed to foster healthy culturally aware academic partnerships. Thus, as can be observed, the Mitakuye Oyasin Assessment has the potential to serve many purposes.

5.3 Limitations and Findings

Perhaps the most obvious limitation is that this assessment has not been piloted. For this reason, proving the efficacy of the Mitakuye Oyasin Assessment is not possible at this time. However, while the paradigm shifting effectiveness of this assessment cannot yet be quantified, what this study proves is the ability to create a tool which is imbued with Indigenous epistemologies for the purpose of unseating colonial paradigms. Additionally, this study exhibited an applied Indigenous methodology through the use of Walker's (2001) Medicine Wheel paradigm.

CHAPTER 6

CONCLUSION

Language is a primary concern in preserving Indigenous philosophies, and it is something that must be thought through within research epistemologies.

- Margaret Kovach (2009)

6.1 Summary and Conclusion

While it is commendable that the reclamation of Indigenous languages has taken center stage globally, the focus on language reclamation has long been a concern within Indigenous communities. Additionally, while the academy has been steadfast in their support of language reclamation, the Eurocentric paradigms embedded within academic research approaches have been harmful. Leonard (2019d) writes:

Outcomes of the 2019 International Year of Indigenous Languages remain to be seen, but the focus in Linguistics on leveraging the International Year toward research on Indigenous languages, rather than addressing the structures that contribute to language "disappearance" (a term also used by the United Nations), is revealing.

Thus, it is not enough to sound the alarm, because a systematic and paradigmatic change of heart is also needed – especially at the institutional level. To that end, this study explored the paradigms of positivism and Indigenous research, concluding the latter as the best option to utilize in Indigenous spaces. For this reason, a paradigm shift was proposed as a solution. Additionally, although Eurocentric research paradigms are overtly racist to some, many within the academy may not realize or even acknowledge their

harmful proclivities. This causes colonial ideologies to be propagated through academic pedagogies and eventually academic research approaches. Therefore, change is needed on many levels within the academy; especially if the goal is for healthier and improved intercultural partnerships. Subsequently, a self-assessment constructed from the best interests of Indigenous peoples by Indigenous peoples was created for linguistic students. Under the umbrella of Walker's (2001) Medicine Wheel paradigm, the Mitakuye Oyasin Assessment was constructed using Kirkness and Barnhardt's (1991) Four Rs and relationally legitimated through Hanohano's (2001) encircle theory. Additionally, I attempted to permeate the principles of Indigeneity throughout the entire scope of this process by building from the intellectual reserves of Indigenous scholarship. By doing this, I was not only able to answer the questions which guided my study, but also demonstrate the dexterity of an applied Indigenous paradigm and methodology. It is my hope, then, that by creating the Mitakuye Oyasin Assessment, we begin the process of better preparing linguistic students for the rigors, challenges, and best of all joys of collaboration with our Indigenous brethren. For as much as we are all citizens of this exquisitely diverse world, we must never forget that we truly *are* all related.

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APPENDIX A

MITAKUYE OYASIN ASSESSMENT LINKS

[Consult Attached Files]

Assessment Links:

Assessment A: https://s.surveyanyplace.com/s/mitakuyaoyasintesta

https://su.vc/mitakuyaoyasintesta



Assessment B: https://s.surveyanyplace.com/s/mitakuyeoyasintestb

https://su.vc/mitakuyeoyasintestb



APPENDIX B

MITAKUYE OYASIN ASSESSMENT QUESTIONS

Respect-

a linguist must be willing to respect the culture and beliefs of the community with whom they are partnered. A linguist must also respect each Indigenous nation by acknowledging that a shared history under the regime of colonization does not equate to a pan-Indigenous identity for all Indigenous peoples. Each Indigenous nation is complex in their own right, politically, culturally, and linguistically.

Resist-

a linguist must put forth a concerted effort to resist the colonial paradigms which pervade Western ways of knowing. This means putting the linguist's own beliefs aside (except those regarding safety) in order to understand the community's perspectives and or epistemologies.

Responsibility-

a linguist must act with the highest modicum of integrity by remaining responsible to the appropriate entities within an Indigenous community. A linguist must also make a concerted effort to avoid approaches, procedures, and practices which could reinforce undesirable stereotypes of Indigenous peoples and or their communities.

Reciprocity-

a linguist must continually make decisions which allow for reciprocity to take place during the research process which includes but is not limited to the protection, independence, growth and development of an Indigenous community.

You have been collaborating with Nataani on language documentation and he references a creation story which illustrates a key concept within the project. You... **A.** Dismiss this story because spiritual knowledge is not objective and therefore not scientific.

You have scheduled a meeting at the tribal community center for 8:00 am, however, community members arrive from 8:30-9:30. How do you respond?

A. Educate the group about the importance of being on time.

B. Reiterate the

correct time.

When the International Review Board approves your research project, you should also seek to receive consent on a/an...

- A. Individual level.
- **B**. Group level.
- C. Tribal level.
- **D**. All of the above.

Pearl describes an Indigenous epistemology that aligns with the research topic you've been collaborating on. You decide to use Pearl's concept in the project. You... **A**. If appropriate, give Pearl coauthorship. **B.** Thank Pearl in the acknowledgements.

 B. Find a way to incorporate the story in your research. C. Ask Nataani if you can include the story in your project. D. Both B and C. 	C. Adapt the schedule.D. All of the above.		C. Thank Pearl by giving her an appropriate token, monetary or otherwise, of appreciation. D. All of the above.
Pearl recommends using Indigenous songs to aid in language reclamation efforts, however, a recent research article by a prominent non-Indigenous linguistics scholar refutes the use of music as a language acquisition tool. How important is it for you to consider Pearl's recommendation? SCALE Very Important. Somewhat Important. Not Important. Not Relevant.	When working with an Indigenous community on language reclamation who is the expert on the language? A. The linguist who has done extensive research on the language. B. A native speaker on the language who has no formal linguistics training. C. Both the linguist and the native speaker. D. Neither, no one can be a language expert.	How important is it to agree upon an appropriately accessible place, digital or otherwise, to store completed data or research? SCALE Very Important. Somewhat Important. Not Important. Not Relevant.	Indigenous people and their communities do not have ownership rights over cultural and intellectual property utilized or related to the research project. A. True. B. False.
It is important to consider power dynamics when collaborating with Indigenous communities such as those associated with race, tribal identity, sexual identity, gender, age, or class? A. True.	The researcher alone is capable of determining the scope of the research project with little to no input from the community SCALE Always. Occasionally. Rarely.	How important is it to give the community time to react and respond to the research findings before the completion of the final report? SCALE Very Important. Somewhat Important.	Who sets the standards for data collection, analysis, and discoveries within a research project? A. The researcher. B. The researcher and the academy. C. The researcher and the community. D. All of the above.

B. False.	Never.	Not Important.	
		Not Relevant.	
How important is a researcher's own self-awareness of their beliefs, attitudes, and behaviors to a research project with an Indigenous community? SCALE Very Important. Somewhat Important. Not Important. Not Relevant.	Which form of historical knowledge has more value, written or oral? A. Written. B. Oral. C. Both A and B. D. Neither have any inherent value.	How important is it for research to be designed for the purpose of ensuring that participants won't be compromised by the research aims, methodology, or results? SCALE Very Important. Somewhat Important. Not Important. Not Relevant.	Ensuring reciprocal arrangements are discussed during the design phase of the project is something that is necessary SCALE Always. Occasionally. Rarely. Never.
You have been invited to a sacred ceremony; however, you have been feeling unwell. How important is it that you communicate your condition to the host? SCALE Very important. Somewhat important. Not important. Not relevant.	It is okay to encourage Indigenous participants to adapt their knowledge to Western ways of knowing SCALE Always. Occasionally. Rarely. Never.	How important is it to provide all relevant information to the participants prior to seeking their consent? SCALE Very Important. Somewhat Important. Not Important. Not Relevant.	Benefits derived from the research should sometimes be distributed in favor of the community. A. True. B. False
You are given the opportunity of participating in a ceremony normally reserved for community members. During the ceremony you	You have spent years studying a particular Indigenous community and culture while in school and now you have been invited to	Researchers should acquire proper cultural competence prior to beginning their work with an Indigenous community	In mutually beneficial research relationships, the benefits should be A. Tangible. B. Intangible.

witness something that will help to support your research. Do you A. Use the information as it does not break any copyright laws. B. Ask the community's permission before using the information. C. Use the information and let the community know. D. Choose not to include the information in your research.	collaborate with them on their language reclamation efforts. How important is it for you to hire a cultural liaison? SCALE A. Very Important. B. Somewhat Important. C. Not Important. D. Not Relevant.	SCALE Always. Occasionally. Rarely. Never.	C. Both A and B. D. None of the above.
How important is it to treat a community as a collective group? SCALE Very Important. Somewhat Important. Not Important. Not Relevant.	A prestigious publication wants to interview you and Nataani about the language reclamation project you've been collaborating on, however, the interviewer only directs their questions to you. Do you A. Speak on behalf of both you and Nataani. B. Ask that the interviewer question both parties. C. Leave the interview altogether.	You have been awarded a generous grant to work with an Indigenous community, however, you realize you are not able to accomplish the goals spelled out in the grant. What should you do? A. Proceed anyway. B. Inform the appropriate entities before proceeding. C. Adjust the goals and explain later. D. Both A and C.	You have been given a generous grant to partner with an Indigenous community, but part of the grant requires you to hire a team of experts to aid in the completion of the project. Do you A. Hire your colleagues because you know them to be capable of fulfilling the roles in the project. B. Hire equal members of your colleagues and members of the community.

	D. Ask for a new interviewer.		C. Hire only members of the community. D. Hire members of the community first and then hire colleagues for roles which were not filled.
Who determines which research findings are valid and reliable? A. The researcher. B. The researcher and the university. C. The researcher and the community. D. All of the above.	The community often speaks their language in your presence, and you worry that they might be talking about you. To encourage cordiality, you should politely request that they try to speak more in English so everyone can understand. A. True. B. False.	Cultural appropriation and inappropriate use of cultural practices can be caused by A. Assuming ownership of shared knowledge. B. Not consulting with the appropriate community efficiently. C. Cultural appropriation does not exist D. Both A and B	You have gotten wind that the community is interested in hiring a programmer to help with the creation of a language app, and you happen to have an undergraduate degree in programming. You A. Offer to program the app for the community. B. Offer to teach the community how to program. C. Both A and B. D. Focus solely on your project.

When should a linguist work with an Indigenous community A. When they've been invited to work with the community. B. When the linguist perceives a need for professional linguistic assistance in an Indigenous community. C. When the linguist has built a relationship with the community. D. Both A and C.	Pearl's mother has a dream that she would like to share in order to help further your research project. Do you A. Listen to the dream to see if it can help your project. B. Listen to the dream solely as a matter of respect. C. Dismiss the dream because dreams cannot be utilized in scientific research. D. Dismiss the dream out of respect because you are not a community member and are ill equipped to understand its significance.	A key participant has decided to drop out of the research project, however, if they leave a significant part of your research will have to be reconfigured to their exclusion. You should encourage them to stay in the project in the interest of saving time and or money. A. True. B. False.	You should take on an Indigenous mentee during the scope of your project SCALE Always. Occasionally. Rarely. Never.
You meet a new community member named Dah'te'ste'; however, her name is difficult for you to pronounce. You A. Politely offer to give her an English sounding name. B. Ask if you can give her a nickname like "Dee". C. Learn how to say her name correctly.	You are asked to partner with a community that has worked with a particular team of linguists for 15 years. You immediately feel like the team of linguists are taking advantage of the community. Do you A. Expose the team of linguists' misdeeds to the community.	You have been asked to work with an Indigenous community on their language reclamation because of your stellar academic qualifications. However, after working with the community you find that they are already extremely capable of completing their project. You	On a walk you come across community members who are attempting to plant a community garden. You have quite a bit of horticultural expertise. You A. Offer to start a garden for the community. B. Offer to teach the community some of the tricks

D. Choose to avoid	B . Do nothing.	A. Stay with the	and trades you have
her rather than	C. Work towards	community until	learned.
offend her because	building a	the project has been	C. Both A and B.
her name is too	relationship with	completed.	D. Focus
difficult to	both the linguists	B . Resign from the	solely on
pronounce.	and the community	project.	your
	in order to better	C. Further discuss	research
	understand the	your role and be	project.
	dynamics.	prepared to adjust it	
	D . Help change the	as needed.	
	way the team of	D. Revamp the	
	linguists work with	project so that you	
	the community.	can be included in	
		the process.	

APPENDIX C STANDARDS

Good practices listed by the Canadian Tri-Policy Council:

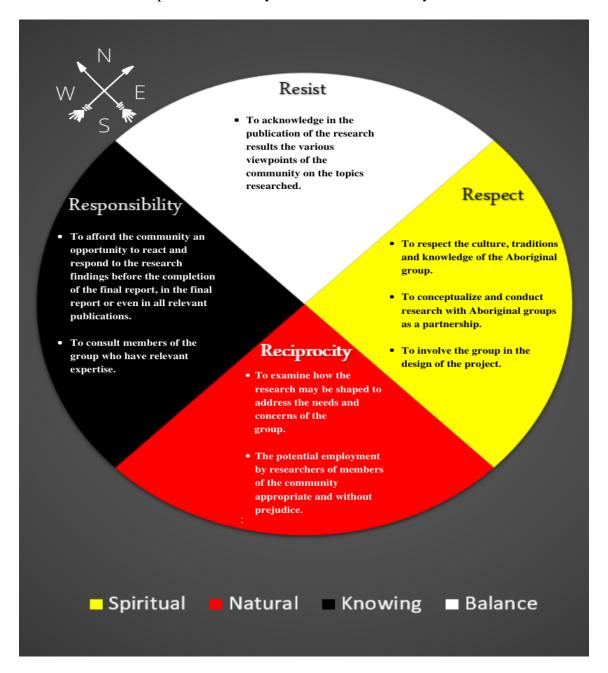


Figure 4 Good Practices as described by the Canadian Tri Policy Council Canadian Tri-Council Policy, as cited in Czaykowska-Higgins, 2009, p. 28 on Walker's (2001) Medicine Wheel.

Good Practices listed by the Canadian Tri-Policy Council continued:

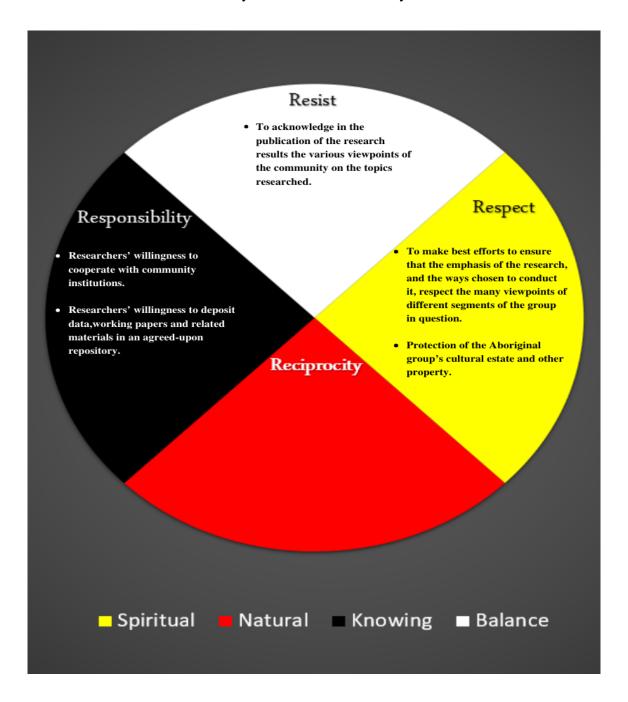


Figure 5 Good Practices as described by the Canadian Tri Policy Council Canadian Tri-Council Policy, as cited in Czaykowska-Higgins, 2009, p. 28 on Walker's (2001) Medicine Wheel.

Good Practices text only:

- 1. To respect the culture, traditions and knowledge of the Aboriginal group
- 2. To conceptualize and conduct research with Aboriginal groups as a partnership;
- 3. To consult members of the group who have relevant expertise;
- 4. To involve the group in the design of the project;
- 5. To examine how the research may be shaped to address the needs and concerns of the group;
- 6. To make best efforts to ensure that the emphasis of the research, and the ways chosen to conduct it, respect the many viewpoints of different segments of the group in question;
- 7. To provide the group with information respecting the following:
 - Protection of the Aboriginal group's cultural estate and other property;
 - The availability of a preliminary report for comment;
 - The potential employment by researchers of members of the community appropriate and without prejudice;
 - Researchers' willingness to cooperate with community institutions;
 - Researchers' willingness to deposit data, working papers and related materials in an agreed-upon repository;
- 8. To acknowledge in the publication of the research results the various viewpoints of the community on the topics researched; and
- 9. To afford the community an opportunity to react and respond to the research findings before the completion of the final report, in the final report or even in all relevant publications.

Six Values for Ethical Conduct in Aboriginal and Torres Strait Islander Research:

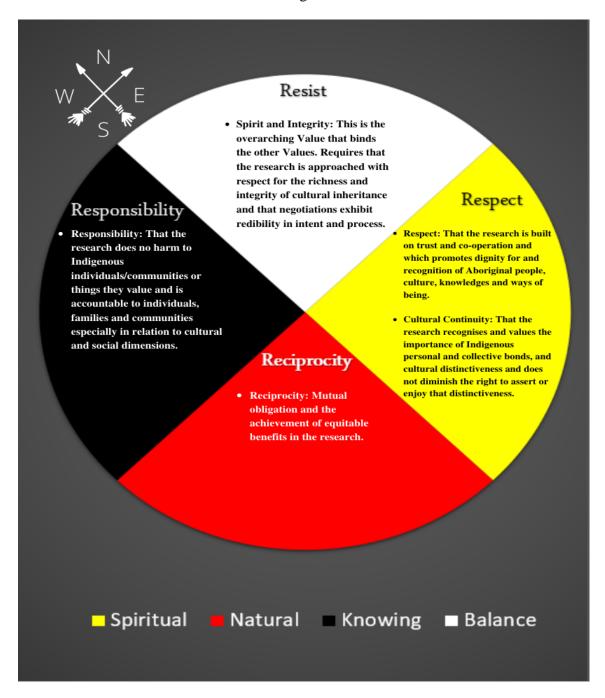


Figure 6 Six Values for Ethical Conduct in Aboriginal and Torres Strait Islander Research on Walker's (2001) Medicine Wheel. Retrieved from https://www.utas.edu.au/__data/assets/pdf_file/0015/1011345/Guidance-for-the-Six-Values-Table.pdf

Six Values for Ethical Conduct in Aboriginal and Torres Strait Islander Research continued:

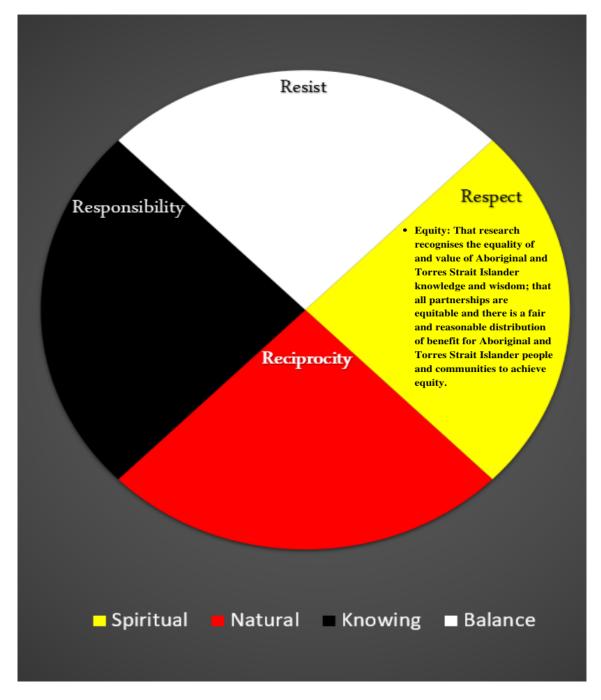


Figure 7 Six Values for Ethical Conduct in Aboriginal and Torres Strait Islander Research on Walker's (2001) Medicine Wheel. Retrieved from https://www.utas.edu.au/_data/assets/pdf_file/0015/1011345/Guidance-for-the-Six-Values-Table.pdf

Six Values for Ethical Conduct in Aboriginal and Torres Strait Islander Research text only:

- 1. Spirit and Integrity: This is the overarching Value that binds the other Values. Requires that the research is approached with respect for the richness and integrity of cultural inheritance and that negotiations exhibit credibility in intent and process.
- 2. Reciprocity: Reciprocity is about mutual obligation and the achievement of equitable benefits in the research.
- 3. Respect: That the research is built on trust and co-operation and which promotes dignity for and recognition of Aboriginal people, culture, knowledges and ways of being.
- 4. Equity: That research recognises the equality of and value of Aboriginal and Torres

 Strait Islander knowledge and wisdom; that all partnerships are equitable and there is a

 fair and reasonable distribution of benefit for Aboriginal and Torres Strait Islander people
 and communities to achieve equity.
- 5. Responsibility: That the research does no harm to Indigenous individuals/communities or things they value and is accountable to individuals, families and communities especially in relation to cultural and social dimensions.
- 6. Cultural Continuity: That the research recognises and values the importance of Indigenous personal and collective bonds, and cultural distinctiveness and does not diminish the right to assert or enjoy that distinctiveness.

Research Protection Act Guiding Principles only:

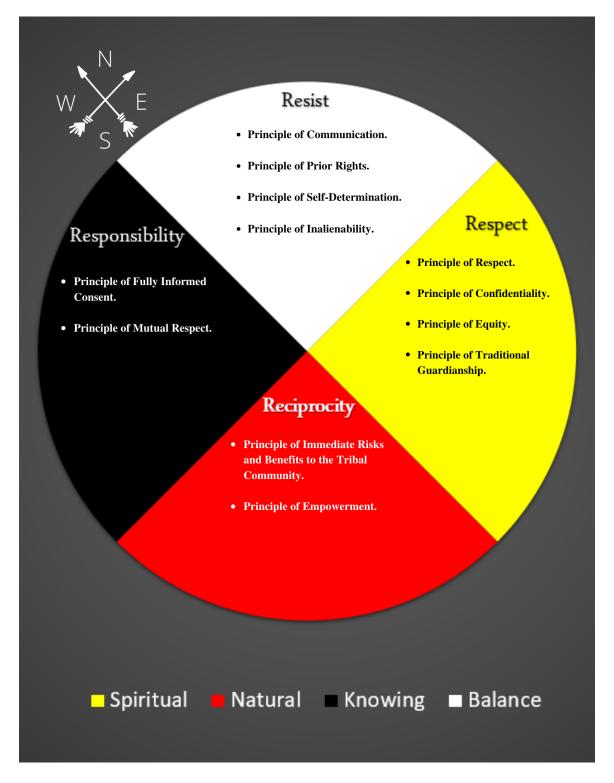


Figure 8 Research Protection Act Guiding Principles on Walker's (2001) Medicine Wheel. Retrieved from http://www.ipcb.org/publications/policy/files/irpa.html

Research Protection Act Guiding Principles fully elaborated text only:

The RRC, in examining proposals, shall be guided by the following principlesa. Principle of Fully Informed Consent After Full Disclosure and Consultation

Research should not be conducted until there has been full consultation with all

potentially affected Tribal communities and individuals, and each such community and individual has approved the research after full disclosure. Full disclosure is of: the full range of potential benefits and harms of the research, all relevant affiliations of the person(s) or organization(s) seeking to undertake the research, and all sponsors of the researcher(s).

b. Principle of Immediate Risks and Benefits to the Tribal Community

The research should be of immediate benefit to the Tribal community, and the risks associated with the research should be less significant than the benefits to be gained.

c. Principle of Confidentiality

This principle recognizes that the Tribe and local communities, at their sole discretion, have the right to exclude from publication and/or to have kept confidential any information concerning their culture, traditions, mythologies, or spiritual beliefs.

Furthermore, researchers and other potential users shall guarantee such confidentiality.

d. Principle of Respect

This principle recognizes the necessity for researchers to respect the integrity, morality, and spirituality of the culture, traditions, and relationships of Tribal members with the world, and to avoid the imposition of external conceptions and standards.

e. Principle of Communication

This principle recognizes that communications should be carried out in the local language, using translators as necessary.

f. Principle of Empowerment

This principle recognizes that empowerment is the sharing of power and is premised on mutual respect. Empowerment means that each affected party feels that their needs are being met through a fair and equitable manner. Empowerment also means that research authorship must be shared between the Tribal community and the researcher.

g. Principle of Equity

This principle recognizes that equity is a sharing of resources. Both the researchers and the Tribe must bring equity to any research contract, agreement or understanding. Each of the participants in a good research agreement must evaluate such equity in relation to the research. Finance or money is only one form of equity. Community knowledge, networks, personnel and political or social power are other forms of equity useful to the project. Each of these commodities has value and must be shared between the researchers and the Tribe if a good agreement is to be formulated. The parties must continuously review equity over the duration of a research agreement.

h. Principle of Mutual Respect

This principle recognizes that in order to develop a good research agreement, the researchers and the Tribe must generate respect for each other. Respect is generated by understanding the social, political and cultural structures of the other party. The

researchers and the Tribes can not assume that they believe in the same things or share the same goals and expectations. Good communication is required if a proper research agreement is to be generated. Cultural sensitivity training for the researchers and Tribal awareness presentations will help develop a mutual understanding in conducting the research project. Definitions and assumptions must be clarified and questioned by each side and set forth in an agreement. The Tribes and the researchers must listen to each other with open minds.

i. Principle of Prior Rights

This principle recognizes that indigenous peoples, traditional societies, and local communities have prior, proprietary rights and interests over all air, land, and waterways, and the natural resources within them that these peoples have traditionally inhabited or used, together with all knowledge and intellectual property and traditional resource rights associated with such resources and their use.

j. Principle of Self-Determination

This principle recognizes that indigenous peoples, traditional societies and local communities have a right to self-determination and that researchers and associated organizations will acknowledge and respect such rights in their dealings with these peoples and their communities.

k. Principle of Inalienability

This principle recognizes the inalienable rights of indigenous peoples in relation to their traditional territories and the natural resources within them and associated traditional

knowledge. These rights are collective by nature but can include individual rights. It shall be for indigenous peoples to determine for themselves the nature and scope of their resource rights regimes.

1. Principle of Traditional Guardianship

This principle recognizes the holistic interconnectedness of humanity with the ecosystems of our Sacred Earth and the obligation and responsibility of indigenous peoples to preserve and maintain their role as traditional guardians of these ecosystems through the maintenance of their cultures, mythologies, spiritual beliefs and customary practices.

APPENDIX D

MITAKUYE OYASIN ASSESSMENT IMAGES

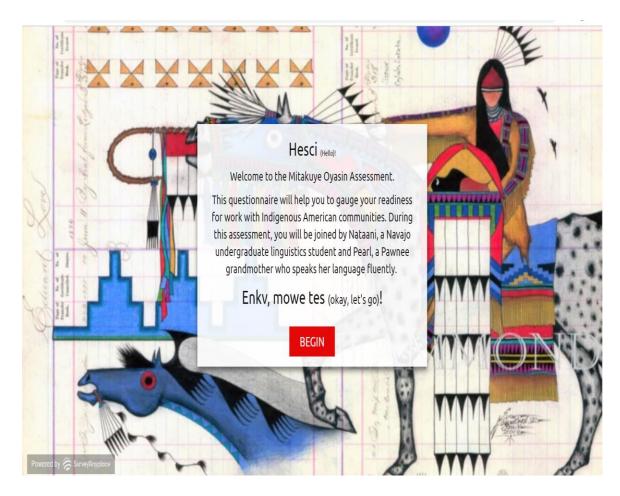


Figure 9 Image of Mitakuye Oyasin Assessment welcome page.

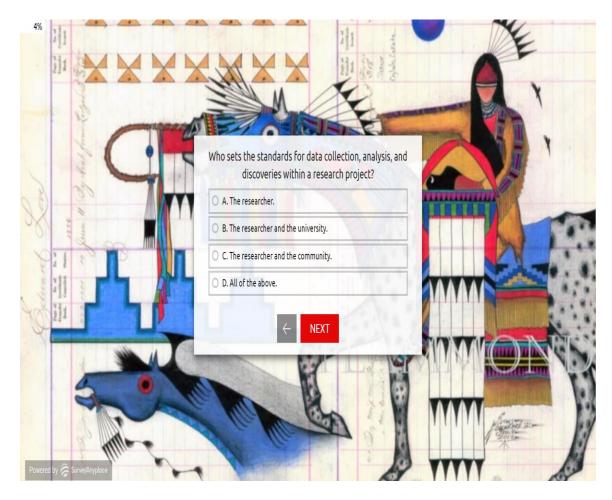


Figure 10 Image of Mitakuye Oyasin Assessment question.



Figure 11 Image of Mitakuye Oyasin displaying Evans Flammond Sr.'s piece "Ready for the Parade".



Figure 12 Image of Mitakuye Oyasin final results page.