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Cultivating Creation: Exploring Traditional Ecological Knowledge of Native Song

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Cultivating Creation: Exploring Traditional Ecological
Knowledge of Native Song

by

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A culminating thesis submitted to the faculty of Dominican University in partial fulfillment
of the requirements for the Master of Arts in Humanities

Dominican University of California

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This thesis, written under the direction of the candidate's thesis advisor and approved by the Chair of the Master's program, has been presented to and accepted by the Faculty of the Department of Humanities in partial fulfillment of the requirements for the degree of Masters of Arts. The content and research methodologies presented in this work represent the work of the candidate alone.

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Abstract

Humanities scholarship, the result of millennia of deep reflection on the human condition, informs the practices and principles that structure the way we approach our investigation of the human experience. As we consider the ways in which the humanities canon shapes the relationship of what we include as “knowledge” and how we value it, the continued exploration of how meaning and value are perceived in traditional knowledge systems and their contributions to our current models of thinking and process is vital. Through an investigation of relationships between Native song and Traditional Ecological Knowledge (TEK), I explore the importance of Native song as just one example of the powerful knowledge systems that synthesize and amplify the voices and visions of traditional knowledge, Native sciences and worldviews. As such, Native songs offer a path towards understanding diverse knowledge systems and what they have to offer to the worlds of critical analysis and academic rigor, as well as the possibilities of strengthening the larger society as a whole.

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chiokoe utte'esia

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A Note About Terms

For the sake of clarity, throughout this paper I use the following terms interchangeably to describe the people: Indian, American Indian, Native American, Native, and Indigenous. Tribe and Nation will also be used interchangeably in a similar context. While each term has been used over the centuries to categorize and describe the first peoples of North America for various purposes, and also in relationship to changing eras, it should be noted that these descriptors are all in a language that is foreign to the indigenous groups that they are attempting to describe. As such, it is recognized that they are descriptors that cannot honor the immense diversity of the currently 573 (BIA 2018) federal and state recognized (United States) tribes that contain more than 50 distinct language families, cultural traditions and worldviews

Rethinking the Narrative of Knowledge

“... I listen to where they wish to live,
ask them about the birds they need,
the butterflies, insects when they blossom,
and sing to them songs
some say are forgotten,
the words for placing them in earth
and I promise to protect them
and paint the house as the old ones did
with the flowers, the plants, the lizards
and vines, and believe, yes, there is renewal,
because this is what the seeds ask of us
with their own songs
when we listen to their small bundle of creation...”

- excerpt from *Ceremony for the Seeds* by Linda Hogan (Chickasaw)

The world of critical inquiry, the explorations of knowledge and cultural consciousness, the analysis of our human experience, relationships and structures: each of these systems of thinking that lay at the foundations of academic rigor refer to the immense body of work that is the Humanities as home. The foundations of study and disciplines that investigate the expressions of the human mind (Bod 1) such as language, literature, history, art and philosophy lie in the realm of humanistic scholarship. In a 2014 *Harvard Magazine* editorial, Harvard University President Drew Faust describes the

value of ones immersion in the Humanities canon as like being handed “a looking glass,” (Faust) that is, an invaluable perspective into the human condition that has the potential to both stretch beyond ourselves and, at the same time, bring our present lives into new view. A 2017 *Dartmouth Alumni Magazine* article called humanities studies “essential” and “critical” to our intellectual pursuits in a time when “society and culture are highly polarized in what has been deemed the ‘post-truth’ era. Because Big Data is so valued we even capitalize the term. Because the fake news phenomenon has been giving critical thinking... a run for its money” (Hertog). Similarly, an October 2017 *Washington Post* article called the practices of humanistic study essential to understanding and solving problems in the “current state of our world today,” asserting that the humanities are what pushes us as individuals to “open to the examination of the entirety of the human condition and encourages one to grapple with complex moral issues ever-present in life. It encourages reflection and provides one with an appreciation and empathy for humanity” (Strauss).

As we begin to consider the scope of Humanities scholarship, the reach of influence the humanities knowledge systems have in how they inform the practice and principles that structure the way we approach our investigation of the human experience begins to emerge. From retaining collective cultural knowledge of both the past and present, to educating future generations, engaging the public in critical debate, and researching and posing hypotheses regarding human artifacts, the Humanities explore what we experience and create as people. As we consider how these systems of ordering inquiry and analysis have shaped and informed us in academics and as a contemporary

society, in what ways has the Humanities canon shaped what we have come to value as knowledge?

If we begin with Rens Bod's *A New History of the Humanities* as a starting place in exploring the development of humanistic scholarship and academic frameworks for inquiry and the relationship between these frameworks and the development of how we consider and assign value to knowledge resources, then we begin to see a relationship between the Humanities and what we define as knowledge itself. Bod's text focuses on the development of Humanistic study, methodology and practices that are the framework through which we approach critical analysis. His historical study focuses on "patterns in humanistic material on the basis of methodical principles" (7) across disciplines beginning with what he identifies as the first methodical humanistic analysis, namely, linguistics studies, being the dawn of the Humanities in Antiquity. From this time prior to the clear division of arts and science as separate schools of study, Bod traces the emergence of principles for systems of thinking and methodologies of investigation that are foundational to all areas of study and how the manner in which we approach analysis has lasted over time. It is during this timeframe, at the very beginnings of scholarship and critical inquiry, that we see a shift in what we regard as 'knowledge' and also in how we assign value to varying sources of 'true' and informed ways of knowing.

This shift in the definitions of knowledge happened at a time in history when oral traditions and cultural arts were strong and vibrant transmissions of traditional ways of knowing and being in the world. Like the *Iliad* and the *Odyssey* in their original forms, oral traditions and cultural arts were sacred sources of knowledge and were honored as such in the original explorations of humanistic study and scholarship. Bod's historical

analysis of these traditions as valued and informed source materials of the time not only found that emerging scholarship included these forms as primary data; they, also, relied on oral narrative for validation and support in the review of other sources. Oral traditions held a vital authority in these investigations, as they were a way by which to validate the authenticity of, for example, an ancient text. The historical events of the text were verified by the oral histories of the local land, the area and people, indicating an inherent value in the quality of the oral narrative as a touchstone of verification and truth. However, this relationship changes around the first century BCE and the inconsistency of the variations found in the transmission of oral and arts traditions quickly became an issue for scholars working towards the determination of a record of accuracy and objectivity, and thus “establishing facts” (Bod 251) as verifiable truth.

This is the beginning of patterned analysis that lead to the development of such methodologies as the *written source principle* and *philology*, structures that were created with the aim of authentication and validation. Developed to remedy “large quantities of inconsistencies...” (Bod 36) this evolving framework challenged the validity of knowledge held within oral tradition and creative arts, as by their nature they house variation and value interpretation; details dance and move in these traditions, as they are shared through the expression of the speaker, singer, carver, dancer, orator and artist. As academic scholars moved towards verifiable consistency in order to come to a notable and achievable conclusion “...based first and foremost on textual rather than oral sources, and thus on the written source principle...” (Bod 25) oral traditions and their traditional scholars, as well as other interpretive arts, were now seen as fallible and unreliable.

This shift in the perceived value of traditional forms of knowledge becomes a lasting lens. Many scholars today argue that literate societies promote more sophisticated and comprehensive ways of experiencing the world than those with limited or nonexistent literacy. The value of the verifiable and documented knowledge form is elevated in our modern framework and we begin to see how it is possible that the scholarship of our times is built on the legacy of the written word. Through President Faust's "looking glass" we see the emergence of a dominant worldview that affects how we perceive meaning and value in traditional societies and their contributions to our current systems of knowledge, science, art and culture.

Ways of Knowing

I recently had the opportunity to spend a day in an intensive workshop with ethnobotanist and clinical herbalist Sage LaPena. The workshop was part of a series of community events run by The Cultural Conservancy's Native Foodways Program. The day was held at their educational farm space The Indian Valley Organic Farm & Garden in Novato, California, and was centered on indigenous ecological relationships with land, water, and plants through Native agricultural and foodways traditions. Sage is Nomtipom Wintu, a Native California tribe whose traditional lands extend from north-central California near the Sacramento Valley west to the Klamath Mountains. She specializes in both Western and Native American herbal traditions that reflect her work with her own tribe and neighboring tribes including the Maidu, Miwok, Pomo, and Karuk.

Throughout the day Sage's teachings on the land highlighted the importance of our human role within a diverse and thriving ecosystem. She talked of the role each *being* plays as part of that larger system: from land animals to sea microbes, each entity has a *relationship* to the earth as part of the living community. She discussed the responsibility we all have as fellow *beings* within the natural system to engage in ethical practice in that space, in recognition of our interdependence as a whole. Held within Sage's teachings are the ethics and values that lay at the foundation of traditional relationships to ecological knowledge and systems of being in the world, our 'original teachings' that give form to interconnection, reciprocal relation, and the awareness of sacred. Growing from these roots, Native knowledge systems walk a path that engages the living world in deep relationship in order to cultivate a healthy future for all.

Native scholar Melissa K. Nelson (Anishinaabe) provides an entrance into some of the foundations of Native thought and Indigenous ways of knowing and being in her book *Original Instructions*. The text is a collection of works that come together to share Native knowledge systems that reflect this interdependence of life, inspiring the reader to consider an examination of our current modern scope and how far our systems seem to be from remembering the importance of this reality. Throughout her work, Nelson explores how the revitalization of traditional knowledge and practice systems can offer a path towards bringing our modern worldview back into *relationship*. In a current world that is grappling with some of the more complex moral issues of recent history with regards to climate chaos and the 'post-truth' era, a return to *relationship* may be worth considering. "Curiosity, creativity, and empathy aren't unruly traits that must be reined in to ensure success. Just the opposite. The human touch has never been more essential in the

workplace than it is today,” author George Anders writes in his book quoted in the 2017 Washington Post article titled *Why we still need to study the Humanities in a STEM world*, “The more we automate the routine stuff, the more we create a constant low-level hum of digital connectivity, the more we get tangled up in the vastness and blind spots of big data, the more essential it is to bring human judgment into the junctions of our lives” (Strauss).

Relationships with one another, other beings and the natural world, bring us into engagement in the collective reciprocal links that connect us in the commonality of creation. A piece by elder, author, and activist John Mohawk (Seneca) in Nelson’s *Original Instructions* is from a welcoming that was offered to open the space of a gathering circle. This is notable, because it is a conference style gathering, a coming together of people for discourse and knowledge exchange in a current modern context. As the people came together, the first words shared were ones of recognition of relations to all. His opening to acknowledge all beings that walk, swim, fly, and then into the expanded world of brother sun, grandmother moon, all the waters of life, the thunder voices that come from the West, the stars that are the face of the universe that hold the knowledge we have already forgotten. The list is notably comprehensive, as he takes the time to respectfully acknowledge all forms of life known, as well as that that is ‘unknown.’ “This is the talk that our people give at the beginning and end of every group gathering, so that we remember our relationships,” he says. “I’ve always thought it a very useful thing to remember that relationship requires us to be thankful.” (Nelson -)¹

¹ “-” Indicates lack of page number

Native activist and author John Trudell's (Santee Dakota) work also appears in Nelson's text. "To me this is the fact that we're all human beings in relation. Every one of us, we are the descendants of a tribe. Every one of us has a tribal ancestry and we have a genetic memory. Encoded in the genetic memory is the experience of our individual and collective evolution. You can follow it through the ancestry. The information is there, because we're human beings – the knowledge of all those experiences [those relations] are with us." (319) Nelson reflects on this in her own personal relationship with those *original instructions* as a guide for living in a good way. Through each of these pieces Nelson illustrates the importance of relationship among, between, through all aspects of living creation, including our living relationship with the earth. This acknowledgement of relationship is the place where the cultivation for ethical living happens.

Interwoven into Sage LaPena's teachings were rich stories of ancestors, those who held knowledge of the bonded relationship between humanity and nature. Her dance between tradition, science, story and the land was a dynamic reflection of the Indigenous relationship to oral traditions, which are a potent part of the Native transmission of knowledge. Nelson describes that these teachings refer to the diverse lessons and ethics that contain the "literal" and "metaphorical" instructions for how to be a good human being living in reciprocal relations with *all*: "Indigenous education is more about observing things in action, understanding things in their context, and listening to the reflective rhythms and inherent wisdom that spiral through the story..." (2)

Following this tradition, Sage's stories were grounded in examples of the human relationships in, and responsibilities to, the natural world. One story stood out in particular to me, as she described the responsibilities each *being* has in how they relate to

and tend to the earth. Worms bring new oxygen into the soil as they tunnel and move, bees are vital pollinators. Each being she said, has a interactive role in tending to the earth for the benefit of the whole and humans are not excluded from this relationship. Sage's teachings brought into immediate focus how distant our current relationship is to the natural world. In an Indigenous worldview is the awareness of each being's relation to earth and all other members of the natural community, our interconnection. Traditional knowledge echoes this clear and reverberating tone of acknowledgement and importance of deep relationship that exists within the Native American and Indigenous ethos.

This awareness of the human being in relation to the wider scope of the world is vital to understanding Indigenous worldviews, as it connects the people directly to the land, to the waters, to all other living beings seen and unseen. This worldview is one that resonates with the tenets of traditional knowledge systems and provides a way of being that binds all life together on this earth. This awareness of connection leads to an ethical space of living with the world around us and celebrates the health and wellbeing of all involved in that larger connected web on earth.

Bridging Worlds

In 1997 the Gitksan and Wet'suwet'en peoples in Canada B.C. argued a court case that, for the first time, heard the oral histories of the Indigenous peoples with regard to land rights. In order to prove their title, they had to provide evidence that they had occupied their territories for thousands of years. Having no written documents to prove

the claim, Gitksan and Wet'suwet'en elders presented their oral histories in the form of narratives, dances, speeches and songs. As Erin Hanson describes in *Aboriginal Title*, the judge presiding over the case concluded that the oral histories held no weight in validating their claim. Hanson writes that, “ ‘Their culture’, the judge infamously wrote, ‘had no written language - no horses, or wheeled vehicles’ ” (Oral Traditions). This revealed an inherent lack of respect for Indigenous knowledge and traditional transmissions of that knowledge. Hanson writes, “Oral evidence may be deemed inadmissible simply because there is other evidence available to use. Lastly, it is characterized as contradictory - which one assumes never happens in *written history*” (Oral Traditions). This case provides an example of the lasting divide that exists in the validity of traditional knowledge forms and their cultures, also reflecting the foundations of a current scholarship that has come to prioritize the written word as the dominant form of record keeping and knowledge, generally considering other knowledge forms and oral societies to be peoples without history or the means for obtaining and sharing valuable insight. Ultimately the divide between written and oral histories is how we *perceive the value of the knowledge*; as subjective or objective, as rational, even as civilized or uncivilized.

Oral-based societies - those that have relied on the oral transmission of histories, stories, and other knowledge to sustain cultures and maintain a historical record of communities - are reflected in the cultural traditions of Native and Indigenous peoples around the world. This stands in contrast to the current dominant “western perspective” that, among other differences, holds written text at the center of the social and historical record. Where literate societies view oral traditions as prone to error, bias and

inconsistency in its variations, Indigenous people hold them as vital to the transmission of collective historical knowledge and to the sharing of cultural and social values.

In the 2009 article *Oral Traditions* by Erin Hanson, tribal elder Stephen J. Augustine of the Mi'kmaq Grand Council shares reflections on the role of oral narrative in collective historical knowledge:

The Elders would serve as mnemonic pegs to each other. They will be speaking individually uninterrupted in a circle one after another. When each Elder spoke they were conscious that other Elders would serve as 'peer reviewer' [and so] they did not delve into subject matter that would be questionable. They did joke with each other and they told stories, some true and some a bit exaggerated but in the end the result was a collective memory. This is the part, which is exciting because when each Elder arrived they brought with them a piece of the knowledge puzzle. They had to reach back to the teachings of their parents, grandparents and even great-grandparents. These teachings were shared in the circle and these constituted a reconnaissance of collective memory and knowledge. In the end the Elders left with a knowledge that was built by the collectivity. (Oral Traditions)

Returning to Bod's analysis of the development of Humanities scholarship, provides an overarching depth inherent in the aim of the work. "[The Humanities] have a memory function in keeping alive the works from the past and the present, often through collections. They have an educational function by teaching these works to new generations. They also have a critical function by interpreting these works for the public at large. In addition to all this, the humanities have a research function by asking

questions and posing hypotheses regarding humanistic expressions” (2). Bod provides in his analysis a comprehensive picture of the central role of Humanities in the investigation of the human experience and to informing new thought.

It is here that we discover an opportunity for rethinking our overarching relationship with the historical narrative of what we value as knowledge, for through the devaluing of such knowledge forms as oral traditions as a valid source for textual analysis, the Humanities narrows its scope and understanding of the human experience and limits our ability to inform new ways of knowing. Rethinking our perception of the value of Native knowledge systems and forms in understanding our human experience impacts the foundations of our culture in study and influences how we redevelop thought processes and social structures. One place to begin may lie in deconstructing our notions of “accuracy” in direct relationship to how we perceive the quality of the historic collective knowledge.

Today we predominately rely on written text form to sustain culture, and to maintain a historical record of the community and inform society. As we have seen, Indigenous societies rely on the oral and creative transmissions of knowledge through such ways as story, song, weaving, carving, and dance in the same manner. Written text approaches historical knowledge in a linear fashion, giving it a definitive starting place and ending place. In contrast, Traditional knowledge systems include a level of interpretation that recounts a more interconnected, contextualized, holistic experience in a variety of forms, including proverbs, songs, myths, poems, prayers, and dramatic performances. A large part of this interconnected dynamic is the embodied knowledge of the speaker or artist coming to the community with focused purpose, in response to a

particular need. This transmission of knowledge plays a crucial part in keeping culture alive.

In Western contexts, authors of written documents are often received automatically as authorities on their subjects and their produced works are accepted with equal consideration. This is not altogether different in the context of Traditional knowledge holders. The storyteller is a robust knowledge scholar, informed in histories, social customs, cultural lifeways, ceremony and ritual; moreover, the quality of the transmission is developed over a lifetime through lived experiences. In other words, community principles are engaged through living practice. The knowledge holder shapes the piece given to meet the specific needs of the community or individuals.

For example, in the fall season, a speaker, singer, or dancer may emphasize the importance of a particular fall harvesting practice in an often-repeated story about the history of the people and the land, in order to increase community knowing and ways of being in preparation for the coming winter and a change in access to food and water resources. It is the message that takes central importance, rather than the path to the message, where the nuances evident in distinct versions of a specific history or ecology represents a broader understanding of the events and the various ways people have internalized them (King). It is this framework that holds variation as an important part of traditional knowledge transmission, reflecting the relationships between people, land, time, season, animal, and place. Rather than an indicator of error and inconsistency, variation becomes a methodology of Indigenous societies in making knowledge more meaningful, relatable and accessible to the group.

As we grow in our understanding of the richness of knowledge found in the diversity in traditional knowledge systems, and the meaningful intention of variation, the unreliable quality of these knowledge forms begins to recede and in its place a profound recognition of the wealth and *value* that exists within these forms rises. In opening the world of Humanities scholarship to traditional knowledge systems as a valid “text” for inquiry and analysis, we make room for understanding and valuing other worldviews and what they have to offer to the worlds of critical analysis and academic rigor. In so doing, we can imagine the immediate value of opening up the world of Humanities into the future with new thinking and the development of new scholarship.

In the United States, education dropout rates of twice the national average link directly to suicide rates among Indigenous youth. A large part of this complex issue is the fact that Indigenous peoples, and particularly youth, do not see themselves, their cultural values or ways of being reflected within the dominate society or educational systems. By changing the narrative of scholarship at its foundation to recognize the value of Indigenous knowledge and ways of learning, we begin to bridge the divide. Bringing Native and western educational models into an ethical relationship and cultivating systems that are enriched by diverse worldviews, Indigenous communities begin to see themselves reflected within a new framework that recognizes their knowledge and processes as valid.

Upon receiving the initial judgment in the case, the Gitskan and Wet’suwet’en communities appealed to the Canadian Supreme Court for consideration of their land rights case in British Columbia. On appeal in 1997, they won a precedent-setting victory for traditional oral knowledge and histories to be given weight as legal evidence. Chief

Justice Lamar of the Supreme Court of Canada concluded, “The laws of evidence must be adapted in order that [oral] evidence can be accommodated and placed on an equal footing with the types of historical evidence that courts are familiar with, which largely consists of historical documents. Given that most aboriginal societies ‘did not keep written records,’ the failure to do so would ‘impose an impossible burden of proof’ on aboriginal peoples...” (Hanson)

Following this case and appeal, the Tsilhqot’in tribe took the province of British Columbia to court in 2002 in a similar case of land rights. Justice David Vickers found that the oral traditions presented in story, song and histories to him by members of the Tsilhqot’in Nation were sufficient to prove their title. He also historically rejected that oral tradition was unreliable or should be measured against written documents, observing that “disrespect for Aboriginal people is a consistent theme in the historical documents.” (Hanson)

The recognition of traditional knowledge systems as a valued source of knowledge and wisdom is an opportunity for more than the expansion of Humanities into a new more diverse world. There is also the potential for a much larger shift in current social, political and economic structures that are also informed by the structures of academic scholarship. As Indigenous knowledge and science move from folklore, fictitious narrative and rumor, to relevant, tangible reality, the larger scope of relationships between diverse societies and how communities view and respect one another also shift. As we recognize the deep and profound knowledge of Indigenous and First peoples within western frameworks, we begin to see a coming together of worlds and the harmony possible when a diversity of people are in healthy relationship. The

possibilities of including new perspectives, new ideas, and new ways of being arise in the circle of open dialogue and genuine inquiry; ultimately the divide between cultures gives way to the possibility of complementarily strengthening the larger global society as a whole.

Knowledge Bundles and Native Song

“ The story of Skywomen’s journey is so rich and glittering it feels to me like a deep bowl of celestial blue from which I could drink again and again, it holds our beliefs, our history, our relationships. Looking into that starry bowl, I see images swirling so fluidly that the past and the present become as one. Images of Skywomen speak not just of where we came from, but also of how we can go forward...

As a writer, a scientist, and a carrier of Skywomen’s story, I sit at the feet of my elder teachers listening for their songs...”

- from *Braiding Sweetgrass* by Robin Wall Kimmerer (Potawatomi)

So much of our time in today’s culture is spent separating ourselves from the rhythms and rules of the natural world around us. Almost like a reflex, when we humans experience a natural world that pushes against our modern frame, often we work quickly

and effectively to resolve the inconvenience. When it is too cold outside we step into our heated interiors and warm ourselves. When it rains we block the water with next-generation goretex, when the ground is uneven we flatten it for ease of passage, when it is too hot we seek the cool embrace of central air conditioning, and in parts of North America when the sun sets too early for us we change our measure of time in order to make the light last longer.

For centuries the steady march of progress and modern culture has, little by little, moved us further and further away from our relationships and rhythms with the natural world and our separation from those relationships can be heard in the echoes of such things as climate chaos and loosely regulated industry. These kinds of systems are, in part, a reflection of our current societies' human-to-nature relationship as one of superiority and domination, revealing an underlying cultural model that sees the natural world as a supplier of resources for human needs and little else.

In her text *Feminism and the Mastery of Nature* scholar Val Plumwood argues that this attitude of domination is a hallmark of the anthropocentrism that is an unavoidable feature of our modern worldview, influenced by what we value and why. Plumwood explores how this shifting cultural view from one of humankind operating as part of existence, to humankind regarding itself as the most central element of existence, shifts humans from being an *equal part* within the ecosystem to being *the most important* piece within the ecosystem. Plumwood quotes German philosopher Martin Heidegger whose work criticizes western thinking as placing nature on a kind of "standing reserve" or on call for human purposes. "Meanwhile, man precisely as the one so threatened, exalts himself to the posture of lord of the earth. In this way the illusion comes to prevail

that everything man encounters exists only insofar as it is his construct” (165). This construct is important to consider because it is an unavoidable reality that we must, and do, interact with nature in a multitude of ways and how we do so is underscored by how we see ourselves in relation to it.

Reminiscent of Bod’s analysis of the development of critical inquiry and the resulting influences on what we value as primary knowledge, Plumwood argues that the methodical unbinding of humankind from nature is founded on a complex logical system. Driven by a dualism of otherness characterized by radical exclusion, distancing and opposition, these constructs systematically manifest as attitudes of “higher and lower, as superior and inferior, as ruler and ruled,” Plumwood writes, “which treats the division as part of natures being constructed not merely as different, but as belonging to” (48). She argues that the lasting affect is that everything seen on the side of human or superior can now be represented as forms of *reason* or valued knowledge, and that those on the side of *other*, such as nature, and other systems of knowledge, are now represented as inferior ways of knowing and being.

Dr. Sharon Blackie is an author and psychologist whose work is deeply grounded in ecology. Her book *If Women Rose Rooted* (2016) is an exploration of reclaiming an authentic connection to nature in order to create dialogue and inquiry around social, political and environmental injustices that she recognizes as present in the world today. Blackie echoes Plumwood, exploring among other things, the effects of the denial of human interconnection within the natural world. She argues that in separation, there is no longer a space of ethical engagement upon which to build human-nature interactions. “This state of affairs has its roots in the deeply dualistic worldview which emerged out of

Western philosophy over the last 2,000 years: we have come to believe that we are separate from nature, more than this, that we are somehow above it” (33). Like Bod, Plumwood and Blackie each describe how the development of our current knowledge systems in the modern ‘western’ ethos reflect our contemporary intellectual and cultural attitudes, in particular how we value, or not, other systems of knowledge held within that larger world ecology.

Traditional Ecological Knowledge

Traditional Ecological Knowledge, or what is now becoming more popularly referred to as TEK, is a reflection of these knowledge systems and values that push back at the construct of separation and domination, bringing back into recognition the inherent value of reciprocal relation within the natural ecosystem. The world of Traditional Ecological Knowledge is a return to the awareness that the human experience is a *participatory* act in nature, and that understanding is also born in relation to our lives in context. These systems of knowledge are held in the lived stories of experiences with a natural landscape, reflecting the value of knowledge in perception, emotion, sensation and imagination, as well as logic and reason. These teachings are held in the oral anthologies and arts of Native people around the world. Rather than only stories that make up the myths and legends of illiterate societies; Native language and oratory, song, dance, and arts such as weaving, pottery, textiles, carving – each is a knowledge bundle

that contains the collective wisdom of ancestral relation, interaction, and sustainable life practices within the larger ecology of the natural world.

In the 2018 book *Traditional Ecological Knowledge: Learning from Indigenous Practices for Environmental Sustainability* Native author and educator Gregory Cajete (Santa Clara Pueblo) writes, “Traditional Ecological Knowledge may be viewed as part of a broader Indigenous paradigm that I call Native Science, which includes Indigenous relationship to land, plants, animals, community, self, cosmos, spirit and the creative animating processes of life,” (15) bringing the human being back into relationship with the larger living ecology of the world. In so doing, Cajete connects us back to Nelson’s ‘original instructions’, traditional knowledge that is housed within the oral knowledge and traditional practices of the community. “Native science is a foundational expression of the Indigenous mind,” Cajete writes, “which is first and foremost a relational orientation, knowledge base, and process for sustaining people, community, culture and place through time and generations” (16) exploring how this worldview reshapes how we interact with the environment in our modern frame.

Native scientist and educator Robin Wall Kimmerer (Potawatomi) also explores how Traditional Ecological Knowledge reflects a knowledge system that includes as a predominate tenant an embodied relationship with the natural world. In other words, more than *knowing*, it is a way of *being* that is informed and transmitted through traditional methodologies. In her book *Braiding Sweetgrass* (2013) Kimmerer writes, “The story of our relationship to the earth is written more truthfully on the land than on the page. It lasts there. The land remembers what we said and what we did. Stories are among our most potent tools...” (341) In a separate 2016 interview on scientific and

native views of the natural world, Kimmerer continues with her exploration of traditional knowledge systems and how they become a potential ally for western frameworks:

“Often science dismisses indigenous knowledge as folklore – not objective or empirical, and thus not valid.” she explains, “but indigenous knowledge, too, is based on observation, on experiment. The difference is... Traditional knowledge brings together the seen and the unseen.” (Tonino, 6) Cajete proceeds to explain how such knowledge is embedded in the contextual living practices, meaning that Native Science becomes inclusive of categories such as “metaphysics and philosophy; art and architecture; practice sustainable technologies and agriculture; and ritual and ceremony practiced” he explains, “More specifically, Native Science encompasses such areas as astronomy, farming, plant domestication, plant medicine, animal husbandry, hunting, fishing, metallurgy, geology, and an array of other studies related to plants, animals, and natural phenomena” (17). Through Cajete and Kimmerer, we begin to see how Traditional Ecological Knowledge emerges as a comprehensive set of coded knowledge and transmission systems for Native people, one that accesses data and understanding relevant to our human relationship on earth past and present.

The Knowing of Song

I recently had the opportunity to stand with a small group of people, just five of us, in the center of a circle that was made up of Indigenous youth singers who were singing for us. It was a traditional song being sung in a modern context, in that the song

had traditional roots but was being offered in a kind of hip-modern-performative-a cappella singing circle that was, honestly, incredible. The circle idea was created as part of the group's Native Performing Arts courses senior performance project. They had the idea of putting the listener in the very center of the song and Native sounds, a kind of natural surround sound that put all speaker systems in the world to shame. The hope was that the listener would be able to inhabit the song in a way they could not before, similar to the way the singers inhabit the song when they sing it. They achieved their goal. As the five of us standing in the middle each closed our eyes we each entered the song and felt its resonance teachings in a profound way. The traditional voice of the group was unmistakable, at once deeply connected to the land the song was describing, but at the same time the unique identity of the individual singers and the collective voice as a whole, could be heard in the modern signatures. This Native youth group was sharing with us who they are as a living tradition in a modern world.

Native song is often considered the most ancient of art forms. Housed in the realm of oral traditions, Native song carries within its forms and structures, more than harmonic sound and lyrical signatures; they are in fact home to the oldest collective knowledge of the people. Within their rhythms and poems, Native song is a bundle of knowledge that remembers the origins and histories of the people, the natural ecological systems of the land, ancient celestial codes, agricultural sciences, sacred geometry, and the nature and origins of creation. Within each song, a bundle of knowledge exists that simultaneously holds within its systems the physical, mental and spiritual identity of the people.

To be a knowledge holder and keeper of these histories and traditions, stories and songs, is to have a profound responsibility; it is to inhabit a sacred space. A singer, a

dancer, an artist, a carver, an orator, a weaver, a farmer – each are examples of those Indigenous scholars that bring forth the collective knowledge held in the song stories of the people. “It would be difficult not to remember that history. It is physically keyed into the body through the scent, the sound, the texture, the feeling, and the taste of a particular place”, says California Native food gatherer Jacquelyn Ross (Jenner Pomo/Coast Miwok), “It would be difficult to ignore my place in the universe because the songs, prayers, and feelings innate to that food gathering remind me that we are each a part of each other,” (Nelson, *Health and Ecology*) describing how Native song is a vital transmission of the traditional ecological knowledge embodied in the song. “They represent the collective activity of a group of individuals that includes the musicians, their families, friends, and listeners” (4) writes ethnomusicologist and musician John-Carlos Perea (Mescalero Apache) in *Intertribal Native American Music in the United States*, explaining that singers and their songs have an interconnected life system, they are not merely things or products; rather, they are collective activity of the knowledge that comes together in place and time to create the song-poem. In *Heartbeat of the People* (2002) ethnomusicologist and Native dancer Tara Browner (Oklahoma Choctaw) agrees, “Indian musicians do not talk about song-making in a densely analytical way, but then again neither do most musicians outside the academy. What Indian musicians do talk about is process, which involves personal (sometimes tribal) history, tradition, song function, and the immediacy of performance” (13).

This act of bringing the song alive in participation with the living world echoes the Traditional Ecological Knowledge that it contains. Songs are shared in community gathering, that is to say that they are evoked each time they are sung, in a particular time

and space. As a Native community the dialogue of song is important not just as it is given by a singer, often accompanied by a dancer who brings another chapter of the stories transmission, but also as it is experienced in the space. Completing a circle of relationship, knowledge sharing, and wholeness, the community is there to not only watch, but also to bear *witness* and to *receive*.

As powerfully as a singer who inhabits the song as a transmitter of knowledge and story, equally engaged is the community in receiving it, for the community is firmly rooted in the power of the exchange, the knowledge, the discourse. One might argue that it is where the two meet -- the song performance and the song witness -- is where the deepest connection is made.

In the case of the song, a large part of that transmission is the connection to some part of our lived human experience; the song is a space of knowledge in culture and in society. The transmission of that sacred knowledge is held within the song and in many ways is completed with the receipt of that knowledge by the receiver. It is this full participatory experience that allows Native song to connect us deeply, as it does with life experience, individually and collectively. In part, it is the embodiment of kinesthetic empathy – the development of our ability to relate to other people and connect to them and form bonds of powerful meaning. Song brings alive a major driver in the human experience, sacred knowledge of the reciprocal relationships of our natural world, both the act of giving and receiving, to remembering that we are all alive together.

Cultivating Creation: Song Stories

“In the beginning, like this,
Our grandfathers,
the ones who are grandfather Surem,
The ones that first appeared here,
They left this inheritance...
Like this, now, it is continued in the songs.”

- Loretto Salvatierra (Yaqui), singer, from *Yaqui Deer Songs*

As we explore the knowing found in traditional Native song and what it means to extract understanding from these kinds of traditional knowledge forms in participatory experience, it becomes an important part of the dialogue to discuss lived experience as part of this research. The following story-scapes are the marriage of research and lived experience as I participated in the receiving of these mighty bundles of knowledge. As a Native person, returning to these traditional systems of knowing to explore Native song in an academic framework was a powerful exercise. Through a Traditional Ecological Knowledge lens I experienced song forms that I have heard across the Native community for years in a new light. The bridging of worlds, bringing together an Indigenous framework in a modern critical analysis, has elevated new understanding in each of these song stories, and I walk forward enriched by the sharing of these worlds in relation.

A Seed Song Story

I first met Rowen in 2016 as part of a series of seed and planting teachings related to Native Foodways work. She was leading a teaching day in traditional Three-Sisters Agricultural science, a special day in the field of tending to the soil, the seeds and the knowledge of Native foods. As part of the agricultural teachings Rowen sang a seed song, which was informally offered almost as a quiet reflection. As we entered the field, she sang as she walked the land, singing to where the planting was to be, asking her permission to arrive, calling to the plant seeds that would grow food for the people. I still carry that song with me. It is in more than my intellectual memory, my mind fails to remember some details of the song, yet each spring since, when I begin to walk the fields and work with the first seeds of spring, I can hear the song she sang with perfect clarity. It is remembered in my body on the land; in time and space I can hear her song of relationship and it connects me to the knowledge of past while in the present.

Rowen White is a Mohawk Seed Keeper from the Akwesasne community in the eastern regions of North America. The Akwesasne traditional lands span the intersecting territories of what are currently international borderlands between the Northern United States around New York, and Southern Ontario and Quebec in Canada. Rowen is the founder and director of Sierra Seeds, an organic seed cooperative working across the country and internationally using an Indigenous ecology of education in the areas of seed re-matriation (a term she uses to describe, in part, the returning of traditional seeds from private holdings, such as museum art collections and educational institutions, to the Indigenous Tribes of those traditional foods), food sovereignty, and land justice. She

talks about her work as “rekindling a relationship with our foods that is mutually beneficial, and truly honors the seeds for all that they continue to share,” (White) describing how her seed work is grounded in traditional knowledge systems aimed at cultivating a way of seed stewardship that brings us back into relationship with the larger ecology of the land-human connection.

In the spring of 2018, Rowen was featured on the inaugural episode of the new podcast series *The Native Seed Pod* to talk about her journey of growing and sharing her ancestral seeds across lands, climates, and changing times. In the episode entitled *The Native Seed Revolution*, she shared how the oral traditions of her elder people grounded her work with seeds and traditional food systems, describing how those original instructions of the first relationships between plants and people are honored in a modern context and what it means to carry that knowledge forward:

You know as a Mohawk woman, as a Haudenosaunee woman, I was told by my elders that the seeds don't belong to us, we belong them. We borrow them from our children and really when we think of our work in that way, every single thing that we do - whether it's weeding in the fields in July when it's hot, or threshing the beans and the various foods in the fall and harvest - it's all on behalf of those future generations; faces we don't know yet and names we don't know yet, but we're doing it on their behalf. And it's about being a good future ancestor and a responsible descendant, you know, when we do this work. Because a long-long time ago our ancestors came into an agreement with our plant relatives - the wild and the cultivated ones - and particularly there were particular plants, corn and beans and squash and various ones, that gave up a little of their wildness and we

gave up a little of our wildness as humans, and we came into this beautiful covenant and this agreement that we would care for each other. And there were some plants that I've been told that decided that they didn't want to be cultivated and that we were going to have a different relationship to them, but those agreements, that covenant, that you know that sacred relationship, we carry those in our blood, in our bones, you know - like wild rivers they run in our blood and our bones. [*Native Seed Pod S1 E1 00:13:44 – 00:15:19*]

Throughout the episode she reveals how relationships to food and land systems rooted in traditional agricultural sciences are potentially powerful models for addressing some of the current social and economical challenges of our times. For example, access to good and clean food. With huge populations of people across the globe today with little or no access to clean food and water, reliance on large-scale production commodity foods that are heavy in refined sugar, flour and domesticated meats have become staples. These habits are resulting in epidemic levels of nutritional-related diseases such as diabetes, obesity and heart disease, while the related agricultural industry models are having heavy impacts on the environment. The need for new thinking, new systems and new understanding - seed knowledge, land-specific and climate adapted agricultural practices, nutritional and medically diverse plants and foods - is quickly becoming a topic on the world stage.

Through White's dialogue we begin to see how traditional knowledge systems contained in the seed practices of heirloom foods can serve important ecological health purposes while also representing deeply embedded parts of history, cosmology, and lifeways. She describes how these practices are part of a stronger reconnection and

revitalization of knowledge that has the potential to create new dialogue and thinking in the larger international community. In a modern world described in part as a highly-polarized, ethically-charged society, bringing western models into an ethical relationship with knowledge systems enriched by diverse worldviews is essential to developing healthy people and healthy communities.

In the same episode, Rowen discusses a seed song that was offered as part of teachings that were shared at an Intertribal seed summit gathering at the Shakopee Mdewakanton Community in Minnesota. The song she describes is an Anishinaabe seed song shared by her friend who is an Anishinaabe midwife. The song's origins were as a seed song but it was one also used when midwives would assist a women in labor, sung directly to the baby. In the Anishinaabe language the repeated phrases sung were calling to the child to "come in your own time, come when you are ready" (White) honoring the natural rhythms of labor and process. She describes sitting with the others gathered and listening to her friend:

... she spoke and sang the song and told us that it meant 'sacred seed, come in, come in your own time sacred seed, we humbly implore you or ask you that you might grant us good life, you might give us a good life'. You know when you think about it - so there were two things that I thought about when she gifted us that song: was that first, that we are seed keepers, we are plant midwives right. We help assist the seed, the new life coming from one generation to the next. And then secondly, the indigenous perspective of receiving the gift that our grand family of relations has to give to us. That the seed is coming in its own time, not when we're ready, not when we want it, not when we're ready to control and to

take it, to exploit it - but when that [seed] gift is ready. Then we have to be ready to receive it. [*Native Seed Pod SIE1 00:12:08 - 00:13:01*]

Growing from her ongoing exploration of returning to traditional models of engaging with land and foodways, she sheds light on the equalizing effect that is an inherent acknowledgement of interconnection when it comes to traditional knowledge systems. The song contains the memories of that first human-plant relationship and the exchange of knowledge between the two, so that each gives to each other in order for the larger ecosystem to thrive. In a national food system that is dominated by nutritionally deficient fast foods, the concepts of food cultivated in its natural time can be a staggering thought. But if we consider that the seed has its own set of encoded knowledge systems, ones that know unequivocally when the seed will come to bear its best fruit for the nourishment of the living community, as agreed to in the original relationship, then even the foundations of our daily food systems begin to take on new shape.

This seed song contains within it a way of knowing and being that provides a platform for ethical engagement that values patience, attunement to the land, space and time of growing cycles, acknowledgment for the life/food produced, the awareness for reciprocal relationship, and stewardship. Encoded in the knowledge of the song are the teachings for a person working to cultivate new life into this world, a seed keeper, to access and embody knowledge on the ethical engagement of processes for sustaining people, community, culture and place for generations.

As the episode concludes, we begin to hear the echoes of singing as Rowen tells a story of how the plants and seeds first came into being in the world. A seed rattle shakes, calling the song forward and grounding the song in the natural sounds of the land. It is

Rowen singing. She is sharing part of one of her seed songs and we hear it as a backdrop to the story she is sharing, a story of how original women brought the first foods, singing the land awake, cultivating creation in song and offering the knowledge of these foods to the people. As Rowen sings, I can hear this ancient relationship echoed in the song:

When we plant the seeds in the ground we renew our creation story every spring. That creation story never ended, that when those seeds began to sprout out of the Mother Earth, it's the same - We believe in our creation story that the corn grew out of the grave of the daughter of original woman, and from her breast sprouted the corn, and from her hand sprouted the beans, and from her bellybutton sprouted the squash like the umbilicus of that vine and sunflowers sprouted from her legs, and from her feet were the original potatoes the sunchokes, and from her mind came the tobacco, and from her heart came the strawberry. And so when we plant that garden again, we renew our understanding of that story and where we came from and who we are life to, and that they grew from her body and so they are our relatives. It's a part of that Cosmo-genealogy, so it's a part of that relationship and so I think it's a beautiful, I guess maybe beginning and ending, to say that as a part of our creation story we renew our covenant to that every single year when we plant. Because original woman came down clutching a handful of seeds in her hand and began to shuffle her feet upon the back of Turtle Island and she began to sing the world awake. And so those same songs that she sang, when she originally landed on Turtle Island, we still sing in our gardens. We still honor her memory. We still honor her guidance. We still honor her legacy in the millennia and

millennia of lineages and generations that have come, that have taught us these responsibilities that we have to our planet kin. [SI E1 00:47:48 - 00:49:39]

A Flower Song Story

There are a group of songs that fall into a category of what are known as curing songs, songs that are sung in order to cultivate an intention of what would be considered individual or community healing, wellness, balance, restoration and connection. As with the Anishinaabe seed song, healing songs are shared in a variety of formats utilizing a wide array of imagery found in the natural world. The song is a gateway to the curing knowledge held within, bringing into relationship the practice of the knowledge in time and place; in other words, it is embodied knowing and practical application. In many communities, these song bundles are some of the older ones held, as they contain more than the ecological knowledge of the plant and animal. They also contain the information for utilizing that plant knowledge in the world and the legacy of that particular human-plant relationship.

Gary Paul Nabhan is an agricultural ecologist and ethnobotanist whose work in biodiversity, cultural diversity, local food movements and heirloom seed saving has led to his involvement in the development of such programs as Native Seeds/SEARCH and The Center for Sustainable Environments at Northern Arizona University in Flagstaff, AZ. His work links health and wellness to cultural and ecological diversity, exploring how biodiversity in systems is essential to health and resilience. In his 2004 work titled *Cross-*

pollinations: The Marriage of Science and Poetry, Nabhan explores what it means to open up our current scientific systems to other approaches of obtaining and accessing information and understanding in the world. Exploring the traditional knowledge held within an O’odham song-poem recorded in 1901, Nabhan explores the journey to new understanding by connecting traditional knowledge in Native song and western science. “By cross-pollinating the linguistic, ethnographic, and poetic understanding of the song with insights from field ecology and neurobiology, we can now celebrate the song-poem in all its dimensions... by how it embodies an empirical understanding of plants and animals that modern scientists have only recently gained” (27).

The song Nabhan describes was part of a collection of Pima Jimsonweed or Thorn-apple songs that were considered to be linked to a genre of what were known as peyote button songs. They are related to the more southerly Uto-Aztec tribes of the Sonoran Desert regions of North and Central America. They are also related to a series of songs about specific plants and their relationships to ceremony and the people. The song had been translated a number of times throughout the years, Nabhan explains, from Pima to O’odham and eventually English, losing nuanced information separating it from the knowledge systems that originally contained the ecological information within it. The song translation was eventually corrected and the “Sacred Datura-Hawkmoth Song” once again began to tell its original story.

In its first translations the song was believed to be the story of a butterfly, but when more accurately translated the correct ecological relationships emerged in the landscape. What was once a day-time pollinator visiting a weed became the intriguing interactions of a night-time pollinator, the hawkmoth, and the dangerous daturas flower.

The daturas or *kotadopi* flower, Nabhan explains, is considered by the O’odham to be a powerful plant, one that they believe could make humans insane. Over time cultural taboos have risen that keep one from brushing up against the plant, for fear of going crazy from even the smallest touch of the plant. Yet as a people, they were fascinated by the hawkmoths who were capable of consuming and detoxifying the powerful attributes produced by the plant. In their larvae form, they can ingest the toxic leaves and use the chemicals as a natural deterrent of potential predators, altering the toxin to benefit them. In their adult form, the moths were found to have a pronounced kind of dizziness after foraging in and around daturas leaves, presumably feeling the hallucinatory effects of the alkaloids present, but not perishing in the process. The people were observing the conditions of the interactions and developing a scientifically accurate record based on those observations.

Following is an excerpt from the song as Nabhan shares in its corrected translations:

Stopping for a while in the white of dawn,
 Stopping for a while in the white of dawn,
 Then rising to move through the valley,
 Then rising to move through the valley,
 Remembering when the green of the evening fell away,
 When the green of the evening fell away:
 Sacred datura leaves, sacred datura leaves,
 Eating you, I dizzily staggered, drunkenly crawled,
 Sacred datura blossoms, sacred datura blossoms,
 Drinking your nectar, I dizzily, drunkenly flew away... (Nabhan 34)

Based on these kinds of observations and knowledge gathering, O’odham people and their land-language relatives have long held knowledge around these plants and their uses. By engaging in the traditional knowledge systems that recorded images of how the plant produced dizziness, nausea, and tranquilizing effects, “it now seems plausible,” Nabhan writes, “that the composer of this O’odham song had witnessed such aberrant behavior among pollinators visiting datura blossoms, for his observations predated by at least a century those of the scientists who confirmed this chemically mediated relationship” (33). “Ironically,” he continues, “modern medical practitioners have recently begun to prescribe small doses of alkaloid extracts from datura to their patients... Psychiatrists, I suspect, could learn much about the effects of potent plant drugs like atropine and scopolamine simply by more deeply reflecting upon oral traditions regarding datura still extant among Native Americans” (39).

The song records with great accuracy the inter-relational experiences of a hawkmoth and daturas plant while also describing the conditions essential to interacting with it to ensure individual and community health and well-being. When desert ecologists first began to study the datura flower, the scope of understanding was limited to new interaction in a modern context. It was almost a century after the knowledge was embodied and transmitted in a Native song, that western methodologies came to a similar place in knowing. Nabhan writes, “A datura flower, if left unpollinated, is a sad spectacle to behold during the days following the decline of its blooming. It has wilted down to a flaccid, twisted, withered rag – a far cry from the silky evening gown that excited hawkmoths only a few hours before. That is how I feel about some pursuits of the human

mind, which, if kept out of reach of cross-cultural and interdisciplinary exchanges, languish like a withered flower, never to bear fruit” (27).

A Deer Song Story

My traditional tribal language is known as Yaqui or Yoemem which is connected to the Uto-Aztecan language families that include, among others, the O’odham, Tarahumara, Pima, Mayo and Huichol peoples of the Sonoran Desert regions of North and Central America. There are songs that are shared between some of these language families that frequently contain images of moths, flowers, deer, or peyote – elements that evoke connection with the natural world in order to encourage the restoration of wellness and healing through the telling of stories of life cycles. For my tribe, these are the song forms that I hear most often at ceremony, repetitive and rhythmic, these songs are the ones that call me home.

My tribe is Yaqui, or Yoeme, or Hiyasaki Yoeme. As is common for most tribal names, ours translates in one manner or another as “the people.” In our original instructions, we are born of the sun as decedents of the Surem, the first people. The Surem lived in sacred stewardship and relationship with the land, a small, quiet people who lived by instincts and closeness to all living things. Sun father gave them the language to speak directly with all elements of the land, as they spoke in the sound of creation. One day the wind carried a new sound that led to a tree that was vibrating and buzzing. Being that it was a new sound, there was no understanding until one came

forward, who was able to understand the song-language. The tree told of the future to come, and gave council of a coming new world. The Surem divided then; some of them choose not to walk into the coming future and, instead, began to walk back in time to where they were created, becoming mountains, rivers, the sea, the clouds and living in the embrace of the earth. Those who stayed, with their awareness of the coming future, became bigger beings in the world, became stronger and became the Yoemem bloodline. I have heard variations of this origin story throughout my life, and yet, each time I encounter it I am reminded of the importance of remembering; we are born of the sun, we are born of a sacred sound, we contain the knowledge of the language of creation in our ancestral memory, and our relatives are in the natural world all around us, in the *sea ania*, guiding us and singing us into the future.

In the 2018 essay *The Tradition of Recycling Identity in Native Culture*, Native dancer and scholar Eddie Madril writes, “Yaqui song itself is the vibration of the shaking tree.” He says “it has the vibration of that creation sound that comes directly from the voices of our ancestors. Yaqui song is a living anthology of the continued work of telling the history, both past and present, expressed through the lived experience of the people from time immemorial to the present. From sunrise to sunrise, morning to morning, the songs are life understood as it should be lived” (4).

Yaqui deer songs, *maso bwikam*, are a traditional song form that is usually sung by three singers accompanied by a deer dancer. The deer dancer, an iconic symbol for Yaqui people, is known as *saila maso* or little brother deer, and the song teachings are a representation of his voice. This voice speaks to all through the songs and these songs are considered to be the oldest. Yaqui deer singer Felipe Molina and folklorist Larry Evers

together have produced some of the most comprehensive texts on Yaqui song, music and dance in the world. In their book *Yaqui Deer Songs* (1987) they explore the role of deer songs in a living tradition and the contexts in which they continue to move forward into the future. “Yaquis have always believed that a close communication exists among all the inhabitants of the Sonoran desert world in which they live: plants, animals, birds, fishes, even rocks and springs. All of these come together as part of one living community...” they write, “Yaquis regard song as a special language of this community, a kind of ‘lingua franca of the intelligent universe’ ” (18).

In deer songs, little brother deer *maso*, is the messenger between our living world and the *sewa ania* -- the flower world or enchanted world, that is the place of creation in manifestation. Our relationship to the original ways of knowing and being, our sciences, our ethics and values, our relational awareness, are all held in our original spaces of creation, and *maso* is a guide to the way we understand our place as physical beings on earth. *Maso* is from this space and as he dances to deer songs, he brings us into healthy relationship with both of our worlds. “Highly conventionalized in their structure, their diction, their themes, and their mode of performance, deer songs describe a double world, both ‘here’ and ‘over there’, a world in which all the actions of the deer dancer have a parallel... Deer songs describe equivalencies between these two real parts of the Yaqui universe” (Evers, Molina 7). For Yaqui people these songs are a continuity of knowledge that stretches back continuing a language and knowledge system as old as the first people who came into the desert world of our desert homelands.

Each year I sit with my family and community in our land space in the desert and listen to these songs, and each year I hear something new. As I grow as a human in

context to this world, each year I arrive to gather in these circles of exchange as a new person with expanded lived experience and the songs welcome me home as I am. *Maso* is our guide, our elder, and educator, and it is the gift of the singer and dancer together that call him forth, to bring that creation energy into the ceremonial space. That creation connection, brought through song and dance, is where prayer, knowledge transmission, healing and connection to the whole world takes place. While I live my life in contemporary analytical time and space, I know that I did not come to this world through the sacred sounds of a tree. I am not born from the sun. Yet the original knowledge stories of our first people are a part of my identity as a Native person – and so I also know - I am indeed born of the sun. Our songs are there to remind me.

Aa look out,
 To the light blue outside
 up to the light blue outside.
 Look out,
 to the light blue outside
 up to the light blue outside.

Aa from the side,
 to us, as he is walking,
 From that side,
 to us, as he is running,
 Look out,
 to the light blue outside,
 up to the light blue outside.

– Miki Maaso, Vicam Pueblo, May 29, 1983 (Evers, Molina 5)

Knowing and Being

“ Bilinguals may have a more flexible approach to the world... from a meta-linguistic awareness of arbitrary, non-physical aspects... and the effect of context on the meaning... bilinguals may find it easier to encode and access knowledge in diverse ways, and have greater tolerance for ambiguity.”

- Todd I. Lubart, *Handbook of Creativity*, as quoted in
Cross-pollinations by Gary Nabhan

As science and intellectual pursuit take the lead in advancing this phase of our human experience, we should not underestimate the ethical and social implications of our engagement with the world around us. As we face a current world of moral and ecological unrest, the opportunity found in growing our understanding of the richness of knowledge found in the diversity of traditional knowledge systems around the world creates new opportunities for creating a more balanced and healthy global community.

Our human condition is not one of isolated existence. This is an indisputable fact that we cannot circumvent in our desire to pursue progress and new technologies. The role our ethical engagement with the natural world plays in our collective future is critical. We all exist within a hugely diverse community of organisms and species and our ability to reverently and respectfully approach this larger whole is a reality we cannot leave behind. A single pillar does not hold the expanse of a roof; similarly, the current western ethos alone cannot hold the answers to all that is available in our search for

understanding the human condition. Our current modern knowledge systems as a series of disciplines will inherently never be holistic, as the nature of the intellectual systems is built on an obligation to narrow its field in order to become structured and highly specialized. However in isolation and separation from contextual knowledge, what is left behind? What can be gained in a meaningful cohesion of modern and traditional knowledge systems and how does the Humanities matter to this conversation?

The world of the Humanities touches upon all aspects of our human condition - our social structures, our moral conflicts, our ethical perspectives, our inner voices of thought and deep contemplation are all reflected in the work of the humanities - the culture that stems from our biology. They are the models of inquiry that have given birth to our systems and sciences today. The possibilities of new thinkers, new ideas, and new ways of being arise in the circle of open dialogue and genuine inquiry, and ultimately the divide between cultures opens to the possibility of complementarily strengthening the larger global society as a whole.

As scholars and as thinkers of critical analysis and inquiry, we have a responsibility to continue to open to knowledge systems and practices that expand and bring forward new thinking. This responsibility is a calling, to bring forward and inspire knowing both past and present, to widen the scope and bring diverse understanding into coherent relationship. Perhaps it is time to step into a new circle of exchange, and sing our songs of knowing into the world.

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