



# Indigeneity as a Decolonizing Praxis

Corinna Netherton

Community, Culture and Global Studies, University of British Columbia Okanagan, Kelowna, Canada

Email: cnethert@hotmail.com

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## Abstract

Decolonization must be inclusive of gender and diversity, and of equal importance, is the sustained relationship with the natural world. Indigenous philosophical practices provide a foundation to create a paradigm shift in socio-economic, and political practices. In this way, instilling principles of indigeneity across boundaries can help mitigate climate change. Red pedagogy asserts and premises Indigenous knowledge and praxis in education [1]. This paper expands upon this premise of praxis with the implementation of the ethics that is indigeneity. As a concept, “indigeneity” is a self-defined identity through lived experience [2]. An imbedded belief and values system is a part of one’s self-identity and lived experience. The ethics or principles of indigeneity articulated by 4 r’s: building mutually respectful relationships and renewing and reciprocating those relationships [3] can be centralized as a transformative decolonizing practice not only in education but also in everyday life. Cultural protocols exemplifying Indigenous ethics as a red/critical pedagogy provide a praxis for relationships and negotiations between Indigenous and non-Indigenous organizations. Indigeneity imbedded in cultural protocols can be used to promote good relationships in treaty negotiations. Transboundary relations among government, Indigenous and non-Indigenous organizations can be strategic and dynamic partnerships if Indigeneity and philosophical practices are applied as a transformative process in transboundary negotiations. Indigeneity is necessary for a paradigm shift in a vision to support the Truth and Reconciliation Calls to Action, the National Inquiry’s Calls to Justice, and the United Nations Declaration on the Rights of Indigenous Peoples. Future generations will inherit the legacy of socio-economic and political decisions of today. A paradigm change can only be accomplished through Indigenous guidance within the Indigenous praxis of indigeneity. This paradigm change can only be accomplished through Indigenous guidance within the praxis of indigeneity. Applying indigeneity as a baseline will be a transformative process to a re-imagined new future. Applying indigeneity as a sustainable ethic will help to alleviate climate change anxiety.

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## Subject Areas

Decolonization, Reconciliation, Indigenous, Climate Change

## Keywords

Decolonization, Indigeneity, Paradigm Shift, Climate Change, Social Justice

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## 1. Introduction

Decolonizing is an action-based process of breaking down colonial inequalities of structured hierarchies. In contrast, indigenization, is the implementation of ways of knowing and Indigenous values and ethics. In this way decolonization leads to the process of indigenization of social, economic and political institutions and organizations. Collaborative applications of Indigenous knowledges and/or worldviews can work together with western social, economic, and political realms. Armstrong explains how Syilx Okanagan stories and the Nsyilxcen language can be teachings of attitudes and “praxis in order to contextualize the experience of Indigeneity as a social paradigm in practice” [4]. Similarly, “Red Praxis centers Indigenous sovereignty rooted in epistemological and ontological orientations to place-to land” [5]. Red praxis is an extension of red or critical pedagogy applying the praxis of Indigenous knowledge, at the same time, critiques colonial practices in education [1]. Community based systems rely on land-based knowledge as an indigenization praxis and are a way to re-center Indigenous philosophical values and ethical constructs outside and away from settler/western ideology. Indigenization utilizes indigeneity or red praxis. In this way, as a praxis, indigeneity is decolonizing through active listening and sharing where research is done with the community and according to community protocols [6]. Active listening and sharing are part of Indigenous ethical practices contributing to creating good relationships and reciprocity that are essential components of indigeneity [3] [7].

Decolonization is a process to reach a state of reconciliation. True reconciliation is creating equity in the relationship between Indigenous and non-Indigenous peoples. Reconciliation then is a process of decolonization by infusing Indigeneity into western society’s Eurocentric ideologies and systems as essential elements for change. An action-based process expressive of true reconciliation reflects the intentions of the Truth and Reconciliation Commission (TRC) Calls to Action, the National Inquiry into the Murdered and Missing Women and Girls (MMIWG+) Calls for Justice, and the recent federal and provincial (B.C.) Bills C-15 and 41 respectively, to implement the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). The TRC Calls to Action together with the MMIWG+ Calls for Justice and UNDRIP are a framework for reconciliation. The more recent passing of the Canadian government and the B.C. government bills to implement UNDRIP is a starting point and an action plan for change by

asserting Indigenous rights.

As a settler Canadian of primarily English and German descent, I am grateful for the opportunity to currently work and live on the unceded Syilx Okanagan territory. I situate myself as an ally working with Indigenous scholars and students. Through my work I rely on Indigenous scholars for their insight, and I provide a platform for Indigenous voices and experiences. In this way, I am contributing to the process of decolonization as an active learner in hopes of creating a much-needed paradigm shift. This paper suggests the need for a social paradigm shift implementing Indigeneity as a philosophical and ethical praxis. Indigeneity can be a basis for local, regional, and national partnerships, as well as transboundary Indigenous led collaborative partnerships. There are three main sections in this paper. First, Indigeneity is defined to understand what it is and how it serves as a foundational ethical approach for social-economic and political practices. As an Indigenous praxis, Indigeneity is an ethical based process informed by the relationship with the land specific to the people. In the next section, Indigeneity as a process applied to transboundary negotiations through co-management agreements. The final section examines Indigeneity as a practice and process for reconciliation. This paper seeks to understand how Indigeneity, as a philosophical and ethical praxis, can be used as a foundation and transformative process for negotiations and partnerships among Indigenous and non-Indigenous governments and organizations. Finally, Indigeneity is proposed as a tool for climate change adaptation.

## 2. Indigeneity as a Philosophical and Ethical Praxis

Indigeneity is not a term or concept to be dismissed. As a worldview, Indigeneity is a perspective based on common sense ethical principles. According to Syilx Okanagan Jeannette Armstrong Indigeneity is a social philosophy and is not about ethnicity or race but is about affirming Indigenous culture and identity [4]. As a philosophy, indigeneity is the idea that Indigenous peoples and all other life forms are equal as illustrated visually by concentric nested circles: individual, family, community, nation and the natural world, all are equal [3] [7]. Absent is the hierarchy of social beings in relation to each other and the ecology. The ego centric individuality is decentralized with preference given to equality of humans with the environment. The focus is on sustained relationships with the land and ecology. Good relationships are nurtured and maintained between humans and among all living and non-living entities. Positive and progressive relationships encompass cultural, racial and ethnic diversity<sup>1</sup> and gender. The interconnection between humans and ecology, that is Indigeneity, is further expressed by Martinez, as *kincentric* ecology. In other words, *kincentric* ecology is the reciprocal relationship with the ecosystem and the natural world where all are equally important [8].

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<sup>1</sup>Diversity can refer to different perspectives, ways of knowing and being, culturally based, racial or ethnic. In this context, diversity pertains to ethnic and cultural diversity of different ways of knowing and being as applied to Indigenous peoples.

Indigeneity, as a philosophical and ethical concept, is articulated by the principles of four words that change depending on the source. In an education and research context, Armstrong [4], Kirkness and Barnhardt [9], and Kovach [10] identify the four (4) r's as: respect, relevance, reciprocity, and responsibility. Expanding on these 4 r words: building respectful relations in community-based research is essential and takes time. The researcher is responsible to the community to conduct research in an ethical and respectful manner. The reciprocity is the giving back component of research in doing research that is relevant for the community. Engaging in research that is relevant to community interests in an ethical, respectful, and responsible way is essential for building good relationships. From a healing perspective, Mohawk Marlene Brant Castellano refers to 4 r's as: building mutually beneficial and respectful relationships and reciprocating and renewing those relationships [3]. Instead of *relevance* Brant Castellano uses *renewal* of relationships as an important transformative stage in the healing process to restore balance [3].

Sto: lo Jo-Ann Archibald identifies the four principles in her dissertation research as a variation of the 4 r's [11]. She builds on the principles of good relationships to consider:

- (1) *Respect* for each other and for the cultural knowledge;
- (2) Carrying out the roles of teacher and learner in a *responsible* manner (a serious approach to the work and being mindful of what readers/other learners can comprehend);
- (3) Practicing *reciprocity* where we each gave to the other, thereby continuing the cycle of knowledge from generation to generation; and
- (4) *Reverence* towards Spiritual knowledge and one's spiritual being [11].

Archibald highlights respect, responsibility, reciprocity, and reverence as the 4 r's. She substitutes *renewal* with *reverence* associated with the spiritual component of knowledge and one's spirituality [11]. The principles are similar to those expressed by Armstrong [4] [7] Brant Castellano [3], and Kirkness and Barnhardt [9]. The importance lies in building relationships with one another and all living and non-living entities. An essential element is learning from one another and transmitting the knowledge through generations.

Anishinaabe Kathleen Absolon [12] articulates Indigenous ethical principles as they apply to the Seven Grandfather Teachings in leading a good life in an expanded version of the principles: "respect, reciprocity, relevance, humility, gratitude, purpose, truth, kindness, sharing, balance, harmony, love, bravery and wisdom" (p. 155). The main Anishinaabe seven teachings are: truth, humility, respect, love, honesty, courage, bravery and wisdom (Benton-Banai, 1988 [13]; Seven Generations Education Institute, 2021 [14]. The 4 r words in Absolon's [12] are an expanded version of the principles. In Absolon's [12] context: respect, reciprocity, and relevance are essential for good relationships to maintain balance and harmony. Maintaining harmony and balance is the foundational components to indigeneity [7] [12]. The overlap with Absolon [12] and the Seven Grandfather

Teachings is “respect” yet the importance of good relationships and reciprocating good relationships is assumed in the principles of love, humility, and honesty. One perspective of the principles is viewing them as common sense and ethical practices by humans with all other living and non-living entities. According to Absolon [12] “Indigenous worldviews and knowledge have our [Indigenous] codes of conduct and ethics embedded within them” (p. 156). Non-Indigenous peoples often cannot readily understand the codes or meaning and intent of the ethics and values without an interest in learning them. Sometimes it is necessary for Indigenous peoples lead the conversations in a culturally appropriate way.

According to the Indigenous scholars discussed in this paper, the 4 r’s can be expanded and summarized to include 5 r’s: respect, responsibility, reciprocity, renewal, and relevance [3] [7] [9] [12]. Indigeneity includes ethical guidelines to live by in a philosophical way. The basis of the 4 r’s is providing a basis for a moral code forming one’s cultural identity when practiced by an individual in a community. Based on the 4 r’s discussed above they can expand to the 5 r’s or more. For example, Indigenomics refers to “7 Rs” for the center of power for evolving relationships in business: right to an economy, rights and title, recognition, representation, resources, re-storying Indigenous business success, and collective response [15]. Indigenomics includes different ‘r’ words yet the base principle of forming good relationships is repeated. Based on the examples presented, there are more “r” words that can be applied to all social, economic, and political contexts.

As a theory, Indigeneity, as a practice of the 5 r’s: respect, responsibility, reciprocity, renewal and relevance, is a foundation for transformative social praxis separate from western practices. Indigeneity, that is a holistic focus, may never be fully understood by non-Indigenous scholars given the inability to fully engage in the spiritual component. Yet, Indigeneity is a transformative foundational praxis for building alternative social, economic and political systems to western practices normalized by the present society. According to scholar Weber-Pillwax the connection of blood memory to ancestral knowledge transcends and interconnects through generations, “Blood, cellular or ancestral memory enables and supports the capacity of each generation to live and create knowledge in response to life experiences, as both individual and collective” [16]. The spiritual component is a part of the blood memory connection. Indigenous peoples have extensive generational lineages and kinship networks that is often missing in non-Indigenous familial relations. On a basic level, non-Indigenous peoples can understand the interconnection of humans, the land, and all the living and spiritual entities. In this way, Indigeneity as a praxis can be utilized by non-Indigenous peoples but with limits. Building collaborative relationships are essential where Indigenous peoples who are knowledge holders are leading the discussions. A continued reliance on Indigenous scholars and knowledge holders is necessary for guidance on Indigenous ways of knowing for all peoples.

Absolon [12] accurately suggests by engaging in ethical research the researcher is practicing a wholistic indigenist process. The Indigenist process is relationship

building encompassing the principles of Indigeneity discussed previously [12] [17] [18]. Building on the principles of indigeneity Weber-Pillwax expands upon their importance for use by Indigenous and non-Indigenous peoples engaging in Indigenous research:

(a) The interconnectedness of all living things, (b) the impact of motives and intentions on person and community, (c) the foundation of research as lived indigenous experience (d) the groundedness of theories in indigenous epistemology, (e) the transformative nature of research, (f) the sacredness and responsibility of maintaining personal and community integrity, and (g) the recognition of languages and cultures as living processes [19].

The principles Weber-Pillwax [19] outline are similar to those previously discussed by Archibald [11]. Indigeneity is a worldview to support a transformative practice offering potential for a paradigm shift in ideology. As an ethical practice, Indigeneity is a framework for social, economic and political processes. In other words, Indigeneity is a common-sense approach to break down colonial systems indicative of male dominated authoritative processes. The common-sense framework asserts humanity as a focal point to create a change on the basis of ideology indicative of forming mutually respectful relationships. Arguably, the ethics and principles of Indigeneity are similar to those live by settlers who originally came to Turtle Island and engaged with Indigenous peoples. A good and helpful working relationship was present at the beginning of contact among Indigenous peoples and settlers where Indigenous peoples helped settlers live and survive on the land. The relationships changed with the onset of the ongoing colonial narrative seeking to eliminate Indigenous peoples and their Indigeneity, at the same time, dismissing the importance of indigeneity as a philosophical and ethical framework.

Systems theory compliments Indigeneity as a theoretical approach to counter colonial authority and hierarchical structures. Frijot Capra's system theory [20] [21] compliments Indigenous theory by integrating Indigeneity as a practice. Systems theory is based on nonlinear patterns of relationships breaking up a linear and hierarchical framework:

Because living systems are nonlinear and rooted in patterns of relationships, understanding the principles of ecology requires a new way of seeing the world and of thinking—in terms of *relationships, connectedness, and context*—that goes against the grain of traditional Western science and education [21].

Capra's idea of systems theory conceptualizes nested relationships found in the natural ecology. Nature is inclusive of circular feedbacks forming the and revitalizing the system through continuous communication and building mutually beneficial and respectful relationships. The natural and circular elements of Capra's ideas of systems theory are relatable to Indigenist philosophy in the application of a whole system approach [17] [18]. Systems theory breaks down the hierarchy and

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encompasses Indigeneity and the kinship relationships with humans and all other entities articulated by Armstrong [7]. Indigeneity and system theory offer a process to support a paradigm shift in socio-economic and political frameworks and decision-making essential for collaborative partnerships and transboundary relationships.

### **3. Indigeneity as a Transformative Process in Transboundary Negotiations**

Indigeneity as a practice and as an ethical philosophy can be used as a baseline for Indigenous and non-Indigenous engagement. Indigenous peoples have territories across borders that have existed prior to contact. Both the U.S. and Canada have similar colonized experiences challenging Indigenous peoples and their cultural knowledge. An example, Indian Residential Schools/boarding schools sought to eliminate and erase Indigenous peoples and destroy their culture. Another example of the impacts of colonization, in a different way, is the U.S. and Canada geopolitical border as a virtual boundary dividing Indigenous nations and communities and the land on either side. The 60-year, Columbia River Treaty Transboundary Water Agreement between the USA and Canada challenges transboundary negotiations to accept Indigenous participation. In the fall of 2024, an Indigenous led advisory board was announced as part of the modern Columbia River Treaty re-negotiations [22]. How much participation and decision-making authority Indigenous peoples will have at the negotiation table is still a question. There are other examples of co-management negotiations which are limited in this way. Meetings are dominated by western parties and agendas that are culturally inappropriate for Indigenous peoples. Transboundary negotiations between Indigenous communities and nations with government and stakeholders can benefit by integrating Indigenous philosophical ethical practices. Treaties made with Indigenous entities are often in the form of co-management discussions. Co-management discussions often involve negotiating impact benefit agreements (IBAs) and or memorandum of understandings (MOUs). Both options of agreements are made building good relations and are strengthened with the inclusion of Indigenous protocols as a framework for negotiations and imbedded in the agreements as ongoing relationships for the duration of the partnerships.

Implementing the 5 r's, that is Indigeneity, functions as an operational framework for negotiations and partnerships to help navigate differences. A consensus based-decision making approach based on Indigenous ethics can be utilized by all parties to ensure all perspectives are understood. Cultural protocols can be used to help facilitate respectful discussions and offers reciprocity for ongoing relationships. Cultural protocols are specific to an Indigenous community but the general ethical principles are: respect, responsibility, reciprocity, renewal and relevance. In co-management or partnerships between Indigenous peoples and non-Indigenous people, adhering to cultural protocols is essential for building respectful relationships, reciprocating and renewing those relationships on an ongoing basis.

Creating respectful relationships is a long-term commitment. Also essential is conducting research or business that is relevant to the Indigenous community or communities in an equal partnership with transparency and accountability.

### 3.1. Co-Management

Co-management practices have been led primarily by government and stakeholders [23] [24]. The engagement process has, therefore, been driven by western processes without the inclusion of Indigenous knowledge practices. According to Fikret Berkes co-management is the “sharing of power and responsibility between the government and local resource users, is an arrangement whereby such partnerships can come about” [23]. Generally, co-management relations consist of Indigenous nations working with governments and other organizations as equal partnerships. Co-management counters colonial systems of privilege and decentralizes the decision-making process and facilitates cultural understanding. Yet, Indigenous led negotiations offer a relational approach with consideration of the environment first and foremost.

The benefits of cross-cultural co-management are best articulated by David Natcher *et al.* in the context of comprehensive land claims in the Yukon. Renewable Resource Councils (RRC) made up of First Nations and non-Indigenous community members offer “a more meaningful role in management and policy formation” [25] by including different perspectives. Cultural diversity can be enhanced where management decisions include Indigenous peoples. Cultural protocols or what is also known as cultural or commercial codes can offer new insight and parameters in agreements. According to Douglas Sanderson and Bradon Willms, in their discussion on Indigenous commercial codes, “commercial codes created by Indigenous groups can set the ground rules for contractual relations in Indigenous communities and set the parameters for development in their territories” [26]. Commercial codes can be used outside of communities for regional, national, and global agreements. The importance of cultural codes lies in the longevity of knowledge systems acquired from generations of traditional ecological practices specific to a location. According to Natcher *et al.* [25] the benefits of incorporating Indigenous knowledge and ethics includes: sharing of knowledge of the lands and territories, the ability to incorporate traditional knowledge and values of the community into the decision-making process, and the ability to respond quickly to complex problems. Berkes [23] and Hossen *et al.* [27] expand upon the flexible approach or adaptive co-management allowing parties to change management tactics based on the changing conditions. A part of the adaptive process, is social learning and understanding of not only local Indigenous perspectives but also national and global issues such as climate change and how to respond to changing conditions. The benefit is for local knowledge present in the discussions. Berkes [23] specifically identifies characteristics of adaptive co-management: horizontal and vertical linkages to facilitate a learning-by doing approach across stakeholders; medium to long scope of decision-making including

multiple cycles of learning and adaptation; multi-level governance with self-organized networks; and is based on relationships among all parties. In the past, local knowledge was often absent and decisions were made in corporate offices in city centers. Prioritizing local knowledge is decentralizing the decision-making process and resituating community participation in the process. Communities must have agency in all decisions impacting them. Local knowledge is essential in providing expertise acquired from active agency with the land. Collaborative partnerships with Indigenous peoples offer a way for local input into decisions made by the people involved and who the decisions directly impact.

Colonial obstacles continue to create conflicts where competing values collide. Cultural biases between Indigenous and non-Indigenous peoples can create obstacles in effective engagement [25]. According to Natcher *et al.*, Renewable Resources Councils (RRC) in the Yukon have their problems including lack of jurisdictional authority and limited cultural inclusion [25]. Indigenous participation is generally limited overall considering the co-management approach is generally dominated by western colonial processes of authority: “First Nations representatives are being forced to participate in an institutional process that is in many ways culturally inappropriate. Rather than promoting socio-political equity, co-management has been criticized by some as furthering the hegemonic role of government” [25]. Berkes [23] offers some strategies for improving co-management including bridging knowledge gaps; cooperation for building strategies and tactics; engaging in participatory research; collaborating and co-producing knowledge; distributing power fairly and equitably; initiating trust, accountability and transparency across multi-level networks of governance, and initiating decisions from the community level. Co-management can work if there is equity and trust in the partnership but there are challenges contributed to differences in engagement protocols that need to be considered.

One challenge is the integration of traditional knowledge in western practices. Nadasdy analyzes traditional knowledge use in Dall sheep wildlife management in the Yukon and found how obstacles are ultimately politically motivated [24]. In the wildlife study, Nadasdy found differences in perspectives between biologists and First Nations exist in how each interpreted the success of the project [24]. Biologists found co-management was successful while First Nations found the practice to be a failure [24]. The difference in perspectives played a major role in the findings. Biologists and outfitters relied on science and allocations whereas First Nations relied on traditional knowledge. Even though there was interest and consideration of TK by biologists and outfitters, western practices and policies superseded TK and First Nations interests. The misperception lies in not understanding Indigenous knowledge (TK) as a valid scientific-based approach acquired through generations of knowledge. Obstacles in working partnerships are founded in misunderstandings contributed to different perspectives. Competing jurisdictional authority of parties for the management of wildlife, for instance, is also an obstacle in co-management partnerships. There are ongoing challenges and limitations in integrating TK into western practices, that in the end, is a prob-

lem of political will.

### 3.2. Impact Benefit Agreements and Memorandums of Understanding

Impact Benefit Agreements (IBAs) and Memorandums of Understanding (MOUs) are beneficial for outlining the premise of co-management engagement practices between Indigenous and non-Indigenous parties. Both IBAs and MOUs have been used for a while and are not the only mechanisms for agreements. The importance of IBAs and MOUs is the ability to include cultural protocols in the agreements outlining the nature of the relationship. Agreements should be signed early in negotiations among parties to build trust and outline the parameters of the relationship [28]. In this way, all parties as signatories for IBAs and MOUs agree to the protocols and conditions of engagement in co-management agreements.

IBAs and MOUs can work well when they contain Indigenous cultural protocols as a business framework for all parties to follow. Asserting Indigenous protocols alleviates questions from non-Indigenous parties on the appropriate behavior for working effectively with Indigenous peoples. Ken Coates and Carin Holroyd analyze IBAs in Canada and how these agreements can provide a path for pursuing self-governance. Generally, IBAs are used for non-renewable resource agreements providing skills training, employment opportunities, and financial provisions for resource sharing, for example [29]. The benefits of IBAs are the inclusion of terms such as commercial codes and Indigenous values to improve socioeconomic and cultural expectations for sustained long term relationships [29]. The limitation of IBAs is the short-term nature of treaties considering resource development is unsustainable long term [29].

The benefit of MOUs is the compatibility with IBAs to include cultural protocols for engaging in a partnership with Indigenous peoples. Cultural protocols are essential in outlining the parameters for respectful relationships and behavior between Indigenous and non-Indigenous peoples. In this way, cultural protocols are an assertion of self-determination through provisions for free, prior and informed consent, collaborative working relationships, and a consensus-based decision-making processes. The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) is in the process of being implemented in Canada and B.C. These bills can provide a new path for asserting Indigenous free, prior, and informed consent. Reo *et al.* emphasize how MOUs should occur in the early stages of engagement for understanding of expectations and for building respectful relationships [28]. Building respectful relationships is an Indigenous ethical practice that can be easily implemented into all partnerships.

## 4. Multi-Level Framework

Multi-level governance frameworks offer support for Indigenous partnerships and co-management. The flexible and adaptive nature of multi-level governance

frameworks works with foundational Indigenous governance principles to make collaborative land management decisions [25]. Decision-making is decentralized and dispersed across several jurisdictions instilling a collaborative approach [30]. Co-governance is inclusive of several government organizations: federal, provincial, territorial, and Indigenous. Different government arrangements structured to support a flexible management approach will support co-management relationships across several different levels with multiple parties. Nadasdy [24] and Natcher *et al.* [25] confirm co-management is a way to integrate different knowledge streams for greater diversity of perspectives and information sharing for developing informed decisions.

Similar to Nadasdy [24] and Natcher *et al.*'s [25] co-management strategies, White focuses on treaty federalism as co-management relationships working with multi-level frameworks:

treaty federalism, as realized in claims-mandated co-management and regulatory boards, is about relationships, about sharing of jurisdiction and authority, about multi-level governance capable of melding very different cultural perspectives and socio-political priorities, and about practical accommodation of Aboriginal and Euro-Canadian needs and traditions [31].

The ability of multi-level governance frameworks to embrace different cultural perspective beneficial for a holistic approach to making decisions. According to Liesbet Hooghe and Gary Marks, the benefits of multi-level frameworks of governance with overlapping jurisdictions allow for greater flexibility in decision-making and the ability to respond to changing conditions [30]. White emphasizes the importance of building collaborative relationships within a multi-level organization to provide a space for local communities to participate and share their expertise and knowledge of the land [31]. Local and traditional knowledge is essential to make decisions best for not only humans but for the land and entities. In the structure of the multi-level framework, there is a space for dialogue among parties with opportunities for feedback and continued dialogue among all levels of governance for devising informed decisions.

Federalism can be based on the local ecology and dismissive of artificial boundaries. Trans-boundary management of ecological areas is not a new concept. For instance, watersheds expand across the virtual boundaries of all state and provincial borders. In the current construct, the Canada and U.S. border creates an impossible barrier for Indigenous nations that exist on both sides of the border. Managing local resources based in Indigenous rights and interests within a co-management strategy is imperative for an equitable nation-to-nation relationship. Local Indigenous knowledge holders have to be included in the conversation of managing resources with the federal and provincial governments. Multi-level framework of governance is supportive of co-management arrangements including transboundary governance to support respectful relationships.

## 5. Reconciliation

Indigeneity as a basis for reconciliation can work with national and global documentation. The TRC Calls to Action [32], the National Inquiry into the MMIWG+ Calls for Justice [33], and UNDRIP [34] provide a framework not only for reconciliation but for a baseline for collaborative partnerships between Indigenous and non-Indigenous entities. All three documents support one another as a workable plan for self-determination of Indigenous peoples including individual and collective rights. The TRC Calls to Action 43, 44 and 45 specifically apply to the implementation of UNDRIP into federal, provincial, municipal and territorial laws [32]. The other component in article 44 is the development of a national action plan to ensure the implementation of UNDRIP into Canadian law [32]. Indigenous self-determination encompasses the rights to cultural practices, language and identity as well as governance over their lands.

UNDRIP provides a basis for minimal human rights standards for Indigenous peoples. Canada was late in adopting UNDRIP along with the U.S., New Zealand, and Australia. UNDRIP now has legal standing in Canada and BC with Bills C-15 [35] and 41 [36], respectfully. What does this mean? At the time of writing, this means there are federal and BC action plans to support the implementation of UNDRIP in the near future. The action plans are made in consultation with Indigenous peoples which is a significant step towards the inclusion of Indigenous engagement in matters that affect them. Both bills have action plans associated with them and includes Indigenous engagement and collaboration. The full implementation of the action plans is yet to occur and will be completed in stages or incremental steps for several years. UNDRIP provides hope as a framework for reconciliation and Indigenous self-determination not only provincially, nationally but also globally. United Nations mechanisms as well as national documents are a framework for reconciliation that can be applied globally for uniting people.

## 6. Climate Change Adaptation

Indigeneity and the 5 r's offer a foundation for a paradigm shift essential to mitigate climate change. The foundational principles of creating and maintaining respectful relationships and showing reciprocity applies not only to humans but to the environment as well. Nancy Turner and Helen Clifton confirm that Indigenous Peoples in North America have a history of adapting to climate change using Traditional Knowledge [37]. Traditional Knowledge unique to communities' predates settlement in North America. For instance, some oral stories transferred to generations often contain teachings useful for adapting to natural catastrophes [37]. Traditional Knowledge applied in adaptation measures includes Indigenous participation, leadership and collaboration [38]. Nurturing relationships forms an essential component for land-based practices grounded in traditional knowledge [39]. Ancestral knowledge is passed through generations in families and in extended communities. In this way, local knowledge or traditional knowledge is a conservation tool [39]. UNDRIP articles 18 and 19, for example, support Indige-

nous collaboration and participation in resource management and other project that impact them such as climate change [34]. In this way, UNDRIP and the TRC Calls to Action provide a framework for not only reconciliation but also a means to strengthen Indigenous knowledge applied to help mitigate climate change [32] [34]. Indigenous peoples across the globe will play a key role in helping to mitigate climate change, especially locally with the land-based practices that utilize traditional knowledge.

The obstacles to Indigenous led climate change initiatives and the use of traditional knowledge are many. Governance agendas and decisions impact the mitigation measures and adaptation outcomes. Yet, Indigenous ethics such as the 5 r's offer a foundation and for the acceptance of traditional knowledge into the decision making of all parties involved in climate change adaptation.

## 7. Conclusions

Indigeneity is a common-sense ethical approach that is essential for a social, economic, and political paradigm shift. Indigeneity as a praxis is a conceptual ideology to transform western systems by focusing on relationship building. As a foundational element for change, indigeneity as a philosophical, ethical and practical principle is the focus to break down western hierarchy and individual impersonal approaches and perspective to create that paradigm shift. The practice of Indigeneity can dissolve virtual and physical boundaries and barriers allowing for cross cultural relationships essential for a new approach to governance.

Co-management requires western structures and processes to change to better accommodate a co-management partnership between western parties and Indigenous organizations [24]. Multi-level governance frameworks can facilitate co-management partnerships between Indigenous communities and organizations and western organizations. Working towards collaborative partnerships is a goal encompassing reconciliatory action by implementing the TRC Calls to Action, the National Inquiry into the MMIWG+ Calls for Justice, and UNDRIP through Bill C-15 and Bill 41 action plans. As a framework for reconciliation, these mechanisms can support a paradigm shift in not only social relationships but also political and economic relationships including governance.

Indigenous-led collaborative partnerships are essential for adapting and mitigating large scale environmental issues such as climate change. Trans-boundary co-management has to be guided by Indigenous peoples to fully understand and implement Indigeneity as a praxis. In this way, governance will transform to a relationship-based and land-based focus. Flexible and adaptative governance approaches benefit all people and will help with reconciliatory action-based decision-making.

Scope and Limits: This research focuses primarily on the Syilx-Okanagan context and the Canada-U.S.A. transboundary water governance. Indigeneity is generalized across Indigenous peoples, but the author recognizes there are differences among Indigenous groups. When conducting business or doing research with In-

digenous peoples, one should inquire from the specific Indigenous community in question on who they should consult, for example, a specific knowledge holder or elder. Additionally, cultural protocols are unique to each community. One should ask for specific cultural protocols from all applicable Indigenous communities.

### Conflicts of Interest

The author declares no conflicts of interest.

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