The Turn Toward the Indigenous: Knowledge Systems and Practices in the Academy

Kerstin Knopf

ABSTRACT

Since the late 1990s, Indigenous scholars have called for an 'indigenizing of the academy' (Mihesuha and Wilson 2004), integrating Indigenous knowledges into discourses and practices of institutions of higher education worldwide. The calls to integrate Indigenous and Western knowledge discourses and practices mainly come from Indigenous researchers throughout the world. They indict the 'self-evident' primacy of Western knowledges and presumptuous disregard for Indigenous knowledges in universities that re-produce colonial dominance and epistemic violence. This article analyzes the relationship between Indigenous and Western knowledge systems and practices. It also discusses the Indigenous concepts of *Saytk'ilhl Wo'osim'* (resource-sharing), *Enowkinwixw* (consensus-finding), *Tsawalk*, and *Haḥuułism* (a synthesis of Indigenous and Western philosophies articulating the unity of creation) and suggests their applications in the political and social sciences, economics, and environmental studies.

When the United Nations Declaration on the Rights of Indigenous Peoples was adopted in 2007, UN official John Scott reminded "governments and parties to respect Indigenous knowledge and culture" (Borrero 74). He thus added political pressure to the movement to indigenize the Western-dominated academy that has been gaining momentum since the late 1990s. Indigenous and non-Indigenous scholars demand the inclusion of Indigenous knowledges into our academic and scientific discourses,[1] mainly in response to the large-scale dismissal of Indigenous knowledges in these very discourses. According to a Western logo-centric and Cartesian-Newtonian understanding of the academy,[2] sciences, and humanities, Indigenous knowledges have been viewed as primitive, folkloric, anecdotal, unscientific, amethodological, insignificant, and lacking scientific rigor and objectivity.[3] If at all, they were only recently considered as being essential to the so-called Indigenous Studies—mainly Western Studies of Indigenous cultures, literatures, and histories. This ignorance and neglect of Indigenous knowledge

[1] Tuhiwai Smith 1999; Mihesuha and Wilson 2004; Kuokkanen 2007; Wilson 2008; Kovach 2009; Gilliland 2009.

[2] The term 'Western' is highly contested and vague. It goes back to European classical culture, Christianity, modern Enlightenment, and liberal democracy that shaped the dominant civilizations in Europe and settler nations. In our globalized world, the power-dominance-exploitation-axis of West-East is likewise an axis of North-South. Both are being eroded by powerful Eastern and Asian economies; the axes have shifted and become more complex. In this article, I employ the term 'Western' as denoting Eurocentric political, cultural, economic, and intellectual thought and practice.

[3] Cf. Hobson and Grenier 40.

is a legacy of colonial and neocolonial relations, where Indigenous social and political structures, knowledges, religions, and world views were seen as inferior, insignificant, and even barbaric by the Western world. Tellingly, in the United States, the incentive to 'indigenize the academy' came from within Native Studies, notably the Native academics Devon Abbot Mihesuah and Angela Cavender Wilson, who published *Indigenizing the Academy: Transforming Scholarship and Empowering Communities* in 2004. In the same year, the *American Indian Quarterly* published a special issue entitiled *The Recovery of Indigenous Knowledge*, edited by Cavender Wilson.

The calls to integrate Indigenous and Western knowledge discourses and practices mainly come from Indigenous researchers throughout the world. Linda Tuhiwai Smith (1999; Ngāti Awa/Ngāti Porou), for example, identifies (historical) Western research paradigms as neo/colonial and imperialist, takes issue with the 'self-evident' primacy of Western knowledge systems, and proposes methodologies and protocols for Indigenous and Kaupapa Maori research. Rauna Kuokkanen (2007; Sami), from Finland and based in Toronto, similarly explains that the academy is couched in Enlightenment logic, colonialism, modernity, and liberalism, generating epistemic dispossession, exclusion, and marginalization. She demands a reciprocal inclusion of the gift of Indigenous epistemes. Shawn Wilson (2008; Cree), who makes his home in Australia, develops a research paradigm based on Indigenous Australian and Canadian discourses and epistemological patterns. In Canada, Margaret Kovach (2009; Cree/Saulteaux) explains the necessity of decolonizing the academy and its theories, introduces an Indigenous epistemological framework and methodology, including story, self-location, and holistic engagement, and stresses the importance of reciprocity in researching different epistemologies. And Ulia Popova-Gosart (2009; Udmurt), from Russia and teaching at UCLA, calls for the protection of traditional knowledges and notes increasing Indigenous pressure to have Indigenous intellectual and cultural heritage recognized as a legitimate knowledge resource. While this concise outline of the state of research introduces different approaches and terminology, it also illustrates that the objective of developing mutual respect, common understanding, and collaboration between both knowledge systems is a pan-Indigenous and transnational concern that goes beyond North America.

This article examines the relationship, differences, and similarities between Indigenous and Western knowledges, discourses, and methodologies, based mainly on the work of Indigenous scholars in this field. This topic of including Indigenous epistemologies into the Western-dominated academy needs to prioritizes. Indigenous voices in order to counter the very neocolonial practice of marginalizing and neglecting Indigenous thought (cf. Mihesuha and Wilson 4). Most Indigenous academics writing on Indigenous knowledges, epistemologies, and methodologies repeatedly critique the colonial power relations that are institutionalized in Western universities and that continue colonial practices of inclusion and exclusion, recognition and neglect as well as standardized Western assessment and control. The scholars request a fundamental turn concerning these assumed hegemonic premises and practices and, in this way, connect the task of 'indigenizing the academy' with 'decolonizing the academy' (Alfred 88-89; Gone 134; Kovach 13-14, 30;

Kuokkanen 2-3; Mihesuha and Wilson 5, 14; Tuhiwai Smith 7-8; Tyeeme Clark 218-19). The second part of this article then outlines how Indigenous thinkers indigenize academic discourses by introducing Indigenous concepts and practices into the disciplines of political and social science, economics, and environmental studies, thus suggesting their potential applicability in these fields.

Indigenous and Western Knowledges

In his discourse theory, Michel Foucault convincingly shows how knowledge and power are profoundly interconnected in Eurocentric societies. Seeking knowledge, the "will to truth," covers up the will to power, and discourses of the academy and larger society become agencies of power. Their production is "at once controlled, selected, organised, and redistributed according to a certain number of procedures" that render them a "system of exclusion (historical, modifiable, institutionally constraining)" (Foucault 8, 10). This system of exclusion relies heavily on public institutions and their practices: pedagogy, print, the publishing system, libraries, and laboratories (Foucault 11). Thus, discourse is both agent and subject of control, limitation, and exclusion; and academic and scientific disciplines are controlling instruments of discourses and of power. According to their "rules of exclusion" that operate with neo/colonial self/other dichotomies, they separate valid from invalid, progressive from traditional, scientific from unscientific, logo-centric from irrational knowledge and methodology. They have thus produced and buffered the predominant Western Cartesian-Newtonian worldview and cemented and disseminated it in discourses of the academy, which, in this way, assigns primacy to knowledge based on reason, logic, science, and empirical proof and excludes knowledge based on observation, oral tradition, digressive thinking, and even the spiritual. Indigenous epistemologies are associated with the latter categories, grounded in Indigenous traditions and worldviews. Therefore, as a Western-based logic suggests, Indigenous knowledges cannot belong to the legitimate materialistic worldview of true science, reason, and logic. They, to speak with Foucault, "speak the truth in a void"—they are not in the realm of truth of mainstream discourse because they do not obey the rules of the Cartesian-Newtonian "discursive 'policy'" (17).

There are many statements by Indigenous and non-Indigenous scholars alike illustrating this hegemonic thought system ingrained in the academy. George Hobson holds in his article "Traditional Knowledge *Is* Science" in 1992 that "Western scientists have a tendency to reject the traditional knowledge of native peoples as anecdotal, non-quantitative, without method, and unscientific […]. From our scientific ivory towers we tend to ignore basic knowledge that is available to us." Western educational institutions have discounted Indigenous knowledges and nurtured the belief that non-Western cultures "contribute nothing to the development of knowledge, humanities, arts, science, and technology," which Mi'kmaw scholar Marie Battiste terms "cognitive imperialism" (Hobson).[4] Colleen Mc-

[4] Cf. Grenier 9.

Gloin et al. state that it is necessary to reinstate "knowledges that are often omitted from the realm of the western episteme" (3). ["T]he academy," writes Kuokkanen, " has ignored, overlooked, and dismissed [Indigenous] ontologies—in fact, the academy's structures and discourses are built on the assumption that there only is one episteme, one ontology, one intellectual tradition on which to rely and from which to draw" (3). Kovach reinforces the fact that prioritized Western-based research practices and policies reproduce colonial relationships in the academy (28). And Mihesuha and Cavender Wilson reproach the North American academy explicitly for condoning structural racism: "Gate-keeping, ethnic fraud, biased writings, favoritism, ignorance, racism, and exclusion are only a few anti-Indianisms we face regularly" (13).[5]

Many definitions of Indigenous knowledge abound in political, ecological, and cultural studies discourses. I have found Battiste's definition most useful:

> Indigenous knowledge is an extensive and valuable knowledge system. According to the categories used by Eurocentric knowledge, it is a transcultural (or intercultural) and interdisciplinary source of knowledge that embraces the contexts of about 20 percent of the world's population. Indigenous knowledge is systemic, covering both what can be observed and what can be thought. It comprises the rural and the urban, the settled and the nomadic, original inhabitants and migrants. […] Indigenous knowledge comprises all knowledge pertaining to a particular people and its territory, the nature or use of which has been transmitted from generation to generation. […] Indigenous knowledge is an adaptable, dynamic system based on skills, abilities, and problem-solving techniques that change over time depending on environmental conditions.

Its premises are grounded in holism and relational world views, and it defies categorization as it operates, to speak with Western categories, in an interdisciplinary and transcultural mode (Battiste). Tewa scholar Gregory Cajete speaks of "Native Science," explaing that "it is a metaphor for a wide range of tribal processes of perceiving, thinking, acting, and 'coming to know' that have evolved through human experience with the natural world. Native science is born of a lived and storied participation with the natural landscape. […It] is the collective heritage of human experience with the natural world" (2-3). Indigenizing the academy means foremost synthesizing the two knowledge systems in a rather holistic approach toward science and research, transforming the Western understanding of Indigenous knowledge and carving an academic and scientific space where Indigenous values and knowledges are respected and supported (Mihesuha and Wilson 2; Alfred 88), where Indigenous methodologies, decolonizing perspectives, and critical reflexivity are included, where multiple truths are accepted, where epistemic differences are bridged, where guidelines for ethical research are applied (Kovach 27-33; Kuokkanen 143; Tuhiwai Smith 7), and where subjectivity, spiritual components, and sacred knowledge have legitimate value beside objectivity and empirical evidence (Kovach 67; Wilson 55).[6] Indigenous scholars mostly apply an inclusionist approach to indigenizing the academy, i. e. they acknowledge respectful work of non-Indigenous scholars, including Marxist, feminist, postcolonial, and

[5] Cf. Atleo Principles of Tsawalk 3.

[6] Cf. Grenier 40 and Deloria 40.

other critical theories that help to expose and overcome Eurocentric hegemonies in Western societies, discourses, and educational systems (Tuhiwai Smith 165-66, 185-91; Kuokkanen 142; Kovach 48, 86; Graham Smith in Kovach 88, 91-92).

At the same time, Indigenous academics warn that the predicament of including Indigenous knowledge into Western-dominated academies risks transforming oral-based epistemes into print-based ones (Kovach 12), validating Indigenous knowledges and methodologies solely according to Western standards, subjecting the knowledge to Western control (Grenier 13, 55), and, moreover, potentially appropriating, tokenizing, and exploiting these knowledges as happens in the pharmaceutical industry.[7] Indigenizing the academy must thus proceed according to the principles of respect, recognition, reciprocity and responsibility (Grenier 42; Evans et al. 5; Kovach 67; Kuokkanen 144 ff. 157; Wilson 77). Integrated research approaches must counter neocolonial patterns in universities, must not be extractive, and must be accountable to Indigenous standards, honoring a tribal worldview (Kovach 28-29). And the academy must go beyond the hackneyed and token "giving of respect" and seriously engage with Indigenous epistemes (Kuokkanen 149). It is essential to understand Indigenous knowledges and practices not as static, solely traditional, and directed at a precolonial past, but as dynamic, innovative, and changing according to neo/colonial influences, new technologies, and political developments (cf. Grenier 6).[8] Likewise 'Western' and 'Indigenous' perspectives must not be seen as entrenched oppositions but as polar points of a contact field where both knowledge systems face each other from various positions within the field, depending on the discipline and aspect, degree of openness of the discipline, and the history of their contact. Pertaining to the environmental sciences, for example, they might be fairly close, while in chemistry or economics they might still have immense gaps between them. The objective is to bring the knowledge systems closer together and encourage them to develop mutual respect, understanding, and eventually cooperation.

In general, however, Indigenous scholars notice that there are two knowledge systems in place with one almost arrogantly ignoring the other, simply because of its historically developed authoritative power position. There is still not much collaboration between Indigenous and Western people, scholars, and scientists and there is little respect for, or genuine interest in, Indigenous knowledge and observations on the part of Western academia. This is largely due to sanctioned Western hegemonies, cultural and intellectual, but also to often very diverging worldviews as Kuokkanen states, "[F]rom the perspective of indigenous peoples, liberal humanism and its values—equity, individualism, rationalism, progress, and democracy, among others—are inherently problematic in that in many cases they

[7] Cultural Survival Canada states in 1995 that the "world market value of pharmaceuticals derived from plants used in traditional medicine had an estimated value of 43 billion United States dollars [USD] in 1985. Less than 0.001 % of the profits have gone to the original holders of that knowledge" (qtd. in Grenier 16). Cf. Tuhiwai Smith 118-19.

[8] The term "traditional knowledge" is also widely used; however, I propose that it is inappropriate and patronizing, because it locks Indigenous knowledge in the archaic and primordial, as suggested above, and disallows Indigenous modernity. Instead, the term "Indigenous knowledge" includes traditional and contemporary knowledges.

run squarely counter to key principles of indigenous philosophies and worldviews" (19). And yet, Western science cannot meet the challenges of, for example, environmental problems on its own. Louise Grenier argues on the basis of Darshan Shankar: "Western technoscientific approaches are (in themselves) an insufficient response to today's complex web of social, economic, political, and environmental challenges. The paradigm in support of 'one technology or one knowledge system fits all' has been debunked. IK [Indigenous knowledge] systems suggest a different approach to problem solving" (11). The academy will fail to achieve its objectives if it continues to exclude Indigenous epistemes, as its knowledge is based only on a fraction of world knowledge (Kuokkanen 153, 157)—the point being to alert Western scholars and scientists to this fact.

Grenier explains one major dissimilarity between both knowledge systems: "Whereas Western science attempts to isolate a problem—to eliminate its interlinkage with various other factors and to reduce a problem to a small number of controllable parameters—traditional approaches usually examine problems in their entirety, together with their interlinkages and complexities" (11; cf. Wilson 56). Likewise, Kovach notes that Western knowledge usually fragments and compartmentalizes the world and problems to be studied (1), while Indigenous knowledge sees them holistically and as a set of relationships (Wilson 127; cf. Kuokkanen 157). Milton M. R. Freeman and Martha Johnson agree, saying that the methods of Western science are reductionist because they break down natural systems into the smallest or simplest manageable parts and study these in isolation. Furthermore, Freeman observes that Western scientists are concerned with linear causality, assuming that one can predict future developments if one understands the causes or effects of past and present phenomena. Many indigenous peoples, in contrast, see themselves and their environment as "constantly reforming multidimensional interacting cycles, where nothing is simply a cause or an effect, but all factors are influences impacting other elements of the system-as-a-whole" (Freeman). A linear cause-and-effect-analysis applied to complex ecosystems and natural cycles will not yield the desired results: "Nowhere does the Cartesian model of modern science fail so completely and utterly as in trying to explain the workings of natural ecosystems" (Freeman). Following Gregory Bateson and echoing Shawn Wilson, Freeman thus suggests understanding these ecosystems through their systemic relationships, or better yet, studying phenomena based on the influences they have on other phenomena, rather then explicitly describing the phenomena. Another difference between these knowledge systems concerns the stress on quantitative versus qualitative information. Whereas Western scientists, for example, use quantitative data to generate mathematical models of animal population dynamics, which are in turn employed to calculate sustainable yields of the resource and to establish hunting or fishing regulations, Dené people are more concerned with general qualitative conditions and development trends of species than exact numbers (Johnson).[9]

[9] Cf. Ellen Bielawski confirms that the Inuit did not increase their interest in accuracy in measurement of phenomena but were rather interested in their general character. Also Grenier makes this point: "the scientific community prefers to deal with quantitative data, rather than with the interview or qualitative data that characterize IK" (39).

Possibly most suspicions arise about the validity of belief and a spiritually-based moral code that regulates Indigenous peoples' interactions with and stewardship of the environment. While Western natural scientists usually eschew or deny faith-based worldviews of creation and clearly distinguish between myth and reality and between earth, animals, and humans, Indigenous worldviews can interweave these supposed "oppositions" and "differences" and see the natural environments, flora, fauna, and humans as equal co-existing beings. Western scientists seek a rationalist scientific explanation of natural phenomena, based on developing and testing hypotheses, theories, and laws (Johnson)—which are closer to belief than Western scientists and academics would like to admit. At the same time, Western scientists are indisposed to accept Indigenous spiritual explanations of such natural phenomena. "What they often fail to recognize, however," Johnson explicates,

> is that the spiritual explanation conceals conservation strategies and does not necessarily detract from the reality of a situation and the making of appropriate decisions about the wise use of resources. It merely indicates that the system exists within an entirely different cultural experience and set of values, one which paints no more and no less valid a picture of reality than the one which provides their own frame of reference.

Indigenous peoples, on the other hand, are often critical of Western science and technology because, from their percspective, these methods tend to control and interfere with nature, and sometimes have a socially and ecologically destructive impact,[10] although some Western techniques of measurement provide data that Indigenous knowledges cannot acquire and that often prove beneficial (Johnson). A different understanding of ownership of intellectual and practical knowledge, likewise, might raise Indigenous skepticism towards integrating both knowledges. Wilson explains that the Western idea of an individual as the source and the owner of knowledge runs counter to the Indigenous understanding that knowledge is a set of relationships (127) and is based in a community: "For indigenous peoples, life is a common property which cannot be owned, commercialized and monopolized by individuals … Accordingly, the patenting of any life forms and processes is unacceptable to indigenous peoples" (Sabah qtd. in Grenier 20). "Western conventions of thought," echoes Kuokkanen, "typically emphasize individual status and competition; in contrast, indigenous cultures place more value on consensus, cooperation, and collective identity" (2).

In the fields of sociology or the humanities, adaptable Indigenous theories and research methodologies have already been developed—and used, pertaining to Indigenous issues. They include a tribal-centered worldview and Indigenous forms of representation, such as visual, symbolic, or metaphorical illustrations of research designs or results. In place of theoretical approaches like deconstruction or phenomenology, conceptual research frameworks might be applied, such as the Mayan *Ceiba* (tree of life) or the alder post in a Cree ceremonial teepee (Kovach 40-41; Smith in Kovach 47). The open-structured methods of talking or sharing circles, providing equal speaking opportunity and discouraging confrontational

[10] Cf. the statements of Inuit elders in the documentary *Qapirangajuq: Inuit Knowledge and Climate Change*.

argumentation, might be used beside the conventional interview (Evans et al. 16; cf. Kovach 124 ff.). Also, Indigenous knowledge is often compactly contained in stories and legends (Johnson; Kovach 123) and might be presented and transmitted through orality, drawing, painting, song, dance, and theater (McGloin et al. 9). Based on the notion that printed texts supersede oral texts (Wilson 58) as well as visual, bodily, and other forms of expression, these are profoundly unusual media to Westerners in terms of containing and transmitting knowledge and scientific data—a fact that renders us blind to the information held in/on them. If we strive to balance Western and Indigenous ways of knowing and transmitting knowledge, we must ready ourselves to accept and learn to "read" such forms of knowledge containers. I doubt that we are ready to accept story and narrative (Kovach 35) in or as an academic article, or a drawing or dreaming story as seminar paper, or a dance or theater piece as MA thesis. On the other hand, the Western academy has had to find ways to compare the achievements of scholars in Musicology and Fine Arts with scholars in the other humanities; so we might not be so far from rethinking the evaluation of diverse knowledges.

Contrary to Western research practices, acquiring research participants through family and friends is a proper Indigenous method that enforces the accountability of the researcher; providing their names, uncommon in Western research, ensures accountability of the research participant as well (Wilson 129-30, Kovach 148). Indigenous representation of research involves sharing information and making connections, and not necessarily building up arguments and drawing conclusions (Wilson 133). Interfering with, critiquing or evaluating the research of other scholars, often a necessary element in the Western academy, is inappropriate in an Indigenous cultural framework and violates codes of accountability and respect (43, 133-34). Equally, self-location, including cultural and personal grounding, is part and parcel of a necessary Indigenous presentation paradigm (Kovach 50, 121) and rather disdained in the Western-dominated academy. Kuokkanen argues that the "incorporation of narrative, story, and self-location found within Indigenous writing is perceived as indulgent rather than being recognized as a methodological necessity flowing from a tribal epistemology" (84). For example, by Western academic standards, it would be unconducive to the quality of this article if I stated that I am a female German scholar with family roots in the north eastern coastal area, researching Indigenous film, media, and literature among other things, and became intrigued by this topic through the documentary *Qapirangajuq: Inuit Knowledge and Climate Change*.

Nevertheless, when concerned with similar objectives—for example environmental protection—both knowledge systems share many similarities; spotlighting such similarities instead of differences is a useful place to start educational reform, as Battiste proposes. Johnson, research director of the Dené Cultural Institute in Yellowknife, holds that "both knowledge systems require thoughtful and systematic observation to understand ecological processes and that both seek to utilize resources in an ecologically sustainable manner. The main difference between the two systems appears to be in the different types of information gathered, how this information is interpreted and expressed, and the approaches to resource manage-

ment" (Johnson). The institute, which launched a pilot project to document Indigenous environmental knowledge in the early 1990s, holds as well that

> Research in the Canadian North has shown that hunters and scientists may apply the same ecological indicators in their evaluation of the local environment (for example, age, sex, health of animal populations). Western science and traditional environmental knowledge diverge mostly in their explanations or interpretations of ecological processes and in their concepts of environmental management. (DCI qtd. in Grenier 55)

Freeman makes clear that both knowledge-seeking practices employ critical comparative analysis: they compare contemporary states or processes with historical states and processes that are part of "base-line" data sets and then try to account for the reasons of variability. The difference is that Western scientists rarely have comprehensive data sets that include varying environmental features over long periods of time, whereas "traditional knowledge-based systems already possess such data sets, often of sufficient length to cover several population 'cycles' where periodicity may be measured in 70- or 80-year spans" (Freeman).[11] In this line of thought, the Dené knowledge project demonstrates that Dené, who in general have, like other Nordic nations, kept a life style and sustenance in very close relationship with the land, hold as much or more knowledge about wildlife and fishery ecologies than Western scientists (Johnson). Similarly, Grenier points out "that indigenous peoples' population estimates of caribou, fish, or whale populations have been found to be far more accurate than scientific estimates. Also, areas identified as 'critical' by scientists are not always the same as those identified by residents" (12).

Incorporating both knowledge systems in practical research creates a number of obstacles. Because elders pass away with limited possibilities to document their knowledge, Indigenous knowledge disappears fast (Johnson); the reason is to be sought in colonial history, which "has disrupted the ability of Indigenous peoples to uphold knowledges by cultural methodologies" (Kovach 12).[12] Also the neglect of Indigenous knowledges has contributed to its decline simply because it has not been used and applied (Grenier 9). There is the risk, even inadvertently, of neocolonial representation of the Other (10) because power structures grant primacy and authority to Western knowledge practices. Within this neocolonial framework, we must be cautious to preclude tokenism and the scenario Kuokkanen describes: "[M]any indigenous people cannot 'speak' in the academy. […] they are neither taken seriously, nor heard, nor understood. Instead they are reduced to the position of native informants whose task it is to buttress the dominant individuals in the academy" (21).[13] All work with Indigenous knowledge has to happen according to cultural protocol—in practice, however, researchers complain about completing ethics approval processes. Furthermore, there is the difficulty of reconciling two highly different world views and the complexity of translating

[11] Cf. McGloin et.al., who state that Western scientific knowledge is recent compared to Indigenous scientific knowledge grounded in observations of the world for millennia (3-4).

[12] Cf. Battiste; Grenier 8; Kuokkanen 59; McGloin et.al. 9.

[13] Cf. Tuhiwai Smith, who states that young Maori researchers, often employed as minor (token) assistants, have enormous difficulties to ensure Kaupapa Maori research (192).

one knowledge system into the other. As well, difficulties in translating traditional languages into global *linguae francae* complicate the integration (Grenier 30), as well as the fact that all knowledge is contextual (Evans et al. 7) and in the integration process is—usually—taken out of its context where it has self-evident value and the quality of "truth." Unfortunately, the practice still exists that Indigenous knowledge indeed is respected and accepted but collected, verified, and validated according to Western categories and methods and is mostly documented in English that may not reflect the specific meaning of terms and concepts in the Indigenous languages (Johnson; cf. Kovach 148, 170-71).

Indigenous Knowledges in the Disciplines

In general, indigenizing the academy does not mean privileging, but equally including Indigenous epistemes and methodologies and combining the respective competences of Indigenous and Western knowledges (cf. Tuhiwai Smith 191).[14] For example, the British theoretical physicist David Peat[15] respectfully merges his understanding of Indigenous knowledges with his own knowledge and discusses integrated anthropology, history, metaphysics, cosmology, and quantum physics, arguing that Western ideas of quantum physics and Indigenous holism have more common premises and ideas than are generally assumed (1994). Indigenous scholars followed suit: Eduardo and Bonnie Duran (1995) craft an Indigenous psychological framework integrating Jungian psychology with Indigenous cultural traditions, beliefs, and cosmology in various areas of clinical psychology; Gregory Cajete explores Indigenous science paradigms according to Western categories of knowledge: Indigenous philosophy, psychology, ecology, herbology, holistic health, relationships to land and animals, and astronomy (2000); and Jo-Ann Episkenew (2009) applies the concept of post-traumatic stress disorder to Indigenous colonial traumas. Ideas and documentation of how Indigenous knowledges and methodologies have been applied in the academy are outlined in manifold articles: from combining Western and Indigenous approaches to conflict resolution (Walker 2004), re-applying Hawaiian traditional ecological knowledge and land management practices (Gon III 2003), reviving Lakota research and evaluation practices grounded in the ideas of *wopasi* and *tokata wasagle tunpi* (Robertson et al. 2004), introducing Anishinaabe pedagogy into classroom learning (McNally 2004), to countering diet-related diseases with research into traditional Mi'kmaq diet (Milburn

[14] During my reading of Indigenous scholars on the issue of decolonizing and indigenizing the academy, I have nowhere encountered a standpoint that requests prioritizing Indigenous knowledges, epistemologies, and methodologies. Rather, scholars demand combating colonial structures, racism and 'gatekeeping,' incorporating Indigenous knowledges, values, principles, and research practices and creating an environment that respects and recognizes these (cf. Alfred 88-89; Gone 134; Hunter 169-70; Kovach 13-14, 30; Kuokkanen 2-3; Mihesuha and Wilson 2, 5; Tyeeme Clark 218-22).

[15] I thank Birgit Däwes for pointing out to me the works of Gregory Cajete and David Peat.

2004). In the following, I will introduce three Indigenous good governance concepts that have potential relevance to the academy and governing practices.

Saytk'ilhl Wo'osim' as Economic Theory and Practice of Resource-Sharing

When in May 2000 the Nisga'a Final Agreement was signed, a 113-year quest for Indigenous self-government concluded with its crowning success. After the James Bay and Northern Quebec Agreement (1975) and the Nunavut Land Claims Agreement (1993), the Nisga'a Treaty is the third of Canada's major self-government agreements with Indigenous people. The Nisga'a, who, like other British Columbia nations, had never signed a treaty with the British Crown and its successors, gained collective ownership of 2000 square kilometers in the Nass River Valley in Northern British Columbia, which is approximately eight percent of their traditional land base, and they received legal authority to govern their own affairs and resources. *Saytk'ilhl Wo'osim*,' or the Common Bowl concept, is a traditional practice of resource-sharing that is applied in contemporary Nisga'a land and resource management. It is defined in the *Ayuukhl Nisga'a*, a complicated body of traditional knowledge and law, which is passed on orally and which was recently published in an eight-volume edition (Spanjer and Griffins 81-82). The Nisga'a see the Nass Valley as a food bowl, or supper bowl, out of which the whole family eats; the concept considers all Nisga'a lands and resources as common property, managed for the benefit of all since all depend upon them (79, 74; Chief Azak in Raunet 74; Trosper 50). "Resources" also include relationships among people as the Nisga'a explain:

> The Nisga'a concept of Saytk'ilhl Wo'osim', or common bowl, is the foundation of Nisga'a culture. Under Saytk'ilhl Wo'osihl Nisga'a, it is understood that since everyone relies on the same resources and community, all must contribute. It is about sharing energy, wisdom, spirit, joy and sadness and it touches all aspects of life. Nisga'a government uses this principle to guide the delivery of education, health, and social services. As the nation develops policies and guidelines, the common bowl concept of fairness will continue to inform decision-making. ("Nisga'a Final Agreement" 34)

Traditionally, the Nisga'a shared certain lands and resources as common property, and certain lands and resources were reserved for single families and their largely exclusive use. Since one family *wilp* [also house] was usually very large with many *huwilp* [houses], this family-controlled territory would be very close to the contemporary understanding of common property (Spanjer and Griffins 75, 77). *Wilp* or *huwilp* were stewards of the resources and were responsible for conserving them for the benefit of all, including future generations (King 168). The "Common Bowl" concept, integral to Nisga'a culture, was the guiding ideology during the land-claim negotiations; it was employed to popularize Nisga'a culture and the Nisga'a Treaty in the media, and the treaty referendum in 2002 was duly won in their favor (Spanjer and Griffins 73). Moreover, since the Nisga'a gave up control over most of their traditional territory, the treaty negotiations themselves were guided by the principle of sharing common lands (Svensson in Spanjer and Griffins 82). No doubt the concept has changed over time, not least because it is

adapted to contemporary challenges for the sake of the treaty. *Saytk'ilhl Wo'osim'* has been adopted into the Nisga'a constitution as a governing principle and now all Nisga'a lands are common bowl property (80; "The Constitution of the Nisga'a Nation," 5-6).

The Nisga'a have shown how a traditional philosophical concept can be turned into an economic principle that is in turn applied to concrete political action (the treaty negotiations) and used as a tool for good publicity, all of which benefits a modern political group. Likewise, the concept is cemented as a governing principle into a constitution where it regulates communal sharing of land and natural resources in a capitalist society. Why then can it not also serve as an idea for further thought on the solution of global resource crises? Can not international fishing conflicts, disputes over oceanic minerals and international water rights, and the like be approached with an adapted Common Bowl practice?

Ronald Trosper convincingly explains how the Common Bowl concept will help to circumvent the "tragedy of the commons," or the mismanagement of common lands, their overuse, and overexploitation by single groups or families, as happened in seventeenth-century England. Based on game theory and general examples from fisheries, he argues that the Nisga'a have solved the tragedy of the commons by stipulating that not only the commons, but also the profits generated from the use of the commons will be shared, and that for communal or individual problems, cooperative solutions will be found. In contrast to Eurocentric cultures, which, according to a capitalist ideology, generally strive for prosperity and accumulation of wealth, Indigenous cultures (Trosper uses the Nisga'a and the Cherokee as examples) traditionally espouse ideologies of generosity and sharing. Because these practices would inhibit Indigenous assimilation and development in consonance with capitalist principles, the idea of private property was imposed through various laws and banned public systems of sharing (Trosper 50-59). For example, in the U.S., the Dawes Act of 1887 turned Indian reservation land into 160-acre parcels that were to be owned by single individuals. This legal sleight of hand considerably reduced the amount of Indian land, because non-allotted land was appropriated by the government and because many individuals, to whom the idea of land as private property was alien, sold their land to non-Indigenous settlers or speculators. In North Western Canada, the Potlatch, a feast where considerable wealth is distributed, was banned in 1885 because it likewise was thought counterproductive to Eurocentric ideas of progress and civilization that are based on self-advancement and private ownership. This feasting was thus decreased but continued in hiding; only in 1951 could North West Coast nations legally conduct Potlatches again.

The *wilp*-system, the Common Bowl concept, and the Potlatch are all institutions that govern access, property rights, harvesting systems, technologies, stewardship of the Nisga'a territory and ecosystem, and distribution of resource-generated wealth (King 165). Holders of certain titles (e.g. as heads of a *wilp*) could can only maintain their title by distributing wealth through a strictly regulated system that indicated how much would be given to whom, which was publicly acknowledged during a Potlatch; likewise, titles could only be transferred at a Potlatch, where the beneficiaries would acknowledge the title and new title holder by accepting the goods they received. Thus all families that gained "prosperity"

through the resources they could access (e.g., fishing grounds) had an obligation to distribute this prosperity; and in return would maintain a certain social status (Trosper 59-65). Skeptics of an adaptation of the Common Bowl concept to Western cultures argue that an agreement to share the output from resource use is not enforceable in capitalist societies, that human beings are basically selfish and do not wish to share and that there is no incentive to work hard for an output if one receives the same portion of resources and resource yields for doing less work through one's share. Trosper proposes that in societies where sharing is compulsory such an enforcement system is effective, that in other societies, contracts can bind individuals and groups to sharing because sharing can secure high social status, i.e. the higher the shared output, the higher the accepted social status. Studies in fifteen different cultures, where participants played test games, showed that all, to varying degrees, showed concern about others—the argument that individuals are generally selfish is not tenable (59-60). The usual solutions to resource issues are state control and regulation, the division of common resources into private "parcels," and allowing "communities of resource-users […] to organize their own rules for governing entry and removal of harvest from the resource" (60). While the first two approaches are adopted in capitalist societies with more or less success, the Nisga'a and other Northwest Coast cultures of Canada take the third approach through the *wilp*-system and regulated distribution at Potlatches.

Like Trosper, Leslie King outlines the significance of *Saytk'ilhl Wo'osim'* for sustainable environmental governance. As stipulated by the Nisga'a Treaty, the Nisga'a co-manage fisheries in their territories with Fisheries and Oceans Canada (DFO); they have integrated the *wilp* system, the Common Bowl practice, feasting, and Indigenous fishery knowledge with DFO scientific knowledge in order to ensure sustainable fisheries in their waters. King explains:

> In their co-management fisheries regime, Nisga'a Fisheries ensured their equal partnership by taking control of data generation using traditional technologies such as fish wheels for stock assessments and monitoring that produced data of much higher quality and more accurate predictions than had been previously available. Because traditional fisheries management had always been based on a total ecosystem approach, they were also very well placed to contribute conservation, habitat, and long term planning expertise to the partnership. (172)

Their superior knowledge and experience with the resource enabled the Nisga'a to implement their own 'Fishing Plan' and become advisors in international fishery issues. Moreover, the joint resource analysis has generated a "common international approach for sockeye assessment and counting" (172)—this, I argue, is the result of concerted efforts to pool and develop Indigenous and Western knowledges for local, national, and international benefits.

En'owkinwixw as Political Theory and Practice of Finding Consensus

The Okanagan *Enowkinwixw* is an Indigenous method that helps a community reach consensus that might likewise prove influential on Western political practices. Jeannette Armstrong, an Okanagan author and activist, director of the

En'owkin Centre in Penticton, founder of the En'owkin School of International Writing, faculty member of UBC Okanagan, international consultant to UNESCO and Indigenous, social, and environmental organizations, Judge to the First Nations Court of Justice, speaker for the land, and traditional knowledge keeper in her nation, explains this complicated governance procedure in her dissertation "Constructing Indigeneity: Syilx Okanagan Oraliture and tmix^{w}centrism" from 2009. *Enowkinwixw* is translated in English as "consensus building" or "meetings using Syilx rules of order." In the Okanagan language the term prompts the image of "a number of heads together, filling each other, drop by drop with a composite view" (154). According to an Okanagan [Syilx] world view, human beings are "intricately woven into the very fabric of the life force of the land" (Armstrong, "Kwtlakin?" 31). This view is well demonstrated with the Syilx word for 'land,' *tmxwulaxw*, translated as "from nothing, the life force spreading outward […] in many individual strands," "is here in continuous cycles" (30). The Okanagan people see themselves as one of those strands, "which are continuously being bound with others to form one strong thread coiling year after year into the future as the life force of the land" (31). Armstrong explains:

> the *tmix*^{w} [life force of the land] are Chiefs ['people' in animal and plant forms] in the Syilx meaning of the word—that is they represent a role—in being duty-bound to twining/coiling the many strands. They are meeting to find a collectively agreed-upon way for the "People-to-be" to survive, and at the same time to maintain the grand imperative of twining/coiling the many strands into a unity of direction and existence. ("Constructing Indigeneity" 158)

Armstrong illustrates *Enowkinwixw* and key understandings of the Okanagan environmental ethic with the example of the "Four Chiefs" story. Through *Enowkinwixw*, the Four Chiefs Black Bear, Spring Salmon, Bitterroot, and Saskatoon Berry resolve to sacrifice themselves as food for the human beings, who must then make sure that they can revive—the basic principle of ecological sustainability. By analyzing the story and unraveling the philosophical ideas, ecological principles and governing processes it contains for non-Okanagan readers, Armstrong shows how crucial Indigenous knowledge is articulated through story and narrative (143-95).

To Armstrong, Western forms of democracy, and specifically the majority rule, oppress minorities and almost certainly cause conflict:

> This type of process is in fact a way to guarantee the continuous hostility and division that give rise to aggressive actions that can destabilize the whole community and create uncertainty, distrust, and prejudice. […] [I]n our tradition the minority voice is the *most important* voice to consider, because it is most likely to tell us what is going wrong, what we're not looking after, doing, or acting responsibly toward. ("En'owkin" 16; emphasis in original)

Hence, *Enowkinwixw* begins from an unbiased position and includes all members of a given community in finding a solution to various tasks, problems, and issues that require action. It systematically produces a composite view from the various pieces of information and perspectives in the community. In this way, it ensures that the needs of all individuals, family units, the community as a whole, and the

land/environment as well as all relations among them are granted equal consideration. The four *tmix*^{w} lifeforces are included through *sux*^{w}*q*^{w}*a*ʔ*q*^{w}*a*ʔ*lulax*^{w}, speakers for the land ("Constructing Indigeneity" 162-63, 178-79). At the first stage, all views are put forward without any debate, devaluing, discarding, or lobbying, in order to generate a comprehensive picture of the issue, to see how any potential decision will affect all parts of the community and to enlighten others about each perspective. The most opposing and dissenting opinions are not seen as potential conflicts, but as necessary in order to enlighten all about each other's perspective (182). The formal dialogue seeks

> to collectively project and envision what would be there without the problem and to construct strategies toward that vision rather than to engage in debate. […] The construct provides insight into the principle that opposing forces are actually two extremes seeking stability and as such are actually one continuum in which the only point at which no opposition occurs is the center. (183)

This unbiased overall clarification of the problem and composite view of a desired solution must be achieved before stating obstacles toward that solution. Each party, being mindful of the concerns of the others that it is prepared to contribute in order to move toward the desired resolution, rather than asking other groups to move or change, then offers feasible strategies and actions. All identify, clarify, and remove obstacles and adjust themselves toward the agreed solution with self-offered steps. Such proposed self-sacrifices cancel out oppositional dynamics and enable an exchange of mutual benefit (183-84). Leaders and those in the strongest power positions are required "to take the lead in the difficult task of setting the tone and level of 'sacrifice,'" thereby setting an example and leading "through a willingness to give up personal bias and to find a way for others to act responsibly" (185). The goal is that all understand the reason for opinions of others and that the decision addresses the whole community's needs. Not everyone can agree, but the decision is supported by all because all are fully informed about and participate in the process of deciding; the chosen resolution becomes the best possible action ("En'owkin" 15-16). All who have benefited from the solution and the sacrifices made by others must make sure to revive [or reward] those who have sacrificed ("Constructing Indigeneity" 185).[16]

Enowkinwixw has now adapted to contemporary challenges and operates with four core opposing dynamics that are balanced or reconciled through finding a resolution. In conflict situations, there can be preservationists vs. innovators and integrationists vs. segregationists; in the psychological realm, these oppositions are intellect vs. emotion and physical impulse vs. ethical/spiritual restraint. When *Enowkinwixw* is employed as a legal instrument, these are tensions between the collective and the individual and between the status quo and changed conditions that cause injustice and conflict. Four major groups articulate their concerns and visions pertaining to a decision: elders being concerned with consequences for the land and environment, mothers looking after the well-being of the whole community, fathers asking how any resolution will affect security, sustenance, and shelter, and the youth with innovative energy pushing for changes and new approaches (187-92).

[16] For a more concise and earlier version of Enowkinwixw cf. Armstrong "En'owkin: Decision-Making as if Sustainability Mattered."

This Indigenous methodology is different from reductionism ("Constructing Indigeneity" 204) and thus qualifies as an alternative model to Western democratic processes that are not designed to meet the needs of all members of a given group. Likewise, *Enowkinwixw* is a foundational concept to the Okanagan environmental ethic since it always looks at how any decision will affect the land and environment through the so-called land speakers. This procedure requires a fundamental rethinking of our methods: specifically, not focusing on one's own benefit and concerns but on those of others as well as not expecting others to change, move, or sacrifice but being prepared to do so oneself. Once this shift in thinking has begun, *Enowkinwixw* can be applied to contemporary non-Okanagan practices of consensus-finding and conflict resolution, as it already guides decision-making processes at the Center for Ecoliteracy (CEL) in Berkeley (Barlow and Stone 6, 7, 12). *Enowkinwixw* presents a desirable alternative to the majority rule and Western forms of conflict resolution that are designed to achieve individualistic rather than communal solutions, are implicated in the 'human-over-nature' trope (Galtung in Walker 535-36), and are likely to produce marginalized minorities, unpopular decisions, division, uncertainty, and instability.[17] The incorporation of Indigenous political practices into such fields as political theory and comparative politics, argues Joely de la Torre, will broaden and strengthen political science and its search for alternative concepts of political decision making, outcomes, and processes (174, 188).

Tsawalk, *Haḥuułism* and the Challenge of Global Crises

The Nuu-chah-nulth philosopher, educational scholar, former hereditary chief, and speaker of Nuu-chah-nulth E. Richard Atleo (Umeek) compares and integrates Western and Indigenous philosophies and knowledge practices in his writings. He develops the theories of *Tsawalk*, "everything is one," and *Haḥuułism*, the "unity of creation," as possible ways to combat current crises, such as climate change, energy and oil shortages, rampant diseases, and threats of nuclear war and terrorism, and to approach the ideals of peace, order, and good government (*Tsawalk* xix, *Principles of Tsawalk* 169). *Tsawalk* is a theoretical approach that assumes reality and the universe to be one network of relationships, a unity of the physical and metaphysical aspects of existence (*Tsawalk* xi, 117-18). Atleo explains: "Whereas the methodologies of the physical sciences demand the isolation of one or two variables so that cause and effect can be measured, the theory of *Tsawalk* assumes that any variable must be affected by a multitude of additional variables that can be found in a variety of contexts across different dimensions of experience" (118). Such an holistic concept may at times be applied in the

[17] Cf. Walker (2004), who presents a brief outline of four Indigenous methods of conflict resolution, the Tsalagi (Cherokee) Talking Circle, the Hawaiian Ho'oponopono, the Iroquois Great Law of Peace, and the Navajo Justice and Harmony Ceremony (Hozhooji Naat'aanii), and compares them to two Western models, Roger Fisher and William Ury's "principled negotiation" (1981) and John Burton's "conflict resolution" (1996).

academy, but it is not an overriding pattern in Western thought (xii).[18] Rather, as mentioned above, Western research methodologies tend to isolate variables, compartmentalize experience, favor fragmentation and reductionism, and define reason, empirical experience, and human cognition as the only sources of knowledge. While it thus forecloses relationships between seemingly separate elements as well as spiritual and metaphysical insights into experience, Albert Einstein's theory of relativity postulates that matter cannot be separated from its gravity field, and Fritjof Capra argues that the universe does not so much consist of matter in space, but of a quantum field containing condensations of particles and concentrations of energy (xii-xiii). Their theories—major milestones in the history of Western science—are closer to *Tsawalk* than to other reductionist theories. Atleo explains the Nuu-chah-nulth quest of *ʔuusumč* as investigation into the metaphysical, a research method that seeks to uncover what the relationship between the physical and spiritual is and how it works; and to test the validity of origin stories and apply them to human quests and behavior in the empirical world; its success in the physical realm is achieved via answers in the spiritual realm (72, 84, 120).[19] Although the differences between *ʔuusumč* and Western research methods are enormous, Atleo maintains, they are not incompatible.

The story "How Son of Raven Captured the Day" serves Atleo's argumentation: in the beginning the people had no light [fire, knowledge, power], which was held by a Chief across the waters [the spiritual world]. Son of Raven suggested capturing the day [light]. The people sent Son of Deer to dance for the Chief and in doing so dip its tail of cedar bows into the box containing the light and bring it home—Deer failed. They then devised the plan that all transform into sockeye salmon in order to be caught by the Chief's daughters and thus abduct them. This strategy failed as well because the megalomaniac Raven transformed into a giant king salmon instead and thus alerted the Chief's people. The wise Wren then proposed that Raven transform into a tiny leaf to be swallowed by one daughter. She becomes pregnant and her child, the reborn Raven succeeds bringing the Day box to the people (*Tsawalk* 6-10).

Atleo explains the allegorical meanings of the story elements in the physical realm, and how the story suggests the spiritual-physical unity, observes and shapes human behavior and values, and confirms the necessity of community (10-17). As well, he outlines that the story, much like Western research processes, contains the stages of identifying a problem, developing solutions, devising methods to test the theories, and pursuing a tested strategy (120). Oppositions, obstacles, and errors are necessary dynamics in the *ʔuusumč* process, much like in Western sciences, which, as Foucault teaches us, "consist of errors as well as truths, errors […] having their own positive functions and their own valid history, such that their roles are often indissociable from that of the truths" (15). Atleo thus shows that Indigenous stories provide theories and guidelines to understand the nature of reality as well as methods of knowledge acquisition. Not—not unlike scientific

[18] Atleo makes clear that the term 'holism' does not quite express the theory of Tsawalk (Tsawalk xi).

[19] Pronounce oo-sum-ich (Principles of Tsawalk xi).

inquiry, they display a trajectory from immature to mature methods for solving problems (*Principles of Tsawalk* 5, 52, 76). The application of *ʔuusumč* reveals spiritual knowledge and knowledge about the human condition; it assures successful hunts; its results are announced during public feasts; and myth-as-theory is suggested by the stories guiding the people to create meaningful and harmonious relationships between all life forms—the stories are valid and reliable (53-54). Atleo clarifies that *ʔuusumč* ensured the continuity of life:

> the Nuu-chah-nulth way of life persisted over millennia because it provided for the basic necessities of food, clothing, shelter, and a measure of security. This provision of basic necessities is critical to its sustainability. If this way of life could be taken as a political party then ancient Nuu-chah-nulth kept voting this party into power because they kept the promise of providing for the basic necessities of life to every person. This is definitely not the same as saying that the Nuu-chah-nulth way of life was complete or perfect, it was not.[20]

Based upon these prerequisites, Atleo proposes the concept of *Haḥuułism*, "a constitutional order predicated on building equitable relationships between Canadians and Indigenous nations" (Lee). *Haḥuułism* is a neologism derived from *haḥuuł*i,[21] meaning land and its resources owned by a Chief, and the ending *ism*, indicating an ideology or philosophy (*Principles of Tsawalk* 139, 153).[22] The principles of the land-centered approach *haḥuułism*, much like the Okanagan *tmix*^{w}*centrism*, "are taken from ancient beliefs and practices that sought constantly to strengthen life through emphasizing relationships between all life forms […and] a necessary struggle for balance and harmony"—a difficult struggle and state as difficult to maintain (139, 155). Atleo concedes that *ʔuusumč*, when challenged by contemporary technological developments, is incomplete. He proposes combining the Indigenous method of maintaining relationships with Western methods of fragmenting and reducing variables and of developing advanced technologies:

> The term *haḥuułism* represents a synthesis of worldviews as it translates indigenous knowledge into a Western philosophical framework with the intention of suggesting the possibility of an equitable and harmonious working relationship between the two ways of life. […] *Haḥuułism* is a way of life based on an ancient view of integrated reality, which consists of the unity of the physical and non-physical. This ancient view of reality is supported by origin stories that were tested by an integrative method of research over a long period of time with consistent and reliable outcomes. (140-41)

Time and again, Atleo derives his theories and explanations from various Nuu-chah-nulth stories that carry allegorical information in conditions, plots, character types, and developments. This buoys the above argument that narrative myths, stories, songs, and dances contain Indigenous theory and knowledge (147). Similar to the Okanagan Four Chiefs that gave their lives for humans to feed on, in Nuu-chah-nulth belief, the Salmon people gave themselves as food in exchange for recognition in a public ritual (143). The Story of Bear, which tells how the people came to share the salmon with the bears, demonstrates how sustainable and shared protocols can be developed. It was unconstitutional for one species to make decisions for other life forms,

[20] Email conversation with E. Richard Atleo, 22 April 2013.

[21] Pronounce ha-hoolth-ee (Principles of Tsawalk x).

[22] Ḥahuuł*i* may also mean the link between the physical and non-physical realms (153).

to take unilateral actions, so to speak; necessary inter-species communication was achieved through *ʔuusumč* (143). Oppositions and conflicts were resolved through the *haḥuułic* principles of recognition, consent, and respect that then ensured continuity of all beings (143). *Isaak*, for example, signifies respect for all life forms; all have intrinsic value and are held in equal esteem, which must be recognized through appropriate protocols (*Tsawalk* 130). *ʔuusumč* would lead to "protocols of *Tsawalk*," "a system of life management, […] agreements or treaties between life forms that must compete for resources on one planet" (*Principles of Tsawalk* 156). These protocols "move competitive relationships away from conflict and towards harmony until all the constitutional principles of life—mutual recognition, mutual consent, and mutual respect—allow for the continuity of all life forms" (156). Much like *Enowkinwixw*, Nuu-chah-nulth decision-making was a long process that enabled every council member to speak on the particular issue, ensuring recognition and respect for all [life forms]. Each must understand the issue and arguments, and then a probable solution was again addressed by all indicating dissent or agreement (*Tsawalk* 88-90). Even if members disagreed, they would carry the final solution simply because they understood the overall concerns and arguments and were involved in achieving the resolution—a process so unfamiliar to our democratic systems that usually alienate the outvoted minority and exclude it from the resolution of the majority.

Applying *Haḥuułism* nationally or globally is a difficult challenge because, according to Atleo, liberal democracies are in stages of early development in terms of democratic ideals, on a global scale tend to trigger global polarities, and, moreover, because *Haḥuułism* requires a dramatic shift in worldview (*Principles of Tsawalk* 161). And yet, Atleo is optimistic about the project; to him opposition holds not conflict but solution, and he deliberately invites other theories to further develop *Haḥuułism*: "today's peoples are not helpless: a polarized reality always guarantees its opposite—in this case, help. This book represents a Nuu-chah-nulth perspective on this developmental process, which must begin with darkness and move towards light. It is an emergent perspective that requires the addition of other perspectives in order to be more complete" (169).

Concluding Remarks

This article presents a call for Indigenous Studies scholars to indigenize where possible, apply Indigenous concepts and theories to research and teaching and thus decolonize the academy from within. The task for both Indigenous and non-Indigenous political, economic, social, and environmental scientists is to break down prejudices against Indigenous good governance principles such as are introduced here, study these complicated governing processes in detail, and develop their applicability to common problems of finding mutual understanding, common ground, and consensus and of sustainably managing and sharing resources on local, national, and international levels. They may turn such principles, ideologies, and philosophies into political, economic, social, and environmental theory and practice and help global knowledges and politics to greatly benefit from Indigenous knowledges and practices.

Works Cited

Alfred, Taiaiake. "Warrior Scholarship: Seeing the University as a Ground of Contention." *Indigenizing the Academy: Transforming Scholarship and Empowering Communities.* Eds. Devon Abbot Mihesuah and Angela Cavender Wilson. Lincoln: U of Nebraska P, 2004. 88-99. Print.

Armstrong, Jeannette. "Constructing Indigeneity: Syilx Okanagan Oraliture and tmix^{w}centrism." Diss. U of Greifswald, 2009. Web.

---. "En'owkin: Decision-Making as if Sustainability Mattered." *Ecological Literacy: Educating our Children for a Sustainable World*. Eds. Michael K. Stone and Zenobia Barlow. San Francisco: Sierra Club, 2005. 11-17. Print.

---. "Kwtlakin? What is Your Place?" *What is Your Place? Indigeneity and Immigration in Canada.* Ed. Hartmut Lutz with Thomas Rafico Ruiz. Augsburg: Wissner, 2007. 29-33. Print.

Atleo, Richard E. ---. *Principles of Tsawalk: An Indigenous Approach to Global Crisis*. Vancouver: UBC P, 2011. Print.

---. *Tsawalk: A Nuu-chah-nulth Worldview.* Vancouver: UBC P, 2004. Print.

Barlow, Zenobia, and Michael K. Stone. "Introduction." *Ecological Literacy: Educating our Children for a Sustainable World*. Eds. Michael K. Stone and Zenobia Barlow. San Francisco: Sierra Club Books, 2005. 1-8. Print.

Battiste, Marie. "Indigenous Knowledge: Foundations for First Nations." 2005. Web. 15 August 2012.

Bielawski, Ellen. "Inuit Indigenous Knowledge and Science in the Arctic." *Canadian Arctic Resources Committee* 20.1 (1992). Web. 28 April 2011.

Borrero, Roberto. "Caribbean Indigenous Peoples and Climate Change." *Traditional Knowledge and Indigenous Peoples*. Ed. Ulia Popova-Gosart. n.l.: L'auravetl'an Information and Education Network of Indigenous Peoples (LIENIP) and World Intellectual Property Organization (WIPO), 2009. 71-77. Print.

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

Cultural Survival Canada. "Indigenous peoples, biodiversity, and health." Factsheet. Ottawa: Cultural Survival Canada, 1995. Print.

De La Torre, Joely. "In the Trenches: A Critical Look at the Isolation of American Indian Political Practices in the Nonempirical Social Science of Political Science." *Indigenizing the Academy: Transforming Scholarship and Empowering Communities.* Eds. Devon Abbot Mihesuah and Angela Cavender Wilson. Lincoln: U of Nebraska P, 2004. 174-90. Print.

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

Duran, Eduardo E., and Bonnie Duran. *Native American Postcolonial Psychology.* Albany: SUNY P, 1995. Print.

Episkenew, Jo-Ann. *Taking Back our Spirits: Indigenous Literature, Public Policy, and Healing.* Winnipeg: U of Manitoba P, 2009. Print.

Evans, Mike, et al. "Common Insights, Differing Methodologies: Towards a Fusion of Indigenous Methodologies, Participatory Action Research, and White

Studies in an Urban Aboriginal Research Agenda." n.l.: Okanagan Urban Aboriginal Health Research Collective, n.d. Print.
Foucault, Michel. "Orders of Discourse." Trans. Rupert Swyer. *Social Science Information* 10.2 (1971): 7-30. Print.
Freeman, Milton M.R. "The Nature and Utility of Traditional Ecological Knowledge." *Canadian Arctic Resources Committee* 20.1 (1992). Web. 28 April 2011.
Gilliland, Anne. "Traditional Knowledge and Information Systems." *Traditional Knowledge and Indigenous Peoples*. Ed. Ulia Popova-Gosart. n.l.: L'auravetl'an Information and Education Network of Indigenous Peoples (LIENIP) and World Intellectual Property Organization (WIPO), 2009. 124-27. Print.
Gon III, Samuel M. "Application of Traditional Ecological Knowledge and Practices of Indigenous Hawaiians to the Revegetation of Kaho'olawe." *Ethnobotany Research & Applications* 1 (2003): 5-20. Print.
Gone, Joseph P. "Keeping Culture in Mind: Transforming Academic Training in Professional Psychology for Indian Country." *Indigenizing the Academy: Transforming Scholarship and Empowering Communities.* Eds. Devon Abbot Mihesuah and Angela Cavender Wilson. Lincoln: U of Nebraska P, 2004. 124-42. Print.
Grenier, Louise. *Working with Indigenous Knowledge: A Guide for Researchers.* Ottawa et al.: International Development Research Centre, 1998. Print.
Griffin, Mansell, and Antino Spanjer. "The Nisga'a Common Bowl in Tradition and Politics." *Aboriginal Canada Revisited*. Ed. Kerstin Knopf. Ottawa: University of Ottawa Press, 2008. 72-85. Print.
Hobson, George. "Traditional Knowledge *Is* Science." *Canadian Arctic Resources Committee* 20.1 (1992). Web. 28 April 2011.
Hunter, Andrea A. "Teaching Indigenous Cultural Resource Management." *Indigenizing the Academy: Transforming Scholarship and Empowering Communities.* Eds. Devon Abbot Mihesuah and Angela Cavender Wilson. Lincoln: U of Nebraska P, 2004. 160-73. Print.
Johnson, Martha. "Dené Traditional Knowledge." *Canadian Arctic Resources Committee* 20.1 (1992). Web. 28 April 2011.
King, Leslie. "Competing Knowledge Systems in the Management of Fish and Forests in the Pacific Northwest." *International Environmental Agreements: Politics, Law and Economics* 4 (2004): 161-77. Print.
Kovach, Margaret. *Indigenous Methodologies: Characteristics, Conversations, and Contexts.* Toronto: U of Toronto P, 2010. Print.
Kunuk, Zacharias, and Ian Mauro, dirs. *Qapirangajuq: Inuit Knowledge and Climate Change*. Canada: Twentieth-Cenutry Fox, 2010.
Kuokkanen, Rauna. *Reshaping the University: Responsibility, Indigenous Epistemes, and the Logic of the Gift*. Vancouver: UBC P, 2007. Print.
Lee, Damien. "Review: *The Principle of Tsawalk: An Indigenous Approach to Global Crisis* by Umeek (E. Richard Atleo)." Web. 26 April 2013.
McGloin, Colleen, Anne Marshall, and Michael Adams. "Leading the Way: Indigenous Knowledge and Collaboration at the Woolyungah Indigenous Centre." *Journal of University Teaching & Learning Practice* 6.2 (2010): 1-15. Print.
McNally, Michael D. "Indigenous Pedagogy in the Classroom: A Service Learning Model for Discussion." *American Indian Quarterly* 28.3/4 (2004): 604-17. Print.

Mihesuah, Devon Abbot, and Angela Cavender Wilson. "Introduction." *Indigenizing the Academy: Transforming Scholarship and Empowering Communities*. Eds. Devon Abbot Mihesuah and Angela Cavender Wilson. Lincoln: U of Nebraska P, 2004. 1-15. Print.

Milburn, Michael P. "Indigenous Nutrition: Using Traditional Food Knowledge to Solve Contemporary Health Problems." *American Indian Quarterly* 28.3/4 (2004): 411-34. Print.

"Nisga'a Final Agreement." Web. 18 Februray 2013.

Peat, David. F. *Blackfoot Physics: A Journey into the Native American Universe*. London: Fourth Estate, 1994. Print.

Popova-Gosart, Ulia, ed. *Traditional Knowledge and Indigenous Peoples*. n.l.: L'auravetl'an Information and Education Network of Indigenous Peoples (LIENIP) and World Intellectual Property Organization (WIPO), 2009. Print.

Raunet, Daniel. *Without Surrender, Without Consent: A History of the Nisga'a Land Claims*. Vancouver: Douglas & McIntyre, 1996. Print.

Robertson, Paul, Miriam Jorgensen, and Carrie Garrow. "Indigenizing Evaluation Research: How Lakota Methodologies Are Helping 'Raise the Tipi' in the Oglala Sioux Nation." *American Indian Quarterly* 28.3/4 (2004): 499-526. Print.

Shankar, Darshan. "The epistemology of the indigenous medical knowledge systems of India." *Indigenous Knowledge and Development Monitor* 4.3 (1996). Web. 12 May 2012.

Smith, Linda Tuhiwai. *Decolonizing Methodologies: Research and Indigenous Peoples*. 1999. London and New York: Zed, 2002. Print.

"The Constitution of the Nisga'a Nation." Web. 18 Februray 2013.

Trosper, Ronald. *Resilience, Reciprocity and Ecological Economics: Northwest Coast Sustainability*. New York: Routledge, 2009. Print.

Tyeeme Clark, David Anthony. "Not the End of the Stories, Not the End of the Songs: Visualizing, Signifying, Counter-colonizing." *Indigenizing the Academy: Transforming Scholarship and Empowering Communities*. Eds. Devon Abbot Mihesuah and Angela Cavender Wilson. Lincoln: U of Nebraska P, 2004. 218-32. Print.

Walker, Polly O. "Decolonizing Conflict Resolution: Addressing the Ontological Violence of Westernization." *American Indian Quarterly* 28.3/4 (2004): 527-49. Print.

Wilson, Shawn. *Research Is Ceremony: Indigenous Research Methods*. Halifax: Fernwood, 2008. Print.