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Abstract: Rapidly changing conditions and the complexity and interconnectedness of global challenges means that learning across the lifespan is more important than ever. Equally critical are sustainable planetary futurities and associated pedagogical practices which reach beyond the imposition of settler temporalities, modernist technological solutions, and western cognitive imperialism as a means of responding to our cultural-ecological crisis. Pedagogical practices must actively work with diverse generational realities and impacts associated with the cultural, ecological, and climate emergency. This paper reports on a growing conversation across diverse cultural biospheres regarding inclusive Indigenous-led strategies of multi-generational resilience addressing human–environmental wellbeing. Adopting an inclusive Indigenist theoretical and methodological approach, it narrates the epistemological and relational practices of several multigenerational pedagogical forums (land-based and virtual) based in and out of Turtle Island/Canada from 2015–2023. Based on an Indigenist research paradigm and qualitative research methods pertaining to one multi-day land based learning summit and three online virtual learning forums, a thematic analysis of key findings relating to pedagogical practices, intercultural and intergenerational themes, and the shifting dynamics of multi-generational resilience work is provided. Themes include the critical importance of epistemological shifts over time; Indigenous multi spatial-temporalities; relational rather than binary or even hybrid views of sexual, gendered, ethnic, and racial identities within cultural-ecological restoration work; the relevance of transnational gatherings; and the adaption of pedagogical practices to meet fluctuating local–global conditions. The paper then summarizes the key elements of lifelong learning within an Indigenist approach to cultural-ecological restoration work, and concludes with a discussion regarding the relevance of this approach in reorientating three previously identified leverage points for accelerating sustainability transformation.

Keywords: lifelong learning; sustainability; climate emergency; Indigenous; resilience; intergenerational learning; Indigiqueer; cultural-ecological restoration

1. Introduction

Recent years have seen increased emphasis on lifelong learning and intergenerational relationships throughout much of the world in response to turbulent and rapidly changing economic, social, and ecological conditions [1,2]. Global warming as a result of human-induced climate change continues to wreak havoc in much of the world as severe weather events hammer economies and eradicate whole communities [3,4]. As record-high temperatures and Greenhouse Gas emissions [5] coincide with nations haggling over carbon emission reductions, the dynamics of western imperialist geo-politics continue to play out internationally [6]. Within some of the same so called “developed countries”, the ravages of colonization continue [7,8] as increasing numbers become economic and social...
casualties of libertarianism and the culture of individualism. The resulting physical, social, and cultural dislocation for many has led to a burgeoning mental health crisis, particularly for younger people, many of whom have a great sense of urgency regarding the state of our planet and their futures [9].

Despite the disastrous impacts of ongoing colonialism on Indigenous Peoples [10], their territories contain around 80% of the world’s biodiversity. These communities play an important role in sustaining biodiversity [11,12] because “they know they are part of nature” [13] (p. 907). In this regard, those still Indigenous to place are among the remaining bastions of human intergenerational and interspecies connectivity. These relationships are critical in terms of planetary wellbeing. For example, while Indigenous approaches to the climate crisis are rooted in kincentric framings of wellbeing [14], Eurocentric conceptualizations prioritize the reduction in global carbon emissions, which can lead to the adoption of neoliberal and techno-rational approaches (e.g., the wholesale placement of wind turbines on Indigenous lands by corporate entities) that do not necessarily take distinct ecologies of place into account [15,16]. However, contemporary colonial and modernist dynamics can also pose challenges to the intergenerational transmission of Indigenous knowledges and lifeways. These challenges include young people’s dissociation from the land, the impacts of changing climates on the reliability of traditional ecological knowledge and the overuse of technology as a substitute for interpersonal contact [17]. Yet, Indigenous youth are also creative in their responses to ongoing colonialism [7], with many reasserting traditional lifeways and adapting these to contemporary contexts.

At broader levels, and paralleling these developments, is increasing emphasis on intergenerational equity within sustainability discourse [18–20]. With deep inequalities in both its causes and effects, the climate crisis is already exacerbating cultural and generational inequities within and between nation states. The cumulative effects of food and water scarcity, and permanent impacts of undernutrition, societal violence, and breakdown will continue to impact younger people and future generations disproportionately [19]. Part of the broader debate on climate justice, issues of intergenerational climate justice are largely conceived from westernized human-centric rather than kin-centric perspectives.

This paper situates these challenges of planetary unsustainability as rooted in the ongoing colonization of all forms from the philosophical to the material [7]. Relatedly, environmental issues arise out of our contemporary cultural-ecological crisis [2,21], manifested through key interconnected global challenges or existential threats. In summary, these are: global neoliberalism and worsening social and economic inequalities; extractive relationships towards people and planet; and unprecedented human and inter-species displacement [22,23]. These challenges are intimately underscored by a fourth—the erasure of Indigenous lands, peoples, and lifeways, alongside the pervasive rupture of relationality between people and the earth [2].

This paper reports and reflects on a growing conversation across diverse cultural biospheres regarding inclusive Indigenous-led strategies of multi-generational resilience addressing interrelated global challenges originating in the rupture of human environmental relationality. It focuses on the pedagogical practices of the Alliance for Intergenerational Resilience (AIR), a Canadian-based not-for-profit organisation, whose key aim is to increase human–environmental resilience through connecting, supporting, and emphasising the resurgence of Indigenous knowledge systems and intergenerational resilience [24]. Intergenerational resilience refers to strengthening knowledge transmission and connectivity between human generations and humans and other forms of life. It is, by definition, interspecies and intercultural work. This epistemological orientation centres an Indigenous or kinship [14] approach to life, in which all beings have agency, are deeply interconnected, and the “land is alive and thinking” [25] (p. 4).

This cultural-ecological restoration work responds to the complexity of global challenges previously described, and in particular the erasure of Indigenous knowledges and lifeways [26]. The research described here focuses on two distinct pedagogical fora:
1. The “Resilient Places—Resilient Peoples Elders’ Voices Summit”, a four-day Indigenous-led, land-based international gathering on the Traditional territory of the Tsawout First Nation, Vancouver Island, in 2015 (Study One).

2. An ongoing series of virtual Wisdom Councils, “The Language of the Land” (2021); “Climate Crisis and Multi-generational Resilience” (2022), and “Queering Climate Crisis Response” (2023) (Study Two). Attended by Elders, Traditional Knowledge Keepers, and youth, these adopt an inclusive, Indigenist approach to re-balancing human-environmental relations. While building on each other, each learning forum has also evolved within distinct sets of changing global conditions and realities. These include:

- The cultural-ecological and climate crisis, and a growing urgency to limit the carbon footprint;
- Economic recession and uncertainty, and increasingly tightly targeted funding favouring reductionist forms of science and techno-rationalism which purport knowledge to be objective and neutral [27];
- The impacts of the global coronavirus pandemic, which has in many respects leveraged the digital revolution, in part through the rapid and intensive development of online learning.

While both the Elders’ Voices Summit (EVS) and the Wisdom Councils (WC) are informed by the Indigenist cultural-ecological theoretical framing described in the next section, the methodologies of each—as a response to changing global conditions—are distinct. The EVS represents a collectivist approach to cultural-ecological restoration by a diverse range of Indigenous and no-longer-indigenous-to-place peoples, physically grounded in a particular spatial-temporal reality over four days. The WC series, however, represents Indigenous Peoples (either still Indigenous to place, or with Indigenous ancestry and in an active process of recovering their Indigeneity) who are locally grounded in a diverse range of spatial-temporal contexts coming together in a shared virtual temporal space over two hours. The studies, therefore, do not map neatly onto one another, but rather represent a series of exchanges and developing pedagogies regarding cultural-ecological restoration work in challenging times. Their narration is intended to contribute to the burgeoning research field concerned with creating maximum impact through environmental sustainability innovations [28–30]; in particular, following the lead of Abson et al. [28], who pinpoint three key leverage realms for sustainability transformation:

- Reconnecting people to the environment;
- Rethinking how knowledge is produced and used;
- Restructuring institutions so that they are receptive to implementing deep rather than shallow sustainability policies and practices.

Accordingly, this article aims to contribute to theory and practice related to the above strategic action areas through addressing two key questions:

1. What are some of the key elements of lifelong learning within an Indigenist cultural-ecological restoration framework?
2. How can Indigenist cultural-ecological restoration practice (including its unique approach to lifelong learning) strengthen and extend the three identified strategic action areas above?

At broader levels, this article also aims to give voice to key pedagogical considerations within place-based and virtual approaches to indigenist cultural-ecological restoration in the context of rapidly fluctuating global conditions.

2. Theoretical Context

2.1. Lifelong Learning

For the most part, the overriding tendency of governments and institutions is to view lifelong learning as a key lever to meet the demands of the market economy [31–33].
Bolstering this international turn to market-driven, lifelong education, has been the explosion of the knowledge-intensive economy, including the rapid turnover of new information, technological innovations, and the perceived need to manage these shifts strategically [34,35]. Within state structures of “capitalist accumulation” [36], lifelong learning has seemingly become synonymous with knowledge and information acquisition, with little apparent critique of the dominant cultural power relations and interests underlying knowledge production. Relatedly, Byrnes et al. [27] (p. 30) note that many dominant environmental wellbeing strategies do little to challenge consumption patterns, “viewing environmental crises solely as challenges for science and technology”. At best, such initiatives are oriented towards “shallow sustainability”, which refers to targeting “often highly tangible but essentially weak leverage points…with little potential for [effecting] transformative change” [28] (p. 30).

2.2. Holistic Approaches to Sustainability

Fortunately, critics, including sustainability scholars, have noted the fragmented and individualistic approach to knowledge acquisition’ within modernist neo-liberally driven world economies [27,32], which contributes to our psychic fracturing and, as Byrnes et al. note, our “collective inability to tell a coherent story about how we got here, where we need to go, and the paths we must forge to get there” [27] (p. 2). Recognizing deteriorating human social and human–environmental relationships to be largely a crisis of disconnect underpinned by reductionism and capitalism, in recent years, a significant number of western sustainability [27,37,38] and transformative sustainability educators [39–42] have rallied to develop theoretical frameworks and pedagogical practices that restore human and human–environmental relationality. Among other things, these approaches have emphasized the importance of holistic pedagogies which promote deep cultural shifts in ways of perceiving and being, the critical importance of political ecology, and the multi-level nature of change [27,39,41,43]. These pedagogical developments have coincided with the burgeoning digital economy and the proliferation of online learning, which tends to be more strongly associated with western cognitive approaches to learning, information acquisition, and individual behaviour change [44]. Western normative approaches to online learning can present significant challenges to Indigenous pedagogies which emphasize teaching in place, context, relationality, and holistic and embodied ways of knowing and doing. Yet, as Indigenous scholars Tessaro and Restoule [45] (p. 183) point out, to “not attempt to bridge online learning and Indigenous pedagogies” would be to significantly limit “efforts to disrupt the settler foundations of both school and society”. Following their lead and contending with the limitations of the global coronavirus pandemic, we considered it to be important to utilize and explore the application of online learning forums—in this case, the development of online Wisdom Councils—to Indigenist cultural-ecological restoration work.

2.3. Theoretical Framework

A significant departure of AIR’s work from the majority of decolonising and sustainability initiatives is our effort to dig underneath the Indigenous–non-Indigenous binary and associated identity politics to fundamental issues of ontology (beliefs about the nature of reality) and epistemology (how we are in the world and come to know) [43]. The terms Indigenous and no-longer-Indigenous-to-place are used to convey peoples’ varying states of intergenerational connection and disconnection from ancestral lands. This recognizes the reality of Indigenous Peoples’ different connections to territory and culture and the severing of the deep empathic links to the land for many settler-migrant peoples whose ancestors were once Indigenous to place [40]. Ultimately, this work is about the recovery of our larger experience of the animate and interconnected Indigenous Life-World [46] (p. 93) we all potentially inhabit. It recognizes ecology as an animating force and that all people develop from ecological origins [47].
The Indigenist cultural-ecological restoration approach underpinning Studies One and Two implicitly positions Indigenous laws and knowledge of place flowing from the land as the foundational epistemologies informing all other culturally situated beliefs and action [48]. Within Indigenous Life-Worlds [46], the energetic connectedness of all entities is manifest, for example, in the ways Indigenous languages comes from the land and responsibilities exercised by First Peoples towards the Earth Mother through ‘deep listening’ as traditional guardians. A key responsibility of Māori, for example, is to express the consciousness of Mother Earth within this guardianship role [49]. In this sense, and as is consistent with Indigenous environmental justice [50], society is conceived as comprising our more-than-other human relatives as well as people. Within a cultural-ecological restoration framing, once the epistemological foundation of Indigenous knowledge and legal orders specific to the lands, waters, and beings of a place is established by its Indigenous Peoples, the diversity of other-human cultural perspectives within that specific place become relevant.

Whereas modern Western conceptualizations of time and space assume a single linear temporality with a shared present, our Indigenist articulation of cultural-ecological restoration embraces multiple Indigenous temporalities (spatial-temporal relationships) as enmeshed with the land, co-constituted through the dynamic interaction of living entities (seen and unseen) with one another [51]. In this sense, Indigenous spaces and places animate unique temporalities. As expressed by Métis scholar, Awâsis: “Indigenous temporal multiplicity is learned from the land and inherent in the natural flow of time—the creation of the multi-verse, the change of the seasons, the earth’s solar rotation and the lunar cycle” [52] (p. 832). In this sense, Indigenist cultural-ecological restoration—including unique systems of Indigenous knowledge—can be considered as an expression of what Battiste and Henderson [53] call “the vibrant relationships between the people, their ecosystems, and the other living beings and spirits that share their lands” (p. 42).

This Indigenous temporal multiplicity, which underpins Indigenous environmental governance, informs our cultural-ecological restoration work. For example, the first WC “The Language of the Land” represented participants from four ancestral migration waka (canoes) with the traditional territory on the Western side of the Kaimai ranges being strongly linked to the Tainui and Arawa waka with the Eastern seaward side of the range being the rohe (territory) of descendants from the Takatimu and Mataatua waka. While there may be similarities, each territorial eco-system will have its own the tohu (signs) informing the unique Indigenous practices of growing, harvesting, and ceremony. Furthermore, each rohe has particular whakapapa (genealogy), dialects, pūrākau (stories), waiata (songs), and mōteatea (poetry or laments) with its traditional ecological knowledge woven throughout. These uniquely constituted ecosystems are further nuanced by the shifting and accelerating dynamics of climatic conditions and entities.

This work recognizes the complexities inherent in identities, places, and epistemologies, and our range of Indigenous and no-longer-indigenous-to-place locations. Geographically dispersed, we recognize that the everyday realities and localized knowledges of WC participants are constituted by vastly different cosmological-cultural-ecological contexts; each reality is, however, inextricably linked by similar centre-periphery colonial power-structures. For example, the Gàidhealtachd (Scotland’s Gaelic speaking cultures of the Highlands and Islands) is increasingly recognized as having experienced internal colonization [54,55] since the 1600s through land clearances, the banning of the Gàidhealtachd’s traditional language Gàidlig within which Indigenous ontologies, and legal orders that were encoded. Thousands were forcibly shipped to the colonies, many subsequently becoming agents of imperialism in the external colonies of Canada and New Zealand [21]. Both the EVS and the WCs acknowledge and work with these complex identities, seeking to emphasise the revitalization of Indigenous traditional ecological knowledge and lifeways through the lived epistemologies of place as a grounded response to our planetary challenges. In these ways, we seek to ultimately dig underneath identity
politics, while being mindful of the cultural power dynamics that are also at play within everyday colonizing structures [7,8].

Also significant to cultural-ecological restoration practice is the recognition of the importance of emphasising the re-naturalization or re-indigenization of non-binary gender, sexual, and Indigenous identities. This is consistent with Indigenous environmental justice [50], which seeks to acknowledge and reconcile the rights and responsibilities of all entities—animate and, in the western sense, inanimate. Whereas “the naturalization of Westernized-settler identities and Indigenous elimination relied on the [indigenization of] Western heteropatriarchy and binary sex/gender on new lands is to prove their own premise that the totality of human life can conform to them” [56] (p. 13), Indigenous knowledge honours creation in her diversity. In writing about this, Métis scholar Awášís notes that difference is not treated as deviance, but as normal. In this sense, Indigenous knowledge can “be considered queer because it honours epistemic diversity and multi-temporalities” [52] (p. 840). These connections between emplaced Indigenous queer epistemologies and identities are important, not only because they invite us to consider how Indigenous environmental justice might contribute to a more active inclusion of these groups in climate emergency and cultural-ecological restoration work, but because they also facilitate re-indigenization of non-binary identities (including for some of our WC participants) across a range of gender, sexual, and Indigenous and no-longer-indigenous-to-place identity locations.

Intergenerational and Lifelong Learning within the context of Indigenist cultural-ecological restoration work centres human and interspecies knowledge transmission and connectivity. It adopts an Indigenous non-binary Life-World framing—the animate and interconnected state of all beings in which the material world is undergirded by an unseen energetic or spiritual reality. It assumes that most people, particularly those no-longer-indigenous-to-place, inherit a contracted experience of reality in which western reductionism and materialism dominates, and, accordingly, will be generationally disconnected from the capacities to perceive the expansive realities of Indigenous Life-Worlds. Therefore, a key role of lifelong learning is for people, particularly those no-longer-indigenous-to-place or the “long ago colonized” [57] to re-open to these deeper and more subtle dimensions of reality through deepening relationality, learning the Indigenous law of place, and subsequently achieving “epistemological shifts” over time [58]. Lifelong learning is not about knowledge acquisition, but rather about coming to know one’s place/s within kinship relations, with the understanding that knowledge cannot be owned, but rather is a collective phenomenon continuously generated through our interconnected and changing reality.

3. Materials and Methods

The study is grounded in an Indigenist research paradigm [59,60], which centres Indigenous ontologies (our experience of the nature of reality), epistemology (our beingness in the world and how we come to know), and axiology (the values we carry). This paradigm acknowledges that Indigenous worldviews share broad ontological, epistemological, and axiological principles [61,62], while respecting the specificity of these to places and communities [58]. Rather than emphasizing identity, this framework prioritizes philosophy and is therefore inclusive of those no-longer-indigenous-to-place. However, as Wilson and Mulrennan [63] note, Indigeneity is a lived epistemology—in other words it is one thing to philosophically align with an Indigenist research paradigm, but quite another to deeply understand its ontological, philosophical, and axiological tenets. Within both the EVS and the WC series, in line with AIR axiology, those still Indigenous to place are at the centre of the pedagogical and research methodologies utilized.

The study uses critical pedagogical approaches to knowledge production, developed by scholars in Indigenous education and research methods [58,64,65]. It prioritizes holistic ways of knowing, placing equal emphasis, for example, on knowledge gathered through empirical cognitive methods or intuitive ways such as dreaming, sensing, and feeling. In
keeping with the Indigenist paradigm, its methodologies are “process oriented” [66] (p. 195). A key pedagogical focus is the reproduction of culture in place’ [67], which refers to the recovering of Indigenous cultural ecologies, knowledge systems, and ways of being in ways that significantly remap dominant understanding of the cultural ecology of place. Drawing on previous scholarship in critical Indigenous studies and social geography [68,69], we applied this concept in two key ways:

1. The remapping of sociohistorical narratives that disrupt dominant white-settler colonial narratives of the ecology of culture and place through resurfacing and repositioning Indigenous narratives of country, culture, and kin;
2. The remapping of ontology and epistemology through ceremony, stories, arts-based approaches, and simply being one with country.

The replicability of innovations orientated towards sustainability in a rapidly warming world is a vital area of concern. Given the specificity of Indigenous world views and environments [58,65], Indigenist research does not seek to replicate results. That is not because there is lack of interest in ‘scaling up’ sustainability innovations. Rather, the discourse is more about transferability or balancing a ‘slippage’ between the specificity of local Indigenous realities and the general context of Indigenous relationality [62]. The processes, pedagogies, and results articulated in this paper are therefore not intended to be replicable or generalizable in the western positivist sense. Instead, they are articulated as a guide to cultural-ecological restoration work which centres Indigenous epistemologies, lifelong learning, intergenerational resilience, and intercultural alliances. In this context, scaling up requires a cautious kind of reflexivity towards the communities that comprise thinking place’ and the application of cultural-ecological restoration pedagogies within them.

Ethics approval was required and obtained for the focus groups on youth resilience at the EVS and for the “Queering Climate Crisis Response” WC. Findings from both these forums are not drawn on here. We were not required to obtain ethics approval for the remainder of the EVS or for WCs one and two, as they were deemed to be occurring in a public place. However, on the advice of the Human Behavioral Ethics Committees at the University of Victoria (EVS) and University of Western Ontario (WCs), we asked Plenary and Keynote (EVS and WC) participants to sign a two-stage consent form for the video-recordings of these sessions in advance of their open access publication on AIR’s website https://intergenresil.com/. Table 1 below summarizes the pedagogical fora in Studies One and Two.

<table>
<thead>
<tr>
<th>Study 1, 2015–2017</th>
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<tbody>
<tr>
<td>Resilient Peoples, Resilient Places: Elders’ Voices Summit</td>
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<tr>
<td>Collectivist Place-based approach to C-E restoration held in place; Tsawout First Nation Traditional territory provided a common spatial-temporal reality</td>
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<th>Study 2, 2021</th>
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<td>The Language of the Land: Virtual online forum</td>
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<th>Study 2, 2022</th>
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<td>Multi-generational resilience and the climate crisis: Virtual online forum</td>
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<th>Study 2, 2023</th>
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<td>Queering Climate Crisis Response: Virtual online forum</td>
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3.1. Study One: Elders Voices Summit

The ‘Resilient Peoples—Resilient Places: Elders’ Voices Summit’ (EVS) was a four-day Indigenous-led sustainability education forum attended by over 100 people aged
between 17 and 80 years from Canada, Aotearoa, Australia, and Scotland. The Summit served as the inaugural gathering of the Alliance for Intergenerational Resilience (AIR) [70] (AIR was formerly called the International Resilience Network (IRN) until its incorporation as a not-for-profit in 2017). Framed by the broader aims of AIR, the key goals of the Summit were relationship building, knowledge exchange, and the development of ethical and methodological frameworks aimed at Indigenist approaches to cultural-ecological restoration [70]. This four-day programme progressed sequentially (although not linearly) through the four topics shown above in Table 1.

For the most part, the EVS was held on the traditional territory of Tsawout First Nation. In keeping with Indigenist research approaches which regard ‘Thinking Place’ [25] as forming the first and essential foundation of how we come to know, the lands and waters pertaining to TFN were regarded as providing the epistemological bedrock of our learning time. Together with three other bands, the TFN make up the WSÁNEĆ Nation whose traditional territory extends from the North coasts of the Gulf and San Juan Islands, Southern Vancouver Island, and the southern edge of the lower mainland in British Columbia, Canada. Being deeply identified with the Coast Salish Sea which makes up part of their territory, the WSÁNEĆ Nation are also known as the Saltwater People’ [71]. TŦE SKALS’ȽŦE, is the WSÁNEĆ phrase which describes the kincentric [14] law where the WSÁNEĆ peoples view other beings and entities (trees, fish, animals) as relatives. For example, the WSÁNEĆ Nation view the Salmon—both a keystone species and a staple part of their diet—to be amongst their closest relatives, holding a ceremony at the height of the spawning season to acknowledge and honour the Salmon. Within this worldview, the WSÁNEĆ concept of SK´AU´ȽŦE expresses the inseparability of learning, teaching, language, beliefs, ways of being, and laws from the land [71].

The TFN gymnasium, located in community village, provided the venue for the dialogical and arts-based pedagogical practices, while TIXEN (whose colonial name is Cordova Spit) was a key gathering place for the land-based learning activities. Lying at the edge of the Salish Sea, about 2 km from the main village TIXEN is both a space of sustenance as well as spiritual reflection for the TFN, being a place where traditional medicines are harvested as well as a sacred burial ground site. Both spaces formed the epistemological bedrock of our learning time together as essential elements of SK´AU´ȽŦE.

We ensured that the process-oriented focus of Indigenist methodologies [66] was supported through the establishment of a local organizing committee made up of TFN representatives and WSÁNEĆ Elders, key local not-for-profit and provincial government and university partners. Involving local community members in the Summit planning enabled us to ensure that there were benefits back to TFN, including free participation of all community members in the Summit and profiling TFN environmental challenges in the program. Calls were also made as needed to key Indigenous international community leaders planning to attend to discuss specific program matters as thought necessary. While the lands and waterways formed the first foundation of our holding space, the prayers and ceremony led by the EVS Elders “was essential in enabling such a diverse group of people to come together and create a space of trust, and emotional and analytical depth” [43] (p. 46). Both elements—although with different emphasises—of cultural remapping (narrative and embodied) were present on each day. Summit activities are summarised as follows:

- Day One, “Preparing the Ground”, was intended to make more visible Indigenous ecologies, histories, and colonial traumas. Activities consisted of: A Colonial Reality Tour (CRT) (a tour of culturally significant sites for the Lekwungen Peoples, the other key Indigenous group at the southern end of Vancouver Island); Elders’ time on the land (revealing Indigenous ecologies); Youth Dialog Circles on meaning of resilience; “The Whole of Human Relations”, featuring the visual art of Child Taken Arts Partnership Project, largely non-Indigenous students who had worked with Cree Elders to portray their experiences of Indian residential schools; “Common Ground”, an audio-visual display portraying powerful imagery and narratives of Celtic and Māori
understandings of land, forging new understandings of commonalities and indigeneity.

- Day Two, “Indigenous Knowledge and Resilience”, consisted of two plenaries: “The Radical Human Ecology of Resilience” and “Unpacking the Challenges: Stirring the Potential”; and a panel on intergenerational resilience, comprising nine Indigenous and no-longer-indigenous-to-place from Canada, Aotearoa, and Scotland. Parallel sessions and workshops followed during the day on themes contributed by Summit participants.

- Day Three, “A Holistic Approach to Learning”, primarily focused on holistic land-based learning at TIXEN Spit, the sacred ancestral grounds of the Tsawout First Nation included: pre-dawn preparations for a traditional earth oven featuring salmon, regarded as a close relative of W̱SÁNEĆ nation; and traditional food preparation activities, stories of the land, and traditional teachings were given while the food cooked. Figure One below shows the pit cook, or cooking utilizing the traditional earth oven in progress at TIXEN Spit.

- Day Four, “Innovations of Indigenous and Interpeoples Resilience”, focused on the practice of intergenerational and cultural-ecological resilience, consisting of: a panel by social innovation practitioners and policy people; a panel on Indigenous and migrant relations; a session on the revival of ReefNet Fishing in the Salish Sea using modern technology and materials; a presentation on the Principles of Tsawalk as an Indigenous approach to a global crisis; and the closing ceremony, including a youth presentation (Figure 1).

![Summit participants gather around the earth oven at TIXEN Spit.](image)

### Figure 1. Summit participants gather around the earth oven at TIXEN Spit.

#### 3.2. Study Two: Wisdom Council Series

Our approach to creating this virtual interregional dialog series was prompted (and inspired) by two global events. The first was the 25th meeting of the Convention of the Parties (CoP25) in 2019, which “deteriorated into haggling by the most privileged and culpable of nations over carbon emission reductions” [2] (p. 8). Shortly afterwards, COVID-19 erupted, afflicting millions worldwide, replicating the neo-colonial hierarchies regarding those infected and whether they received treatment. Borders were shut, CO₂ emissions plummeted, and for a time the Earth stilled. In both Aotearoa and Canada, limitations on travel and local movement, as well as isolation directives imposed by both
governments, produced a profound opportunity to reconsider human–environmental relations. It was out of this historical moment that the idea for the WCs was conceived [72].

The WCs again focused on the themes of cultivating intergenerational resilience, each building sequentially off each other and the EVS. To date, they have engaged people between 16 and 78 years of age of Indigenous ancestry from Canada, Aotearoa, and Alba/Scotland, and are gender diverse in makeup comprising participants of Two Spirit and Indigiqueer identity. In their simplest terms, Two Spirit and Indigiqueer refer to Indigenous people who identify as LGBTQ+. Two Spirit also refers to the traditional roles that Two Spirit People (i.e., people who identified as having both a female and male spirit) had in their respective Indigenous societies prior to colonization. There is currently a cultural revival of pre-colonial Indigenous sexualities and gender identities in various Indigenous societies throughout the world.

All three WCs are community (AIR)-university partnerships and are listed as follows:

- The first WC, in February 2021, The Language of the Land, involved Traditional Knowledge Keepers and youth living on Indigenous lands of Vancouver Island, British Columbia, Canada, and Tauranga Moana, Aotearoa.
- The second WC, in 2022, Multi-generational Resilience and Climate Crisis, was attended by youth and Traditional Knowledge Keepers from Deshkan Ziibi (Southwest Ontario), Vancouver Island (British Columbia), Aotearoa, and parts of Alba/Scotland.
- The third WC, in 2023, Queering Climate Crisis Response, involved Indigenous Peoples of the Deshkan Ziibi.

Utilizing participatory, relational, and process-orientated methods [66,73], each WC required a combination of individual and group meetings as part of their preparation and included joint decision-making about content and process with prospective participants. These discussions also included wisdom sharing (for example, dialog, poetry, song, traditional stories). Indigenous ceremony and circle were embedded at the beginning of each WC to open the doorway between the ancestors and the living and to create spiritual growth related to the land [58,66]. We decided on the term ‘Wisdom Council’ to communicate Indigenist and participatory values regarding how we come to know and value what counts as knowledge.

Like the EVS, our strategy is to privilege Indigenous epistemologies, lifeways, and peoples of a place, while opening up pathways for those no-longer-indigenous-to-place to simultaneously learn Indigenous laws of the land and deepen experience of their own interconnectedness [2,43]. However, in contrast to the EVS and in response to the issues of ontological-epistemological rupture or tensions (OER)—in other words dissonance between peoples’ understandings about the nature of reality and their interactions with the world—that began to emerge (as described in Section 4 below), we invited participants Indigenous to place, or on an active journey of reconnecting to their Indigenous roots, as WC participants. This was to minimize OER, which is more likely across groups consisting of Indigenous and no-longer indigenous to place peoples, which we anticipated would be harder to work with in a one-off online environment.

Participants were asked to “engage the energies of heart, head and hand (spirit, mind and practical doing)”, and in each gathering “bring together the wisdom and insights of Elders with the different generational experiences and insights of younger people” [72] (p.7). Sequentially, the three WCs asked participants to respond to the questions:

1. How do you experience the language of the land? (WC 1).
2. What are the Indigenous and traditional perspectives and practices that can strengthen intergenerational relationships and resilience in these times of climate crisis? (WC 2).
3. What do you consider to be the impact and unique agencies that Two Spirit and Indigiqueer people may have in response to climate and cultural-ecological crisis? (WC 3).
The first and second WCs were filmed and lightly edited before being posted to AIR’s website. The pre-recording of the second WC was shown at a live online event, with WC members present, to over 100 international participants from North America, Oceania, and the U.K. The virtual space was then open to dialog with WC members present to respond to questions posed by members of the public. The third WC (which is evolving into a distinct series of its own) to date has been recorded over Zoom, and is not publicly available.

4. Results

The research findings below partially synthesize previous research. They also draw directly on published videos on the AIR website. Each are referenced accordingly. An inductive qualitative approach was taken to the data analysis. Quotes are used sparingly, and for the most part, descriptions of themes, pedagogical, and theoretical innovations are brief. Given the significance of participants’ cultural identities and political ecologies within the research findings, the subject positions of participants are identified alongside quotes. For a fuller discussion of the research methodologies and findings, readers are encouraged to consult the original articles and reports quoted. As the WCs have not been evaluated directly, findings reported from these relate to emerging themes rather than participants’ comments about the efficacy of these as pedagogical forums.

4.1. Deepening Relationality

Participants often said that the Summit had a profound impact on them. It was sometimes hard to attribute this to specific things [70,74]. The Colonial Reality Tour (CRT)—a trip lasting several hours that exposed participants to the realities of colonization in the area as well as key sacred sights—was both impactful and a very tangible way of learning for participants. Essentially, the CRT demonstrated, in very real ways, the impacts of colonization on the now largely invisible precolonial landscape of Indigenous (Lekwungen) traditional territory and life in and around the city of Victoria, a few miles west of TFN. It also focused on contemporary practices of cultural revitalization. For example, the tour called at Beacon Hill, a large public park of great beauty in the heart of Victoria. Here, the Camas plant grows prolifically and is much admired by tourists and locals alike for its ornamental beauty. However, the Lekwungen name for Beacon Hill is Miqan (which means warmed by the Sun), and prior to colonial clearances of the Miqan to make way for a Fort, this was a site of Kwetlal (the Lekwungen word for Camas) cultivation, a staple food and trading source, and therefore pivotal to the Lekwungen cultural economy. Far beyond western notions of a beautiful flowering hilltop to be simply admired, this was and remains a site of colonial trauma as well as having great practical and spiritual significance for the Lekwungen Peoples, a cultural narrative which remains invisible in dominant settler society. Similarly, the CTAPP in which the artistic representations of Indian Residential Schools survivors’ stories were on display continuously in the TFN gymnasium provided Summit participants with an everyday grounding and concrete reminder of the ongoing realities of Indian Residential School survivors. Both the CTAPP and the CRT were also critical in terms of helping to ensure, to the fullest extent possible, that the EVS did not inadvertently engage in re-colonizing practices [43,70,74]. Participants also frequently talked about the transformative experience of simultaneously being on the land—which they found to be a powerful entity in its own right—as well as the experience of attending a gathering for which strong spiritual foundations had been laid and continued to be laid each day through prayer and ceremony. Those attending the EVS often felt this created an intent for respectful engagement across the diversity of Indigenous and non-longer-Indigenous-to-place identities. For example, one Gàidheal (Gaelic) participant who is Indigenous to the Gàidhealtachd expressed that the emotional and analytical depths which were shared and explored in sessions were “supported and held through the use of ceremony” [74] (p. 69). Participants also talked about the holistic nature of the pedagogy—including exposure to ideas, imagery, sounds, and stories which had enabled
depths of emotions to be reached, allowing for subsequent inner shifts and realizations [74]. An Indigenous participant (Māori) extended these ideas of holistic and relational space by explicitly talking about the power of kincentricity [14] in her learning experience “I want to express my endless gratitude to the Tsawout First Nation people. I felt the synergies of their land and water flow through me” [43] (p. 47).

The holistic relational learning space which constituted the EVS was also evident in the WCs in which sound, imagery, poetry, art, and ceremony were engaged. One participant of mixed European and Mi’kmaq descent drummed and sang the Waterdrum Song that she had specifically composed for the first WC, while a Māori (Ngāti Ranginui and Ngāti Porou tribes) participant from Aotearoa sang the Māori creation waiata (song) “Te Pū”, [75] (0:17:21). This waiata, which tells about the unfolding stages of creation, including more-than-human life forms bridges the spiritual and material realms both in form and content. From an Indigenous perspective, singing the waiata animates the mauri (lifeforce) of the entities within it, beyond Western linear conceptualizations of time and space [52]. The resulting affect speaks to the whole being of the listeners, going well beyond discursive exchange and mind-body duality.

The sharing of tangible Indigenous practices which cultivate human–environmental connection and reciprocity are also vitally important within Indigenist cultural-ecological restoration work. Both the EVS and WCs provided opportunities for people to share and learn from these practices. In the first WC, one young Indigenous woman of Dene, Tsimsian, and Scottish descent from Vancouver Island, Canada, spoke about how her medicine garden gave her both purpose and connection: “Each time I did it [gardened] I felt more connected. I was doing what my people have done for thousands of years” [72] (p. 9). In the same WC, two Māori participants from Tauranga Moana, Aotearoa, spoke about how listening with one’s entire being enables the recognition of problems in their traditional territory. They then went on to speak about the invasion of Te Awanui (the Tauranga harbour) by Asian Paddle Crabs as a result of climate change and warming seas. However, they were able to address this issue through applying traditional knowledge learned from an Elder about the medicinal properties of Harakeke, an Indigenous species of fibrous flax commonly used for weaving. Learning about the calming effects of harakeke through touching or being in proximity to it, they determined a solution involving weaving baskets of harakeke to catch the crabs. The harakeke had a calming effect on the crabs, making them easier to manage during this process [72] (p. 10).

The exchange of everyday Indigenous practices using a virtual medium (the WCs) appeared fruitful to both the participants and the public audience-participants (second WC). However, participating in Indigenous practices of place-connection in person proved invaluable as embodied practices of deepening relationality and learning about traditional ecological knowledge for those either no-longer-indigenous-to-place or recovering their indigeneity. One young Indigenous woman from Vancouver Island talked about the powerful impression made on her by the experience of preparing the pit cook (a traditional WSÁNEČ earth oven) on the TIXEN Spit with other young people: “This kind of low-key activity promotes comfortable and natural conversations that can produce amazing discussions and bonding between the people and the land” [74] (p. 23).

4.2. Ontological-Epistemological Rupture/Tensions

The EVS activities described in the previous section had a tremendous impact on the “affect” of participants, including effecting changes in ontological-epistemological dynamics—the relationship between understandings about the nature of reality (ontology), and subsequent interactions with the world (epistemologies). This was particularly the case for participants no-longer-indigenous-to-place. A kind of ontological-epistemological convergence resulted, because of shared activities, exchanges, and experiences of ‘thinking place’, inscribing a kind of Indigenous cultural remapping for people. In other words, participants, Indigenous and no-longer-indigenous-to-place, shared an embodied
and deepened sense of collective interconnectedness with each other as well as the other-than-human beings which constitute place.

However, findings also indicate a kind of onto-epistemological rupture as newly learned ontological understandings (understandings of the nature of reality) start to diverge from lived epistemologies because of the diverse political ecologies or daily realities that people inhabit [27]. At the Summit, the emergence of onto-epistemological rupture or tension was most evident in the activities aimed at facilitating interpeoples and intergenerational resilience [43].

For example, on the fourth day, at the session “Innovations of Indigenous and Interpeoples’ Resilience”, in a panel on Indigenous-migrant relations, migrant panellists [74] (p. 74) talked about having to keep their culture in the “back seat” and getting the message from society of having to put their “cultures, languages [and] Indigeneity away.” However, in the same panel, a Māori participant talked about her tendency to “view migrants with suspicion” [43] (p. 48) because of historical experiences with white settler migrants and lack of treaty ratification safeguarding her tribe’s future. One Indigenous Gaelic participant talked of how this had helped him understand the tensions between local Gaelic people (Indigenous to place) and newcomers in his homeland. While the panel was generative in that it was thought provoking, it was also unsettling for many, creating a kind of dissonance for some of the participants [74]. Similarly, within EVS evaluation, participants no-longer-indigenous-to-place talked about the “learning that had to be done to catch up to Indigenous peoples”, while Indigenous peoples more often spoke of the immediate need for “strategy and tactics” [43] (p. 48) to protect their homelands. Theoretically, these onto-epistemological tensions also touched on decolonial scholars Tuck and Yang’s [76] notion of incommensurability (the impassable nature) around some aspects of cultural-ecological restoration work in contemporary modernist contexts. Onto-epistemological tensions were also evident within youth–Elder/Traditional Knowledge Keeper relations at times at the Summit and WCs. This is discussed further in the Section Intergenerational Themes below.

4.3. Intergenerational Resilience Dialog: Emerging Themes

The intergenerational dialogs between Traditional Knowledge Keepers and youth, which formed the backbone of the panel on intergenerational resilience at the EVS and the three WCs, was significant pedagogically and thematically. While none of these dialogical learning forums were land-based (the EVS intergenerational resilience dialog was held in the Tsawout First Nation gymnasium, and the WCs were virtual) and were therefore less directly embedded in the physicality of “thinking place” [25] than had they been held on the land, they nevertheless engaged the energies of place-based relations as well as holistic learning pedagogies. While the themes of human intergenerational resilience were prominent, the transmission of knowledge between species was very present as an underpinning theme. For example, in discussing the importance of learning from other species, one non-Indigenous member of the EVS panel talked about working with Indigenous Elders to prepare a medicine from the bark of 10 different trees and what it was like to eventually “taste that medicine and internalize that knowledge” from the trees [43] (p. 47). Loss of these practices, as well as their regeneration, was also a recurring theme [72,74,77–79].

Settler migrants Indigenous to elsewhere on the EVS also talked about their experiences of developing intergenerational resilience in their new homelands. One woman from Ethiopia, for example, sang a traditional song from her homeland and talked of what it is like to develop human-to-human intergenerational resilience, as a newcomer to Aotearoa. As Elders and Traditional Knowledge Keepers and youth listened to each other on these panels, an intergenerational remapping of sorts was apparent as they listened to the generationally embedded stories and experiences. These dialogs produced a range of intergenerational themes, two of which are mentioned as relevant to lifelong learning.
Intergenerational Themes

Carrying the old knowledge forward: In all three countries, state-sponsored policies of assimilation and cultural genocide have had substantial impact on Indigenous multigenerational connections and relationships, especially in terms of Indigenous language acquisition and cultural identity. Various Indigenous youth participants at both the EVS and WCs talked about these associated losses in terms of the “knowledge that seemed to be slipping from their grasp”, as well as concerns about how to keep “these [Elder youth] connections alive in the face of growing colonial encroachment”? [43] (p. 48). Furthermore, the cumulative and corrosive impacts of colonization means that, at times, cultural knowledge and linguistic expertise of some younger people can outstrip that of their parents and grandparents. However, the exercise of this knowledge by younger people can be counter to traditional expectations of older people being in leadership positions. A further source of generational challenge is that the urgency around the climate crisis often experienced by younger Indigenous activists can mean that they are pushing the agenda, educating parents and older generations’ [2]. These diverse and generationally nested realities can sometimes lead to unease between generations. This sentiment was expressed by one Elder at the EVS how the “youth appeared impatient to do their thing without really understanding how the Elders had worked so hard to make future generations’” paths easier [43] (p. 48). Younger people frequently expressed the need to adapt cultural traditions to modern needs and contexts. In the second WC, a young Gaïdheal woman discussed some of these tensions inherent in cultural and linguistic evolution between Elders and youth because of colonization, and that that their forebears had had to work so hard to preserve their culture and language:

“It can be a scary thing to hand the torch over to younger generations and trust them to preserve what is sacred about that while also allowing it to go through them and into the next generation and then evolve and change again” [78] (59:25).

In thinking about tensions around intergenerational knowledge transmission and adaptation to contemporary contexts, a young Anishinaabe man talked about the importance of balancing younger people’s tendency to sometimes substitute communication technology for face-to-face interaction. He talked about the importance of continuing to use technology while avoiding technological distancing [17] through “build[ing] a hybrid where we have that bridge and that branch over between these Elders and these young people to not give up completely the core values of their traditions” [78] (1:00:42).

While these narratives reveal challenges and tensions surrounding intergenerational relationality and knowledge transmission, WC participants were in universal agreement about the importance of bringing humility to all these relationships.

Resistance to colonially imposed binary thinking: Particularly evident within the WC’s has been emerging resistance to binary ways of thinking that have been imposed by colonialism [56,80]. Either directly raised by the WC youth participants or implicit within the ways in which they referred to themselves in terms of their identities, both modes of expression challenged previously constructed binary categories, or sharp divisions between Indigenous and non-Indigenous, human–other-than-human Kin, as well as gender identities and sexual orientations. Binary ways of categorizing are seen by participants as weakening relationality between life forms in ways that run counter to our vision of intergenerational or multi-generational resilience. For example, in the second WC, a younger Anishinabae man, from the Deshkan Ziibi territory (Great Lakes Region of Southwest Ontario) raised the limitations imposed on the reclamation of Indigenous identities and life-ways by ongoing fixations with blood quantum within Canadian society:

“Over here there’s a big thing with blood quantum and how much to get your status card and all of these different issues that stunts people’s exploration into being an Indigenous person … that they’re only 5% or whatever—they feel like they’re less than and cannot really reach out for those supports” [78] (1:01:54).
In the same WC, within the context of connecting to her Cree ancestry, a young Two-Spirit participant talked about the importance of honouring her whole being, including more holistic rather than truncated connections with human and more-than-human ancestors. Elaborating on this, she said: “also, in that like all the interconnection pieces of the land and what our responsibility is and just honouring my whole being and sharing that humility and all of the different ancestral ties that I do carry” [78] (1:04:39). The Indigenous practice of honouring kinship across human and more-than-human realms, including recognition of humans as among the younger earthly kin, was also evident in the sacred Māori creation waiata (song) “Te Pū”, described earlier. These perspectives emphasise “interconnected webs of kinship” [80] (p. 360) rather than colonial binary or even hybrid identities.

The presence of openly identifying Two-spirit and Indi-queer youth within the WCs has inevitably raised the profile of issues regarding both the inequitable impacts of climate and cultural-ecological crisis on 2SGLBTQ⁺ [81], as well as the unique agencies that Two Spirit and Indigiqueer people may have to respond to this crisis. This has also coincided with broader societal changes—particularly in the last five years or so—of increased gender identity fluidity, a change which has been largely driven by young people. Coinciding with a stronger presence of re-merging pre-colonial indigenous queer identities, including the unique societal roles that Two Spirit people once performed in pre-colonial societies (which included Chiefs, healers, and ceremonialists, including conducting ceremony with other-than-human beings) [82,83], has also been emerging postmodern theories of Queer normativity—i.e., that Queerness or difference is normal [84]. While it is premature to discuss emerging data from the latest WC series Queering Climate Crisis Response, the close relationship between cultural–ecological restoration is obvious in terms of not only healing Queerphobia, but also reasserting the potentiality of the unique agencies that people, who are both Indigenous and Queer (Two Spirit or Indigiqueer) have, in relation to the climate and ecological crisis (cultural–ecological restoration) [85].

5. Discussion

The pedagogical practices and research findings described in this article span cultural-ecological restoration work over a period of nine years, during which time global challenges have intensified. The WC series and associated knowledge-exchange practices evolved out of the need to keep finding ways of sharing cultural-ecological restoration practice in the isolationist context of the global coronavirus pandemic in ways that meaningfully connect people and people and place. While not evaluated directly, the WCs appear to be valuable pedagogical forums, which enable a depth of connection while bringing multiple-temporal realities into the same virtual-temporal space. Table 2 below summarizes the lifelong learning cultural-ecological restoration strategies aimed at effecting deep sustainability transformation. These strategies extend and re-orientate the sustainability transformation strategies put forward by Abson et al. [28] in the Introduction. Arising out of the research findings articulated here, these strategies are more fully explained in Sections 5.1 and 5.2 which follow.

<table>
<thead>
<tr>
<th>Indigenist Lifelong Learning Strategies for Deep Sustainability Transformation</th>
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<tr>
<td>1. Lifelong learning appreciates that environmental reconnection occurs through practices which deepen relationality with place and people. Epistemological shifts are integrated over time to centre people within kincentric relations. Environmental reconnection not only has personal meaning, but is also a collective and community-building experience in terms of shared understandings of Indigenous meanings imbued in kinship relations.</td>
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<tr>
<td>2. Lifelong learning and knowledge production centre the agency and voice of our more-other-than-human relatives. Knowledge arises collectively out of “thinking</td>
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place”, which includes human beings as knowledge co-generators. Knowledge democritisation becomes a multi-species strategy, and localized and deep listening approaches to knowledge gathering and utilization are adopted.

3. A lifelong learning approach recognizes that organizational change starts with restructuring the way people think. It aims to imbue within policy makers the appreciation that the Indigenous knowledge of place is deep and specific. Policy development occurs which integrates new knowledge, information, and technologies within the Indigenous epistemologies of place. Policy development make the links to Indigenous environmental justice frameworks which embrace multi-generational, multi-species, and non-binary approaches to kincentricity. Local Indigenous communities play a leadership role in this process.

Table 2 summarises Indigenist lifelong learning strategies for deep sustainability transformation.

5.1. Key Elements of Lifelong Learning within an Indigenist Cultural-Ecological Restoration Framework

Indigenist cultural-ecological restoration establishes an intergenerational resilience praxis that is by nature grounded in Indigenous leadership and worldviews, while cultivating intergenerational, interspecies, and intercultural connectivity. Rather than being boundary-defining, new knowledge, information, and technologies are discerningly integrated within the Indigenous epistemologies of place, which conceives society as comprising both more-than-human and human kin. This collectivist, lifelong work requires pedagogical interventions that simultaneously deepen relationality, not just in terms of felt experiences, but through actual learned practices of Indigenous interconnection.

Indigenist lifelong learning resists the urge towards rapid information acquisition for the purposes of financial accumulation. Rather, lifelong learning, in the context of Indigenist cultural-ecological restoration work, foregrounds epistemological shifts over time towards a deepening appreciation of Kincentricity, interconnectedness, and multi-temporalities. This process-orientated, collectivist praxis appreciates the inevitabilities of onto-epistemological tensions due to the ongoing nature of the work and the diverse political ecologies that people inhabit. Therefore, an Indigenist approach to lifelong learning seeks to engage in methodologies that take account of these potential and actual ruptures.

The unpredictability of rapidly shifting global conditions, as well as the need to conserve the global movement of people, necessitates the use of digital technology to engage with Indigenous and holistic ways of knowing. An Indigenist approach to lifelong learning, because of its appreciation of deep interconnectedness of Indigenous realities, can provide the kind of bridge between normative western techno-rationalist and cognitive approaches to learning and the depth dimensions of Indigenous Life-worlds and lifeways alluded to earlier by Tessaro and Restoule [45]. The pedagogical approaches engaged in throughout the Wisdom Councils are testimony to this.

An Indigenist approach to lifelong learning makes connections with new and evolving theoretical frameworks through an Indigenous environmental justice framework which, for example, embeds and extends the Western theory of Queer normativity into the context of multi-species societies. In this way, it not only addresses social equity, but works towards deep cultural-ecological restoration through efforts to re-ignite the unique agencies and multi-species perspectives of, for example, Indigiqueer and Two Spirit peoples. More broadly, the theoretical and conceptual evolutions—such as non-binary ways of being and Queer normativity—are potent reminders for lifelong learning of the generational shifts that can occur over a short space of time.

5.2. Contribution to Critical Leverage Points for Deep Sustainability Transformation

Indigenist cultural-ecological restoration work is a key leverage point in planetary sustainability work because it reconnects people to the environment, not just through affect, or learning ‘about the environment’, but in very real, practical ways that centre
learning the Indigenous knowledge of land and experiences of being of a place. As settler scholar Hannah Askew [86] notes, while the United Nations Declaration on the Rights of Indigenous Peoples must enable the continued revitalization of Indigenous Law, simultaneously it must facilitate the respect and engagement with Indigenous legal laws on the part of settler governments and people. In a world where many are needing greater sense of belonging, the focus on deepening relationality to people and place through effecting epistemological shifts over time provides a sense of meaning and identity that is grounded in place. Environmental reconnection becomes not only personal, but also collective in terms of shared understandings of Indigenous meanings imbued in kinship relations. This deep sustainability eschews more shallow forms of sustainability aimed at individual behaviour change to conserve environmental resources for ‘human survival’, and instead promotes effecting deep sustainability through a radical reorientation of human subjectivity and behaviour from within kincentric [14] ways of being.

Secondly, Indigenist cultural-ecological restoration work digs beyond more superficial human-centric critiques of knowledge production to centre the agency and voice of our more other-than-human relatives. This challenges western culturally dominant thinking that humans have providence over knowledge. Rather, knowledge arises collectively out of “thinking place” [25] which includes human beings as knowledge co-generators. It is the role of humanity to deeply listen and be guided by what our more-than-other-human relatives are telling us about the state of the Earth. Knowledge, or more succinctly wisdom, arises out of these sacred relationships. Knowledge democratisation is a multispecies strategy which requires localized and deep listening approaches to knowledge gathering and utilization.

Thirdly, institutional change is a necessity for strengthening transformation capacity of Indigenist cultural-ecological restoration work. Attendance of government and policy people at the kinds of pedagogical forums described in this paper is a vital starting point to re-framing sustainability laws and practices towards far-reaching societal transformations which utilize technological innovations in service of kincentric-orientated cultural-ecological restoration. Reorganizing institutions begins with restructuring the way people think. Too often, policy makers use Indigenous language to word smith’ sustainability strategies to be seen as incorporating Indigenous perspectives and/or insert very specific elements of Indigenous knowledge into public policy without having any in-depth understanding of the context of this knowledge [2]. This becomes tokenism, alienates local communities, and ultimately exerts weak leverage in terms of sustainability transformation. An Indigenist approach to lifelong learning and cultural-ecological restoration aims to imbue the understanding within policy people that the Indigenous knowledge of a place is deep and specific. This approach challenges institutions concerned with accelerating sustainability transformation not to merely expose their staff to often compartmentalized online ‘sound bite’ types of learning for purposes of rapid environmental information gathering and action, but rather to collectively engage with the multispecies depth dimensions of Indigenous knowledge systems, the primary laws of place. What people may think of as accelerating or scaling up change is actually more about plumbing deep beyond the (often) superficial human understanding about the nature of the world we live in.

In a sense, accelerating change requires slowing down. Collectively, an Indigenist lifelong learning approach, if applied to these three key action areas, has the potential to make a meaningful contribution to deep sustainability transformation.

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