Nature Sports: Prospects for Sustainability

Derek Van Rheenen 1, * and Ricardo Melo 2

Abstract: This paper articulates a paradigm shift in the adoption of a critical ecopedagogy focused on substantive and systemic change within nature sports. In analyzing the unifying concept of nature sports, we propose an ontological shift towards genuine sustainability, a communion among people and with nature. These activities comprise a group of physical practices that have the potential to challenge participants in novel ways that provide an alternative to traditional sports and the ideological values associated with these dominant sports, such as competition and personal gain. Nature sports inscribe meaning on bodies in motion, with a blurring or erasure of boundaries, as participants become one with nature rather than seeking to exploit or conquer it. These novel and countercultural practices promise the possibility of systemic sustainability, as participants redefine sport in terms of relational equity and ecoliteracy. As a utopian project, this systems approach recognizes the nature-sport nexus as a living framework to honor culturally appropriate practices and traditions in building an ecological movement centered on environmental justice. In this way, nature sports offer an opportunity to reimagine sustainable development through the promotion of a circular, rather than linear, economy—an economy based on re-creation rather than exploitation and waste.

Keywords: ecopedagogy; ecoliteracy; systemic sustainability; relational equity; circular economy

1. Introduction

Hope springs eternal in the human breast;
Man never is, but always to be blest.
The soul, uneasy, and confin’d from here;
Rests and expatiates in a life to come.
Alexander Pope, An Essay on Man [1].

The world emerges from one of the harshest winters we have seen in our lifetime. A global pandemic has infected hundreds of millions of people across the globe, with a death toll of more than four million and counting [2]. Populist leaders perpetuate lies, both big and small, for their own profit, seeking increased power, money, and relevance. Their gains are at the expense of others. Democracy is under siege, a precarious political system made all the more vulnerable by human ignorance and greed. The silent domination of hegemony gives way to despotism and overt oppression as shameless strategies of rule.

It is perhaps no surprise that such despotism fuels its energy on the exploitation of people and of the world’s natural resources, ever increasing the planet’s environmental crises and social injustices. These same leaders and their followers deny that such degradation is taking place at all. They are so bold as to deny that these attacks on human dignity and our larger ecosystem ever took place, denouncing indictments of institutional racism, sexism, homophobia, and climate change as fake news and woke politics from the left [3].

But fortunately, hope springs eternal. Today, looking out across the San Francisco Bay, the spring air is a little clearer and cleaner, the birdsongs more melodious and the
jasmine flowers more prolific and sweeter in scent. A new dawn arises, shedding light in 
upward rays of shine. As former United States President, Franklin D. Roosevelt wrote in 
the aftermath of World War II, ‘we have always held to the hope, the belief, the conviction 
that there is a better life, a better world, beyond the horizon’. This article seeks to build on 
the hope of the future at the intersections of sport, nature, and sustainability.

The purpose of this paper is to explore a paradigm shift in the adoption of a critical 
ecopedagogy, a moral and political philosophy or worldview that seeks substantive and 
systemic change. This begins by redefining how we conceive of the world through domi-
nant readings of our daily practices in relationship to the natural and social world. In an 
analysis of the unifying concept of nature sports, we propose an ontological shift towards 
communion with, rather than against, one another and against nature. This paradigm shift 
seeks to dampen the will to dominate others and to dominate nature for personal gain, an 
existential competition pitting people against one another and in disharmony with our 
very souls and our ecosystem. This project, then, echoes the call for harmony with the 
conviction to act.

The paper defines nature sports as a unifying concept that comprises, a group of 
physical activities that have the potential to challenge participants in a novel way to provide 
an alternative to the traditional ways of seeing, doing, and understanding sport [4,5]. In 
accordance with Krein’s [6] proposition, competition against others is not an essential 
component of nature sports. As Booth [7] has articulated, nature sports participants 
interact with surfaces, textures and fluids of physical geographical features as well as the 
dynamic forces that create them. It is a reframing of the ontological assumptions grounded 
in dominant definitions of sport regarding both competition and nature, whereby social 
connections with the environment need not be antagonistic and one based on controlling 
and conquering nature.

Finally, the paper describes how a critical ecopedagogy lens focused on nature sports 
offers possibilities for systemic sustainability and a genuine ethic of care for nature. In order 
to address the interlinked challenges of environmental sustainability, many scholars have 
called for a socio-ecological ‘regime shift’ or redesign to achieve global sustainability [8–12]. 
As Beddoe et al. [8] have argued, this transformative change “will require a whole systems 
approach at multiple scales in space and time. It will require integrated, systems-level 
redesign of our entire socio-ecological regime, focused explicitly on the goal of sustainable 
quality of life rather than the proxy of unlimited material growth” (p. 2488).

Systemic sustainability draws on the notion of relational equity, ecoliteracy, and envi-
ronmental justice. Relational equity is a living framework to honor culturally appropriate 
practices and traditions in the building of an ecological movement centered on an environ-
mental politics and justice. Ultimately, this paper offers hope, a beacon of light during dark 
times. Hope reveals an emerging utopian project, a politics of possibility, and a mandate for 
moral and political action. This call to action promises a collective commitment to systemic 
sustainability, a light that envisions and enlivens tomorrow’s social and natural world.

2. Ecopedagogy and the Traditions of Critical Pedagogy

An important strand of ecopedagogy (also defined as earth or nature pedagogy) 
is rooted in the theoretical traditions of critical pedagogy [13–16], a moral and political 
practice or project [17,18] grounded in possibility and hope for a more just and democratic 
world. Critical pedagogy as a moral and political project must begin by first naming, and 
then denouncing, the dominant forces that dehumanize people and deny them access, 
justice, and an equality of opportunity [19]. Paulo Freire’s [17] seminal text, Pedagogy of the 
Oppressed, was a call to action, an awakening of critical consciousness, or conscientização 
among the oppressed in society “to liberate themselves and their oppressors as well” (p. 44).

Conscientização is a process of developing critical thinking skills or literacies, a self-
reflection and interrogation to better understand how institutions of power deny indi-
viduals access, equity, and social justice [17]. Rather than internalizing their oppression,
students develop a deepened consciousness of their historical reality as a means of transforming that reality [19], conjugating a more future perfect. Freire writes [17], “It is as transforming and creative beings that humans, in their permanent relations with reality, produce not only material goods—tangible objects—but also social institutions, ideas, and concepts. Through their continuing praxis, men and women simultaneously create history and become historical beings” (p. 101).

This process of honest self-reflection and interrogation initiates the possibility of liberation, a process of becoming. As Macedo [19] reminds us, “liberation comes only through a process of resolution of tensions and contradictions in the relation between the oppressor and the oppressed” (p. 24). Citing Freire [17], “if the goal of the oppressed is to become fully human, they do not achieve their goal by merely reversing the terms of the contradiction, by changing poles” (p. 56).

Liberation is, by necessity, a relational process, a communion of individuals working together in fellowship and solidarity towards the collective goal of freedom or emancipation. Macedo [19] continues: “According to Freire, liberation is never about the democratization of violence, human misery, and obscene poverty. Liberation that resolves the contradictions between the oppressor and the oppressed can only do so “by the appearance of the new man [and woman]; neither oppressor nor oppressed, but man [and woman] in the process of liberation” (p. 24).

For critical theorists, pedagogy is a tool for civic engagement and self-determination rather than a prescriptive methodology or a commodity that can be exchanged in any context [18]. The action and reflection of those engaged in this praxis or process of ‘becoming’ can only be contextualized to a given social and historical reality. In this sense, one’s perceived reality is actually a process, one undergoing constant transformation. Freire [17] writes, “I consider the fundamental theme of our epoch to be that of domination—which implies its opposite, the theme of liberation, as the objective to be achieved” (p. 103, author’s original italics). Men and women experience domination and structures of oppression in real and material ways; in order to transform these realities, we must undertake a mutual process of liberation. As Freire [20] has noted, “the consciousness of incompleteness in human beings leads us to involve ourselves in a permanent process of search” (p. 312).

While Freire’s initial efforts towards liberation were focused on educating peasant and working-class adults for revolution in his native Brazil, his own writings [20–22], and the critical theorists that have followed [23–27], have expanded this framework to address more than class struggle and oppression. These other theoretical categories have focused on race, gender, sexuality, and nature without losing sight of social class.

And yet, feminist, environmental, and post-structuralist scholars have critiqued the Western epistemological assumptions—language, root metaphors, and metanarratives—of critical pedagogy [25–29], which privilege not only men over women but the human enterprise over nature and the more-than-human world. This anthropocentrist blind spot within critical pedagogy [30] “places humanity and human interests at the center of value” (p. 122) rather than acknowledging the “permeability of human/nonhuman borders” [28] (p. 200) and the complex kinship between human beings and nature [7,31].

In this regard, critical pedagogy has focused on human liberation and the naming, dismantling, and transformation of social inequalities (classism, racism, sexism, homophobia) without a similar exploration of the systemic ties between human oppression and the domination of nature. As Bell and Russell [28] revealed, “the exploitation of nature is not separate from the exploitation of human groups” (p. 190). These systems of domination are often interconnected and mutually reinforcing, disproportionately impacting those groups (in particular, Black, Brown, and indigenous peoples) deemed to be closer to nature—savage, uncivilized, and animalistic [17,32,33].

While these designations of savage and uncivilized proffer pedantic interpretations of linear processes of progress and development, the irony is that indigenous, so-called savage, peoples of the world have lived, and continue to live in far more harmonious relationship with nature than do the so-called civilized peoples of the ‘developed’ world.
Similarly, the nonhuman world bears no responsibility for the current global crises (e.g., climate change, species extinction, ozone depletion, toxic contamination, deforestation, etc.) except as products for human consumption.

What critical pedagogy and ecopedagogy have in common, however, is hope, hope for the future and for possibility. In his sequel to Pedagogy of the Oppressed, Freire [22] wrote Pedagogy of Hope, where he states “hope is an ontological need. Hopelessness is but hope that has lost its bearings, and become a distortion of that ontological need . . . I am hopeful, not out of mere stubbornness, but out of an existential, concrete imperative” (p. 2). It should also be noted that Freire was working on a book on ecopedagogy when he died in 1997, a process of growth and development in his own thinking, in his own becoming and being with nature. As he had written earlier [17], “hope is rooted in men’s incompleteness, from which they move out in constant search—a search which can be carried out only in communion with others. Hopelessness is a form of silence and fleeing from it” (p. 91).

The ecopedagogy movement grew soon thereafter, particularly at the First International Meeting on the Earth Charter and Education Perspectives, organized by the Paulo Freire Institute in August 1999 in São Paulo, Brazil. The meeting was supported by UNESCO and the Earth Council. The First International Forum on Ecopedagogy took place in March 2000 at the University of Porto, Portugal. The guiding principles for the ecopedagogy movement were established at these two meetings [8]. Many scholars, as noted above, have taken that intellectual development in Freire’s work and built a strong body of literature, connecting critical pedagogy, ecoliteracy, and environmental justice over the past two decades [28,34–41]

Adopting this ecopedagogical approach, then, is our conviction that we can and must hope for the best, even in the face of adversity and in the face of environmental crises. One area to spotlight as a potential vehicle for possibility and the articulation of an interactionist ontology is the unifying concept of nature sports.

3. Nature Sports

Both nature and sports are contested ideological sites that require a reframing of the dominant narratives which undergird both constructs. These narratives focus on competition, opposition, and conquering the Other, whether by conquering Nature or other human beings and/or groups. There is an inherent violence and corresponding risk associated with these reigning renderings, whether actual and/or perceived. This notion suggests that combined, nature sports, as a unifying concept, offer the possibility of resisting the ways in which both constructs have been conceived and therefore experienced.

As Booth [7] has argued, nature sports are an ideal vehicle to delve into Western ontology and the grounding assumptions of both sport and nature as distinct constructs or categories. Taken together, the unified concept of nature sports challenges epistemological binaries of mind and body and of culture and nature [4,42,43]. He [7] notes, “the abstract concepts and categories of ontology, that are typically presented as binary opposites, do not readily marry with lived experiences and practices [44] that are invariably complex, contextualized, nuanced and situational; nor are they necessarily ‘proved’ by empirical evidence, notwithstanding the common retreat into data to support ontological arguments” (p. 21).

This effort to transcend the ontological bifurcation of nature and culture offers the possibilities of a convergence between human beings and nature [38], surfacing a kinship or relational sensibility between the human and nonhuman material world [7]. This suggests that there is an interconnectedness between all parts of the natural world, always in flux and adaptation, or what Warden [45] identifies as the ‘inside, outside, and beyond’ of nature as place. For her, inside represents one’s inner self, outside represents our relationships with others, both the living and non-living elements of the planet. Beyond reflects “the unobservable, the undefined web of in-betweeness that stretches across the observable and unobservable aspects of our lives” (p. 7).
Experientially, nature sports inscribe meaning on bodies in motion, with a blurring or erasure of boundaries, as participants become one with nature [42,46,47]. Individuals may also experience this blurring of boundaries as a transcendence of the mind-body ontological distinction. Individuals describe these moments of interconnectedness of mind and body, the balancing of human and physical nature, as evoking a sense of spirituality [48]. These transcendental experiences have been referred to as ‘slow time’ [49–51], ‘flow’, ‘the sublime’ [7,52], or ‘euphoria’ [53]. In this regard, nature sports symbolize a sense of spatial, temporal, and institutional autonomy [4,54].

3.1. A Unifying Concept

In their editorial entitled ‘Nature sport: a unifying concept’, Melo, Van Rheenen, and Gammon [4] challenge fellow scholars to question existing theoretical assumptions and heuristic biases at the nature—sport nexus. They underscore the need to reconceptualize nature “as a set of fluid positions and orientations through which embodied experiences inscribe and produce meaning and purpose” (p. 11).

Nature sports comprise a group of sporting activities that are developed and experienced in natural or rural areas, ranging from formal to informal practices. These practices are performed in a variety of natural contexts including on land (mountain biking, rock-climbing, trekking, etc.), in water (kayaking, sailing, surfing, windsurfing, etc.), and in the air (paragliding and hang-gliding, etc.).

Nature sports have a spontaneous, playful nature, “with participation predominantly taking place in informal settings, often without governing bodies or clubs or other forms of external regulation” [55] (p. 117). They are generally autonomous activities, even if some nature sports are practiced collectively, such as kayaking, or those which create sporting sub-cultures, such as in surfing.

Nature sports involve interacting with a natural or material feature, rather than with other human beings, and participants gain the opportunity to strive, employ, and develop their skills in relationship to nature [6]. They are generally non-aggressive activities that involve little to no human bodily contact [56,57]. While some nature sports activities are highly competitive, evidenced in their inclusion within the modern Olympic Games, such as sailing, windsurfing, mountain biking, surfing, and rock-climbing, the structure of nature sports activities often varies from traditional sporting practices.

As such, this unique group of physical activities provides an alternative to the traditional ways of seeing, doing, and understanding sport [4,5]. With new forms and configurations emerging regularly [7,58], nature sports represent a countercultural phenomenon [59,60], highlighting the socio-cultural ways in which these novel sporting practices have developed in contrast to traditional sports and their dominant values [5,57,60–63].

Nature sports reflect the social and cultural changes of late capitalism that have taken place since the end of the twentieth century. These changes have triggered a meaningful transformation within the larger system of sporting practices [4,54]. Although each nature sport “has its own specificity; its own history, (politics of) identities and development patterns, there are commonalities in their ethos, ideologies as well as the consumer industries that produce the commodities that underpin their cultures” [5] (p. 11).

Active participation in nature sports is directly associated with active sport tourism. The relationship between nature sports and tourism has drawn considerable attention to the potential and real economic, environmental, and socio-cultural impacts of these activities, both positive and negative. Numerous scholars have discussed these tripartite impacts in terms of the triple bottom line [64–68], seeking to enhance positive outcomes while mitigating the negative impacts. Nature sports have a particular focus on these activities relative to the environment. This relationship is complex and, at times, highly destructive. However, the relationship affords possibility for greater compassion and understanding, the potential for developing an environmental consciousness, and genuine ethic of care for nature.
3.2. Nature Sports and Sustainability

The social and historical development of nature sports has corresponded with the articulation of environmental policies. Nature sports and other outdoor recreation activities developed in the United States in the second half of the nineteenth century, when national policies emerged regarding the preservation of land. This development led to the conservation and management of natural spaces in the late nineteenth century and the creation of the national park system in the beginning of the twentieth century [69]. The creation of the national park system in the USA, followed by similar initiatives throughout the world, allowed the combination of wildlife protection with the practice of nature sports and other recreational activities [70].

These efforts toward environmental protection and preservation have often run counter to the frenetic expansion of nature exploration and the proliferation and corresponding diversification of nature sports beginning in the late twentieth century. Negative impacts on nature include, among others, natural landscape destruction, soil erosion, water and air pollution, detrimental behavioral shifts of animal species, and the deterioration of monuments and historic sites. Pristine places or sites have been overrun by nature sports enthusiasts—surfers, climbers and mountain bikers, to name a few—leaving these places littered in their wake, with plastic water bottles, empty cans and human excrement. Some of the better and lesser known examples of these paradises littered if not lost include Mt. Everest (‘the world’s highest garbage dump’), once secret surfing spots overrun with boarding enthusiasts, and inexperienced adventurers flocking to back country locations such as the Wind River Mountain Range in western Wyoming [71–76]. In addition to putting themselves in physical danger while straining local search-and-rescue systems, these enthusiasts often disturb or disrupt plant and animal life. For example, some rock climbers will ‘garden’ a climb, using a stiff brush to clean off lichen and mosses from rock faces on their ascent. These species are important parts of a thriving ecosystem, many of which having flourished in these places for decades, if not centuries [77–79].

As such, nature sports have the potential to damage environmental resources, an outcome that generates considerable disquiet among environmentalists and well-meaning participants. Such anxieties have resulted in a call for more sensitive management approaches to protect particularly vulnerable sites, such as zoning and access-reduction initiatives [80–83], as well as a call for a genuine ethic of care for nature and an interspecies communion [7].

Despite the potential negative environmental impacts caused by nature sports, these activities promise the possibility of environmental conservation and protection when developed and managed in a sustainable and authentic way [80]. The various sites and facilities developed for these activities (trails, tracks, routes, take-off and landing areas, mooring buoys, submerged paths, shops, parking, etc.) have contributed to sound conservation management practices, thus reducing the exploitation of the environment. This intentional process allows participants to enjoy nature without harming or destroying it for their singular pleasure [4,54].

Nature sports promote the discovery and appreciation of the environment and its diverse and spectacular ecosystems. These activities potentially awaken a respect for, and a defense of, nature. Participants who immerse themselves in nature experience the beauty and grandeur of these places, creating the possibility for the construction of an eco-literacy and eco-citizenship [54]. As Brymer, Downey, and Gray [46] have argued, “feeling connected to nature leads to a desire to care for the natural world and contributes to more environmentally sustainable practices” (p. 193). In this regard, nature sports participants develop an intimate and reciprocal relationship with the natural world [81].

Space and land management remain important areas for the conservation of the environment, where nature sports and conservation combine to create a symbiotic relationship based on sustainability [82]. Nature sports guides and service providers have an important role in the promotion of sustainability, acting as environmental interpreters, role models, and activists [83–85]. Ideally, a positive economic impact can help maintain ecosystem
protection, while a healthy ecosystem provides the venue for sustainable market supply, even growth [86–89]. And yet, we believe that this genuine ethic of care can only be realized through systemic sustainability efforts and an intentional commitment to relational equity.

4. Systemic Sustainability: Hope and the Promise of Possibility

Ecological or environmental consciousness, a kind of planetary conscientização, fosters meaningful sustainability or what has been referred to in the literature as systemic sustainability [8,12,90–92]. In focusing on the system as a whole, structural or systemic approaches identify specific features of these systems as targets for change, modulated by decision-making and policy development [8,12,90,92]. As Scoones et al. [12] have articulated, “structural or systemic approaches may underpin analyses and offer strategic responses, whether through informing social movements or guiding policy interventions that aim to elevate small-scale niche experiments beyond the local” (p. 71). This requires an integrated or multidisciplinary framework that combines divergent worldviews, institutions, and technologies to envision global sustainability [8,10,12,93]. Recognizing the inherent complexity of systems interactions, these authors [12] assert, “system-focused approaches emphasize the need for knowledge on system dynamics: the interdependency of social, ecological, institutional, and technological elements that together mark thresholds in system states” (p. 67).

Global sustainability, then, is the ultimate goal of a critical ecopedagogy, envisioned as the Earth’s and, by extension, humankind’s liberation from its own destruction and ultimate demise. According to Antunes and Gadotti [13], ecopedagogy “implies making changes on economic, social, and cultural structures. Therefore, it is connected to a utopian project—one to change current human, social, and environmental relationships (p. 136, author’s original italics). In this regard, Kahn [15] defines ecopedagogy “as a form of ethical epiphany that serves to individuate the state of planetary ecology as a whole within a given historical time period” (p. 11). Similar to these authors, we argue that the development of a critical ecopedagogy is therefore a utopian project.

This utopian project intentionally promotes and fosters relational equity rather than the singular pursuit of economic development for profit. Relational equity is a living or systemic framework to promote social and environmental justice. Based on the tenets of equity theory in organizational management [94–96], it seeks to ensure that the distribution of resources is fair to relational partners [97]. As such, relationships of trust become foundational to the promotion of social equity and justice. The term relational equity transcends the business world, however, providing an approach for educators and scholars interested in fostering a critical pedagogy in support of a more just society [98–101].

Those with a singular focus on economic gain and development often pay lip service to sustainability or sustainable development as appropriated and hollow buzzwords printed in glossy advertisements and marketing promotions. As educators, we need to reclaim these words as authentic and meaningful. As we interrogate cultural practices, activities, and industries, it is critical to analyze how relational equity can be achieved within our social and historical contexts. Writer and historian Rebecca Solnit [102] has noted that “history is more of a crossroads, branchings, and tangles than straight lines” (p. 59). Her understanding of history challenges the myth of linear progress or development. Critical pedagogy becomes a tool to reflect on historical structures and envision a healthier future—a future founded on systemic sustainability.

As Freire [17] argues, “there is no historical reality which is not human. There is no history without humankind, and no history for human beings; there is only history of humanity, made by people and (as Marx pointed out) in turn making them” (p. 130, author’s original italics). In this sense, relational equity calls for critical dialogue and the development of constructive alliances among people. It also necessitates the importance of understanding the local context in relation to larger global and transnational forces. The creation of such alliances serves as a means to mobilize diverse peoples to engage with
culturally appropriate practices and traditions in the building of an ecological movement centered on environmental politics and justice [15,103].

Additionally, those who embrace a genuine ethic of care for the environment have sought to move us away from the current linear, materials economy—a system in crisis—and have proposed instead the development of a circular economy. A circular economy shifts the economic logic away from production to preservation and waste reduction, focusing on the reuse, recycling, repair and remanufacture of products and resources. In this regard, the Ellen MacArthur Foundation [104] has defined the circular economy as “an industrial economy that is restorative or regenerative by intention and design” (p. 14). At best, all healthy ecosystems are circular, a dynamic cycle of birth, death and rebirth, of decay and regeneration.

While the conceptual contours of the circular economy and sustainability have often been blurred within the literature, perhaps constraining the efficacy of their use, Geissdoerfer et al. [105] have found that the circular economy represents a beneficial condition for sustainability. These authors write, “while sustainability provides a broader framing (e.g., [80]), which can be adapted to different contexts and aspirations, the Circular Economy emphasises economic and environmental benefits compared to a linear system (e.g., [106])” (p. 764).

People and their commitment to relational equity within the social and material world are critical to the success of a circular economy. Ownership is viewed as stewardship, while consumption is reframed as an intentional cycle of use and (re)creation [107,108]. A study of seven European nations found that a shift to a circular economy would reduce each nation’s greenhouse gas emissions by 70% and grow its workforce by 4% [107].

Relational equity is a critique of modern capitalism and the voracious appetite for profit at the expense of human dignity and diminishing natural resources. As Bragdon [97] argues, “the deleterious effects of business as usual on the biosphere and the growing gap between the world’s rich and poor have bred ecological collapse, disease, resentment, social backlash and more recently economic chaos” (p. 6). Entities (e.g., companies, organizations, and governments) that operate as living, sustainable systems place greater value on people and on nature than they do on non-living capital assets. It is no coincidence, Bragdon [97] continues, that “the collapse of global capital markets has come at a time when important ecosystems are also in collapse” (p. 7). As interconnected and relational parts of a larger living system, the economy is simply a subsystem of the biosphere. For equity to be obtained within this biosphere, stakeholders must place a premium on fostering respect and nurturing a harmonious relationship among diverse peoples and between these peoples and the natural world, not only an ethic of care for the environment but also an interspecies care and communion.

Also known as relational equity management [109–111], this governance framework seeks to innovatively congeal the multiple and often competing priorities of a given sector or combination of sectors (nexus). This framework fosters systemic sustainability by promoting effective resource management by balancing trade-offs and enhancing new and existing synergies [111]. Relational equity, then, is a means toward achieving systemic sustainability, an essential component of ecopedagogy.

In this regard, ecopedagogy seeks to develop three forms of ecoliteracy, or what Kahn [15] has articulated as the (i) functional, (ii) cultural, and (iii) critical components of ecoliteracy. Functional or technical ecoliteracy can be understood as a fluent reading of current environmental knowledge and research (e.g., an environmental literacy). This requires a basic knowledge of how societies or human cultures affect ecological systems for better or for worse, recognizing the production levers that denigrate and cause environmental harm and destruction. Equally important is a fluency in more sustainable approaches to the interactions and interdependencies of local ecosystems, such as those at the nature-sport nexus or the nature-sport-tourism nexus.

Cultural ecoliteracy promotes a rethinking of the exploitive relationship of culture to nature, an epistemological shift or ethical epiphany that honors and respects the earth as
the ultimate life source and force. This is a much-needed departure from western ways of knowing that promote "the pervasive homogenization, monetization and privatization of human expression" (p. 10) or what Bowers [29,103] refers to as ‘the enclosure of the cultural commons’.

In juxtaposition to Western ways of knowing, indigenous knowledge or knowing bonds human and nonhuman elements, a rhythmic process or movement towards finding balance, a harmony between people and the environment [7,15,29,31,45]. These include long-standing traditions of sustainability in social and cultural practices, a sustainability that preserves both traditional culture and the local ecosystem that provides life for the people. Indigenous knowledge is grounded deeply in the promotion of relational equity and an intergenerational perspective that includes future generations. As Bowers [29] insightfully argues, “other traditions provide the basis of living less commodified lives—and thus do not contribute to degrading the environment in ways that threaten the health of marginalized groups, including future generations” (p. 33). Modern environmental conservationists have similarly acknowledged that ‘we do not inherit the earth from our ancestors; we borrow it from our children’ [112–115].

The goal of relational equity within Western epistemologies requires an awareness of the past and the socio-cultural relations of power and politics that have led us to our current crises. This reflective effort documents and calls out historical systems of oppression reified as a result of industrial and corporate capitalism, colonialism, imperialism, and neoliberalism. This process acknowledges that “our current knowledge is contingent on particular historical contexts and political forces” [116] (p. 187). In its place, a new way of being or becoming proposes a more just worldview. It proposes a politics of possibility that foregrounds environmental and social justice and embraces progress as existential transcendence and total liberation.

Critical ecoliteracy, like critical pedagogy, is both a moral and a political mandate, a call to action for sustaining life. Such political action requires an act of moral imagination, and a commitment to change, to enliven the world. Hope without will is passive, just as silence in the face of injustice makes one complicit in that injustice. If we acknowledge that current crises necessitate action, then this utopian project becomes a moral and political imperative. Ultimately, this utopian project is an act of love.

5. Conclusions: Limitations and Future (and Hopeful) Directions

As a unifying concept, nature sports comprise a group of sporting activities experienced in a variety of natural contexts, such as land, sea, and air. These practices provide alternatives to the dominant ontology of both nature and sport as currently conceived and promoted. Adopting a critical ecopedagogical framework, we make the case for the intentional and collective development of relational equity in the production and consumption of these sporting practices. In this way, nature sports offer an opportunity to reimagine sustainable development through the promotion of a circular, rather than linear, economy, an economy based on re-creation rather than exploitation and waste.

At the intersection of nature and sport, then, there is an opportunity to ground the politics of possibility, to reimagine Western ontologies that separate mind from body and that separate culture from nature. By shining a light on this nexus, in particular, we have sought to chart a possible path of resistance to the reigning structures of domination and the exploitation of nature and peoples within a specific socioeconomic context. As with many niche markets, nature sports have the potential to damage, and even destroy, the very essence of its appeal—being at one with nature.

This may be the most compelling limitation to this utopian project and vision. Neoliberalism and global capitalism celebrate economic gain at the expense and exploitation of human and natural resources, such that the expanding supply and consumption of nature sports may simply adopt this exploitative ethos for personal gain. Self-interest and ego gratification run counter to relational equity and the development of a critical ecopedagogy. As Freire [17] argues, “manipulation, like the conquest whose objectives it serves, attempts
to anesthetize the people so they will not think . . . One of the methods of manipulation is to inoculate individuals with the bourgeois appetite for personal success” (p. 149).

The second limitation of this conceptual article is perhaps its greatest potential: idealism, undergirded by hope. This contribution begins with a stanza from Alexander Pope’s famous poem, An Essay on Man, whereby hope springs eternal. To hope is human, but hoping for a better future is a conscious choice. Hope too can be seasonal, even fickle. There are also plenty of enemies to hope, not just hopelessness: powerful forces such as ignorance and divisiveness, cultural vestiges of what Mills [115] identified as uneasiness and indifference at an earlier time.

Shosana Felman [116] argues, “Ignorance is nothing other than a desire to ignore: its nature is less cognitive than performative . . . it is not a simple lack of information but the incapacity—or the refusal—to acknowledge one’s own implication in the information” (cited in Giroux [18], pp. 94-95). Ignorance, paired with divisiveness, is particularly dangerous to a democracy, perhaps more than indifference. (In addition to the current political divisiveness exacerbated by populist leaders worldwide, there have been significant partisan and ideological cleavages between political parties, leaders and their respective supporters on environmental issues and policies. Similar to the backlash against critical race theory, environmentalism and issues such as global warming have been politicized by neoliberal pundits who seek to maintain the status quo and the privileges they and their followers enjoy. Mills [115] believed that the teaching and development of a sociological imagination, a critical quality of mind, would enable human beings to confront the challenges of contemporary society. Some sixty years later, the development of a critical ecopedagogy likewise promises a much needed quality of mind.

Finally, hope alone will not change the future. The will to act must support the vision for change. As scholars and educators, working with students and practitioners alike, we have the ability to help others think more critically, with a focus on social and environmental justice. Relative to nature sports, there is an exciting opportunity before us to recreate a healthier environment and a more respectful relationship with nature. This, in turn, can help to preserve and protect these magnificent spaces for future generations.

Tied to an environmental consciousness and conscience, systemic sustainability becomes the ultimate learning outcome of a critical ecopedagogy. This utopian project seeks to promote a local-to-global ecoliteracy that supports a genuine ethic of care for nature. This ethic simultaneously seeks the freedom of future generations to live and experience life fully. We see this as the future direction for scholarship in the field and the promotion of democratic education, learning and working together to make the world a better place. We encourage others to develop concrete examples of pedagogical interventions that support this effort. Utopian projects are acts of conscience and acts of love. They are relational and equitable. Grounded in specific contexts, such as embodied interactions with nature, we envision nature sports to be novel ways of experiencing, reflecting, and becoming whole, as one spirit, indivisible and in harmony. With eternal hope and concerted, communal action, we believe this vision can be achieved through the development of a critical ecopedagogy.

Author Contributions: D.V.R. was responsible for formulating and promoting a critical ecopedagogy—a call for social and environmental justice—at the intersection of nature sports, sport tourism, and global sustainability. R.M. was responsible for conceptualizing nature sports as a unifying concept in support of genuine sustainable development. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.
References

1. Pope, A. *An Essay on Man*; Princeton University Press: New Jersey, NY, USA, 2018.
2. World Health Organization. WHO Coronavirus (COVID) Dashboard. Available online: https://covid19.who.int/ (accessed on 19 April 2021).
3. Rose, S. The Guardian: How the Word ‘Woke’ was Weaponized by the Right. Available online: https://www.theguardian.com/society/shortcuts/2020/jan/21/how-the-word-woke-was-weaponised-by-the-right (accessed on 19 April 2021).
4. Melo, R.; van Rheenen, D.; Gammon, S. Part I: Nature sports: A unifying concept. *Ann. Leis. Res.* 2020, 23, 1–18. [CrossRef]
5. Wheaton, B. Introduction: Mapping the Lifestyle Sport-scape. In *Understanding Lifestyle Sports: Consumption, Identity and Difference*; Wheaton, B., Ed.; Routledge: London, UK, 2004; pp. 1–28.
6. Krein, K. Nature Sports. *J. Phil. Sport* 2014, 41, 193–208. [CrossRef]
7. Booth, D. Nature sports: Ontology embodied being politics. *Ann. Leis. Res.* 2020, 23, 19–33. [CrossRef]
8. Beddoe, R.; Costanza, R.; Farley, J.; Garza, E.; Kent, J.; Kubiszewski, I.; Martinez, L.; McCowen, T.; Murphy, K.; Myers, N.; et al. Overcoming systemic roadblocks to sustainability: The evolutionary redesign of worldviews, institutions, and technologies. *Proc. Natl. Acad. Sci. USA* 2009, 106, 2483–2489. [CrossRef] [PubMed]
9. Gunderson, L.H.; Holling, C.S. *The Earth Charter in Action*; Trentham Books: Staffordshire, UK, 1995.
10. Meadowcroft, J. Engaging with the politics of sustainability transitions. *Environ. Innov. Soc. Trans.* 2011, 1, 70–75. [CrossRef]
11. Meadows, D.H.; Meadows, D.L.; Randers, J. *Beyond the Limits: Global Collapse or a Sustainable Future*; Earthscan Publications: London, UK, 1992.
12. Scoones, I.; Stirling, A.; Abrol, D.; Atela, J.; Charli-Joseph, L.; Eakin, H.; Ely, A.; Olsson, P.; Pereira, L.; Priya, R.; et al. Transformations to sustainability: Combining structural, systemic and enabling approaches. *Curr. Opin. Environ. Sustain.* 2020, 42, 65–75. [CrossRef]
13. Antunes, A.; Gadotti, M. Eco-pedagogy as the appropriate pedagogy to the earth charter process. In *The Earth Charter in Action: Toward a Sustainable Development*; Blaze, P., Vilela, M., Roerink, A., Eds.; Kit Publisher: Amsterdam, The Netherlands, 2005; pp. 135–137.
14. Gadotti, M. Education for sustainability: A critical contribution to the Decade of Education for Sustainable Development. *Green Theory Prax. J. Ecope.* 2008, 4, 15–64. [CrossRef]
15. Kahn, R. From education for sustainable development to ecopedagogy: Sustaining capitalism or sustaining life. *Green Theory Prax. J. Ecope.* 2008, 4, 1–14. [CrossRef]
16. Misiasz, G.W.; Torres, C.A. Ecopedagogy: The missing chapter of Pedagogy of the Oppressed. In *The Wiley Handbook of Paulo Freire*; Torres, C.A., Ed.; John Wiley & Sons, Inc.: Hoboken, NJ, USA, 2019; pp. 463–488.
17. Freire, P. *Pedagogy of the Oppressed*, 4th ed.; Bloomsbury Academic: New York, NY, USA, 2018.
18. Giroux, H.A. The Promise of Critical Pedagogy in the Age of Globalization. Towards a Pedagogy of Democratization. In *On Critical Pedagogy*, 2nd ed.; Giroux, H.A., Ed.; Bloomsbury Academic: New York, NY, USA, 2020; pp. 79–98.
19. Macedo, D. Introduction to the 50th Anniversary. In *Pedagogy of the Oppressed*, 4th ed.; Freire, P., Ed.; Bloomsbury Academic: New York, NY, USA, 2018; pp. 1–33.
20. Freire, P. A response. In *Mentoring the Mentor a Critical Dialogue with Paulo Freire*; Fraser, W., Freire, P., Eds.; Peter Lang: New York, NY, USA, 1997; pp. 303–329.
21. Darder, A. Teaching as an act of love: Reflections on Paulo Freire and his contributions to our lives and our work. In *The Critical Pedagogical Reader*; Darder, A., Baltodano, M., Torres, R.D., Eds.; Routledge Falmer: New York, NY, USA, 2003; pp. 497–510.
22. Freire, P. *Pedagogy of Hope: Reliving Pedagogy of the Oppressed*; Bloomsbury Academic: London, UK, 2021.
23. Beckett, K.S. Paulo Freire and the Concept of Education. *Educ. Phil. Theory* 2013, 45, 49–62. [CrossRef]
24. Ellsworth, E. Why doesn’t this feel empowering? Working through the repressive myths of critical pedagogy. *Harv. Educ. Rev.* 1989, 3, 297–325.
25. Murphy, P. Defining pedagogy. In *Pedagogy and Practice: Culture and Identities*; Murphy, P., Hall, K., Soler, J., Eds.; Sage Publishing: Milton Keynes, UK, 2008; pp. 28–39.
26. Schugurensky, D. *Paulo Freire*, 1st ed.; Bloomsbury Academic: New York, NY, USA, 2014.
27. Weiler, K. Freire and a feminist pedagogy of difference. *Harv. Educ. Rev.* 1991, 61, 449–475. [CrossRef]
28. Bell, A.C.; Russell, C.L. Beyond Human, beyond Words: Anthropocentrism, Critical Pedagogy, and the Poststructuralist Turn. *Can. J. Educ.* 2000, 25, 188–203. [CrossRef]
29. Bowers, C.A. Educating for a revitalization of the cultural commons. *Can. J. Environ. Educ.* 2009, 14, 196–200.
30. Katz, E. *Nature as Subject: Human Obligation and Natural Community*; Rowman & Littlefield: Oxford, UK, 1997.
31. Ingersoll, K.A. *Waves of Knowing: A Seascape Epistemology*; Duke University Press: Duke, NC, USA, 2016.
32. Haraway, D.J. *Primate Visions: Gender, Race, and Nature in the World of Modern Science*; Routledge: New York, NY, USA, 1989.
33. Hobberman, J. *Darwin’s Athletes: How Sport has Damaged Black America and Preserved the Myth of Race*; Houghton Mifflin Harcourt: New York, NY, USA, 1997.
34. Selby, D. *Earthkind: A Teachers’ Handbook on Humane Education*; Trentham Books: Staffordshire, UK, 1995.
35. Ferrero, E.M.; Holland, J. *The Earth Charter: A Study Book of Reflection for Action*; Redwoods Institute: Redwood City, CA, USA, 2002.
73. Katz, B. Smithsonian Magazine: To Clean Up Everest, Nepal Is Banning Single-Use Plastics on the Mountain. Available online: https://www.smithsonianmag.com/smart-news/bid-clean-everest-nepal-banning-single-use-plastics-mountain-180973005/ (accessed on 4 July 2021).

74. Martin, S.A.; Assenov, I. The genesis of a new body of sport tourism literature: A systematic review of surf tourism research (1997–2011). *J. Sport Tour. 2012, 17, 257–287. [CrossRef]*

75. Swensen, K. The Washington Post: Mount Everest is Full of Garbage. A Cleanup Crew just Hauled Off 24,000 Pounds of Waste. Available online: https://www.washingtonpost.com/nation/2019/06/06/mount-everest-garbage-pounds-waste-human-bodies/ (accessed on 4 July 2021).

76. Watkins, A. The New York Time: Pandemic Wilderness Explorers Are Straining Search and Rescue. Available online: https://medium.com/the-new-york-times/pandemic-wilderness-explorers-are-straining-search-and-rescue-a8953a33a1a7 (accessed on 4 July 2021).

77. Attarian, A. An Investigation of the Ecological and Social Impacts Caused by Rock Climbers. In Proceedings of the 1991 International Conference on Outdoor Recreation, Moscow, Russia, 17–19 October 1991; Rademacher, C., Watters, R., Eds.; Idaho State University Press: Pocatello, ID, USA, 1992; pp. 7–15.

78. Lorite, J.; Serrano, F.; Lorenzo, A.; Canadas, E.M.; Ballesteros, M.; Peñas, J. Rock climbing alters plant species composition, cover, and richness in Mediterranean limestone cliffs. *PLoS ONE 2017, 12, e0182414. [CrossRef]*

79. Bogges, L.M.; Harrison, G.R.; Bishop, G. Impacts of rock climbing on cliff vegetation: A methods review and best practices. *Appl. Veg. Sci. 2021, 24, e12583. [CrossRef]*

80. Melo, R.; Gomes, R. Nature Sports and Sustainable Local Development: Practitioners and Organizations Managers’ Perspectives in Portugal. In *Sport Tourism and Local Sustainable Development*; Sobry, C., Ed.; L’Harmattan: Lille, France, 2016; pp. 75–100.

81. Brymer, E.; Gray, T. Developing an Intimate ‘Relationship’ with Nature through Extreme Sports Participation. *Leis. Lois. 2010, 34, 361–374—[CrossRef]*

82. Boley, B.B.; Green, G.T. Ecotourism and Natural Resource Conservation: The ‘Potential’ for a Sustainable Symbiotic Relationship. *J. Ecotour. 2015, 15, 36–50. [CrossRef]*

83. Weiler, B.; Davis, D. An Exploratory investigation into the roles of the nature-based tour leader. *Tour. Manag. 1993, 14, 91–98. [CrossRef]*

84. Pereira, E.; Mykleuten, R. Guides as Contributors to Sustainable Tourism? A Case Study from the Amazon. *Scand. J. Hosp. Tour. 2012, 12, 74–94. [CrossRef]*

85. Melo, R.; Leite, D. The role of nature sports guides to sustainable local development: A case study in the Coimbra region, Portugal. In *Handbook of Research on Human Capital and People Management in the Tourism Industry*; Costa, V.G., Moura, A.N., Mira, M.R., Eds.; IGI Global: Hershey, PA, USA, 2021; pp. 371–388.

86. King, K.; Church, A. Beyond Transgression: Mountain Biking, Young People and Managing Green Spaces. *Ann. Leis. Res. 2020, 23, 203–222. [CrossRef]*

87. Bailey, A.W.; Huntenberg, E. Managing the rock-climbing economy: A case from Chattanooga. *Ann. Leis. Res. 2020, 23, 165–183. [CrossRef]*

88. Mach, L.; Ponting, J.; Brown, J.; Savage, J. Riding Waves of Intra-seasonal Demand in Surf Tourism: Analysing the Nexus of Seasonality and 21st Century Surf Forecasting Technology. *Ann. Leis. Res. 2020, 23, 184–202. [CrossRef]*

89. Hutson, G.; Howard, R. Weaving place meanings into outdoor recreation sustainability: The case of the Niagara Glen. In *Landscapes of Leisure. Space, Place and Identities*; Gammon, S., Elkington, S., Eds.; Palgrave Macmillan: London, UK, 2015; pp. 176–191.

90. Sala, S.; Ciuffo, B.; Nijkamp, P. A systemic framework for sustainability assessment. *Ecol. Econ. 2015, 119, 314–325. [CrossRef]*

91. Turner, B.L.; Kasperson, R.E.; Matson, P.A.; McCarthy, J.J.; Corell, R.W.; Christensen, L.; Eckley, N.; Kassian, J.; Martello, M.; Polsky, C.; et al. A framework for vulnerability analysis in sustainability science. *Proc. Natl. Acad. Sci. USA 2003, 100, 8074–8079. [CrossRef]*

92. Villeneuve, C.; Tremblay, D.; Riffon, O.; Lanmafankpotin, G.Y.; Bouchard, S. A systemic tool and process for sustainability assessment. *Sustainability 2017, 9, 1909. [CrossRef]*

93. Brown, K. Global environmental change I: A social turn for resilience? *Progr. Hum. Geogr. 2014, 38, 107–117. [CrossRef]*

94. Adams, J.S. Toward an understanding of inequity. *J. Abnorm. Soc. Psychol. 1963, 67, 422–436. [CrossRef]*

95. Adams, J.S. Inequity in social exchange. In *Advances in Experimental Psychology*; Berkowitz, L., Ed.; Academic Press: New York, NY, USA, 1965; pp. 267–299.

96. Adams, J.S.; Freedman, S. Equity theory revisited: Toward a general theory of social interaction. *Adv. Exp. Soc. Psychol. 1976, 9, 421–436. [CrossRef]*

97. Braden, J.H. Capitalism as a Human System: The Value of Relational Equity. *Reflect 2009, 10, 1–8. [CrossRef]*

98. Kitchen, J.; Ragoonaden, K. Mindful and Relational Approaches to Social Justice, Equity, and Diversity in Teacher Education; Lexington Books: Lanham, MD, USA, 2019.

99. Gadotti, M. Adult education as a human right: The Latin American context and the ecopedagogic perspective. *Int. Rev. Educ. 2011, 57, 9–25. [CrossRef]*

100. Hill, D.; Boxley, S. Critical teacher education for environmental, economic and social justice: An ecocritical manifesto. *J. Crit. Educ. Policy Stud. 2007, 5, 28–77.*
101. Kahn, R. Towards ecopedagogy: Weaving a broad-based pedagogy of liberation for animals, nature, and the oppressed people of the earth. Crit. Pedag. Read. 2008, 2, 522–540.

102. Solnit, R. A Field Guide to Getting Lost; Canongate Books: London, UK, 2006.

103. Bowers, C.A. Critical Essays on the Enclosure of the Cultural Commons: The Conceptual Foundations of Today’s Mis-Education; The EcoJustice Press: Eugene, OR, USA, 2007.

104. Ellen MacArthur Foundation. Towards the Circular Economy. Available online: Ttps://www.ellenmacarthurfoundation.org/assets/downloads/publications/Ellen-MacArthur-Foundation-Towards-the-Circular-Economy-vol.1.pdf (accessed on 25 May 2021).

105. Geissdoerfer, M.; Savaget, P.; Bocken, N.M.; Hultink, E.J. The Circular Economy—A new sustainability paradigm? J. Clean. Prod. 2017, 143, 757–768. [CrossRef]

106. Rashid, A.; Asif, F.M.; Krajnik, P.; Nicolescu, C.M. Resource Conservative Manufacturing: An essential change in business and technology paradigm for sustainable manufacturing. J. Clean. Prod. 2013, 57, 166–177. [CrossRef]

107. Stahel, W.R. The circular economy. Nature 2016, 531, 435–438. [CrossRef]

108. Ellen MacArthur Foundation. Universal Circular Economy Policy Goals: Enabling the Transition to Scale. Available online: https://www.ellenmacarthurfoundation.org (accessed on 25 May 2021).

109. Al-Saidi, M.; Elagib, N.A.; Ribbe, L.; Schellenberg, T.; Roach, E.; Oezhan, D. Water-energy-food security nexus in the eastern Nile Basin: Assessing the potential of transboundary regional cooperation. In Water-Energy-Food Nexus: Principles and Practices; Salam, P.A., Shrestha, S., Pandey, A.K., Anal, A.K., Eds.; American Geophysical Union: Washington, DC, USA, 2017; pp. 103–116.

110. Koulouri, A.; Mouraviev, N. Policy and Governance in the Water-Energy-Food Nexus: A Relational Equity Approach; Routledge: New York, NY, USA, 2019.

111. Sawhney, M.; Zabib, J. Managing and Measuring Relational Equity in the Network Economy. J. Acad. Mark. Sci. 2002, 30, 313–332. [CrossRef]

112. Berry, W.; Meatyard, R.E. The Unforeseen Wilderness: An Essay on Kentucky’s Red River Gorge; North Point Press: San Francisco, CA, USA, 1991.

113. Johns-Putra, A. Borrowing the world: Climate change fiction and the problem of posterity. Metaphora 2017, 2, 1–16.

114. Johns-Putra, A. Climate Change and the Contemporary Novel; Cambridge University Press: Cambridge, UK, 2019.

115. Mills, C.W. The Sociological Imagination; Oxford University Press: Oxford, UK, 2000.

116. Felman, S. Jacques Lacan and the Adventure of Insight: Psychoanalysis in Contemporary Culture; Harvard University Press: Cambridge, MA, USA, 1987.