SITUATING VINE DELORIA, JR.'S PHILOSOPHY OF SCIENCE

by

JOEL MAX SOUTHALL

A THESIS

Presented to the Department of Philosophy
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Master of Arts

June 2015

THESIS APPROVAL PAGE

Student: Joel Max Southall

Title: Situating Vine Deloria, Jr.'s Philosophy of Science

This thesis has been accepted and approved in partial fulfillment of the requirements for the Master of Arts degree in the Department of Philosophy by:

Dr. Scott L. Pratt	Chairperson
Dr. Mark Johnson	Member

and

Scott L. Pratt	Dean of the Graduate School

Original approval signatures are on file with the University of Oregon Graduate School.

Degree awarded June 2015

THESIS ABSTRACT

Joel Max Southall

Master of Arts

Department of Philosophy

June 2015

Title: Situating Vine Deloria, Jr.'s Philosophy of Science

This thesis provides a view of Deloria's thoughts on science and metaphysics, presenting his criticism of Western science and of his proposed alternative to what he presents as a historically evidenced epistemic attitude of exclusion. Deloria refers to Thomas Kuhn and Paul Feyerabend, suggesting that the institution of Western science operates according to a paradigm that is both very different from that of traditional Indigenous knowledge practice and fundamentally exclusionary. A potential of communication between Western science and Indigenous knowledge is possible through paradigm shifts as well as through reference to epistemic anarchy. My presentation of Deloria's description of Indigenous metaphysics includes an account of an agential ontology and place-grounded epistemology with reference to Daniel R. Wildcat, Baruch Spinoza, Scott L. Pratt, and others. Ultimately, Deloria breaks with Feyerabend's epistemological anarchy in light of our contemporary environmental predicament and advocates a more restrained, relational epistemology.

CURRICULUM VITAE

NAME OF AUTHOR: Joel Max Southall

GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon, Eugene
Oregon State University, Corvallis

DEGREES AWARDED:

Master of Arts, Philosophy, 2015, University of Oregon
Honors Bachelor of Arts, Philosophy, 2011, Oregon State University
Peace Studies Certificate, Philosophy, 2011, Oregon State University

AREA OF SPECIAL INTEREST:

Philosophy of Science, Environmental Philosophy, Critical Race Theory, Peace Studies, Alternative Pedagogy

PROFESSIONAL EXPERIENCE:

Teaching assistant, Department of Philosophy, University of Oregon, Eugene 2014-2015

GRANTS, AWARDS, AND HONORS:

Graduate Teaching Fellowship, Philosophy, 2014-2015

TABLE OF CONTENTS

CHAPTER I

INTRODUCTION

Why Deloria?

There are two ways of relating to knowledge and existence: antagonism and harmony. Western civilization has long operated according to the former and neglected the latter, going so far at times as to claim sole access to the possibility of absolute knowledge. Fundamental alienation and a pernicious attitude toward the surrounding world informed Western culture's progression from antiquity to the birth of science, capitalism, the subjugation of the rest of the world and our contemporary environmental disaster.

In light of post-Kuhnian criticisms of science, many philosophers of science have begun to realize the limits of universal concepts and unbridled exercise of power. And there are some in these ranks skeptical toward old epistemic attitudes of certainty and exclusion who do not advocate a wholesale rejection of science, but rather advocate for a reform and strengthening. Vine Deloria Jr., I suggest, despite his at times polemic approach, is such a voice. It the intent of this thesis, then, to present Deloria's critique of Western science and examine the alternatives he presents to this epistemic attitude of exclusion.

Following this, the central question is what Deloria's recommendation for an amended scientific practice might be, given that Deloria criticizes what he sees as Western science's problematic epistemic attitude. Although he allies himself with Paul Feyerabend, I argue that he has his own vision of what science should be – one founded on an Indigenous view of spatiality and the ethical importance of relationality.

It is only through this fundamental reformation of our contemporary metaphysical understanding that, in Deloria's view, we can effectively deal with our emerging, arguably pre-apocalyptic, planetary situation in the face of an increasingly interconnected world and the quickening pace of technology that render older Western patterns of interpreting data obsolete.

This project of reformation is informed by and vitally important to what we might identify as Deloria's Indigenous epistemology and his critique of what he often refers to as Western science.

Daniel Wildcat, Professor at Haskell Indian Nations University, characterizes this project as one of "indigenizing the future." Indigenizing, as Wildcat describes it, is "a set of practices that results in processes in which people seriously reexamine and adopt those particular and unique cultures that emerged from the places they choose to live today" (Wildcat, 2005, 419). In line with this, Deloria believes that indigenous epistemology and way of life represent a more embodied, adapted existence in our contemporary world.

Ultimately, Deloria argues for a knowledge-practice grounded in place and informed by an extensive account of agency beyond human persons.

With these points in mind, the intent of this paper is to present Deloria's criticisms of Western science and to ultimately reach a conclusion on the viability of Deloria's proposal for a reformed science.

Towards these ends, I will consider Deloria's conception of "science" and its critique in his major works including: *God is Red: A Native View of Religion* (1994), *The Metaphysics of Modern Existence* (1979), *Red Earth, White Lies: Native Americans and the Myth of Scientific Fact* (1995), *Spirit and Reason: The Vine Deloria, Jr., Reader*

(1999), *Evolution, and Creationism, and Other Modern Myths* (2002), and the jointly authored work with Daniel Wildcat, *Power and Place* (2001). In addition to these larger works, I will also be drawing from Deloria's article, "Civilization and Isolation," to create a larger, more accurate picture of his views on distinctly maladaptive Western ways of thinking.

Beyond Deloria's works, I will also use various works from Daniel Wildcat, Scott L. Pratt, Paul Feyerabend, along with several others to clarify and explain Deloria's views.

Finally, it would seem important to note that my intention is not to address the veracity of Deloria's particular and often seemingly fantastical claims, such as those found in his discussion of evolution's lack of true empirical credibility, Velakovsky's version of catastrophism, the sighting of dinosaurs by particular tribes within the past few hundred years, and others. Rather, my intention is to identify his epistemological stance and vision of fostering a localized indigenous epistemology.

Taking Non-Western Criticisms Seriously

Before we begin on this project, it would seem prudent to discuss the importance of taking criticisms of Western science from a non-Western perspective seriously.

To start with, it is important to note that Deloria's discussion of Western science at times appears as a caricature of what scientific practice actually is about and how it works. At times, Deloria seems to treat science in two different, perhaps contradictory ways. In some places he makes a case for compatibility between Western science, thus indicating that science has value, and that Indigenous knowledge-practice understood via

the field of ethnoscience is compatible with it. At other places, he seems to target science for what he suggests is a tendency toward authoritarianism, exclusion, ossification and excessive abstraction, even to the point of making a caricature of science. In this case indigenous knowledge practice is offered as a better alternative.

Of course, it seems clear that most scientists, while they may be interested in making universal claims in the context of their work, recognize that universal claims are fallible. Science, according to Karl Popper, is a search for truth, but "is not the search for certainty . . . [as] . . . all human knowledge is fallible as therefore uncertain" (Popper, 2000, 4). This corroborates Dewey's definition of scientific practice as relishing doubt even while exemplifying a logic that seeks clarification of natural laws and epistemic expectation. As Matthew J. Brown states, concerning Dewey's view on the scientific spirit of inquiry, "the scientific attitude may almost be defined as that which is capable of enjoying the doubtful; scientific method is, in one aspect, a technique for making productive use of doubt by converting it into operations of definite inquiry" (Brown 279). In this sense, science doesn't look for certainty, but rather, it looks for conditions of uncertainty so as to solve problems, thus ostensibly precluding ossification and dogma.

Reflecting on Dewey and Popper's definition of science as something other than a simple quest for certainty, one might suggest that Deloria overstates his case against Western science. With this criticism of Deloria in mind, then, we might wonder as to the use of reading Deloria. If he fallaciously presents such an inaccurate caricature of actual scientific practice, why isn't he suited for the dustbin of eccentric, mistaken ideas?

In response to this, we might draw attention to the marginalization of non-Western viewpoints, as discussed extensively by decolonial thinkers and feminist thinkers, cited

by Sandra Harding in her work, *Sciences From Below*, who also cite a historic marginalization of women in Western knowledge-practice. With this historical marginalization in mind, it seems perverse to dismiss outright a member of a historically oppressed non-Western community, rather than exploring potentially valuable insights their standpoint may provide.

This point is argued by feminist standpoint theorists such as Sandra Harding, Donna Haraway, Nancy Hartsock, Dorthy Smith and others. Their specific claim that I refer to here is that certain socio-political positions occupied by oppressed groups might afford perspectives that are epistemically advantaged and could serve as important and useful starting points for inquiry. As Sandra Harding states, "starting off research from the lives of people in groups that are absent from the design and management of the institutions which administer everyone's lives has both scientific/epistemic and political consequences" (Harding, 2008, 121-122). These consequences, she argues, allow for less distorted accounts of the actual contents of experience for both the oppressed groups and the groups that oppress.

Delorian Scholarship

Beyond analyzing the necessity of a non-Western criticisms, it would be wise to note some of the existing academic discourse, though scant, surrounding Deloria's views on science.[1]

---

1 There is small but diverse secondary literature on the work of Deloria. The literature I will engage in this thesis is focused on Deloria and science. Other literature includes in anthology, theology, and American Indian law.

Though I encountered some discussion of Deloria's relation to anthropology in the works I used, I chose not to highlight this discussion. Accordingly, there are various articles and books written from that field that engage with Deloria or mention him briefly. Some of these are as follows:

Raymond J. DeMallie's 2006 American Anthropologist article, "Vine Deloria Jr. (1933-2005)";

One review that stands out as a good example of what Deloria criticizes is H. David Brumble's *American Literary History* review, "Vine Deloria, Jr., Creationism, and Ethnic Psuedoscience," wherein he makes the point that not only is Deloria ungenerous with science, but that he is fundamentally anti-realist and practices a sort of "affirmative action science" akin to that of "melanin scholars" and creationists. Melanin scholars, as Brumble describes them, are Afrocentric thinkers who seek to "provide pseudoscientific underpinnings for an Afrocentric creation myth" via the claim that melanin "has remarkable powers" such that African Americans are more physically and intellectually capable than other groups (Brumble, 1998, 338).

Brumble's article is a critical, and, I suggest, unfair, review of Deloria's 1995 work, *Red Earth, White Lies: Native Americans and the Myth of Scientific Fact.* Brumble's account is fundamentally flawed – it hastily generalizes Deloria as an antirationalist who can be grouped with creationists and "melanin" scholars. In doing so, Brumble misses Deloria's central points that this thesis seeks to address. Western culture has often been dismissive of Indigenous culture and its ability to do inquiry. Another

---

Indians and Anthropologist: Vine Deloria, Jr., and the Critique of Anthropology edited by Thomas Biolsi and Laddy J. Zimmerman in 1997; *Destroying Dogma: Vine Deloria, Jr. and His Influence on American Society* edited by Steve Pavlik, Daniel R. Wildcat.

My exploration of Deloria as a theologian is scant, though I do reference *God Is Red* and discuss his reference to religion in *Spirit & Reason*. Some interesting further study in this might be found in his last book, *The World We Used to Live In*, finished a few days after his passing on November 13, 2005 and published posthumously. This work "presents personal experiences and historical accounts of medicine men and their extraordinary and inexplicable range of powers . . . [and uses extensive] . . . quotes . . . [that] . . . function as evidence of the existence, diversity, and veracity of American Indian medicine men." This account, one might suggest, represents a valuable account of Native American spirituality, as it organizes a collection of stories from a variety of ethnographic sources with the addition of Deloria's explanation (Norcini, 2008, 110-112).

Additionally, this work does not address Deloria's extensive work in the legal realm, which is important, as Deloria extensively addresses legal struggles for Native American treaty rights in such works as *Aggressions of Civilization*; *American Indian Policy In The Twentieth Century*; *American Indians, American Justice*; *Behind the Trail of Broken Treaties*; *A Better Day For Indians*; *A Brief History of the Federal Responsibility to the American Indian*; *The Indian Affair*; *The Nations Within*; *We Talk, You Listen*; and more.

point, perhaps most obviously suggested in the title of his book, is that both evolution and creationism are products of Western metaphysics and thus not the sole options available to thinkers. Brumble, in misunderstanding Deloria and reducing his views to essentially the same as creationists and melanin scholars, arguably demonstrates his own situatedness in the very epistemic attitude that Deloria criticizes. Brumble, in this respect, essentially commits the false dichotomy fallacy as he offers only two options – either you adopt a wholesale concurrence with the establishment or else you might as well consider yourself an affirmative action antirealist whose views are harmful to society.

A more favorable description of Deloria's views is offered by Robert Allan Warrior's chapter in *Tribal Secrets: Recovering American Indian Intellectual Traditions,* "Intellectual Sovereignty and the Struggle For An American Indian Future." In this piece, Warrior suggests that Deloria's stance is that of a post-tribal humanist who has much to offer the rest of American society in terms of an epistemology bounded in place. Warrior makes the point that Deloria does not simply advocate a return to tradition in the sense of going back pre-European contact existence, but rather argues that tradition must be both flexible and bounded by community. The truth, he suggests, is that with the changes of context in our contemporary situation, the American Indian tradition's strength lies in its adaptability. In this view, in that Deloria sees tradition in the Native American sense as reflective and open in a way Western epistemology is not, he allows for an opening of greater pluralistic possibility.

Additionally, Scott L. Pratt, in "Persons in Place: The Agent Ontology of Vine Deloria, Jr.", suggests that Deloria understands the conflict between European and Native cultures as a disagreement that is fundamentally philosophical. In particular, Pratt

examines the work jointly authored by Deloria and Daniel Wildcat, *Power and Place,* so as to identify what he calls Deloria's "agent ontology." This agent ontology, Pratt suggests, might be understood as an Indigenous version of vitalism, with important implications for how we ethically and epistemologically relate to a world made up of living entities.

Finally, Daniel Wildcat, in "Indigenizing the Future," expresses that Deloria's view points toward a complex integration operating "on several levels of experience and throughout what might be called different spheres of life, without reducing the world to materialist mechanisms." As Wildcat suggests, "Deloria's methodological approach was informed by what . . . [Wildcat calls] . . . a modest indigenous epistemological position: Knowledge resides in the construction of meaning found in the process of living in the world" (Wildcat, 2005, 420).

Wildcat suggests that, with reference to Michel Foucault, there exists an ontological fear at work in the history of Western civilization that has informed colonization as well as the practice of science. Fear of nature led to a "modern linkage between control and knowledge and, later, the identification of technique or science with control and therefore, the necessity for 'authorities'" (Wildcat, 2005, 422).

This linkage between control and knowledge is precisely Deloria and Feyerabend's point in criticizing Western science as orthodox practice. We might frame this as criticism of a certain epistemic attitude more than a wholesale rejection of science and its ability to offer an inquiry into clarification of normative constraints, that is, tentative physical laws and inductive expectations.

Reforming Western Metaphysics

Deloria sees tremendous, indispensable value in traditional Native American knowledge practices and cultures that are sharply divergent from Western practices. In his view, through an open communication with these indigenous knowledge traditions, humanity can adapt to its changing world context. The necessity of this project might be better conceived through attention to the ecological degradation facing humanity today.

Deloria identifies a fundamental emptiness that results from the ontology and epistemology that inform both the institution of science and public understanding of science – this, I believe, can be well identified with the scientism criticized by philosophers such as Paul Feyerabend. The Western epistemic attitude, Deloria argues, is so divorced from actual lived experience that it lacks the necessary traits of pluralism and community required to alleviate the aforementioned emptiness. Such traits, he argues, are necessary for the maturation necessary for continued growth and flourishing in what he identifies as a rapidly changing context of global interconnectedness and technological advancement. Additionally, he ties the Western epistemic attitude to a dark history of subjugation of non-Western peoples, informed by an evolutionary view of human cultures that has served to buttress that subjugation.

Thus, one can tie Deloria's epistemological persuasion to his ultimate goal of offering an integrated metaphysic that will enable humanity to confront the changing context that it has created through the Western project of science and in which it finds itself. In his view, a certain maturity is necessary and Deloria's life project, besides his goal of advancing the situation of his people in broader American culture and academia, was, in large part, to provide an answer to the real problems confronting humanity and

the world as a whole.

Overview

This work consists of five chapters. The first is an introduction. The second is an exposition of Deloria's criticism of the epistemic attitude that he suggests informs Western science in its more traditional, orthodox operation. His account of the play of this epistemic attitude, I suggest, is well understood with reference to Sandra Harding's terms, “exceptionalism” and “triumphalism”, and Richard Rorty's term, “universal-realism.” With these terms in mind, we are well suited to follow his account of the formation of Western science from its ancient Greek and Judeo-Christian metaphysical roots.

The third chapter is a discussion of Deloria's use of Kuhn's notion of paradigms, how we might situate Deloria in terms of the problem of demarcation, and why Deloria ultimately prefers Feyerabend's epistemological anarchy over Kuhn's account of normal science with occasional “revolutions” still situated in the institution of science. Through this examination we will have a clearer picture of potential avenues and limits to the sort of metaphysics Deloria and Wildcat propose as necessary for a continued planetary survival.

Chapter four is an explanation of Deloria's account of indigenous metaphysics, primarily using Pratt's suggestion that Deloria provides a conception of the kosmos as a vitalistic agent ontology and illustrating how this view informs an Indigenous epistemology that is both more open and holistically ethical.

Finally, Chapter five is a summation of the aforementioned ideas, exploring

Deloria's particular vision of sovereignty and suggesting that Deloria provides a compelling alternative to Feyerabend's epistemology of "anything goes." This alternative is explicated particularly through reference to Daniel Wildcat and what Wildcat calls "indigenous realism."

CHAPTER II

ORTHODOX SCIENCE

As suggested in the introduction, Deloria offers useful insights into a certain epistemic attitude informing the treatment of non-Western knowledge claims, though his analysis of scientific practice is somewhat uncharitable. In the previous chapter, I suggested that Brumble's analysis of Deloria's work, *Red Earth, White Lies*, misses a few key factors in Deloria's project as well as the history of Western epistemology generally.

Deloria offers a description of the development of Western science, tracing its epistemology back to Greek metaphysics on one hand and Judeo-Christian world-denial and anthropocentrism on the other. Along these lines, Deloria points out an epistemic attitude that is exclusionary and treats non-Western knowledge claims and practices as indicative of an earlier stage of cultural evolution and thus less viable than the hallmark knowledge practice of Western science.

A useful way of understanding this theme is offered by Sandra Harding in *Science From Below* through her terms, "exceptionalism" and "triumphalism." My thought is that Deloria's criticism of a certain epistemic attitude can be seen to map onto these two terms. Accordingly, we shall now begin with a presentation of Deloria's criticism of the epistemic attitude as a criticism of an exceptionalist-triumphalist narrative.

An Exceptionalist-Triumphalist Narrative

Deloria states that "Western science today is akin to a world history that discusses only the Mediterranean peoples" (Deloria, 1999, 101). Perhaps this quote most succinctly describes Deloria's gripe with the institution of science. For Deloria, we might suggest,

Western science is interwoven with a history of subordination and racism that denies the intellectual and cultural viability of non-Western peoples.

As Daniel Wildcat suggests, Deloria stood apart from many other Indigenous philosophers of his time in that "he did not view the Indian knowledge systems . . . as artifacts or relics . . . [but] . . . rather as knowledges that should be taken seriously for contemporary and practical purposes" (Wildcat, 2005, 425).

Throughout his works, Deloria evidences a clear desire to give intellectual credence to indigenous knowledge-practices in the face of a certain epistemic attitude. In his view, this attitude has often been employed such that Native American knowledge practices and methods of recording information are relegated to a level regarded as inferior to that which is considered proper science. Accordingly, Deloria states:

> Non-Western knowledge is believed to originate from primitive efforts to explain a mysterious universe. In this view, the alleged failure of primitive/tribal man to control nature mechanically is evidence of his ignorance and his inability to conceive of abstract general principles and concepts. (Deloria, 1999, 41)

I will discuss the claim that Western knowledge evidences a penchant toward mechanism and abstract principles in the section of this chapter entitled the "The Bifurcating Universal Realism of Western Culture." Ultimately, we will see that Rorty's notion of Universal Realism might be conceived as the root of the exclusionary tendency discussed here. First, however, we will explore how Deloria sees this exclusionary tendency manifest in the concrete experience of non-Western interactions with Western

culture.

Though he does not use Harding's terms exceptionalism and triumphalism, Deloria evidences thinking of orthodox science as involving a tendency to relate to Native Americans and other non-Western cultures along the same exceptionalist-triumphalist lines. As Harding states, "by exceptionalism I mean the belief that Western societies alone among all human knowledge systems are capable of grasping reality in its own terms . . . [and] . . . only modern Western sciences have demonstrated that they have the resources to escape the universal human tendency to project onto nature cultural assumptions, fears, and desires" (Harding, 2008, 3-4).

Native American knowledge practices, from an exceptionalist viewpoint, would embody the universal tendency mentioned by Harding in the preceding quote. As Deloria states, despite the occasional recurrent use of ancient and tribal knowledge and technologies, Western use of such knowledge-practices and technologies "is usually accompanied by the patronizing view that although tribals and primitives did originate the idea or the practice, they could not have possibly understood the significance" (Deloria, 1999, 130).

I would argue, in addition to exceptionalism devaluing the Indigenous worldview, we see an appropriative element at work in communication between Indigenous knowers and Western scientific institutions. We have only to look at the prevalence of tomatoes, potatoes, corn and coffee in our diets to see that communication has occurred between peoples. Charles Mann, in his bestseller, *1491,* presents evidence of Native land use, technology, and sophisticated knowledge practices, including unique philosophical ideas, prior to European colonization. Much of these knowledges did, in fact, make their way

into the Western body of knowledge, though often unacknowledged. Some examples include maize (Mann, 2006, 223), the Iroquois (or Haudenosaunee) influence on American democracy and feminism (Mann, 2006, 372-373).

Harding's other term, triumphalism, "assumes that the history of science (which, for triumphalists, is thus the exceptionalist history of Western science) consists of a narrative of achievements. For triumphalists, this history has no significant downsides" (Harding, 2008, 4). What we see at work here is a teleological, Eurocentric perspective in which the Western scientist proverbially pulls out a plumb and says "what a good boy am I," ignoring whatever else or whoever else was involved in getting that plumb. This, Deloria argues, more than simply present in obvious scientism, is a fundamental aspect of the Western epistemology in general. For Deloria, this "whatever else" might include despoliation of the land and cultural annihilation. This continent has a dark history of genocide, as historian Stannard makes clear in his work, *American Holocaust*. As he states "During the course of four centuries – from the 1490s to the 1890s – Europeans and white Americans engaged in an unbroken string of genocide campaigns against the native peoples of the Americas" (Stannard, 1992, 147). His work is a detailed description of the genocidal history of the Americas and the nigh complete devastation of the societies encountered by the Europeans.[2]

2 There is significant scholarship available on the question of the American genocide, that is, whether the devastation of Native American culture and population can be considered genocide. Examples of authors who suggest that it was include Alex Alvarez's 2014 *Native America and the Question of Genocide*; Paul Van Develder's 2009 *Savages & Scoundrels;* Roxanne Dunbar-Ortiz's 2014 *An Indigenous Peoples' History of the United States;* Russel Thornton's 1987 *American Indian Holocaust and Survival*; and more. These accounts describe in careful detail such aspects of the devastation as the role of direct warfare and intentional massacre as well as the ravages of disease, all which seem indisputable. The issue at debate is rather whether what happened to the native population can by definition be considered genocide. Steven Kat's 1994 *The Holocaust in Historical Context: The Holocaust and Mass Death before the Modern Age* and William Rubinstein's 2004 *Genocide: A History* provide counter examples, essentially taking the stance that "the sad fate of America's Indians represents not a crime but a tragedy" (Madley, 2008, 331).

It is particularly important to bring attention to Deloria's suggestion that the Bering Trait theory, the historically prevalent theory that the people now known as American Indians came to the western hemisphere from Asian via a land bridge that formerly tied the two continents together from Siberia to Alaska, is scientifically untenable. With all this in mind, we can better see the motivation for Deloria's critique of Western science, as Deloria states, discussing factors he suggests make it hard for Western scientists to move away from the Bering Trait theory:

> There are immense contemporary political implications to this theory which make it difficult for many people to surrender. Considerable residual guilt remains over the manner in which the Western Hemisphere was invaded and settled by Europeans. Five centuries of brutality lie uneasily on the conscience, and consequently two beliefs have arisen which are used to explain this dreadful history. People want to believe that the Western Hemisphere, and more particularly North America, was a vacant, unexploited, fertile land waiting to be put under cultivation according to God's holy dictates. As Woody Guthrie put it: 'This land is your land, this Land is my land.' The hemisphere thus belonged to whoever was able to rescue it from its wilderness state. (Deloria, 1997, 67-68)

Putting forth a cultivation of the wilderness argument, an account of prehistory that renders the original Indigenous inhabitants effectively invisible, we might suggest, fits the bill of a triumphalist narrative. Deloria continues:

> Coupled with this belief is the idea that American Indians were not original inhabitants of the Western Hemisphere but latecomers who had barely unpacked before Columbus came knocking on the door. If Indians had arrived only a few centuries earlier, they had no real claim to land that could not be swept away by European discovery. (Deloria 1997, 68)

This idea also serves to buttress a triumphalist narrative. The original Indigenous inhabitants are again rendered unimportant and invisible against the force of the triumphalist "we are all immigrants anyway" narrative. But what of Western science?

Deloria sees Western Science as emblematic of Western culture's exceptionalist propensity to devalue the knowledge-practices and the outcomes of such knowledge-practices used by non-Western peoples. In this understanding, Western science, as a knowledge-practice achieved solely by the descendants of settlers and the alleged ultimate proof of the ascendency of Western culture, in a fallacious self-evaluation, can be located at the end of a teleological progression, particularly when one considers it a triumphalist progression.

The implications of this view, following Harding's definition, is that colonialism and the genocide of the colonized peoples are not significantly important factors but even just a stepping stone toward a more scientific, humanist future. Factors such as climate change, threat of nuclear destruction, the evils of conspicuous consumption, etc., are not important or else are rendered invisible in the triumphalist narrative of progress.

This orientation toward triumphalism and exceptionalism has been such, Deloria

suggests, that “the Indian explanation is always cast aside as superstition, precluding Indians from having an acceptable status as human beings, and reducing them in the eyes of educated people to a prehuman level of ignorance” (Deloria, 1997, 7).

While only later couched in evolutionary language, he suggests, this triumphalist-exceptionalist narrative has been at play in both Western practice of science and religion. As Deloria states:

> European civilization has a determined and continuing desire to spread its view of the world to non-European countries. Within a generation of the conquest of Mexico, the Spanish had founded schools in Mexico City for the education of indigenous youths, and an important part of mission activities for the next three hundred years was education of both young people and adults in the Christian religion and the niceties of European customs. (Deloria, 1999, 137)

Accordingly, one can connect Deloria's perception of the exceptionalist-triumphalism of Western Science to a hierarchical evolutionary sequence of which Deloria is critical. As Deloria states “the predominant – one might say overriding – concern of the influential whites of a century ago was somehow to place the savage tribes on the evolutionary railroad track to civilization” (Deloria, 1999, 190). As Deloria states, with his usual acerbic humor:

> Once the man-ape sequence was established, scientists then believed that a series of missing links and 'hopeful monsters' had once existed, arguing that primates

> had eventually evolved into educated middle-class Western capitalists. It was necessary, indeed imperative, to arrange the various human societies on an extended incline in which tribal people with a crude mechanical technology illustrated the early kinds of human societies and ancient Near Eastern peoples became the predecessors of the modern industrial state, moderated eventually by the innate gentility of the Anglo-Saxon genes. (Deloria 1997, 48-49)

Again, Western knowledge-practice, whether religious or scientific, is exclusively exalted as the natural teleological end-point of all peoples. This is a normative claim and, as evidenced here, we saw it play out in Locke's account of proper land use. But what of actual scientific theory and practice?

Ultimately, one might suggest, this understanding of the exceptionalist-triumphalism orientation of Western science simply relates back to the very nature of its underpinning epistemological and ontological views. In this next section, we will explore the roots of the exceptionalist-triumphalist view, which I suggest is well understood using neo-pragmatist Richard Rorty's term, "universal-realism." While Deloria himself has a very different account of reality and epistemology than Rorty, I think it is useful toward understanding Deloria's criticism of this epistemic attitude as a critique of universal-realist tendencies.

Universal-realism and Western Science

Rorty suggests that universal realism construes "truth as correspondence to reality" such that "procedures of justification must lead to the truth, to correspondence to

reality, to the intrinsic nature of things" (Rorty, 2010, 168-169). Rorty's definition of universal-realism is the epistemological view that the "real" can be grasped through adequate knowledge practice and the real, in a sense, corresponds to some separate universal realm of objectivity. This, I suggest, matches Deloria's own conception of Western science's epistemological view. This should become clearer as we progress.

Perhaps an initial definition of objectivity and subjectivity in the understanding of Western philosophy might be useful. Objectivity, according to Perez Zagorin, is commonly used to designate any of the following: "first, the true and certain knowledge of a thing, property or state of affairs; second, a method of enquiry designed or competent to elicit a true knowledge, understanding or explanation of a thing, property or state of affairs; third, a type of judgment or mental disposition on the part of scientists, scholars, moralists, philosophers and other investigators that sets aside prejudice, partiality or predetermined answers in the process of any kind of enquiry and the appraisal of its results" (Zagorin, 2001, 379).

My thought, however, is that this concept can easily map onto the Ancient Greek distinction between "doxa" and "episteme," which designate opinion as an unreliable version of knowledge and true knowledge as a "reflection on scientific knowledge" (Mignolo, 2000, 9). In this conception, objectivity then refers to episteme or true knowledge, whereas subjectivity is restricted to the realm of doxa or opinion. This bifurcation, between subjectivity and objectivity is fundamentally hierarchical.

Deloria, in his descriptions of the method of science, intends to use something closer to Zagorin's third definition of objectivity, that is, a type of judgment or mental disposition that sets aside prejudice, partiality or predetermined answers in the process of

any kind of enquiry and the appraisal of its results. Importantly, in Deloria's view, the fallacious notion of an objective observer supplants the actual subjectivity inherent in embodied epistemic situations.

In *Evolution, Creationism, and Other Modern Myths*, Deloria describes the nature of science as it appears to him:

> . . . it appears to be a reasonable effort to gather and interpret data about the world we live in. When we believe we have found enduring patterns of behavior, we tend to formulate propositions that describe what we will probably happen in succeeding cases or examples of the same behavior. We can then describe this general proposition as 'natural law,' while remembering that it is not law in the usual sense. (Deloria, 2002, 43)

He suggests that these laws are not immutable, but rather, subject to change as warranted by new observations. In his estimation, neither evolution nor creation meet the criteria to be described as scientific. This is interesting if we remember the article by Brumble that I referred to in the introduction, as it seems definite from Deloria's own words that one cannot situate Deloria on either side of the evolution-creationism debate, but rather, one might suggest he offers a third option. I feel this is a significant theme in Deloria's work, that is, the indigenous radical difference he often proposes when commenting on Western bifurcations. Deloria can neither be put in the creationist camp, nor the evolutionist camp. His intent, as we have suggested, is to criticize the metaphysical foundations of both sides in this, in his view, uniquely Western cultural battle.

But what are these key metaphysical concepts?

Metaphysics of the Past

As Deloria states in *Red Earth, White Lies*, “Even the purest forms of scientific and religious expression are rooted in the unconscious metaphysic of the past, and critical examination of the roots of the basic doctrines in these areas will reveal the inadequacy of our beliefs” (Deloria, 1997, 3). This suggests there is a continuity between Western science and religion, arguably stemming from the very origins of Western philosophy.

Accordingly, Deloria suggests, an important aspect of Western thought is that of universalism. He explains, **“**one of the chief distinguishing characteristics of Western peoples in these fields has been the belief that ultimate reality exists over and above the transitory experiences of daily life.” In his estimation, as he cites philosopher Arthur O. Lovejoy, this belief stemmed from the “platonic dilemma of ensuring the validity of human knowledge and Plato's subsequent division of the world into otherworldly and thiswordly realms” (Deloria, 2012, 31).

As we can see, in Deloria's view of Plato, whose philosophy has fundamentally influenced Western culture, the real and the good exist somehow above the regular phenomena encountered in life. In this view, moreover, knowledge of regular phenomena or objects does not constitute an actual grasp of the ultimate qualities of said phenomena or object. The project of philosophy, then, constitutes a quest to reveal or more completely grasp ultimate reality.

This, however, seems slightly different from the naive or direct realism we might suggest constitutes the scientific view. Realism, from an epistemological standpoint,

according to Eftichios Bitsakis, a philosopher from the Department of Physics at the University of Athens, Greece, “simply poses the principle of the existence of an objective world, independent of the subject and accessible to the senses” (Bitsakis, 1993, 166). This succinct and simple definition of realism, of course, doesn't cover the details of various forms of realism, but seems useful for our purposes here. A particular form of realism comes into being for Western culture, in Deloria's estimation, with the Ancient Greeks. Our goal, then, will be to identify how scientific realism arises from the realism made possible through Greek thought.

In Deloria's view, the practice of science, in that it sets out to describe or grasp objective reality, adopts a methodology that eliminates the subjective from its analysis. In this effort, to great effect, science assumes an epistemological stance of direct realism which necessarily holds that reality can be directly perceived and understood via the reductive method of science, which seeks to break concepts down to their most basic elements.

Referencing Democritus, Plato, and Pythagoras, Deloria suggests “Western peoples, particularly the Ancient Greeks, concentrated their efforts to explain the physical universe on determining the ultimate constituent from which all phenomena were derived.” From Democritus' atom as the basis of physical reality to Plato's forms to Pythagoras' suggestion that mathematics decreed the ultimate determination of the forms atoms might take, Western philosophy came to an understanding of objective standards informed by particular basic metaphysical concepts of “space, time, matter, energy, and causality . . . that have dominated and shaped the Western understanding of the kosmos” (Deloria, 1997, 48-49).

The Western conception of space, in Deloria's thought, stemmed from system devised by the Greek mathematician, Euclid, "which assumed a constant and homogenous nature of straight lines and curves for its validity." The Euclidian view led to Newtonian mechanics, which held that space is "an absolute element in the structure of the universe" and is, itself, empty (Deloria, 2012, 58).

Also present was the concept of time "as an irreversible, linear progression that had a beginning and worked toward a known conclusion." Time, divided into absolute units of measurement, allowed for recording of history and keeping track of the passage of day. Onto this concept was overlain the idea that the world was created ex nihilo, that is, from nothing. Deloria calls this idea the "doctrine of creation." This idea, he states, seemed sensible to these early thinkers and the average layperson now, as changing seasons do exist, aging is a concrete experience, and "change of an irreversible nature does occur" through causal relations (Deloria, 2012, 59).

Matter, Deloria states, "to the common person . . . at some level of universal existence is an emotional belief verified in everything we experience" (Deloria, 2012, 60-62). Harkening back to Democritus, "for centuries, the goal of science was to locate and identify the smallest particle of matter that composed the kosmos." While more contemporary scientific beliefs have a different view, he suggests, there was a "traditional belief that matter is irreducible" and was monistic in the sense proposed by Democritus and other ancient Greek philosophers who sought to ascertain the single substance that composes reality (Deloria, 2012, 60-62).

Causality, Deloria states, informed "nearly every sphere of intellectual endeavor . . . [such as the] . . . social sciences, humanities, religion, and law . . . [as well

as science,] . . . causality has been a major tool in arranging data in a comprehensible format" (Deloria, 2012, 62-65). In the context of religion, he suggests, God is thought to have come into the world due to our sinful nature to "balance the scales of cosmic justice." Accompanying this concept of causality are Western ideas such as "predestination, free will . . . [and] . . . the belief in the inexorable march of technological progress." Modern science, he states, arose with the primacy of causality in Newtonian physics which relied, as discussed above, on the rigidity of absolute time and space (Deloria, 2012, 62-65).

Deloria states elsewhere that these metaphysical conceptions ultimately isolate humankind and he suggests that, particularly important to this phenomenon of isolation, are Sir Issac Newton, Descartes, and Leibnitz, for, the idea that "one cannot trust sense perceptions, human emotions, or the intuitional abilities of the human personality . . . [though going] . . . as far back as the Greek philosophers and prophetic movement in Israel . . . was not a dominating factor in Western existence until . . . Descartes, Leibnitz, and Newton demonstrated the efficiency of the mathematical description of the physical world" (Deloria, 1978, 12).

Here we return to the idea that an ultimate reality exists behind the scenes of daily phenomena. As we have presented, with this view, the contrast between episteme and doxa informs the reductionist Western scientific view in that a clear distinction between objectivity and subjectivity is made with former valued over the latter. In this view, there is a fundamental hierarchical valuation made in which objectivity is the superior and subjectivity the inferior, at least in terms of justifying true belief. Our task now, however, is to describe how Deloria suggests that ancient Greek metaphysics and Judeo-Christian

anthropocentrism led to Western science. Ironically, this journey takes us fully into subjective territory where Deloria argues that the so-called strict objectivity of Western science rests ultimately on subjective concepts.

We have stressed the foundational importance of Isaac Newton's conceptions of the universe as “a giant, self-operating clock.” Newton, with this theory, pictured the “world as a secular machine, devoid of religion overtones, yet created by a benign watchmaker who enjoyed human efforts to discern universal secrets” (Deloria, 2012, 50-51). Deloria suggests the rise of theism and deism, alternatives to traditional Christian theology, of this time were connected intimately to the Newtonian conception. This theory was accepted ardently in its time, so much so, that many thought ultimate reality had finally been captured by natural philosophy. Thus, these particular metaphysical concepts were concretely ground into the practice of science until Einstein and others challenged the traditional view. Here we see the rise of secularism, though actual scientific practice at this time was still grounded in the concept of a deity.

To reiterate the connection between science and religion under the same rubric of Western metaphysics, Deloria suggests the reductive method of the science tradition would not have been possible without a merger of “the command of Genesis to 'subdue the earth' . . . [with] . . . Greek conceptualizations of the structure of the universe.” This merger resulted in the “Western scientific spirit of inquiry” (Deloria, 2012, 55).

Outlining this movement more concretely elsewhere, Deloria states, “Beginning with Socrates and Plato and culminating in the thought of Aristotle, the Greek philosophical tradition understood the world of senses as a pale and imperfect representation of a realm of eternal ideas and essences.” The practice of Aristotelian

natural philosophy sought to classify and distinguish taxonomies of creatures, supposing that absolute forms of these creatures existed toward which all the individual various creatures aspired and thus the biological world was given purpose and human ethics were given meaning and ability to shape "the process of life in the universe." This tradition was combined with the Christian tradition's anthropocentric idea that "nature was subordinate to man" (Deloria, 2012, 68-69).

Thus, we have what Deloria claims is the Western scientific spirit of inquiry, which contains a theme of anthropocentric mastery over nature as well as the Greek method of categorization and search for the immutable. This is a very interesting development when one recalls that Western science, as practiced today, seeks to eliminate the subjectivity of non-empirically verifiable claims and biases. Deloria's accompanying claim, it seems, is that science has not eliminated a certain fundamental element of subjectivity in the sense of an underlying adherence to basic metaphysical concepts.

Deloria states, "this underlying belief that science testifies to the existence and genius of deity remains with us, and Einstein's insistence that God does not play dice reflects this unconscious and rarely articulated tie between Western science and religion." Such an expression reveals an underlying belief that "nature is orderly" and therefore scientific inquiry "originates in theological beliefs." This necessary reliance by science on orderliness is thus "an article of faith" (Deloria, 2012, 56-57).

It is important to note here that Deloria is not deriding the presence of this idea in scientific practice. He is rather pointing out its necessary presence and science's ultimate reliance on a subjectively grounded first principle of order that originates in theological belief. Interestingly, he adds, "Even this belief . . . [in the fundamental orderliness of

nature] . . . however, is subject to abuse if it becomes a dogmatic article of faith rather than a presupposition that can be adapted to fit new circumstances" (Deloria 2012, 57).

The Division of Religion and Science

As we have outlined, in Deloria's account, the history of science did not begin with a strict division between religion and science. Western science's anthropocentrism, derived from the merger of Biblical account of creation and Greek philosophy, underpinned the practice of science and informed its attitude toward the world. The basic notion that nature was created for man's benefit changed little, but was secularized.

Deloria suggests that the ensuing universalism-realism, prior to Newton and Darwin, still operated largely under the reign of a religious account of creation, but, gradually, the secular philosophy of humanism began to replace religion's role.

Though the march toward secularization was imminent, Newton still required the hypothesis of a god to make his account of the solar system work. Accordingly, he conceived of a clockwork universe created by a deity. This idea, of course, was just as important to the biological realm. As Deloria states, "Because the origin of species was a theological principle as much as a scientific doctrine, which understood the biological world as a product of instantaneous creation at a specific time in the past, few thinkers saw any possibility of species being other than they were observed to be" (Deloria, 2012, 69).

From Deloria's view, Charles Darwin's famous voyage would more completely secularize science. As Deloria states, "From numerous questions that arose from his

observations of plants, animals, and birds on his several journeys on the ship *Beagle*, Darwin was led to question the rigid interpretation of the origin of species that saw plant and animal life as a stable product of creation week." Here Deloria presents a brief overview of Darwin's theory which he suggests Darwin supported with three main principles, namely: the obvious presence of random variations in species that likely corresponded to generational changes, the necessity of some limiting principle so as to avoid chaos in the biological world, and finally, that "only the fittest member of each species would survive, and only those species that made the proper adaptions would continue to exist." As Deloria suggests, the implications of this theory were radical. Humankind suddenly no longer held its old privileged place in the cosmos, created as "a special creature made in the image of God" (Deloria, 2012, 69-72).

Literal biblical accounts of prehistory were challenged by this new account. Going back to our discussion of the key metaphysical concepts underpinning Western science, we should draw attention to the concept of time. As Deloria states, "the idea of linear time was uncritically accepted as the proper framework within which the physical world could be understood – because science was merely offering secular alternatives to sacred concepts." This idea of linear time, he suggests, was maximized as evolution allowed for the existence of nigh "endless eons of time" (Deloria, 2002, 161).

The common understanding, or misunderstanding, of this new theory of evolution was, however, not so distant from the previous religious understanding. The concept of the survival of the fittest, Deloria states, "had the most practical appeal to the common people . . . [and] . . . fits perfectly with the religious maxim that 'God helps those that help themselves." Accordingly, he suggests, this concept was used in all manner of fields such

that “we speak about the self-made man and attribute individual financial and social success to the inexorable workings of the principle of evolutionary change” (Deloria, 2012, 73). It seems, on this account, that Western religion has succeeded in many ways to weather the changes brought on by the theory of evolution. We will return to this shortly, after we comment on the continuing development of science into the social sphere.

Moreover, “the great seminal years of anthropology, sociology, psychology, and comparative religions coincided with the evolution controversy, and the pioneer thinkers in those social sciences saw in evolution a means of interpreting their data that seemed both reasonable and adequate.” With this movement, Deloria reasons, we see the exceptionalist and triumphalist narrative play out, as the pioneers of these social sciences, following a mistaken understanding of evolution, “came to believe that societies . . . [and their corresponding beliefs, values and practices] . . . had all evolved from simple, primitive, and superstitious fears into the complicated and sophisticated organizations, attitudes, and beliefs we see today” (Deloria, 2012, 73).

Through a review of Deloria's account of this history, we have identified the ambiguous relationship of Western science to its religious heritage which Western science came to, increasingly, reject as it moved to an ever-increasing level of secularization with perhaps the key moment being the advent of Darwin's theory of evolution.

Interestingly, it is here that, despite the shared metaphysical underpinnings, science successfully discarded religion in many ways and the two came to exist in an antagonistic relation, according to Deloria. As he states, “one might better characterize the history of Western thought as a continuous struggle between religion and science, with metaphysics, occasionally attempting to provide a systematic ordering of the

doctrines and beliefs of both." In the play of this phenomenon, Deloria cites problems with attempts to merge the religion and science gap, as "the methodological assumptions of Western knowledge are designed to maintain this isolation" (Deloria, 2012, 22-23).

As we have discussed, in Deloria's view, the universal-realism of Western science adopts a reductionist stance that renders invalid subjective accounts of knowledge. This, we can see, renders subjective beliefs, such as those of religion, as equivalent to mere doxa, while the objective knowledge of science reigns primary as true knowledge or episteme. Necessarily included in the subjectivity rendered obsolete are all elements of the affective dimension. As Deloria suggests, the quest for certainty in Western philosophy and culture progressed to the point that "logical and analytic explanation of human reality . . . have eliminated the human emotions and intuitive insights of the original experience and in their place have substituted a systematic rendering of human knowledge concerning the natural world" (Deloria, 2012, 201).

The limits of this reductionism will become more apparent as well discussion Deloria's account of Native metaphysics in the following chapter.

Conclusion

Universal-realism itself is, arguably, what makes exceptionalist-triumphalism possible, as the Western scientist becomes the sole arbiter of what is true knowledge or episteme, while all others, including non-Western peoples and those interested in the spiritual dimension of human experience must agree that their knowledge practices being generally categorized as doxa.

With a Darwinian explanation and the triumph of secularism, in Deloria's view,

non-Western people and their knowledge-practices were evaluatively reduced to the superstitious, primitive activity of pre-scientific societies. Additionally, in the rejection of all other forms of knowledge than those derived exclusively from the method of Western science, Deloria suggests that much is left out that would benefit humanity. This will become particularly obvious as, following reference to Paul Feyerabend, we discuss the advantages of taking a non-exceptionalist approach to epistemology and metaphysics via some examples of Indigenous knowledges that Deloria mentions. If we are to accept Deloria's view, to move past the devaluation of non-Western knowledge practice, it seems necessary to reject many of the limiting beliefs of Western science. Fortunately, as I shall argue in the next chapter, Deloria provides a potential way out of a strict adherence to this universal-realist, exceptionalist-triumphalist paradigm with attention to unorthodox voices from Western philosophy and science.

CHAPTER III

REBELS OF SCIENCE

In this chapter, I explicate Deloria's understanding of Paul Feyerabend and Thomas Kuhn. Kuhn's notion of paradigms offers some substance to an argument for a Delorian alternative to the more exclusionary account of science discussed in the preceding chapter. However, in comparing the two thinkers, Deloria ultimately favors Feyerabend and his notion of epistemic anarchy. We will explore why as the chapter unfolds. I begin with Deloria's suggestion that Western science commits what Whitehead called the fallacy of misplaced concreteness, alternatively understood in the thought of William James as vicious abstractionism. Also, Deloria's account of alternative knowledge will necessarily run into the question of demarcation, especially with reflection on Brumble's suggestion that pseudoscientists, such as creationists or Deloria himself, take the stance of self-described modern-day Galileos.

To begin with, Paul Feyerabend suggests that pseudoscience is ultimately a sort of empty or even nonsensical term, according to historian Michael D. Gordin (Gordin, 2012, 10-11). For Feyerabend, “There is no idea, however, ancient and absurd, that is not capable of improving our knowledge” (Feyerabend, 1988, 33).

As might be expected, Feyerabend's ideas will prove to be particularly useful, and Deloria prefers him to Kuhn for the reason that his epistemic anarchy allows for a greater degree of openness to alternative perspectives and practices beyond Kuhn's account of normal science and revolutionary science, which, in Deloria's view, is ultimately exclusively dependent upon the scientific establishment. In this sense, Kuhn cannot be seen to provide an escape from the exceptionalist-triumphalist orientation of Western

science.

With reference to Deloria, I have discussed how the exceptionalist-triumphalist persuasion of Western science, informed by a particular reductionist universal-realist epistemological orientation, renders non-Western perspectives invalid or greatly diminished. Deloria suggests that while, in some cases, Western science has begrudgingly admitting to the contribution of non-Western knowledges, this has usually been in an appropriative sense in which the non-Western knowledge is thought to have been achieved by a people who didn't really understand what they had discovered through essentially unreliable, overly subjective means. In this view, the route to true understanding or episteme, that is, the ability to pierce through a veil of subjective biases or doxa, is achieved only by the reductive method of "objective" science. The viability of more subjective endeavors is decried. A prevalent, misbegotten, epistemic attitude, in Deloria's view, supposes that the world is wholly mechanistic while denying and rendering invisible the subjective dimension of its own practice.

In relation to the problems of this reductionist objectivity, Deloria identifies the "fallacy of misplaced concreteness," which he suggests is "one of the fallacies that Alfred North White identified within the Western philosophical tradition." This fallacy is the "belief that the principles of philosophy were 'clear, obvious, and irreformable'" (Deloria, 1999, 3).

To quote Whitehead, "There is an error; but it is merely the accidental error of mistaking the abstract for the concrete. It is an example of what I will call the 'Fallacy of Misplaced Concreteness'" (Whitehead, 1997, 51). As suggested by Whitehead, this fallacy is the mistaken assumption that one's abstract concept or belief about reality is

itself equivalent to a concrete reality. I will discuss this concept by further connecting it to William James' similar notion of vicious abstractionism.

Misplaced Concreteness

This same fallacy we have outlined is also referred to by Williams James in *The Meaning of Truth,* wherein he suggests that rationalistic idealists such as Kant and Hegel abstracted in such a way as to reduce concrete situations solely to the way in which they had categorized it. When one, rather than using the concept to aid in further understanding of a complex and rich phenomenon, instead suggests that the phenomenon is "a case of 'nothing but' that concept," one commits what James terms "vicious abstractionism" (James, 1979, 135-136).

This seems to line up with Deloria's view on what I have identified as the universal-realist commitment of Western thought that we discussed in the last chapter. The exceptionalism of Western science, in this scheme of thought, commits the fallacy as well. For Deloria, besides failing to acknowledge the viability of Indigenous epistemology, Western science's tendency to commit this fallacy leaves out many other potentially useful accounts and perspectives in the pursuit of knowledge. This problematically reduces the methodology of Western science and thus the acquisition of knowledge in general. In line with Feyerabend's basic thesis, Deloria states "Reductionism is about the least efficient way to garner knowledge" (Deloria, 1999, 14).

As we have discussed, for Deloria, this fallacy describes the adherence of Western science to particular universal concepts in what we might call its particular universal-realist orientation. Universal-realism commits the fallacy by treating abstractions from

particular inquiries as if they (and not the particular result) are the real thing. The universals are treated as concrete rather than the particulars. In Deloria's view, this orientation, and thus this fallacy, informs the exceptionalist-triumphalist persuasion of Western science. Deloria is both suggesting that the paradigm by which much of Western science operates is largely outmoded and that the perspectives of non-Western knowers are vitally important to encounter. The particular solution Deloria seeks, however, is not to be found in Kuhn's understanding but rather Feyerabend's. Deloria cites both and it will be important to discuss how Deloria suggests these thinkers differ and why he prefers Feyerabend's account. I begin first with a discussion of correlation and causation. This is interesting in that it presents a significant challenge to the universalist-realist perspective. It seems difficult to viciously abstract the contents of experience when one is forced to give up, in some sense, on absolute deductive or inductive certainty.

Correlation or Causation?

Deloria suggests a movement toward the approach of "reconciling what we think we know about the universe – the empirical data and interpretations of subjects we can describe mathematically – with our aesthetic, emotional, and mental apprehensions of the same universe" (Deloria, 2002, 64). I suggest that Deloria holds a similarly skeptical position to Rorty on what I have identified as the universal-realist epistemology informing Western philosophy and science. On the other hand, Deloria seems to affirm the value of Western knowledge production and suggests that there is a way in which the two are compatible.

Western technology, Deloria suggests, "might indeed be useful in repairing the

damages already done to tribal lands so that the lands can once again be put on a traditional use pattern and become productive" (Deloria, 2001, 65). Deloria grants this, but seems skeptical of Western science generally, in light of the facts that the damage done to tribal lands is a result of Western operations and styles of land management.

It is important to note that both Indigenous people and Western people make use of technology and develop techniques in relation to lived experience. The Six Nations, for instance, had a "basically religious knowledge of plants and animals . . . [and] . . . traditionally planted beans, corn, and squash together . . . [calling these plants] . . . the famous 'Three Sisters' who provided the people with food." Eventually, as Western science "discovered the nitrogen cycle," attention was given to how this knowledge "provided a natural nitrogen cycle so that the fields were never worn out from farming" (Deloria, 1999, 130-131). Deloria states, however, that the two systems of thought, "tribal and Western scientific . . . do not seem to be radically different, but in actual application they diverge radically" (Deloria, 1999, 68).

At the same time, Deloria states, for the Indian, there was no "firm belief in cause and effect, which plays such an important role in Western science and thinking . . . [rather] . . . Indians were well aware that when a certain sequence of things began, certain other elements or events would also occur . . . [thus resulting in] . . . a kind of predictability . . . present in Indian knowledge of the natural world" (Deloria, 2001, 26). Examples of use of such correlations include, Deloria states, "designating the bear as a medicine animal, owls as forecasting death or illness, and snakes as anticipating thunderstorms" (Deloria, 2001, 27).

This willingness to grant legitimacy to such claims as the appearance of an owl

indicating coming death or illness might seem problematic from the get-go. It is important, however, to keep in mind that Deloria himself has problems with “alleged medicine men who were busy peddling a new form of Indian religion that centered primarily on recycled slogans concerning 'Mother Earth' . . . [but] . . . asked little in the way of personal commitment . . . [while exempting] . . . an individual from the guilt that involvement with contemporary industrial society inevitably created” (Deloria, 1999, 235).

The key points, I think, are that, on the one hand, Deloria has some standard as to appropriate uses of correlation, that is, in the context of a body of traditional, community-bound knowledge, versus inappropriate, manipulative contemporary use for financial or social gain. On the other hand, Deloria criticizes the outright disregard of Indigenous knowledge production.

I will discuss this alternative form of knowledge in the following chapter, but, for present concerns, it seems enough to say that Deloria challenges the certainty of the Western method, which he states “is so well controlled by doctrine that it often denies experiences that could provide important data for consideration” (Deloria, 2001, 28). The difference between correlation and causation can be summed as the difference between saying “rain comes when the clouds are dark” and “it rains because the clouds are dark.” The latter is a much more open-ended account of the phenomenon, still noticing connections between dark clouds and rain, but much more hesitant about claims of causal certainty. In some sense, we might say, then, that Deloria values experiential knowledge, but intentionally avoids the fallacy of misplaced concreteness.

Problem of Demarcation

In tandem with the fallacy of misplaced concreteness, it is important to bring up an issue at the heart of science – the problem of demarcation. This problem refers to the difficulty in saying whether some particular practice is science or not. Further still, we might suggest that is refers to whether we can say some claim is eligible to be a knowledge claim or not. A good example to introduce this subject is through Deloria's discussion of the McLean v. the Supreme Court case, which concerned the question of whether "Creation science" could be properly defined as scientific, and therefore, permissible as subject matter fit for a public school curriculum. In this case, the Supreme Court "offered a list of what is considered the essential elements of scientific thinking." Through recounting this list, Deloria is attempting to point out how the courts themselves lack an accurate understanding of what constitutes proper science. From this example, I think, we can glean a few insights into Deloria's view of science aside from his seemingly usual pejorative account. According to Deloria, it was agreed by the court that science is characterized by a few key rules as follows:

1. It is guided by natural laws.
2. It has to be explanatory by reference to natural law.
3. It is testable against the empirical world.
4. Its conclusions are tentative – that is, they are not necessarily the final word.
5. It is falsifiable.

(Deloria, 2002, 31-32)

Deloria, following this list, suggests that the key elements of scientific thinking are falsifiability and the tentative nature of conclusions. He seems to take particular issue with the concept of natural laws, stating that "people outside science seem to give considerably more credence to the absolute nature of "natural law" than do people within science (Deloria, 2002, 33).

We have discussed, to some extent, point number 3 in the section "A Problem of Correlation and Causation." Of particular interest here, however, are points one, two and five.

Seeking a definition of natural law, Deloria concludes that "natural law . . . [is] . . . an expression of averaging countless numbers of unique events to formulate general principles of change and predictability . . . [with human reason acting as] . . . the expression of man's adaption to what is normally there, and this is deposited in complexes of ideas which, organizing themselves step by step, constitute objective values" (Deloria, 2002, 34). This raises issues for the status of scientific statements as anything but statistical truths, again questioning the idea that science is entitled to the exclusive claims of certainty that Deloria sees it has claimed to have in popular understanding. This directly leads to the problem of demarcation.

According to professor of history, Michael Gordin, "the term' demarcation problem' was coined by a young Austrian philosopher named Karl Popper in 1928 or 1929" in response to "the confirmation in 1919 of Albert Einstein's general theory of relativity." Popper contrasted Einstein's audacious predictions with the ideas of psychoanalysis in that the latter lacked a predictive nature that could be proved or disproved, but rather, relied upon confirmation. Popper wanted to formulate a means of

demarcating science from non-science. As Gordin quotes him, “the criterion of the scientific status of a theory is its falsifiability, or refutability, or testability” (Gordin, 2012, 7).

Popper's method, as Gordin suggests, fails to achieve a solid demarcation. Philosophy of science, he states, has long abandoned falsificationism as it fails to ascribe to actual scientific practice and because it does not actually accomplish what it purports to accomplish. As regarding the first failure, scientific practice actually commonly involves what Popper “dismissed as the 'unscientific' generation of ad hoc hypotheses to immunize a theory.” Secondly, “if all a theory has to do in order to count as a scientific is make bold claims that might be proven false, then many doctrines deemed pseudoscientific pass muster.” Gordin suggests that Creationism, parapsychology, and Velikovsky's catastrophism all make predictive statements, which fits the bill for Popper's falsifiability (Gordin, 2012, 8-9).

Following Thomas Kuhn's *The Structure of Scientific Revolutions*, Gordin states, “many looked to . . . his central argument of paradigms as a possible site of demarcation . . . [though] . . . Kuhn rarely invoked the demarcation problem” (Gordin, 2012, 9). As we discuss Kuhn's notion of paradigms, it will become clear why.

Nature of Paradigms

Deloria suggests that Western science has a tendency toward ossification. This, we might say, is the manifestation of the same phenomena we saw at work when discussing Western science's tendency toward exceptionalist-triumphalist narratives and the reductionism of the universal-realist methodology at work. Indeed, as Deloria states:

> Scientific knowledge progresses very slowly because people in science are reluctant to change any of their ideas until the evidence for new interpretations of data is so compelling as to make them seem foolish maintaining the outmoded doctrines. (Deloria, 1997, 137-138)

It seems useful here to describe Kuhn's notion of paradigms as informing the movement of science. Kuhn states, "Close historical investigation of a given specialty at a given time discloses a set of recurrent and quasi-standard illustrations of various theories in their conceptual, observational, and instrumental applications" These, he states, can be called the community's paradigms (Kuhn 43). As historian Michael D. Gordin states,

> According to Kuhn, science consists of periods of stasis ("normal science"), in which scientists solve puzzles within the framework of a general schema of reasoning, which he called a paradigm. As anomalies – experimental findings that prove difficult to reconcile with the dominant paradigm – pile up, occasionally a rupture occurs ("paradigm shift"), and the old paradigm is replaced by a new one, and normal science then continues apace in this framework. (Gordin, 2012, 9)

Deloria seems to concur with this notion, stating, "Science further limits itself by insisting that all data fall within the reigning interpretive paradigm of the time . . . [which] . . . enables scientists to classify data and verify whether or not it falls within the

accepted mode of interpretation." A paradigm, in Kuhn's view of science as a puzzle solving venture, Deloria suggests, allows scientists to choose problems to analyze while discarding other problems that are deemed unworthy of analysis due to difficulty, being too metaphysical, or not the concern of the discipline investigating the problem (Deloria, 1999, 45). This methodology, he suggests, is problematic. Many options that might be useful for the advancement of knowledge are discarded.

Returning briefly to the question of why Kuhn rarely invoked the demarcation problem, we might return to Gordin, who suggests that "if paradigms by definition decide what is scientific and what is not, then any statement outside the paradigm could conceivably be designated psuedoscientific." Those outside the scientific institution, Gordin suggests, had employed this idea, even those regarded as psuedoscientists, such as Velikovsky, who suggest that a paradigm shift is necessary (Gordin, 2012, 9).

Deloria agrees with this statement that any knowledge production outside the paradigm might be declared pseudoscientific, suggesting that through a communication that validates the Indigenous point of view, the store of human knowledge might be bettered. In his view, this necessitates a paradigm shift, as the old exceptionalist-triumphalist account of Western science is outmoded, to allow for a non-appropriative contribution of Indigenous knowledge to the body of human knowledge.

For Deloria, however, though the notion of paradigms is clearly useful, Kuhn doesn't go far enough. In his thought, Feyerabend provides a much more accurate account of epistemology. We will now discuss Deloria's preference of Feyerabend over Kuhn, discussing their similarities and differences.

Feyerabend and Kuhn

We might suggest that Deloria uses the idea of paradigm shift to escape the categorization of indigenous knowledges as mere pseudoscience. Under Kuhn's account of paradigms, all ideas falling outside of the prevalent paradigm might be categorized as pseudoscientific practice, thus rendering the demarcation problem largely meaningless. However, in that Deloria ultimately seeks, at least in his works prior to *Power and Place*, a way for Western science to communicate with Indigenous knowledge-practice, it is necessary for us to discuss the concept of incommensurability.

Incommensurability, denoting the absence of a common measure between paradigms, leads to problems of communication between paradigms. This concept appears in the thought of both Feyerabend and Kuhn, as the two both "used the term 'incommensurable' to describe certain aspects of dramatic theoretical transitions in the course of scientific advance." Kuhn's use of the term was to suggest an inability for communication between differing paradigms due to taxonomical differences (Oberheim, 2005, 364-365). Similarly, "Feyerabend's notion of incommensurability is intended to capture the idea of conceptual incompatibility due to changes of meaning that occur in theoretical transitions that affect our ontological beliefs . . . [as] . . . two fundamental theories are incommensurable because the meanings of their terms are determined by the theoretical principles that govern their correct use, and these principles are qualitatively incompatible" (Oberheim, 2005, 370).

We have identified substantial differences in terms of the practice of Western science and Indigenous forms of knowing. How can the dissimilar paradigms of Western science and Indigenous knowledge-practice speak to one another?

An answer to this question might be found via an examination of the differences between the two thinkers in terms of their ultimate orientation toward epistemology and the hierarchical status of Western science. As Deloria states, “Both Feyerabend and Kuhn agree that the best advances in science and philosophy are made by the outsider, a conclusion not difficult to reach but exceedingly difficult to accept emotionally” (Deloria, 1999, 7). We have seen this discussion via Kuhn's contrasting notions of normal science and scientific revolutions which eventually alters what constitutes normal science.

However, Deloria wants to suggest that Feyerabend has a fundamentally different conception of the origin of ideas. As he states, “Kuhn's agent of change is presumed to be approved by the establishment; his creators of the new paradigm presuppose the uniform march of orthodox science with a few excited changes in perspective.” Feyerabend, he suggests, holds absolutely that “ideas should be judged by the potential for making a contribution to understanding, not on their origin, former use, or relationship to accepted symbols of contemporary authority” (Deloria, 1999, 7-8). In this view, Deloria suggests, the contribution of views usually deemed too mythological or too primitive to be of epistemological merit can be acknowledged as a source of understanding.

In contrast, Kuhn falls short of being the sort of rebel Deloria is seeking in that, in Deloria's estimation, he effectively “endorses the very situation that he has promised to criticize and explain” in that he advocates a kind of group intuition rather than individual intuitions. This, for Deloria, has Kuhn effectively contradicting himself in that Kuhn seems to suggest that outside voices are necessary for the advance of science but that intuition necessarily comes out of the in-group (Deloria, 1999, 8-9). To quote Kuhn himself, “Anomaly appears only against the backdrop provided by the paradigm” (Kuhn,

1996, 65).

We might recall the discussion of exceptionalist-triumphalist narratives as Deloria suggests that Kuhn and Feyerabend differ fundamentally in their epistemological understanding in that "Kuhn feels that Western information gathering is unquestionably superior . . . [while] . . . Feyerabend is certainly no doctrinaire worshiper of Western science . . . [but] . . . delights in pointing out the many advances made by our ancestors, of all cultural traditions . . . that were fundamental to and underlay all our more recent scientific accomplishments" (Deloria, 1999, 10). We see here a definite opening to the sort of validation of Indigenous knowledge that Deloria seeks.

As Deloria states, "Feyerabend is one of the few voices that sees that the body of human knowledge is not merely an instance of adding insights of non-Western peoples to the already constructed edifice of Western knowledge but . . . [rather] . . . derived from the many human traditions represented in planetary history" (Deloria, 1999, 5). To further clarify this point, it seems useful to comment on Feyerbend's overarching thesis, which suggests that "Science is an essentially anarchic enterprise: theoretical anarchism is more humanitarian and more likely to encourage progress than its law-and-order alternatives" (Feyerabend, 1988, 9). Accordingly, we may suggest the pursuit of knowledge, for Feyerabend, includes a fundamentally ethical dimension. As he states, "The attempt to increase liberty, to lead a full and rewarding life, and the corresponding attempt to discover the secrets of nature and of man entails, therefore, the rejection of all universal standards and of all rigid traditions. (Naturally, it also entails the rejection of a large part of contemporary science)" (Feyerabend, 1995, 12).

Perhaps connecting to this concern of Feyerabend for a fundamentally ethical

dimension to knowledge, Deloria states,

> Much of Western science must go, all of Western religion should go, and if we are in any way successful in ridding ourselves of these burdens, we will find that we can fundamentally change government so that it will function more sensibly and enable us to solve our problems. (Deloria, 1997, 3)

These problems, we might suggest, are more than just technological hurdles, but attend more to existential questions and how we can attend to human and environmental well-being.

Conclusion

Again, to sum up the connection between Deloria and Feyerabend, “It is clear, then, that the idea of a fixed method, or of a fixed theory of rationality, rests on too naive a view of man and his social surroundings” (Feyerabend, 1988, 19). As we have discussed, Deloria maintains that Western science's exceptionalist-triumphalist orientation is short-sighted and ultimately an outmoded paradigm. For Deloria, Western science denies the viability of Indigenous thought, thus exemplifying, we might say, an incommensurability on the part of Western science. This is, however, one-sided, we might argue, looking at how the Indigenous view cannot be categorized as a universal-realist epistemology, as we have discussed. Finding an alternative to the either-or epistemological method of Western science, in Deloria's view, Indigenous knowledge retains an openness to novel ideas and anomalies that Western science rejects. Not being

influenced by the history we discussed in the first chapter, Indigenous epistemology will take some other form of realism than universal-realism. This will become clearer as we delve into a more detailed discussion of an Indigenous science of relationality and defining Deloria's epistemology.

CHAPTER IV

VITALISTIC KOSMOS

Perhaps a good way to begin is to directly state that Deloria maintains that Native American metaphysics are fundamentally different than Western metaphysics. As he states in the introduction to the *Metaphysics of Modern Existence*, "The fundamental factor that keeps Indians and non-Indians from communicating is that they are speaking about two entirely different perceptions of the world" (Deloria, 2012, 1).

In this chapter I will describe some of the key characteristics of the Indian metaphysics Deloria describes in his writings. The section is accordingly divided first into a discussion of ontology, focused on an analysis based around the familiar designations of the one and the many, in two sections, as it appears in Native ontology. This is followed by a brief description of human purpose in Native American thought, preparing us for the concluding discussion in the fifth and final chapter.

Previously, in chapter three, we outlined a number of important concepts in Western metaphysics, as suggested by Deloria, as follows: space, time, matter, energy, and causality. Additionally, we discussed at some length the metaphysical view, which we can identify as universal-realism, and its accompanying exceptionalist-triumphalism narrative, which he purports defines the Western view. The Native view, we shall see, much more concretely attends to the contents of experience. Additionally, Natives, without the bifurcations of the universal-realist view and thus with a fundamentally more open engagement with reality, approach knowledge in a much more holistic manner, aiming at understanding in a way that includes both the physical and spiritual dimensions.

This is accomplished via an alternative method he calls "correspondence" that

engages reality via a knowledge-practice that is fundamentally moral and affirms an expansive account of agency. Persons in this view include not just human communities, but a living universe, that is, a vitalistic kosmos. We can call this an agent-ontology. This difference in epistemology and ontology, we might suggest, entails an ethical consideration in a way that the Western tradition lacks the conceptual tools to accomplish.

Deloria outlines an agent ontology in *Power and Place* that involves what he suggests as a simple equation: "power and place produce personality." This equation works such that "the universe is alive, but it also contains within it the very important suggestion that the universe is personal and, therefore, must be approached in a personal manner" (Deloria, 2001, 23). Pratt describes the ontology Deloria outlines as an agent ontology, stating "In effect, the universe has an agent ontology where its entities are persons whose particular character will be a matter of their interactions and where knowledge will be a matter of knowing their personalities" (Pratt, 2006, 5).

This agent ontology involves a few key components. On one hand, it is important to discuss the nature of the kosmos as the one, that is, as the monistic whole, the being, of all existence as it has frequently been discussed in Western philosophy. On the other it is important to discuss the nature of the many beings in relation to this one.

The One as Manitou

While Deloria suggests that, in this account of the universe, kosmos is personal, he makes clear in other places that this personality cannot be understood as constituted by anthropomorphic qualities. As he states in *Spirit and Reason*, "To go further and attribute a plenitude of familiar human characteristics to the earth is unwarranted. It would cast the

planet in the restricted clothing of lesser beings, and we would not be able to gain insights and knowledge about the real essence of the earth" (Deloria, 1999, 49-50).

Jicarilla Apache philosopher Viola Cordova, essentially concurring with Deloria's description in her own account of the Native American ontology, suggests that this concept is similar to that of Baruch Spinoza, who presented a radical metaphysical theory that situated substance as god/nature. This, she suggests, was a threatening concept for European thinkers of his time, as suggested by the excommunication from his Jewish religious community and his contradictory labeling as both an atheist and a "God-intoxicated man." In her account, "Spinoza believed that whatever it is of which the world is composed can only be one thing. He called this one thing God, Substance, and Nature . . . [suggesting] . . . in effect, everything was God . . . [and] . . . this one thing was material." Additionally, Spinoza "saw no problem with calling this matter 'sacred'" (Cordova, 2007,110).

As Spinoza states in *The Ethics*, "some imagine God in the likeness of man, consisting of mind and body, and subject to passions. But it is clear from what has already been proved how far they stray from the true knowledge of God" (Spinoza EIp15s). God, for Spinoza, was what we can identify as the one, the unified kosmos from which flowed the many, the particular entities making up the kosmos.

This monistic view, moreover, Cordova suggests, is comparable to the Jicarilla Apache term "Usen". It is also known as "Manitou" in the Anishnaabe or Ojibwe language. She suggests that, as there are words for this same force in several Indigenous languages, it is likely a pan-Indian concept. (Cordova, 2007, 107-108). This aligns with Deloria's discussion of what Carl Jung called the mana theory, named after Polynesian

beliefs, that is, “the feeling or belief that the universe is energized by a pervading power.” He suggests that such an idea is common to tribal people and known in Native American tribes as “wakan, orenda, or manitou.” This manitou, as I will refer to it, is a fundamentally unified force. This power, Deloria suggests, was recognized religiously rather than scientifically, but was fundamental to tribal beliefs. This insight, he suggests, was that of a sacred kosmos (Deloria, 2012, 203-204).

It is important to note that though this vitalistic kosmos is living, neither Deloria nor Cordova suggest that it can be understood to possess the sort of anthropomorphic qualities one might presume such a view to hold. Deloria suggests the nurturing aspect of this decidedly nonhuman personality as follows:

> The practical criterion that is always cited to demonstrate . . . [the validity of a living universe] . . . is the easily observable fact that the earth nurtures smaller forms of life – people, plants, birds, animals, rivers, valleys, and continents. For Indians, both speculation and analogy end at this point. To go further and attribute a plenitude of familiar human characteristics to the earth is unwarranted. It would cast the planet in the restricted clothing of lesser beings, and we would not be able to gain insights and knowledge about the real essence of the earth. (Deloria, 1999, 49-50).

Here we have a picture, I would argue, of a personality with nurturing capacities. This seems in line with the comparison made of this force as mother nature popular with many environmentalists. As Cordova states, “the Earth becomes 'mother' when she directs the

life force to its numerous creations" (Cordova, 2007, 114).

However, I would suggest that, while we can conceptualize the earth here as feminine gendered, via its connection to creative and sustaining powers, this does not suggest a leap to a conception of an anthropomorphic mother. Motherhood is a quality shared by a diverse arrangement of creatures other than the featherless bipeds who exhibit typically anthropocentric and ethnocentric societies. Thus, to isolate a particular maternal essence to a human interpretation might be problematic, though we must admit that our perceptions of such an entities will be situated from the standpoint of our own being. The earth is mother because we and our sisters and brothers, that is, all the entities existing on the earth, are dependent upon her and sustained by her.

It makes sense now to ascertain how similar Deloria's account is to these features discussed by Cordova. As we stated above, the earth nurtures smaller forms of life, from humans to animals to plants to rivers, valleys, and continents. While defined as mother, according to this characteristic of nurturing, this entity does not possess familiar human characteristics.

The Many in Harmony

This identification of the interconnectedness of the many in a whole is important, as it points to a more holistic account of the kosmos and thus, will, in Deloria's view, inform a more accurate scientific methodology as well as a more fulfilled general sense of being in the world. Such a sense of fulfillment will have positive implications for human life generally, but I will discuss this more in the next section on personhood in community. For now, I will discuss the nature of the constitutive beings, the many, that

make up the unity of being, that is, the one.

Going back to Deloria's account of this personalistic conception of the universe espoused by tribal people, it is important to note how it applies to the many, the multitude of beings that make up the one which we have identified as manitou, or Gitchi Manitou, the “great spirit” or collective manitou in Ojibwe (Bragdon, 2001, 18). Again, philosophers may recognize the similarity to Spinoza's god in this respect. As Spinoza suggests, “Whatever is, is in God, and nothing can be or be conceived without God” (Spinoza EIp15).

Before departing from Spinoza, it is useful to comment on his principle of conatus. This idea can be compared to the Delorian account of a certain purposiveness to all the entities which make up the one. Spinoza states, “The conatus with which each things endeavors to persist in its own being is nothing but the actual essence of the thing itself” (Spinoza III Pr 7). Importantly, in the preceding proposition, he suggests a homeostatic nature to each individuation of the many as he states, “Each thing, in so far as it is in itself, endeavors to persist in its own being” (III Pr 6). In Spinozistic thought, a particular thing, such as a rock, will behave as a rock, that is, the essence of rock. This suggests that entities have a purposive nature, they seek to persist as what they are. As we shall see, this idea is similar to Deloria's account of every entities' responsibility to place and purpose. However, it can be taken in two ways. One in the sense in which Deloria defines the purpose of these entities and another in a much more familiarly Western way.

One account of Spinoza I see as particularly emblematic of this Western ethos is that of Gabriel Albiac writing in the anthology edited by Warren Montag and Ted Stolze.

Albiac suggests in “The Empty Synagogue,” discussing what he sees as Spinoza's ontological implication of determinism toward conflict, that “Essence is the conatus; and the conatus, the effort, is nothing but the conflictual relation of beings with one another on this infinite terrain of encounters . . . that is Nature” (Montag, 1997, 137). In this conception of the fundamental nature of the many, harsh materialism and conflict is the ultimate implication of Spinoza's determinism.

My own opinion is that Albiac gives an excessively negative interpretation of Spinoza's concepts that likely maps onto a tendency in Western culture, at least as argued by Deloria. As Deloria states, “Instead of the predatory jungle that the Anglo-Saxon imagination conjures up to analogize life, in which the most powerful swallows up the weak and unprotected, life is better understood as a tapestry or symphony in which each player has a specific part or role to play.” Accordingly, respect and community are fundamental to identity. Each individual in the many is in relation to the other individuals of the many. Essentially, every entity might be conceived as a member of a community with attendant duties toward all other members (Deloria, 1999, 51).

It is thus important to highlight the moral dimension that is suggested by this vitalistic kosmos in Deloria's view. As he states, “It cannot be argued that the universe is moral or has a moral purpose without simultaneously maintaining that the universe is alive” (Deloria, 1999, 49). Useful for defining this important Indigenous concept is Cordova's suggestion that our relation to the Earth is that of child to parent (Cordova, 2007, 116). This relation, she suggests, is very different than the stewardship model suggested in a more favorable reading of the anthropomorphic account of humanity's place in the kosmos from the Western tradition. For me this point was well communicated

by environmental philosopher Carolyn Merchant in *Radical Ecology*, where Merchant suggests that, in an ecologically-minded interpretation of the Christian tradition, "dominion over the land means that a responsible Christian will care for the land with vision, mercy, benevolence, and compassion . . . [because] . . . stewardship means that humans have a responsibility to take care of the earth and to insure that all its beings function together in an integrated way" (Merchant, 1992, 130).

This view, environmental philosopher J. Baird Callicott suggests, stems from an interpretation of the biblical passage in Genesis 1:26-28 where it is said that God gave dominion over the earth and all the other creatures therein to man. This, Callicott suggests, allows for three interpretations as follows: the despotic interpretation, the stewardship interpretation, and the citizenship interpretation. The first of these is the one most criticized, which suggests that the earth is put there for humans to use however they see fit. The latter two are more environmentally conscious interpretations, the first of which ascribes to what Merchant identifies as well as to what Cordova states the Indigenous view is not. The latter interpretation, which conceives of all entities, including humans and non-humans, as equal members of a community or as world citizens, is a much more radical interpretation which we need not discuss in this project. I mention it for fairness' sake with the comment that it is similar to the Indigenous view in that it conceives of humans as situated equally with the other creatures (Callicott, 1997, 14-17). It seems important to note, if we are to follow Deloria's argument, that these interpretations are likely not as fundamental to the Christian belief system they have developed out of as they are to an Indigenous view.

Deloria states, "The willingness of entities to allow others to fulfill themselves,

and the refusal of any entity to intrude thoughtlessly on another, must be the operative principle of this universe" (Deloria, 1999, 50-51). Pratt explains, "The idea of Manitou provides a ground for fostering diverse personalities even as it makes understanding and unification an ongoing possibility" (Pratt, 2006, 6). In this sense, it accounts for both connections between individual entities as well as their diversity. If we recall the tapestry or symphony analogy, all the members of the many have their part to play in the one. Each individual entity has its particular conatus, to use the Spinoztic term, which, for Deloria, is a relation of identity to place. That is, each part of manitou has its role to play – its essence to fulfill in the holistic order of a vitalistic kosmos.

As Deloria states, ". . . many medicine men spoke of the places that the various entities were destined to occupy, and of the beginning of a world age as time when everything was in its proper place" (Deloria, 1999, 54-55). This proper place, he suggests, is "manifest in spatial arrangements . . . [which had] . . . three major manifestations [. . .] the ceremonial directions; sacred places; particular places" (Deloria, 1999, 55). The first of these, the ceremonial directions, entail the suggestion that every entity and place "was the center of the universe" and necessitated ceremony to reorient oneself to the kosmos and allow for the possibility of renewal. The second suggested the existence of sacred places as sites of "power and significance," requiring "respect and human self-discipline." It was at these places that seekers could find revaluation from and encounter with spiritual forces. Finally, "there was the idea that particular places were designed for particular species, and, in human terms, particular people." This concept suggested that there was a proper place assigned to each life-form, thus preserving a fundamental balance, that is, a proper relation between each species and their proper

place (Deloria, 1999, 55-56).

As Deloria states, “sacred places are the foundation of all other beliefs and practices because they represent the presence of the sacred in our lives. They properly inform us that we are not larger than nature and that we have responsibilities to the rest of the natural world that transcend our own personal desires and wishes (Deloria, 2003, 285). This relates to the equation we discussed earlier, that is, that power and place equal personality. Accordingly, “Deloria's notion of persons is best understood as a form of vitalism in that persons are characterized by their purposes relative to their places.” (Pratt, 2006, 5).

We have discussed the nature of the one and the many in Deloria's ontology of a vitalistic kosmos constituted by agents in relation to one another. Particularly important for the following discussion of epistemology, and ultimately, scientific methodology, is the notion that a living universe carries with it significant moral implications. Conceived of as a tapestry or symphony in which each individual entity is given a proper role to play, the vitalistic kosmos is fundamentally different than the understanding often employed in the Western tradition of nature as agonistic and defined by conflict relations. The conatus of a Delorian entity is not merely one which suggests a preservation of essence from an individualistic perspective, but is rather one which connects essence to place. When a pebble person pebbles, it doesn't pebble as an isolated pebble rather, it pebbles as a pebble in a kosmos in which it has the specific role of pebbling. Similarly, human persons have a role to play and, as humans, we too are defined by fundamentally human activities.

Personhood in Community

Cordova suggests that “being human, in the Native American perspective, requires having an 'enlarged sense of self' . . . [that is, one that] . . . does not suffer a dilution or eradication as is so feared in the Western view of individuality, but, instead, an 'enlargement' of the sense of what one is” (Cordova, 2007, 149-150). In other words, being human, for a Native American, is not to be a person separate from the very living world which one is a part of. This, of course, connects to the concept of the world as a living universe. All the entities that populate the world are persons just as humans are merely some examples of persons.

To be a person is to be in relation to place, that is, as part of a living universe in which one exists in a kinship relation to all other parts, that is, all other persons. This entails a fundamental sense of purpose and moral responsibility as one understands that “humans beings are not above nature or the result of the world . . . [but are rather] . . . incomplete without the rest of the world . . . [in which] . . . every species needs to give to every other species in order to make up a universe” (Deloria, 1999, 226).

Correspondence, Community and Circular Knowledge

I want to suggest from the preceding discussion of the One and the Many in the Native view that Deloria's suggestion is that tribal peoples hold to an agent ontology that allows for a kind of indigenous pragmatic realism that is more about acceptance of knowledge from a living universe than forcing of knowledge from an inert, passive, lifeless universe as it is in the epistemology of Western science. The way this knowledge is organized, thus, is not that of universal-realism and does not feature the same divisions

and bifurcations seen in the Western method. We might even go so far as to say that many of the doctrines of Western logic, such as the law of the excluded middle or the principle of noncontradiction do not follow for Native epistemology as defined by its vitalistic, relational agent ontology. This is suggested as Deloria states,

> In the Indian conception, it was impossible that there could be abstract propositions that could be used to explore the structure of the physical world. Knowledge was derived from individual and communal experiences in daily life, in keen observation of the environment, and in interpretive messages that they received from spirits in ceremonies, visions, and dreams. (Deloria, 1999, 44)

Similar to Deloria's view, Shawnee philosopher Thomas Norton-Smith offers a view of Native philosophy that I think helps to clarify Deloria's position. Indigenous epistemology is rendered according to what Norton-Smith terms "relatedness as a world-ordering principle" such that "all beings and their actions in the American Indian world are related and interconnected, so knowing about the world involves actively seeking out newly emerging connections between experiences" (Norton-Smith, 2010, 58). This act of seeking out knowledge of emerging connections, however, is not one of violent acquisition and dominance. There is no impartial observer with a view from nowhere in Indigenous thought, that is, "there is no innocent observation of the world without consequence." Rather, since, echoing Deloria's statement that we are all related, "everything is related and we are all relatives, so all entities and beings are interconnected, valuable by virtue of those interconnections, and due respect."

Indigenous knowledge is, thus, “principally a procedural knowledge” involving “activity, performance, or procedure, perhaps as elaborate as storytelling, a healing, or a ritual ceremony, or a simple as observing the world to learn something from it” (Norton-Smith, 2010, 58-59). This is, of course, not to say that Western science lacks a component of procedural knowledge, but rather, to stress that Indigenous procedural knowledge entails a fundamental respect for one's relations.

Outlining a story of Black Elk's account of how the Sioux came their central religious object, the White Buffalo Calf Pipe, through a woman who gave moral and religious instruction to the people, Deloria suggests that “the Western Sioux obtained their knowledge by accepting everything they experienced as grist for the mill,” even mystical experience, thus preserving experiences and ideas that Western science rejects (Deloria, 1999, 44). In this epistemology, for example, emotional experiences and insights from sources outside the standards of Western methodology are given credence. Such sources of knowledge might seem very surprising to the Western mind, as Deloria suggests “specific instructions were given to the old people regarding plants, animals, birds and reptiles, stones, and technology on how to live in community with them . . . [and] . . . these instructions came in dreams, visions, and unusual incidents, and more often than not the relationship with plants and animals was a result of interspecies communication” (Deloria, 1999, 131). In this sense, non-human animals and the like were situated as non-human persons that humans were to learn from, rather than enslave and control.

Moreover, in an ever changing universe defined as a vitalistic kosmos, in which all entities are respected and privileged to act as agents, Deloria suggests that “we must

be alert and try not to classify things too quickly . . . [as] . . . the world is constantly creating itself . . . and making choices that determine the future" (Deloria, 1999, 46). Thus, we see a skepticism concerning absolute trust in induction, accepted as fundamental to reality. In a non-mechanistic conception of the world, a world of expanded possibilities is opened and must be dealt with flexibility. Thus, the method Deloria suggests as employed by tribal peoples is that of correspondence. As he states,

> Many tribes described relationships in terms of correspondence between two things ordinarily thought to be distinct, isolated, or unrelated. The old saying in religious ceremonies – as above so it is on earth – is such a correspondence; so is the gathering of things for medicine bags, for making drums, weapons, household goods, and clothing, and creating altars and blessing dwellings. In each of these activities a variety of things are used and they are said to 'represent' certain things. 'Represent' here is not taken as a symbolic gesture but usually means that these things, their power and knowledge, are actually present in the creation of something new. (Deloria, 1999, 132)

Deloria offers as an example of this the way Osages planted corn. They would plant the corn in the spring around the Missouri River before traveling to the Rockies for summer hunting. They would know it was time to return when the leaves changed color in the fall and their crops were ready. Deloria suggests that this sort of knowledge typified the Indigenous epistemology (Deloria, 1999, 133).

With attention to personality as an important constituent of the kosmos, Native

Americans, in Deloria's view, sought to understand psychological behavior of all entities such that they" began to observe and remember how and when things happened together . . . [such] . . . that they made connections between things that had no sequential relationships." Even with "no firm belief in cause and effect, which plays such an important role in Western science and thinking . . . Indians were . . . [still] . . . well aware that when a certain sequence of things began, certain other elements or events would also occur." (Deloria, 2001, 26).

We see here, then, a certain methodology at work in which seemingly unrelated activities and ceremonies actually result in the accomplishment of certain tasks of necessary for survival. Essentially, without a strict method of division and exclusion, the same basic goals common to all peoples, Western or non-Western, are eventually reached through knowledges and practices passed down through generations as received through a variety of methods and sources.

Knowledge, in this format, Deloria suggests, was arranged circularly with "no ultimate terms or constituents of their universe, only sets of relationships that sought to describe phenomena . . . [such that] . . . no concept could stand alone in the way that time, space, and matter once stood as absolute entities in Western science." In this scheme, knowledge was attained, as one idea served as a starting point and was examined by its relations with other concepts. Thus, one would "arrive back at the starting point with the assurance that a person could properly interpret what constituted the idea and how it might manifest itself in concrete physical experiences" (Deloria, 1999, 48).

In addition to this method devoid of the classic logical principles of Western science, there "was a wholistic understanding that undergirded tribal technology . . . [such

that] . . . the knowledge that the old ones attached to their technology demanded that they use their powers sparingly and on the proper occasion. (Deloria, 1999, 133). In this sense, there was a principle of limitation at work in Indigenous knowledge practice.

How one gets knowledge is very important to the Native view. That there are moral implications to every action taken, even that of attaining knowledge, is suggested by Deloria: "the Indian people were concerned about the products of what they did, and they sought to anticipate and consider all possible effects of their actions." (Deloria, 2001, 23).

In that knowledge was fundamentally a relational affair, as everything in the conception of the kosmos as vitalistic, "Indian people carefully observed phenomena in order to determine what relations existed between and among the various 'peoples' of the world . . . [such that] . . . Indians . . . [had the knowledge to] . . . live comfortably in the physical world, and to not unduly intrude into the lives of other creatures" (Deloria, 1999, 53).

Thus, for the Native American, attainment of knowledge is a relation of respect and reciprocity such that some knowledge may be off-limits. As professor of Native American Studies, Andrea Smith quotes Cree historian Winona Wheeler, "In the Cree world all knowledge is not knowable because knowledge is property in the sense that it is owned and can only be transmitted by the legitimate owner" (Smith 133). As Deloria states, "A great gulf exists between these two ways of handling knowledge . . . [as] . . . science forces secrets from nature by experimentation . . . [while] . . . the traditional people accepted secrets from the rest of creation" (Deloria, 1999, 135).

This form of knowledge, Deloria suggests, is holistic and, being predicated upon

relationality and the perceived correspondences between entities and concepts, however seemingly unrelated from a less discerning eye, allows for an increased perception of anomalies. With fundamental attention to harmony and "natural ordering of comic energies," the people could respond to perceived imbalance and seek to correct that imbalance through the use of ceremonies. Rather than reducing phenomena to "alleged constitutive parts and inherent principles," the tribal epistemology works with the whole vision in mind (Deloria, 1999, 134-135).

As Deloria suggests, "Instead of isolating things, Indians encompassed them; togetherness, synthesis, and relatedness characterized their experience of the universe." In turn, this led to "a knowledge totally unlike Western scientific knowledge and yet an understanding of great profundity . . . such that . . . [tribal peoples] . . . have an intuitive understanding of the spiritual nature of life which enables people to act in a purposive and predictive sense" (Deloria, 1978, 13). This form of knowing, following Deloria's argument, is one more fundamentally suited to a sustainable and satisfactory existence in relation to the non-human and various human worlds. It is adaptive and epistemologically open, in contrast to the Western epistemic attitude we have been critiquing. This alternative metaphysics avoids the epistemic attitude of exclusion that we discuss Deloria critiques. Additionally, this model of epistemology, fashioned around a fundamentally interconnected agent-ontology, cannot be understood according to the usual subject-object scheme. We will return to this latter point in chapter five.

Conclusion

With contrast to the Western perspective as outlined in the first chapter, it isn't

clear how the universal-realist tradition with its exceptionalist-triumphalist narratives can see the range of possibilities afforded by the Indigenous tradition. The fourth chapter has given us some hope in terms of Western science's ability to reform itself via the adoption of differing paradigms. These, however, are aptly described as revolutions. The effort associated with making change presents itself as a problematic stumbling block.

Additionally, it seems as though a voice from the bastions of the academy might be necessary. This is perhaps why it is useful to compare Indigenous thought to Western thought and notice similarities on the margins as we have done. Our next step will be to develop the idea that we might suggest that Deloria ultimately proposes – a necessary move beyond Feyerabend and epistemological anarchy.

CHAPTER V

AGAINST ANARCHY

Having outlined a description of two competing metaphysics of the Western and Indigenous traditions, and their entailing epistemic attitudes, we are able to better appreciate Deloria's project as one of reforming a problematic universal-realist and exceptionalist-triumphalist orientation toward knowledge-practice and knowledge-valuation. Put in simpler terms, Deloria's project is one of reforming a certain epistemic attitude of exclusion seen in customary practice of Western science. Along these lines, we have suggested that Deloria seeks to extend the rubric of acceptable science to the knowledge-production of indigenous folk, in that indigenous folk have a wealth of knowledge specific to place and relationality. This, in the thought of several indigenous thinkers, including Deloria, has implications for both Indigenous sovereignty and for the survival of humanity in general.

To return to Paul Feyerabend's epistemological anarchy, we find his views to coincide with Deloria as they share an expanded concept of acceptable knowledge. However, Feyerabend differs from Kuhn, in Deloria's account, due to his willingness to consider voices outside the institution of science as able to advance what is later termed scientific progress. Indeed, Deloria suggests, science does proceed in fits and starts, as in Kuhn's account of paradigms, and results from the knowledge production of those outside the acceptable paradigm of normal science. These outliers, if they succeed in upsetting the establishment, eventually prompt paradigm shifts. However, Deloria maintains, this account remains limited as Kuhn fails to account for viable knowledge production outside of the established institutions of scientific practice. Kuhn's account, he suggests, still

bows to the established institutional authority and is, thus, limited.

In Deloria's opinion, however, Feyerabend is willing to lend credence to mythological and religious accounts in a way that Kuhn's account is unwilling to. Deloria, in *Spirit and Reason*, states that Feyerabend holds that "ideas should be judged by their potential for making a contribution to understanding, not on their origin, former use, or relationships to accepted symbols of contemporary authority" (Deloria, 1999, 8).

This point about Feyerabend's epistemic openness is corroborated with reference to Feyerabend's book, *Against Method*, wherein Feyerabend goes so far as to suggest that anything is open for consideration in terms of scientific methodology. In Feyerabend's thought, excessive adherence to categories contingent upon particular paradigms impacts actual knowledge-practice, often such that practice is stunted. The idea of a particular unchanging methodology or strict adherence to certain accounts of rationality can be limiting. As he states, "The only principle that does not inhibit progress is: anything goes" (Feyerabend, 1988, 14).

Feyerabend's primary concern is not the wielding of greater power via acquisition to dominate nature, as in the epistemic view Deloria critiques. As Feyerabend states in his autobiography, *Killing Time*, the pursuit of knowledge is better informed by shirking adherence to "abstract concepts such as 'truth,' 'reality,' or 'objectivity' . . . [as these concepts] . . . narrow people's vision and ways of being in the world" (Feyerabend, 1996, 179-80).

Deloria, as we have suggested, wants to facilitate a similar integrated system of knowledge-production that includes tribal wisdom from traditional sources. The problem with Western science, in Deloria's account, is its tendency toward vicious abstraction and

misplaced concreteness. These fallacies lead to the very attitude of exceptionalist-triumphalism that precludes the respect Deloria believes Indigenous knowers are entitled to.

However, Deloria, we might suggest, moves beyond an account of science as simply anarchistic. His admonition to Western science can be understood as not unlike that of Gregory Cajete. As Cajete states, "Western science must acknowledge . . . [a common foundation rooted] . . . in the same physical world as Native science, and for its continued evolution, it must integrate and apply the collective lived experience of human participation with nature" (Cajete, 2000, 25).

This viewpoint is an embodied one, as "modern thinking abstracts the mind from the human body and the body of the world. This modern orientation, in turn, frequently disconnected Western science from the lived and experienced world of nature" (Cajete, 2000, 26). This matches well with our account of Deloria's suggestion that Western science is aligned with a particularly maladaptive epistemic attitude of vicious abstraction and exclusion. This abstraction is fundamental to the universal-realist view we described, but particularly its universal component. The ontological fear underlying the universal-realist view leads to the exceptionalist-triumphalist narrative, wherein Western culture takes on a combative role with the rest of existence. Merged with an anthropomorphic myth derived from Genesis, Deloria suggests, the Greek tendency to highlight abstract and universal categories over the assumed illusory nature of experience led on one hand to a condition of fundamental alienation, including from nature and from one another, and on the other hand, a position of planetary dominance for Western culture. The exceptionalist-triumphalist narrative is simply part of this dominance. Devaluation of

other cultures obscures the tremendous sins of the fathers of contemporary Western science and culture, while also serving to heighten the esteem afforded to Western culture. Put poetically, Apollo can stand, holding forth the severed head of the Gorgon, chasing back the Dionysian masses, and have a clear conscience about the whole affair.[3] History of genocide be damned if those other cultures aren't important, we got science and culture in the end!

Intellectual Sovereignty and Unified Metaphysics

We see the exceptionalist-triumphalist narrative playing out in perhaps its most harrowing manifestation as the genocidal acquisition of this content unfolds with the culpable culture most fantastically deluding themselves into a sense of doing the right thing. As Deloria states,

> A century ago whites trampled Indian legal rights, religion, and culture because they considered it a primitive and savage form of human existence that no group of people should be forced to maintain. The motivation of injustices past was the strongly held belief of non-Indians that they were given the divine command to civilize the peoples of the earth. In short, they did it because they thought they were right. (Deloria, 1999, 202-203)

3 The distinction found in Frederick Nietzsche's *The Birth of Tragedy* between the Dionysian and Apollonian elements, that is the chaotic, emotional element of Dionysus and the element of orderly mastery over nature represented by the figure of Apollo provide useful metaphors here (Nietzsche, 1967, 39). In some sense, the way in which Dionysus operates as Apollo's other provides a good metaphor for the way in which the non-Western world is fixed as Western modernity's other or, as we might more radically put it, savagery and barbarism as civilization's other. As Harding suggests, modernity necessarily establishes tradition as an other, so as to make itself more attractive (Hardin, 2008, 179).

The exceptionalist-triumphalist narrative at work in these phenomena was and is harmful in more ways than just how it decimated the indigenous peoples. On one hand, it is most clearly detrimental to the peoples oppressed by the dark history of colonialism. From Stannard's account of genocide to Deloria's struggle for his people to be afforded respect as knowers, we have proposed that such a narrative has had and continues to have a detrimental effect on Native peoples. What is perhaps less obvious is the manner in which such a disjointed existence in the world, via the universal-realist lens and the sort of epistemic conservatism and authoritarianism that Feyerabend rejects, affects the lived experience of the colonizer as well as the planetary context. In this scheme of existence, the environment is conceptually divided as nature in opposition to human culture.

Deloria argues that the idea of alienation and feeling displaced, discussed and theorized about by everyone from Marxists to Christians to existentialists, is a product of the metaphysical underpinnings of Western culture – Western science and Western religion included. Deloria, while concerned with Indigenous sovereignty, is also concerned with worldwide existence and has a clear idea of what this would involve. The prescription of indigenization has clear implications for both.

It is important, as an aid in understanding, to contrast between sovereignty in an absolute separatist sense and sovereignty in a way attendant to the necessary relation of Indigenous culture toward Western culture as a result of shared existence in the same planetary setting. Recalling the importance of community and interrelation in Deloria's account, we must conclude that Deloria is concerned with sovereignty in the sense that recognizes interrelatedness with settler culture. Accordingly, Deloria's account has both a component of concern for Indigenous sovereignty as well as a remedy for humanity's

fractured planetary existence.

To comment first on the issue of Native sovereignty, as Warrior states, “By the time he wrote *God is Red*, Deloria believed that the key to an American Indian future was the return to Native ceremonies and traditions within a framework of asserting sovereignty” (Warrior, 1995, 88). This indigenization, however, isn't isolated to the revitalization of Indigenous cultures in isolation. There is a way of existing in harmony with the rest of existence that Deloria maintains Native American tradition emphasizes. Warrior suggests that, more than striving for Indigenous sovereignty, Deloria holds that the traditional Native American way of life is the most suited as the ideal form of human existence. As Warrior states,

> What Deloria articulates . . . is a position that does not simply posit the essential superiority of American Indians traditions over other ways of life and cultures. His argument that American Indian traditions are the best way of living arises from the presence of those traditions in this particular place for such a long period of time and from the actual practices derived from them. (Warrior, 1995, 91)

This point was argued in chapter five where Deloria describes what I identified as a vitalistic kosmos made up of a variety of purposive agents in community. This Spinozistic-esque understanding of the kosmos can be understood as providing a particular ethical system and epistemology. If all that exists is living and interrelatedness is fundamental to existence, then every being has an interrelational responsibility toward all other beings, as all have a specific role respective to their place. Thus, knowledge

itself must be considered an interrelated phenomena and knowledge production an exchange between equals rather than a hierarchy of subject to object. This involves a certain art of listening to the whole rather than merely employing the reductive violence of reason against the rest of the kosmos.

Following this brief discussion of Deloria's suggestion that the Indigenous epistemology and way of living is most beneficial for all humanity, we will now explore Daniel Wildcat's presentation of Indigenous realism as a solution to many contemporary problems we face today, in particular the impending threat of climate change.

Indigenization as a Solution

As we have discussed, Deloria finds that Indigenous knowledge is particularly adaptive and offers a well-rooted alternative of living in balance to the paradigm of domination that underlies Western culture. Wildcat concurs with this idea, stating that "Indigenous knowledges offer insights into living well on Mother Earth because they are fundamentally cooperative and collaborative constructions" (Wildcat, 2009, 77). In this light, this project of examining Native philosophy seems vitally important, echoing Wildcat's view that ". . . the proposal to critically examine the knowledge and wisdom of the indigenous peoples of North America for insights on how humans might live well and enhance life on the planet seems prudent" (Wildcat, 2009, 79). Furthermore, "the proposal to use indigenous knowledges to save the Earth denotes knowledge as something not passively found in 'nature,' but something found in the experiential exploration of our human place within the natural world" (Wildcat, 2009, 73).

This conclusion maps well onto Dewey's suggestion, as Wildcat paraphrases him,

that there are “miseducative features of the Western dualism, or . . . [an] . . . invidious distinction between nature and culture.” Against this invidious distinction, which we have traced through Deloria's historical account of Western epistemology and ontology, Deloria as well as Dewey offer the insight “that understanding is more important than knowledge as truth, or knowledge as certainty” (Wildcat, 2009, 104-105).

The ways in which epistemology works under such a scheme of knowledge as certainty or truth results in the overlooking of experiential “knowledge gained through attentive living, such as singing and drumming.” While “experimental logic and analysis” is important, it is “in and of itself, insufficient in generating life-enhancing knowledges for humankind. Rather, “the necessary and sufficient conditions for life-enhancing knowledge requires paying attention to the life surrounding us.” Wildcat calls the outcome of this remedied orientation a “deep spatial experiential body of knowledge compiled by scientific information and knowledge” (Wildcat, 2009, 15).

Relatedly, both Deloria and Wildcat can be read as advocating a rejection of the tentative outcomes of either-or distinctions as exclusionary definitions of universal, absolute knowledge. With the realization of the truly subjective dimension attached to so-called neutral point-zero observers, all observations must be treated as tentative and embodied, dependent on the situatedness of all epistemic claims. Moreover, situatedness as an epistemic agent is also situatedness in place, as Deloria and Wildcat would argue. In this sense, the individual is not an atomistic entity, but is rather fundamentally in community both with fellow human beings as well as the Delorian vitalistic kosmos composed of a multitude of agents, as we have outlined.

As Wildcat suggests, “many indigenous knowledge systems extend the notion of

knowledge-construction to a cooperative activity involving the other-than-human life that surrounds us" (Wildcat, 2009, 17). Attendant to this concept, there is a sort of pan-Indian "recognition of practical knowledge and . . . goals . . . [as] . . . based on . . . acknowledgement and respect – an attentiveness – to the sacred in the world surrounding us" (Wildcat, 2009, 56). This perspective, Wildcat suggests, is vitally important to our survival, which we have already suggested is Deloria's motivation. As Wildcat states, "Now we face a situation on the planet where Native voices must be heard in order to avert or hopefully minimize the deadly events emerging" (Wildcat, 2009, 61).

As we have demonstrated in chapter five, Deloria holds that Indigenous epistemology and ontology is particularly suited to planetary adaptiveness and survival. Wildcat echoes this claim, stating "because indigenous people have paid attention to our Mother Earth, it is important to listen to what we can share with humankind" (Wildcat, 2009, 17).

In Wildcat's view, "we can, if attentive, live in what the American Pragmatist John Dewey suggested was a coextensive present with both the past and the future" (Wildcat, 2009, 114-115). This means that rather than picturing a teleological progression from a primitive state to a more advanced state, with attendant morally evaluative statements, we can modify our modernist ways of being more closely to that of an Indigenous way of being.

There is, again, a way of being in the world that is not informed by the anthropocentric admonition to be fruitful, multiply and subdue the earth. This alternative is to live in accordance with one's biological community and the natural limitations of the world. This, Wildcat and Deloria argue, is a fundamental strength of the indigenous

viewpoint.

Conclusion

In this account we have examined Deloria's critique of Western science and suggested that this is better conceived of as a critique of its particular epistemic attitude. Deloria focuses on the exclusionary work that it does, promoting what we have termed an exceptionalist-triumphalist narrative. This is as a result of universal-realism. The adherence to universal categories, as derived from Greek philosophy, leads necessarily to many bifurcations, a problematic relation to the environment, and a tendency toward authoritarianism. An adherence to such a closed account of possible knowledge, as Feyerabend argued, precludes a more effective practice of science – a view that Deloria echoes quite strongly.

Deloria, however, moves beyond Feyerabend in his account of what we might term indigenous realism, following Wildcat's calls to find a solution to our present environmental predicament. Accordingly, Deloria provides an account of knowledge based upon acceptance of vitalistic kosmos that both affirms the knowledge-production of indigenous folk and also provides a solution to the contemporary issues through a focus on localization of epistemology and human existence. Knowledge, in the indigenous perspective, becomes more than a subject-object relation and the forcible acquisition of data.

Humans, with a proper sense of place and duty to community, including non-human members, practice knowledge-production in a very different context than contemporary Western society. Knowledge-practice becomes a two-way street – a way in

which the knower affirms the agency of the non-human world while at the same time accepts the wisdom imparted by non-human world. Knowledge-practice is thus limited by place and context and does not adhere to Feyerabend's suggestion that “anything goes.” Knowledge, as all things, has a particular place.

REFERENCES CITED

Bitsakis, Eftichios. “Scientific Realism” *Science & Society* 57.2 (1993): 160-193.

Bragdon, Kathleen J. *The Columbia Guide to American Indians of the Northeast*. New York: Columbia University Press, 2001.

Brown, Matthew J. "John Dewey’s Logic of Science." *HOPOS: The Journal of the International Society for the History of Philosophy of Science* 2.2 (2012): 258-306.

Brumble, H. D. "Vine Deloria, Jr., Creationism, and Ethnic Pseudoscience." *American Literary History* 10.2 (1998): 335-46.

Cajete, Gregory. *Native Science: Natural Laws of Interdependence*. Santa Fe, NM: Clear Light, 2000.

Callicott, J. Baird. *Earth's Insights a Survey of Ecological Ethics from the Mediterranean Basin to the Australian Outback*. Berkeley, CA: U of California, 1997.

Cordova, V. F. *How It Is: The Native American Philosophy of V. F. Codova*. Arizona: University of Arizona Press, 2007.

Deloria, Vine, Jr., “Civilization and Isolation.” *The North American Review* 263.2 (1978): 11-14.

Deloria, Vine, Jr., *Evolution, Creationism, and Other Modern Myths: A Critical Inquiry*. Golden, CO: Fulcrum, 2002.

Deloria, Vine, Jr., *God Is Red: A Native View of Religion*. Golden, CO: Fulcrum, 2003.

Deloria, Vine, Jr., *The Metaphysics of Modern Existence*. San Francisco: Harper & Row, 2012.

Deloria, Vine, Jr., and Daniel R. Wildcat. *Power and Place: Indian Education in America*. Golden, CO: Fulcrum Pub., 2001.

Deloria, Vine, Jr, Ed. Barbara Deloria, Kristen Foehner, and Samuel Scinta. *Spirit & Reason: The Vine Deloria, Jr., Reader*. Golden, CO: Fulcrum Pub., 1999.

Deloria, Vine, Jr. *Red Earth, White Lies: Native Americans and the Myth of Scientific Fact*. Golden, CO: Fulcrum Pub., 1997.

Feyerabend, Paul. *Against Method*. Rev. ed. New York: Verso, 1988.

Feyerabend, Paul. *Killing Time: The Autobiography of Paul Feyerabend.* Chicago: University of Chicago Press, 1995.

Foucault, Michel. "Nietzsche, Geneology, History," *The Foucault Reader.* New York: Pantheon Books, 1984.

Gordin, Michael D. *The Psuedo-science Wars: Immanuel Velikovsky and the Birth of the Modern Fringe*. Chicago: The University of Chicago Press, 2012.

Harding, Sandra G. *Sciences from Below: Feminisms, Postcolonialities, and Modernities*. Durham: Duke University Press, 2008.

James, William. *The Meaning of Truth: A Sequel to 'Pragmatism'.* Cambridge: Harvard University Press, 1979.

Kuhn, Thomas S. *The Structure of Scientific Revolutions.* Chicago: University of Chicago Press, 1996.

Madley, Benjamin. "California's Yuki Indians: Defining Genocide in Native American History." *The Western History Association* 39.3 (Autumn 2008), 303-332.

Mann, Charles C. *1491: New Revelations of the Americas before Columbus*. New York: Vintage, 2006.

Merchant, Carolyn. *Radical Ecology: The Search for a Livable World*. 2nd ed. New York: Routledge, 1992.

Mignolo, Walter. *Local Histories/global Designs: Coloniality, Subaltern Knowledges, and Border Thinking*. Princeton, NJ: Princeton UP, 2000.

Montag, Warren, and Ted Stolze. *The New Spinoza*. Minneapolis: U of Minnesota, 1997.

Nietzsche, Friedrich Wilhelm. *The Birth of Tragedy, and the Case of Wagner.* Trans. Walter Kaufmann. New York: Vintage, 1967.

Norcini, Marilyn. "The World We Used to Live In: Remembering the Powers of the Medicine Men" *Wicazo Sa Review* 23.2 (Fall, 2008), 110-112.

Norton-Smith, Thomas M. *The Dance of Person and Place: One Interpretation of American Indian Philosophy.* Albany: State U of New York, 2010.

Oberheim, Eric. "On the historical origins of the contemporary notion of incommensurability: Paul Feyerabend's assault on conceptual conservatism." *Studies in History and Philosophy of Science*. 36 (2005): 363-390.

Popper, Karl. *In Search of a Better World: Lectures and Essays from Thirty Years.* New York: Routledge, 2000.

Pratt, Scott L., "Persons in Place: The Agent Ontology of Vine Deloria, Jr." *APA Newsletter. 0*6.1 (2006): 4-9.

Rorty, Richard. "Solidarity or Objectivity?" *The Rorty Reader.* Ed. Christopher J. Voparil and Richard J. Bernstein. Malden, MA: Wiley-Blackwell, 2010.

Spinoza, Benedictus De. *The Ethics ; Treatise on the Emendation of the Intellect ; Selected Letters*. Trans. Samuel Shirley. Ed. Seymour Feldman. Indianapolis: Hackett Pub., 1992.

Stannard, David E. *American Holocaust: Columbus and the Conquest of the New World*. New York: Oxford UP, 1992.

Vizenor, Gerald. Manifest Manners: Narratives On Postindian Survivance. Lincoln: University of Nebraska Press, 1999.

Warrior, Robert Allen. *Tribal Secrets: Recovering American Indian Intellectual Traditions*. Minneapolis: U of Minnesota, 1995.

Wildcat, Daniel. *Red Alert!: Saving the Planet with Indigenous Knowledge.* Golden, CO: Fulcrum Pub., 2009.

Wildcat, Daniel. "Indigenizing the Future: Why We Must Think Spatially in the Twenty-first Century." *American Studies* 46.3/4 (2005): 417-440.

Whitehead, Alfred North. *Science and the Modern World.* New York: Free, 1997.

Zagorin, Perez. "Francis Bacon's Concept of Objectivity and the Idols of the Mind." *The British Journal for the History of Science.* 34.04 (2001): 379-393.