Cardinal Stefan Wyszynski University in Warsaw Institute of Philosophy Center for Ecology and Ecophilosophy

STUDIA ECOLOGIAE ETBIOETHICAE



https://creativecommons.org/licenses/by-nd/4.0







2025, 23, 3: 5-17 p-ISSN 1733-1218; e-ISSN 2719-826X DOI: http://doi.org/10.21697/seb.5851

Consciousness and the Preservation of the Environment: A Panpsychist Perspective

Świadomość i ochrona środowiska – perspektywa panpsychiczna

Festus Chukwunweike Ogonegbu

Delta State University, Abraka, Nigeria

ORCID https://orcid.org/0009-0008-9068-5766 • fogonegbu@delsu.edu.ng Received: 11 Mar, 2025; Revised: 22 Apr, 2025; Accepted: 05 May, 2025

Abstract: The environmental crisis confronting humanity demands not only technological solutions but also a profound philosophical reimagining of our relationship with nature. This paper examines how panpsychism, the philosophical position that consciousness or mentality is fundamental and ubiquitous throughout the universe, offers valuable resources for environmental ethics and conservation practices. While conventional Western ontologies maintain a sharp divide between conscious humans and non-conscious nature, panpsychism suggests a fundamental continuity throughout the natural world that transforms our ethical responsibilities toward environmental preservation. Employing analytical and phenomenological approaches, this paper argues that the recognition of consciousness in natural entities provides philosophical foundations for acknowledging their intrinsic value beyond instrumental utility to humans. Furthermore, it contends that panpsychist principles, when integrated with Indigenous knowledge systems that have long recognized agency and personhood in nature, offer holistic approaches to environmental challenges that honour both philosophical coherence and practical wisdom. The paper concludes that while environmental degradation continues at unprecedented rates, a panpsychist perspective can contribute to developing more reciprocal relationships with natural systems based on mutual recognition rather than instrumental exploitation, potentially addressing both the metaphysical foundations and practical manifestations of our environmental predicament.

Keywords: Panpsychism, Environmental ethics, consciousness, Indigenous knowledge, Environmental Preservation

Streszczenie: Kryzys środowiskowy, z którym mierzy się ludzkość, wymaga nie tylko rozwiązań technologicznych, ale także głębokiego filozoficznego przeobrażenia naszej relacji z naturą. Niniejszy artykuł analizuje, w jaki sposób panpsychizm, stanowisko filozoficzne, zgodnie z którym świadomość lub mentalność są fundamentalne i wszechobecne w całym wszechświecie, oferuje cenne zasoby dla etyki środowiskowej i praktyk ochrony środowiska. Podczas gdy konwencjonalne zachodnie ontologie wciąż promują ostry podział na świadomych ludźmi i nieświadomą naturę, panpsychizm zakłada istnienie fundamentalnej ciągłości w całym świecie przyrody, która zmienia nasze etyczne zobowiązania w zakresie ochrony środowiska. Stosując podejścia analityczne i fenomenologiczne, autor w niniejszym artykule twierdzi, że uznanie posiadania świadomości przez byty istniejące w naturze zapewnia filozoficzne podstawy do uznania ich wewnętrznej wartości wykraczającej poza ich instrumentalną przydatność dla ludzi. Ponadto autor twierdzi, że zasady panpsychizmu, gdy są zintegrowane z systemami wiedzy tradycyjnej, które od dawna uznają sprawczość i osobowość w naturze, oferują holistyczne podejścia do wyzwań środowiskowych, które uznają zarówno filozoficzną spójność, jak i praktyczną mądrość. W konkluzjach artykułu autor twierdzi, że mimo postępującej w niespotykanym dotąd tempie degradacji środowiska, przyjęcie perspektywy panpsychicznej może przyczynić się do rozwoju wzajemnych relacji z systemami naturalnymi, które

będą oparte na wzajemnym uznaniu, a nie na eksploatacji. Takie podejście mogłoby umożliwić uwzględnienie zarówno aspektów metafizycznych, jak i praktycznych przejawów naszego trudnego położenia w zakresie sytuacji środowiskowej.

Słowa kluczowe: panpsychizm, etyka środowiskowa, świadomość, wiedza tradycyjna, ochrona środowiska

Introduction

The environmental crisis confronting humanity represents not merely a technical challenge but a profound philosophical one that interrogates our fundamental understanding of consciousness, value, as well as our relationship with the natural world. As ecological devastation continues at an unprecedented pace, traditional anthropocentric frameworks that sharply distinguish between human consciousness and the rest of nature have come under increasing scrutiny (Plumwood 2002). These frameworks, deeply embedded in Western philosophical traditions, have arguably contributed to environmental degradation by positioning nature as a collection of inert resources available for human exploitation rather than as an intrinsically valuable living system (Merchant 1980). Panpsychism, the philosophical position that consciousness or mentality is fundamental and ubiquitous throughout the universe, offers an alternative ontological framework that may contribute meaningfully to environmental ethics and conservation efforts. By attributing some form of consciousness or experience to all entities in nature, panpsychism challenges the metaphysical foundations that have historically justified environmental exploitation (Mathews 1991). This perspective suggests that the gap between human and non-human consciousness may be one of degree rather than kind, potentially transforming how we conceptualise our ethical responsibilities toward the natural world.

It is important to acknowledge, however, that panpsychism remains a contested philosophical position. Many philosophers and scientists reject panpsychist theories, arguing that they lack empirical support, encounter significant conceptual problems (such

as the "combination problem" of explaining how micro-consciousnesses combine to form macro-consciousness), or violate principles of parsimony (McGinn 2006; Searle 2013). Critics often maintain that consciousness emerges only in complex biological systems with specific neural organizations, dismissing panpsychist attributions of consciousness to fundamental particles as category errors or anthropomorphic projections (Dennett 2017). This paper does not claim that panpsychism is the only viable approach to environmental ethics but rather explores its potential contributions while recognizing the ongoing philosophical debates surrounding consciousness.

The panpsychist perspective emerges from a rich philosophical tradition stretching from ancient animistic worldviews through the speculations of Western philosophers like Spinoza, Leibniz, and Whitehead to contemporary formulations in philosophy of mind (Goff, Seager, and Allen-Hermanson 2020; Nagasawa and Wager 2022). This perspective has gained renewed attention in recent years as philosophers continue to grapple with the hard problem of consciousness and seek alternatives to reductive materialism (Goff 2023). While often marginalised in mainstream Western philosophy, panpsychist themes resonate strongly with many Indigenous knowledge systems that have long recognised consciousness, agency, and personhood in natural entities and systems (Kimmerer 2021). These Indigenous perspectives, having sustained more reciprocal relationships with local ecosystems for millennia, provide valuable insights for environmental preservation that align with certain panpsychist principles. The growing ecological crisis demands not only technological solutions but a fundamental

reimagining of humanity's relationship with nature. A panpsychist framework, by extending consciousness beyond the human realm, may help facilitate this transformation by providing philosophical foundations for recognising the intrinsic value of nonhuman entities and establishing more reciprocal relationships with the natural world.

The significance of this inquiry extends beyond academic philosophy. If consciousness is indeed more widespread than conventionally assumed, this has profound implications for environmental policy, conservation practices, and the ethical frameworks that guide human interactions with nature. As Schaefer (2022, 415) notes, "reconceptualizing our understanding of consciousness in nature directly influences how we formulate policy responses to environmental challenges." Through a panpsychist lens, environmental degradation becomes not merely the manipulation of inert resources but potentially the destruction of conscious entities deserving of moral consideration. This paper explores these intersections between panpsychism and environmental preservation through three main sections. First, it examines the metaphysical foundations of panpsychism and its implications for reconceptualising the humannature relationship. Second, it analyses how a panpsychist perspective might inform specific approaches to environmental ethics and conservation practices. Finally, it considers how panpsychist principles might be integrated with Indigenous knowledge systems to develop more holistic approaches to environmental preservation that honour both scientific understanding and traditional wisdom. Throughout, the paper maintains that panpsychism offers valuable philosophical resources for addressing our environmental challenges, even as it raises complex questions about consciousness, value, and humanity's place within nature.

1. Metaphysical Foundations of Panpsychism and the Human-Nature Relationship

Panpsychism, in its contemporary formulation, challenges the dominant scientific-materialist paradigm that treats consciousness as an anomalous emergence within an otherwise non-conscious universe. Instead, it posits that consciousness, or mentality represents a fundamental feature of reality that is present, in some form, throughout nature (Goff 2023; Kastrup 2021). This seemingly counterintuitive position has recently gained renewed scholarly attention as philosophers of mind grapple with the "hard problem" of consciousness, the challenge of explaining how subjective experience could arise from purely physical processes (Chalmers 1996). Panpsychism offers a potential solution by suggesting that consciousness does not emerge from wholly non-conscious matter but is intrinsic to the fundamental constituents of reality. Several variants of panpsychism exist within the contemporary philosophical landscape. Goff, Seager, and Allen-Hermanson (2020) delineate three primary forms: constitutive panpsychism, which holds that macro-consciousness is constituted by micro-consciousness at the fundamental level; non-constitutive panpsychism, which maintains that macro-consciousness is not merely the sum of micro-consciousness; and cosmopsychism, which proposes that the universe itself possesses a form of consciousness from which individual consciousnesses derive. Despite these variations, all panpsychist positions share the core commitment that consciousness is not confined to humans or even to complex biological organisms but extends in some form throughout the natural world. This ontological stance carries profound implications for reconceptualising the human-nature relationship.

It is important to acknowledge, however, that panpsychism remains a contested philosophical position. Many philosophers and scientists reject panpsychist theories, arguing that they lack empirical support, encounter significant conceptual problems (such as the "combination problem" of explaining how micro-consciousnesses combine to form macro-consciousness), or violate principles of parsimony (McGinn 2006; Searle 2013). Critics often maintain that consciousness emerges only in complex biological systems with specific neural organizations, dismissing panpsychist attributions of consciousness to fundamental particles as category errors or anthropomorphic projections (Dennett 2017). This paper does not claim that panpsychism is the only viable approach to environmental ethics but rather explores its potential contributions while recognizing the ongoing philosophical debates surrounding consciousness.

Traditional Western philosophical frameworks have largely maintained a sharp ontological divide between conscious humans and a non-conscious natural world, a division that some environmental philosophers argue has facilitated ecological destruction by positioning nature as mere resource rather than as intrinsically valuable entity (Plumwood 2002). As Mathews (1991) observes, the view that matter is devoid of any psychic dimension has authorized our treatment of natural systems as devoid of inherent value or meaning. By contrast, panpsychism suggests a fundamental continuity between human consciousness and the rest of nature, potentially challenging the metaphysical foundations of environmental exploitation. Contemporary panpsychist theories have evolved beyond earlier formulations, with some suggesting that consciousness may be intrinsic to the fundamental structure of reality itself (Goff 2023). Kastrup (2021, 4) argues that physicalist views that deny consciousness as fundamental may function as "neurotic ego-defence mechanisms" that avoid confronting the implications of consciousness permeating the natural world. These modern perspectives reinforce the potential significance of panpsychism for reshaping our

understanding of humanity's relationship with nature.

Within a panpsychist framework, the natural world transforms from a collection of inert objects to a community of conscious or proto-conscious subjects. This reframing aligns with what environmental philosopher, Arne Naess, termed as "deep ecology," an approach that recognises the inherent worth of all living beings regardless of their instrumental utility to human needs (Naess 1973). While not all panpsychists are deep ecologists, and not all deep ecologists are panpsychists, there exists a natural affinity between these perspectives that challenges anthropocentric value systems and recognises nature's intrinsic worth. Recognition of consciousness throughout nature also suggests a different understanding of humanity's place within ecological systems. Rather than positioning humans as fundamentally separate from or superior to nature, panpsychism situates human consciousness within a broader continuum of natural mentality. As Lemmens and Hui (2017, 150) note, "humans are not ontologically unique in possessing mind; rather, they represent a particularly complex manifestation of qualities that are present, to varying degrees, throughout the natural world." This perspective aligns with growing ecological understanding that positions humans as embedded participants within natural systems rather than detached observers or controllers.

Interestingly, contemporary panpsychist perspectives often resonate with traditional animistic worldviews that have long recognised consciousness, personhood, and agency in natural entities and processes. While philosophical panpsychism and traditional animism differ in important ways, both challenge the modern Western tendency to restrict consciousness to the human realm, suggesting instead that mentality pervades the natural world. This convergence with Indigenous perspectives is particularly relevant for environmental preservation. Many Indigenous communities

have maintained sustainable relationships with local ecosystems for millennia, guided by worldviews that recognise reciprocal responsibilities between humans and other conscious entities in nature (Kimmerer 2021). The perspective found in discussion of traditional African ontological holism similarly emphasizes the interconnectedness of beings within a comprehensive reality. These traditional approaches, though developed outside academic philosophical contexts, often incorporate practical wisdom about sustainable human-nature relationships that align with panpsychist principles.

The philosophical challenge that panpsychism presents to conventional Western ontology extends beyond academic discourse to practical environmental questions. If rivers, forests, mountains, and even individual plants possess some form of consciousness or experience, this raises profound questions about how humans should ethically relate to these entities. This reconsideration potentially transforms environmental preservation from the conservation of resources to the protection of conscious communities with their own inherent value and interests. Critics, however, raise important questions about panpsychism's practical applications. Kirkpatrick (2021, 72) argues that "even if panpsychism is metaphysically true, the forms of consciousness present in simpler natural entities might be so rudimentary as to lack moral significance." Others suggest that panpsychism risks anthropomorphizing nature by projecting human-like consciousness onto non-human entities. These critiques highlight the need for further discussion about the relationship between consciousness and moral standing which is a crucial consideration for developing panpsychist approaches to environmental ethics. Despite these challenges, the metaphysical framework offered by panpsychism provides valuable philosophical resources for reimagining the humannature relationship. By challenging the ontological divide between conscious humans and non-conscious nature, panpsychism

suggests a fundamental continuity throughout the natural world that potentially transforms how we conceptualize environmental value and responsibility. This reconceptualization forms the foundation for more specific applications of panpsychist principles to environmental ethics and conservation practices.

2. Panpsychist Approaches to Environmental Ethics and Conservation

The metaphysical position that consciousness extends throughout nature carries significant implications for how we approach environmental ethics and conservation practices. If non-human entities possess some form of experience or mentality, this suggests that they may deserve direct moral consideration rather than merely instrumental protection based on human interests. Several distinctive ethical approaches emerge from this panpsychist foundation, each offering different perspectives on environmental preservation and human responsibilities toward nature. Perhaps the most straightforward ethical implication of panpsychism is an expanded conception of moral consideration. Traditional anthropocentric ethics limits direct moral obligations to human beings, treating environmental protection as instrumental to human welfare. Even many biocentric approaches extend moral consideration only to living organisms, excluding rivers, mountains, and ecosystems as a whole. Panpsychism, by contrast, suggests that consciousness and potentially moral standing may extend far beyond conventional boundaries, including entities traditionally considered inanimate (Palmer 2022). This expanded moral community aligns with Leopold's (1949) land ethic, which famously proposed extending ethical consideration to "soils, waters, plants, and animals, or collectively: the land."

It should be acknowledged that many environmental ethicists and philosophers have developed robust frameworks for environmental protection without recourse to panpsychism. Value-pluralist approaches (Norton 2005) recognize multiple types of values in nature without necessarily attributing consciousness to non-human entities. Virtue ethics approaches to environmental ethics (Sandler 2007) focus on the development of ecological virtues rather than metaphysical claims about consciousness. Pragmatic environmental philosophers such as Bryan Norton (2005) argue that attributing consciousness to natural entities may be unnecessary for developing effective conservation ethics, suggesting instead that concepts such as ecosystem health and integrity can provide sufficient normative foundations. These alternative frameworks remind us that while panpsychism offers one approach to environmental ethics, it is not the only path toward developing more sustainable human-nature relationships.

Palmer (2022) offers a nuanced examination of how panpsychist perspectives inform environmental ethics, suggesting that the recognition of mentality throughout nature need not entail equal moral consideration for all entities but does require a fundamental respect for nature's inherent subjectivity. This aligns with what Vogel (2022) terms as "ecological thinking" in the Anthropocene approaches that recognize the inherent value of natural systems while acknowledging humanity's embedded place within them. This broader scope of moral consideration manifests in practical environmental initiatives such as the legal recognition of personhood for natural entities. In recent years, several rivers including the Whanganui in New Zealand have received legal rights and protections previously reserved for human persons. O'Donnell and Talbot-Jones (2022) document how rivers in New Zealand, India, and Colombia have received legal personhood status, reflecting evolving understandings of natural entities as possessing inherent rights. Kauffman and Martin (2021) analyse the political and legal frameworks supporting these developments, noting their foundation in both Indigenous worldviews and

emerging ecological jurisprudence. While not explicitly grounded in philosophical panpsychism, these legal developments reflect a growing willingness to recognise agency and inherent value in natural systems in ways that align with panpsychist principles. They represent practical applications of what Stone (1972) famously advocated in his essay "Should Trees Have Standing?" the extension of legal rights to natural entities. Beyond this expanded scope of moral consideration, panpsychism suggests more specific approaches to environmental ethics. Mathews (1991) develops what she terms as "ecological panpsychism," which views the universe as a self-realizing system in which each entity seeks its own form of selfrealization or "conatus." Environmental ethics, in this framework, involves respecting the self-realizing tendencies of all natural entities, allowing them to follow their own developmental trajectories with minimal interference. This approach emphasizes the inherent teleology within natural systems, their tendency to develop according to their own internal principles rather than external impositions.

A complementary approach emerges in Plumwood's (2002) critique of dualistic thinking, which emphasizes dialogical relationships with nature rather than instrumental manipulation. Plumwood challenges the "hyper-separation" between humans and nature, suggesting that genuine ecological relationships require recognising agency, intentionality, and communicative capacity in natural systems. This perspective aligns with panpsychism's attribution of mentality throughout nature, suggesting that environmental preservation should involve attentive "listening" to natural systems rather than merely managing them as resources. These philosophical approaches translate into specific conservation practices that differ markedly from conventional management paradigms. Conventional conservation often employs a resource management framework that positions humans as external managers of natural systems, applying technical expertise to maximize defined outcomes like biodiversity or ecosystem services. A panpsychist approach, by contrast, might emphasize what Kimmerer (2021, 337) terms "reciprocity" the development of mutual relationships with natural systems based on respect for their inherent agency and consciousness.

This reciprocal approach manifests in practices like "adaptive co-management," which integrates scientific knowledge with local and Indigenous knowledge systems, recognizing multiple ways of knowing and relating to natural systems. It also appears in "rewilding" initiatives that deliberately reduce human control to allow natural systems to follow their own developmental trajectories. Rewilding principles have gained significant traction in conservation biology, with Pettorelli et al. (2019) documenting both the ecological and philosophical dimensions of various rewilding approaches across different contexts. These approaches shift from positioning humans as managers of nature to participants within natural communities, aligning with panpsychism's recognition of agency and consciousness throughout the natural world. The panpsychist perspective also offers distinctive responses to specific environmental challenges such as climate change and biodiversity loss. Rather than treating these primarily as technical problems requiring human management solutions, a panpsychist approach might emphasize the need to restore reciprocal relationships with natural systems based on mutual recognition and respect. As Abram (1996) suggests, genuine reciprocity requires meeting the natural world halfway, acknowledging it as an active, animate participant in our shared existence. This perspective transforms climate action from a technical problem of carbon management to a relational challenge of restoring balanced relationships with Earth systems.

Critics argue, however, that panpsychist approaches risk impracticality in addressing urgent environmental challenges. Morrow (2020, 113) suggests that "while panpsychism

might provide philosophical grounding for environmental care, it offers limited practical guidance for resolving conflicts between different natural entities or addressing immediate environmental threats." Others argue that panpsychist frameworks might actually impede effective conservation by restricting necessary interventions in natural systems if those interventions are seen as interfering with natural agency. In response, proponents suggest that panpsychism need not imply a hands-off approach to conservation but rather a more attentive, respectful engagement with natural systems. As Mathews (2003) argues, recognizing consciousness in nature does not mean abandoning management but transforming it from control to dialogue. This perspective suggests that environmental preservation can incorporate active human participation while still respecting the agency and inherent value of natural systems which is what Callicott (1989) terms as "enlightened management" as opposed to either technological domination or complete non-intervention.

Perhaps most importantly, a panpsychist approach to environmental ethics emphasizes the experiential dimension of natural entities. If non-human entities possess consciousness or experience, environmental degradation becomes not merely the destruction of resources but the infliction of suffering or harm on conscious subjects. This perspective transforms environmental preservation from an abstract concern with biodiversity or ecosystem services to a more immediate ethical concern with preventing harm to conscious beings. Integration of panpsychist principles into environmental ethics and conservation thus suggests a fundamental shift from resource management to relationship cultivation. By recognizing consciousness, agency, and inherent value throughout the natural world, panpsychism provides philosophical foundations for approaches that respect the intrinsic worth of natural entities and systems while developing more reciprocal human-nature relationships. This relational

approach aligns particularly well with many Indigenous knowledge systems, which have long recognized consciousness and personhood throughout nature while developing sustainable interactions with local ecosystems.

3. Integration of Panpsychism with Indigenous Knowledge Systems for Environmental Preservation

The philosophical position that consciousness pervades nature finds striking parallels in many Indigenous knowledge systems, which have traditionally recognized agency, personhood, and communicative capacity in natural entities and processes. While philosophical panpsychism and Indigenous animism differ in important ways, their convergence suggests valuable possibilities for integrating academic philosophy with traditional ecological knowledge to develop more holistic approaches to environmental preservation. This integration represents not an appropriation of Indigenous knowledge but a respectful dialogue that acknowledges the complementary insights of different knowledge traditions.

Indigenous knowledge systems typically embed recognition of consciousness in nature within comprehensive frameworks for sustainable human-nature relationships. As Kimmerer (2021, 332), a botanist and member of the Citizen Potawatomi Nation, observes, "in Indigenous ways of knowing, we understand a thing only when we understand it with all aspects of our being: mind, body, emotion, and spirit." This holistic approach contrasts with conventional Western science's emphasis on detached observation, instead positioning humans as active participants in reciprocal relationships with conscious natural entities.

The concept of reciprocity holds central importance in many Indigenous traditions and offers a substantive ethical framework that complements panpsychist recognition of consciousness throughout nature. Reciprocity entails mutually beneficial relationships characterized by balanced

giving and receiving between humans and non-human entities. In Potawatomi tradition, as Kimmerer (2021, 335-340) explains, the "honourable harvest" represents a carefully developed ethical system governing human relationships with plants. This includes specific principles: asking permission before taking, taking only what is needed, minimizing harm, using everything that is taken, sharing what is gathered, and giving thanks for what has been received. These principles embody a sophisticated ethical system predicated on recognition of plants as conscious beings with whom humans maintain ongoing reciprocal relationships. Rather than abstract philosophical assertions, these principles manifest in concrete practices that guide sustainable interaction with natural systems. Similarly, the Māori concept of kaitiakitanga (guardianship) exemplifies an integrated approach to environmental stewardship that recognizes consciousness throughout nature. As Harmsworth and Awatere (2013, 274-275) explain, kaitiakitanga involves "the obligation to nurture and care for the mauri (life force) of a place or resource," positioning humans not as owners of nature but as relatives with responsibilities toward other conscious entities. This concept incorporates sophisticated understanding of ecological relationships while recognizing natural entities as possessing consciousness, agency, and inherent value. Such recognition underpins New Zealand's groundbreaking legal recognition of the Whanganui River as a legal person with its own rights and interests, representing a practical application that aligns with panpsychist principles while emerging from Indigenous understandings of river consciousness.

The African philosophical concept of *ubuntu* offers another substantive framework that resonates with panpsychist principles while offering practical guidance for human-nature relationships. According to Chuwa (2014, 38-42), *ubuntu* emphasizes that "a person is a person through other persons" – a principle of interconnection and

mutual recognition that extends beyond human communities to include relationships with the natural world and spiritual realm. This perspective recognizes consciousness and personhood as extending throughout the natural world, with specific ethical imperatives for maintaining harmonious relationships between humans and nature. As Murove (2009, 316) explains, ubuntu ethics involves "fostering harmonious relationships with nature based on recognition of shared vitality and interdependence," suggesting practical approaches to environmental preservation grounded in recognition of consciousness throughout natural systems. These Indigenous frameworks typically situate consciousness within relational networks rather than treating it as an isolated property of individuals. This relational epistemology offers valuable corrections to Western tendencies toward abstraction and detachment in environmental thinking, suggesting approaches to knowledge that integrate intellectual understanding with embodied relationships. As Simpson (2021, 7-9) articulates, land itself functions as pedagogy within Nishnaabeg Indigenous traditions, embedding knowledge transmission within direct, experiential relationships with conscious natural entities. This pedagogical approach involves "learning through observation, experience, and participation within natural systems," developing embodied understanding of natural consciousness rather than abstract theoretical knowledge. This perspective challenges Western educational approaches that often abstract environmental knowledge from direct experience with natural systems.

The practical wisdom embedded in these Indigenous approaches has produced remarkable environmental outcomes. Research increasingly demonstrates that Indigenous-managed lands show higher biodiversity and greater ecological health than comparable protected areas under conventional management (Garnett et al. 2018). This success stems not from technical superiority but from different relationships

with natural systems, relationships that recognize agency, consciousness, and personhood throughout nature while developing reciprocal practices based on this recognition. A promising integration of panpsychist principles with Indigenous knowledge emerges in approaches that emphasize not only environmental protection but restoration of reciprocal relationships between humans and other conscious entities. Integration of philosophical panpsychism with these Indigenous frameworks provides theoretical foundations for recognizing consciousness throughout nature while offering practical guidance for developing reciprocal relationships with natural systems. This integration manifests in specific conservation approaches that explicitly bring together Indigenous knowledge and Western scientific understanding in complementary relationships.

The Two-Eyed Seeing approach (*Etuapt*mumk in Mi'kmaq), developed by Mi'kmaq Elder Albert Marshall, exemplifies this integration as it "refers to learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of Western knowledges and ways of knowing, and to using both these eyes together, for the benefit of all" (Bartlett et al. 2012, 335). This approach explicitly acknowledges multiple ways of understanding natural consciousness and agency, bringing together Indigenous recognition of personhood in natural entities with scientific understanding of ecological processes. Reid et al. (2021, 1295-1297) document how Two-Eyed Seeing has informed collaborative conservation initiatives in Canada, creating governance models that respect both Indigenous understanding of natural consciousness and scientific ecological knowledge. Similarly, co-management approaches in Australia's Indigenous Protected Areas integrate Aboriginal conceptions of natural consciousness with conservation science, creating frameworks that honour traditional understanding of Country as living and conscious while

incorporating scientific ecological knowledge (Muir and Rose 2010).

Integration of panpsychism with Indigenous knowledge also suggests possibilities for addressing the spiritual dimensions of environmental preservation. Many Indigenous traditions recognize not only consciousness but spiritual significance in natural entities and systems, treating mountains, rivers, and forests as sacred beings deserving of reverence rather than merely conscious entities deserving of moral consideration (Kimmerer 2021). While philosophical panpsychism typically avoids explicit spiritual claims, its recognition of consciousness throughout nature potentially creates space for reintegrating spiritual dimensions into environmental thinking; dimensions often excluded from conventional scientific frameworks but central to many traditional approaches to nature.

Critics argue, however, that attempts to integrate panpsychism with Indigenous knowledge risk inappropriate appropriation or oversimplification of complex traditional worldviews. Todd (2016, 18) cautions against "metaphysical extractivism" that appropriates Indigenous concepts while divorcing them from their cultural and historical contexts. This critique highlights the importance of approaching integration with cultural humility and recognition of the distinct historical and cultural contexts from which different knowledge systems emerge. In response, proponents suggest that respectful integration need not involve appropriation but can represent a genuine dialogue between different knowledge traditions, each offering valuable insights while maintaining their distinctive perspectives. Whyte (2018) outlines principles for respectful cross-cultural environmental cooperation that honour different ontological frameworks without reducing one to terms of the other.

Perhaps the most valuable aspect of integrating panpsychism with Indigenous knowledge systems lies in the practical wisdom the latter offer for living reciprocally with natural systems recognized as conscious. While philosophical panpsychism provides theoretical foundations for attributing consciousness throughout nature, many Indigenous traditions have developed sophisticated practices for maintaining sustainable relationships with conscious natural entities practices developed over millennia of careful observation and relationship. As Kimmerer (2021, 333) notes, traditional ecological knowledge is rooted in relationships, not just understanding. These relational practices offer valuable guidance for developing more reciprocal approaches to environmental preservation based on recognition of consciousness throughout nature.

Integration of panpsychism with Indigenous knowledge systems thus suggests possibilities for environmental preservation that honour both philosophical coherence and practical wisdom. By bringing together panpsychism\'s theoretical recognition of consciousness throughout nature with Indigenous traditions\' practical approaches to reciprocal relationship, this integration offers resources for developing more holistic environmental approaches that address both the metaphysical foundations and practical manifestations of human-nature relationships. This integration represents not a final solution but an ongoing dialogue between different knowledge traditions, each contributing valuable insights to our understanding of consciousness in nature and its implications for environmental preservation.

Conclusion

Exploration of consciousness and environmental preservation through a panpsychist perspective reveals profound interconnections between our metaphysical understanding of nature and our practical approaches to environmental challenges. By attributing consciousness or mentality throughout the natural world, panpsychism challenges conventional ontological frameworks that sharply separate conscious humans from a non-conscious environment, potentially transforming how we conceptualize our

ethical responsibilities toward natural systems. This reconceptualization offers valuable philosophical resources for addressing contemporary environmental challenges while developing more reciprocal relationships with the natural world. The metaphysical foundations of panpsychism suggest a fundamental continuity between human consciousness and the rest of nature, positioning humans not as ontologically unique beings but as particularly complex manifestations of qualities present throughout the natural world. This perspective challenges the anthropocentric frameworks that have historically justified environmental exploitation, suggesting instead that consciousness, value, and agency extend far beyond the human realm. By recognizing this continuity, panpsychism provides philosophical foundations for approaching natural entities not merely as resources to be managed but as conscious subjects deserving of moral consideration.

It is important to emphasize, however, that panpsychism remains one theory among many competing philosophical approaches to consciousness and environmental ethics. Many philosophers and scientists maintain that consciousness emerges only in complex biological systems with specific neural organizations, rejecting panpsychist attributions of mentality to simpler entities as conceptually confused or empirically unsupported (Dennett 2017; Searle 2013). Furthermore, environmental ethicists have developed numerous frameworks for valuing and protecting nature without recourse to panpsychist metaphysics, including biocentric, ecocentric, and pragmatic approaches (Norton 2005; Sandler 2007). This paper has explored the potential contributions of panpsychism to environmental ethics while acknowledging these ongoing philosophical debates and alternative approaches.

This metaphysical position translates into distinctive approaches to environmental ethics and conservation practices. By expanding the scope of moral consideration beyond conventional boundaries, panpsychism suggests ethical frameworks that recognize the inherent value of natural entities and systems independent of their instrumental utility to humans. These frameworks manifest in practical approaches like legal recognition of personhood for natural entities, adaptive co-management that incorporates multiple perspectives, and rewilding initiatives that reduce human control to allow natural systems to follow their own developmental trajectories. These approaches shift from positioning humans as managers of nature to participants within natural communities, emphasizing reciprocal relationships rather than instrumental control. Integration of panpsychism with Indigenous knowledge systems offers particularly promising avenues for environmental preservation. Many Indigenous traditions have long recognized consciousness and personhood throughout nature while developing sophisticated practices for maintaining reciprocal relationships with natural systems. The convergence between philosophical panpsychism and these Indigenous approaches suggests possibilities for bringing together theoretical recognition of consciousness in nature with practical wisdom about sustainable human-nature relationships. This integration represents not an appropriation of Indigenous knowledge but a respectful dialogue between different knowledge traditions, each offering valuable insights for addressing shared environmental challenges. Several important implications emerge from this exploration. First, recognition of consciousness throughout nature suggests the need for greater humility in human interactions with natural systems, acknowledging that our understanding of other forms of consciousness remains limited and partial. Second, it highlights the importance of relational approaches to environmental preservation that emphasize dialogue and reciprocity rather than management and control. Finally, it suggests that addressing environmental challenges requires not merely technical solutions but fundamental

reconsideration of how we conceptualize nature and humanity's place within it.

In conclusion, a panpsychist perspective on consciousness and environmental preservation suggests that the way we understand consciousness profoundly shapes the way we approach our relationship with the natural world. By challenging conventional ontological frameworks that restrict consciousness to the human realm, panpsychism offers philosophical foundations for recognizing consciousness, value, and agency throughout nature. This recognition, when integrated with practical wisdom from Indigenous and other knowledge traditions, provides valuable resources for developing more reciprocal approaches to environmental preservation that honour the inherent value and consciousness of the natural world. In a time of unprecedented environmental challenges, this reintegration of consciousness into our understanding of nature may prove crucial for developing more sustainable and respectful relationships with the Earth systems that sustain all life.

Institutional Review Board Statement: Not applicable

Funding: This research received no external funding. **Conflicts of Interest:** The author declares no conflict of interest.

References

- Abram, David. 1996. The spell of the sensuous: Perception and language in a more-than-human world. New York: Vintage Books.
- Bartlett, Cheryl, Murdena Marshall, and Albert Marshall. 2012. "Two-Eyed Seeing and Other Lessons Learned Within a Co-Learning Journey of Bringing Together Indigenous and Mainstream Knowledges and Ways of Knowing." Journal of Environmental Studies and Sciences 2(4): 331-340.
- Callicott, J. Baird. 1989. *In defence of the land ethic: Essays in environmental philosophy.* Albany: State
 University of New York Press.
- Chalmers, David J. 1996. *The conscious mind: In search of a fundamental theory.* Oxford: Oxford University Press.

- Chuwa, Leonard. 2014. African Indigenous Ethics in Global Bioethics: Interpreting Ubuntu. New York: Springer.
- Dennett, Daniel C. 2017. From Bacteria to Bach and Back: The Evolution of Mind. New York: W.W. Norton & Company.
- Garnett, Stephen T., Neil D. Burgess, John E. Fa,
 Álvaro Fernández-Llamazares, Zsolt Molnár,
 Cathy J. Robinson, James E.M. Watson, et al. 2018.
 "A Spatial Overview of the Global Importance of Indigenous Lands for Conservation." *Nature Sustainability* 1 (7): 369–74. https://doi.org/10.1038/s41893-018-0100-6.
- Goff, Philip. 2023. "Why Panpsychism Matters." *Philosophy Now* 154 (February): 18-21.
- Goff, Philip, William Seager, and Sean Allen-Hermanson. 2020. "Panpsychism." *Stanford Encyclopedia of Philosophy*. Last modified August 25, 2020. https://plato.stanford.edu/entries/panpsychism.
- Kastrup, Bernardo. 2021. "The Physicalist Worldview as Neurotic Ego-Defense Mechanism." *SAGE Open* 11, no. 2 (April): 1-10.
- Kauffman, Craig M., and Pamela L. Martin. 2021. "Politics and Law of Lake and River Rights." *Annual Review of Law and Social Science* 17: 235-254.
- Kimmerer, Robin Wall. 2021. "The Honorable Harvest: Indigenous Knowledge for Biodiversity Conservation." *Botany* 99, no. 6: 331-343.
- Kirkpatrick, Kate. 2021. "Degrees of Consciousness and the Case for Moral Consideration." Environmental Ethics 43 (1): 65-78.
- Lemmens, Pieter, and Yuk Hui. 2017. "Reframing the Technosphere: Peter Sloterdijk and Bernard Stiegler's Anthropotechnical Diagnoses of the Anthropocene." Krisis: Journal for Contemporary Philosophy 2: 143-158.
- Leopold, Aldo. 1949. *A Sand County almanac: And sketches here and there.* Oxford: Oxford University Press.
- Mathews, Freya. 1991. *The ecological self.* London: Routledge.
- Mathews, Freya. 2003. For love of matter: A contemporary panpsychism. Albany: State University of New York Press.
- Merchant, Carolyn. 1980. The death of nature: Women, ecology, and the scientific revolution. New York: Harper & Row.

- Morrow, Karen. 2020. "Ethical Frameworks for Morethan-Human Environmental Governance." *Journal* of Environmental Policy & Planning 22 (1): 107-121.
- Naess, Arne. 1973. "The shallow and the deep, long-range ecology movement. A summary." *Inquiry* 16 (1-4): 95-100. http://dx.doi.org/10.1080/00201747308601682.
- Nagasawa, Yujin, and Khai Wager, eds. 2022. Panpsychism and Pantheism: New Perspectives on Consciousness and Value. London: Routledge.
- O'Donnell, Erin, and Julia Talbot-Jones. 2018. "Creating Legal Rights for Rivers: Lessons from Australia, New Zealand, and India." *Ecology and Society* 23(1): 7. https://doi.org/10.5751/ES-09854-230107.
- Pettorelli, Nathalie, Jos Barlow, Philip A. Stephens, Sarah M. Durant, Ben Connor, Henrike Schulte to Bühne, Christopher J. Sandom, et al. 2019. "Making Rewilding Fit for Policy." *Journal of Applied Ecology* 55 (3): 1114-1125. https://doi.org/10.1111/1365-2664.13082.
- Plumwood, Val. 2002. Environmental culture: The ecological crisis of reason. London: Routledge.
- Simpson, Leanne Betasamosake. 2021. "Land as Pedagogy: Nishnaabeg Intelligence and Rebellious Transformation." *Decolonization: Indigeneity, Education & Society* 3, no. 3: 1-25.
- Stone, Christopher D. 1972. "Should trees have standing?—Toward legal rights for natural objects." Southern California Law Review 45: 450-501.

- Todd, Zoe. 2016. "An Indigenous Feminist's Take on the Ontological Turn: 'Ontology' Is Just Another Word for Colonialism." *Journal of Historical Sociology* 29 (1): 4-22. https://doi.org/10.1111/ johs.12124.
- Tuhiwai Smith, Linda, Te Kahautu Maxwell, Haupai Puke, and Pou Temara. 2019. "Indigenous Knowledge, Methodology and Mayhem: What is the Role of Methodology in Producing Indigenous Insights? A Discussion from Mātauranga Māori." *Knowledge Cultures* 4 (3): 131-156.
- Vogel, Birte. 2022. "The Economic Local Turn in Peace and Conflict Studies: Economic Peacebuilding Interventions and the Everyday." *New Political Economy* 27(6):989-1001. https://doi.org/10.1080 /13563467.2022.2045925
- Whyte, Kyle. 2018. "Critical Investigations of Resilience: A Brief Introduction to Indigenous Environmental Studies & Sciences." *Daedalus* 147, no. 2: 136-147. https://doi.org/10.1162/DAED_a_00497.
- Whyte, Kyle. 2021. "Against Crisis Epistemology." In Routledge Handbook of Critical Indigenous Studies, edited by Brendan Hokowhitu, Aileen Moreton-Robinson, Linda Tuhiwai-Smith, Chris Andersen, and Steve Larkin, 52-64. New York: Routledge.
- Yusoff, Kathryn. 2018. "Politics of the Anthropocene: Formation of the Commons as a Geologic Process." Antipode 50, no. 1: 255-276. https://doi.org/10.1111/anti.12334.