

Weaving the Sacred Back In: Revitalizing biocultural diversity through Indigenous-led conservation sovereignty in New Ireland, Papua New Guinea

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Abstract

Conservation practices in the twenty-first century are facing a critical reckoning as global biodiversity loss, climate disruption and social inequalities expose the limitations of exclusionary, top-down approaches. Nowhere is this more evident than in Indigenous territories, where external conservation priorities often clash with local lifeways. In this article we describe the work of Ailan Awareness (AA), an Indigenous non-governmental organization (NGO) in New Ireland, Papua New Guinea; it challenges conventional conservation models by centering on Indigenous sovereignty, biocultural diversity, and spiritual obligations. Through initiatives such as the revitalization of *Vala* (a practice rooted in ecological and spiritual obligation) and the *Ranguva Solwara Skul* (Saltwater School, a school that teaches at the nexus of Indigenous and Western science), AA fosters community-driven conservation grounded in relational sovereignty. Drawing on our long-term collaboration, this research argues that AA's model represents a radical reimagining of conservation as cultural resurgence. By prioritizing local governance, cultural continuity, and the reactivation of ancestral responsibilities, AA's initiatives counteract the colonial legacies embedded in mainstream conservation practices. Our work contributes to ongoing debates in conservation biology, political ecology, and Indigenous studies, advocating for practices that honor cultural sovereignty and foster sustainable, community-driven environmental care.

Keywords: Indigenous sovereignty, biocultural diversity, decolonial conservation, community-driven stewardship, relational sovereignty, cultural resurgence, Papua New Guinea

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Résumé

Les pratiques de conservation au XXI^e siècle sont remises en question, car la perte de biodiversité mondiale, les perturbations climatiques et les inégalités sociales révèlent les limites des approches exclusives et descendantes. Cela est particulièrement évident dans les territoires autochtones, où les priorités externes en matière de conservation entrent souvent en conflit avec les modes de vie locaux. Dans cet article, nous décrivons le travail d'Ailan Awareness (AA), une organisation non gouvernementale (ONG) autochtone de Nouvelle-Irlande, en Papouasie-Nouvelle-Guinée. Elle remet en question les modèles de conservation conventionnels en mettant l'accent sur la souveraineté autochtone, la diversité bioculturelle et les obligations spirituelles. Grâce à des initiatives telles que la revitalisation du Vala (une pratique ancrée dans l'obligation écologique et spirituelle) et la Ranguva Solwara Skul (École de l'eau salée, une école qui enseigne à la croisée des sciences autochtones et occidentales), AA encourage une conservation communautaire fondée sur la souveraineté relationnelle. En nous appuyant sur notre collaboration de longue date, nous soutenons que le modèle de l'AA est une réinvention radicale de la conservation en tant que forme de renaissance culturelle. En donnant la priorité à la gouvernance locale, à la continuité culturelle et à la réactivation des responsabilités ancestrales, les initiatives de l'AA contrecarrent l'héritage colonial ancré dans la conservation traditionnelle. Notre travail contribue aux débats actuels sur la biologie de la conservation, l'écologie politique et les études autochtones, en plaident pour des pratiques qui respectent la souveraineté culturelle et favorisent une gestion durable de l'environnement axée sur la communauté.

Mots clés: souveraineté autochtone, diversité bioculturelle, conservation décoloniale, gestion communautaire, souveraineté relationnelle, renaissance culturelle, Papouasie-Nouvelle-Guinée

Resumen

Las prácticas de conservación en el siglo XXI se enfrentan a nuevos retos, ya que la pérdida de biodiversidad a nivel mundial, las alteraciones climáticas y las desigualdades sociales ponen de manifiesto las limitaciones de los enfoques excluyentes y verticalistas. Esto es especialmente evidente en los territorios indígenas, donde las prioridades de conservación externas a menudo entran en conflicto con los modos de vida locales. Describimos el trabajo de Ailan Awareness (AA), una organización no gubernamental (ONG) indígena de Nueva Irlanda, Papúa Nueva Guinea. Esta organización desafía los modelos de conservación convencionales al centrarse en la soberanía indígena, la diversidad biocultural y las obligaciones espirituales. Entre sus iniciativas se incluyen la revitalización del Vala (una práctica arraigada en la obligación ecológica y espiritual) y la Ranguva Solwara Skul (Escuela del Agua Salada, que imparte enseñanza en la encrucijada entre la ciencia indígena y la occidental). AA fomenta la conservación impulsada por la comunidad y basada en la soberanía relacional. Basándonos en nuestra larga colaboración, sostendemos que el modelo de AA es radical y reimagina la conservación como un tipo de resurgimiento cultural. Al dar prioridad a la gobernanza local, la continuidad cultural y la reactivación de las responsabilidades ancestrales, las iniciativas de AA contrarrestan el legado colonial de la conservación convencional. Nuestro trabajo contribuye a los debates en curso sobre biología de la conservación, ecología política y estudios indígenas, abogando por prácticas que respeten la soberanía cultural y fomenten el cuidado medioambiental sostenible impulsado por la comunidad.

Palabras clave: soberanía indígena, diversidad biocultural, conservación descolonial, gestión impulsada por la comunidad, soberanía relacional, resurgimiento cultural, Papúa Nueva Guinea

1. Introduction

Conservation practice in the twenty-first century is at crossroads. With the acceleration of biodiversity loss, climate disruption, and social inequality, conservationists are increasingly recognizing the limitations of top-down, exclusionary, and technocratic approaches to conservation. Nowhere is this reckoning more urgent than in Indigenous territories, where global conservation

priorities often clash with local lifeways. In response, a growing body of scholarship and practice emphasizes the need to reimagine conservation in ways that center Indigenous self-determination, relational ontologies, and place-based knowledge systems. Ballard and Wilson's (2012) notion of "unseen monuments" sharpens this point by showing that Pacific heritage cannot be reduced to what is materially visible or monumental. Much as *Vala* (a practice rooted in ecological and spiritual obligation) in New Ireland persists as a lived practice rather than a built structure, they demonstrate that sacred geographies across Oceania remain powerful precisely because they are often invisible to outsiders and withheld from bureaucratic classification (Ballard & Wilson 2012). This recognition challenges the assumption that conservation success can only be measured by material evidence or external validation.

In Papua New Guinea (PNG), a country with over 800 Indigenous languages and one of the planet's highest levels of biocultural diversity, Indigenous communities have long managed their lands and waters through intricate systems that fuse ecological knowledge, spiritual practices, and social governance. Yet, PNG has also been a site of extensive missionary intervention, colonial and post-colonial extraction, and externally imposed conservation models (West, 2006; 2016). In this context, the work of Ailan Awareness (AA)—an Indigenous NGO founded and led by New Irelanders—offers a compelling model for decolonial, community-driven conservation.

Established in 1993 by Indigenous activists, AA operates on the philosophy that proper conservation emerges from revitalizing Indigenous social and spiritual life rather than external impositions. Working in partnership with an anthropologist since 2008, AA has developed an approach that centers the concept of *Vala*—a traditional practice of spiritual and ecological obligation—as well as initiatives like the *Ranguva Solwara Skul* (a school that teaches at the nexus of Indigenous and Western science), and serving as a site for intergenerational learning and biocultural resurgence (Aini *et al.*, 2023). This article draws on their collaborative work to present a comprehensive case study of conservation as cultural revitalization in New Ireland. In what follows, we argue that AA's work challenges prevailing definitions of conservation success and offers a powerful alternative grounded in Indigenous sovereignty and biocultural diversity. In doing so, it contributes to broader debates in conservation biology, sustainability science, and Indigenous studies about the role of cultural and spiritual relationships in sustaining life systems.

2. Contextualizing New Ireland: Geography, history, and biocultural complexity

New Ireland Province, located in the Bismarck Archipelago of Papua New Guinea, comprises the long, narrow island of New Ireland and numerous offshore islands, including Lovongai (also known as New Hanover). These islands are situated within the Coral Triangle, a globally significant hotspot for marine biodiversity, and are home to vibrant coral reef ecosystems, mangroves, and tropical forests. Ecological studies reinforce that the Coral Triangle, which includes New Ireland, remains one of the most biodiverse and ecologically vital marine regions on Earth (Allen, 2008; Bellwood & Meyer, 2009; Carpenter *et al.*, 2008). Yet New Ireland's significance lies not only in its biological abundance but also in its deep cultural and linguistic diversity. Over seventy Indigenous languages are spoken in the province, and customary land and sea tenure systems continue to structure social life.

Historically, New Irelanders maintained a socioecological system in which spiritual beliefs, customary laws, ecological practices, and social obligations were deeply interwoven. This integrated system governed the use of resources, maintained environmental balance, and affirmed relational responsibilities among people, places, and non-human beings. However, colonialism, missionization, and the expansion of the cash economy fractured this system. The arrival of Christian missionaries in the nineteenth century, followed by German and Australian colonial administrations, introduced new systems of authority and undermined customary governance. The shift to a money economy and wage labor further eroded the subsistence base and the transmission of traditional knowledge.

Today, communities in New Ireland face intensifying pressures from climate change, extractive industries, and externally driven conservation efforts. Rising sea levels, coastal erosion, and increasingly frequent storm surges pose a significant threat to livelihoods and infrastructure. Meanwhile, logging, mining, and industrial fishing compromise ecological integrity and community autonomy. Despite decades of international conservation presence, local communities often perceive these interventions as extractive or paternalistic, prioritizing biodiversity metrics over their lived relationships with the place. In response, AA and its partners seek to re-center Indigenous systems of knowledge and authority in environmental governance. Their work acknowledges that in New Ireland, ecological health is inextricably linked to spiritual health, linguistic vitality, and cultural continuity. Biocultural diversity—the inextricable link between biological and cultural diversity—is not a theoretical concept but a lived reality.

3. Sovereignty and conservation

Sovereignty, as traditionally conceived, often connotes state control, political autonomy, and territorial integrity. In Papua New Guinea, national sovereignty has always been entangled with legal pluralism, as the state's authority rests uneasily alongside Indigenous systems of governance and law. The post-independence constitution explicitly recognized customary law, but in practice, this recognition produced what Rivers and Amankwah (2003) call a "contested sovereignty," where state institutions coexist with village-level authorities that command far greater legitimacy in everyday life. Narokobi's *The Melanesian Way* (1983) and Lo Bilong Yumi Yet articulated a vision of national law grounded in Indigenous epistemologies, arguing that true sovereignty requires the state to embrace rather than subsume customary authority. Building on this, Boege and colleagues (2008; 2009) described PNG as a "hybrid political order," where state sovereignty operates through negotiation with local power structures rather than their replacement. Nowhere is this clearer than in Bougainville, where autonomy agreements (Ghai & Regan, 2006) institutionalized Indigenous sovereignty claims within the state framework. Demian (2021) shows that these overlapping systems create multiple "states of law," highlighting how national sovereignty in PNG cannot be understood apart from the plural legal orders that continually reshape it. Together, these works demonstrate that sovereignty in PNG is not a singular national attribute but a dynamic and negotiated relationship between state authority and Indigenous law.

In New Ireland, sovereignty takes on an expansive form. Building on the work of Indigenous scholars and critical theorists, this article reconceptualizes sovereignty within the domain of environmental conservation to include political, material, intellectual, representational, and rhetorical dimensions (Lyons, 2000; Raheja, 2010; Warrior, 1995; West, 2016). This holistic understanding recognizes the multiple ways in which communities exercise autonomy over their lives, cultural expressions, and ecological practices. We argue that political sovereignty and material autonomy in Papua New Guinea are deeply interwoven with "intellectual sovereignty," "representational sovereignty," and "rhetorical sovereignty" (West, 2016). These interconnected forms of sovereignty counteract the ongoing dispossession perpetuated by global capitalist processes and conservation practices that obscure Indigenous agency and that through fostering approaches to conservation grounded in Indigenous sovereignty actors can work to counteract previous dispossessions associated with conservation (see West & Brockington 2006; West 2016).

The work of AA exemplifies this multifaceted approach to sovereignty through its community-driven conservation practices. Rather than adhering to external conservation metrics that prioritize biodiversity without contextualizing cultural continuity, AA's initiatives foreground relational sovereignty—whereby cultural resurgence, intergenerational knowledge transmission, and the restoration of sacred relationships to land and sea are prioritized. The revitalization of *Vala* which will be discussed in more detail below, exemplifies this commitment. *Vala* is not merely a tool for environmental management but a lived expression of ecological governance embedded within social relations and spiritual obligations. By restoring *Vala* practices, AA reclaims environmental

stewardship from technocratic conservation models that often impose external priorities on local landscapes. This aligns with what Audra Simpson (2007; 2014) terms "refusal"—a strategic assertion of Indigenous governance that resists externally imposed political identities. Similarly, it aligns with Marcia Langton's analysis of Indigenous property relations, who offers a striking parallel here. For her interlocutors in Cape York, property is not a bundle of rights but a sacred ontology performed through ritual, fire, and water practices (Langton, 2005). This resonates with AA's revitalization of *Vala*, which, like Langton's "landscape behind the landscape," affirms that sovereignty is enacted through ritual inscription and the maintenance of ancestral geographies, not through codified legal categories.

In a similar vein, the *Ranguva Solwara Skul*, which will be discussed in full in what follows, serves as a site where the intellectual, representational, and rhetorical dimensions of sovereignty converge. This community school revitalizes ecological knowledge through culturally embedded educational practices, where youth learn the interconnected principles of environmental stewardship, spiritual obligations, and community governance. The school embodies a "refusal" (Simpson 2007, 2014) to conform to Western conservation paradigms, offering instead a model of ontological sovereignty where relational practices and spiritual obligations shape conservation outcomes.

In Melanesian contexts, sovereignty is not a static state of political power but a relational and ongoing process sustained through everyday practices, exchanges, and embodied relationships between land, people, and non-human entities (LiPuma, 2000; Strathern, 1988). This relational understanding recognizes that community well-being is inextricably linked to environmental stewardship. Thus, the preservation of cultural practices, traditional governance systems, and spiritual responsibilities becomes foundational to sovereign practice. This perspective contrasts sharply with neoliberal conservation models, which often reduce Indigenous communities to passive recipients of external environmental care (Doane, 2014). In contrast, AA's work in New Ireland illustrates how Indigenous communities actively reclaim their sovereignty by reasserting control over ecological management, community governance, and cultural revitalization.

Like AA's understanding of sovereignty, Youdelis *et al.* (2021) discuss Indigenous Protected and Conserved Areas (IPCAs) as articulating sovereignty as a multifaceted, dynamic, and contested process, especially within colonial-capitalist contexts. While AA's work, in conversation with Paige West's previous work (see West 2016), focuses on how sovereignty in Papua New Guinea is maintained through intellectual, representational, and material practices, Youdelis *et al.* (2021) examine how Canadian IPCAs similarly resist state-led conservation models that mask ongoing dispossession. In both cases, sovereignty is enacted through refusal: a rejection of external conservation logic and an affirmation of Indigenous knowledge, governance, and stewardship.

AA's approach to sovereignty resonates with this understanding that sees conservation models one way of masking ongoing dispossession, as it challenges the colonial logic embedded in conventional conservation paradigms. For instance, while neoliberal conservation often frames Indigenous communities as beneficiaries of external aid, AA positions these communities as agents of change, actively shaping conservation outcomes through practices like *Vala* and the pedagogical innovations of the *Ranguva Solwara Skul*. Similar to how IPCAs in Canada represent assertions of sovereignty through ecological governance, AA's work asserts sovereignty through the reinvigoration of traditional practices and the revitalization of community-based educational systems. This commitment to relational sovereignty also contrasts sharply with the dynamics described by Minnegal and Dwyer (2017) among the Kubo and Febi, who, in anticipation of LNG wealth, reorganized genealogies and lists to make themselves legible to corporate bureaucracies. Where extractive regimes compel people to refashion kinship and land for outside recognition, AA's work insists on the opposite: revitalizing customary authority structures and sacred obligations as the foundation of governance.

Central to AA's conservation strategy is the notion that ecological health and cultural vitality are inherently interconnected. The restoration of biocultural diversity in New Ireland—whether

through the revitalization of *Vala*, the documentation of traditional ecological knowledge, or the re-establishment of stone weirs or fish traps—illustrates how sovereignty is not merely a matter of political autonomy but a holistic process of community resurgence and environmental care. As West (2016) asserts, sovereignty in this context also encompasses intellectual and representational dimensions, emphasizing the importance of maintaining control over how cultural practices and ecological relationships are understood and represented. Youdelis *et al.* (2021) similarly critique how neoliberal conservation practices often tokenize Indigenous participation while perpetuating extractive practices. By contrast, AA's model insists on the primacy of Indigenous-led governance, where conservation success is measured not by external biodiversity metrics but by the vitality of cultural practices and the strength of intergenerational relationships. This model redefines conservation as an assertion of biocultural sovereignty—one that aligns with community priorities and resists the commodification of nature.

We assert that sovereignty in New Ireland, as enacted through AA's work, represents a profound reimagining of conservation. It challenges the neoliberal conservation paradigm by foregrounding relational, intellectual, and representational forms of sovereignty rooted in cultural resurgence and environmental care. As both scholars emphasize, Indigenous sovereignty cannot be adequately understood through the lens of state control alone. Instead, it must be seen as a living practice that simultaneously challenges colonial structures and reaffirms the interconnectedness of social, spiritual, and ecological worlds. Through the revitalization of *Vala* and the *Ranguva Solwara Skul*, AA models an approach to conservation that is grounded in local governance, cultural continuity, and the refusal to separate environmental stewardship from community well-being. In doing so, it offers an invaluable example of how Indigenous sovereignty can guide sustainable and just conservation practices in a rapidly changing world.

4. Biocultural diversity, sacred practice, sovereignty, and Indigenous people-led conservation

Biocultural diversity refers to the intertwined variability of life in its biological, cultural, and linguistic forms. It emerges from—and is sustained by—dynamic and place-based interactions between humans and the ecosystems they inhabit. Rather than treating nature and culture as separate domains, biocultural diversity frameworks emphasize their mutual constitution and co-evolution. The concept gained traction following the 1988 Declaration of Belém and has since become foundational in ethnobiology and sustainability sciences (Franco, 2022; Maffi, 2007; Reina-Rozo, 2024). As Turner and colleagues (2016) define it, it is a "dynamic, interdependent complex of relationships linking human populations, biodiversity, non-human species, and their environments," explicitly recognizing how cultural practices shape—and are shaped by—biodiversity (Reina-Rozo, 2024). This view challenges the legacy of conservation models that position humans as external threats to ecological integrity, instead proposing that many human communities have historically contributed to the creation and maintenance of diverse ecosystems (Albuquerque *et al.* 2023; Maffi 2007). In the Pacific specifically, attention to the "invisibility" of Pacific sacred sites underscores that biocultural diversity is not only ecological but also epistemological—it includes knowledge that is deliberately withheld, secrets that safeguard sacredness, and practices that resist disclosure (Ballard & Wilson 2012). Recognizing these dimensions strengthens AA's approach, which likewise frames *Vala* as a sacred protocol not meant to be exhaustively documented but lived.

The work of AA sits at the intersection of several converging research fields: biocultural diversity, cultural ecosystem services, spiritual ecology, and Indigenous conservation governance. Each of these domains contributes key insights that help frame AA's approach, while AA's practices extend and challenge the boundaries of this literature. Scholars such as Luisa Maffi (2005) and Pretty *et al.* (2009) have long argued that biocultural diversity is a vital component of sustainable conservation, especially in Indigenous territories where language, spiritual knowledge, and land-use systems are intimately intertwined. The erosion of language and traditional practices often occurs in

tandem with biodiversity loss, suggesting that the revitalization of one cannot happen without attention to the other. This is evident in New Ireland, where AA has focused not only on reef and forest health but also on customary law, spiritual obligations, and linguistic transmission through their revitalization of both *Vala* and *Rangama* networks. Langton's (2005) work reinforces this argument by showing that property and ecological practice among Aboriginal people cannot be disentangled from sacred geographies. Her concept of "places as events" parallels the way New Islanders understand *Vala* closures—not as abstract prohibitions but as ongoing ontological events that reproduce both ecological balance and ancestral authority.

The relationship between biocultural diversity and Indigenous livelihoods is central to the persistence of cultural traditions and the health of ecosystems. Indigenous livelihoods are embedded within systems of reciprocal exchange, ethical obligations, and intergenerational knowledge transmission—systems that are often finely attuned to specific ecological conditions. Studies have shown that the subsistence strategies of Indigenous communities, such as agroforestry, hunting, and fishing, are closely tied to linguistic and spiritual practices that encode ecological knowledge (Franco, 2022; Girard *et al.*, 2022; Nemogá *et al.*, 2022). In both urban and rural settings, these relationships are adaptive and resilient, forming what Reina-Rozo (2024) refers to as "biocultural innovation." Such innovations are not simply technical; they are rooted in memory, ritual, and relational ethics. When these livelihood systems are disrupted—by forced migration, extractive development, or language loss—both cultural heritage and biodiversity are imperiled.

The literature on cultural ecosystem services (CES) complements this view by articulating the non-material benefits that people derive from ecosystems, including spiritual enrichment, cultural identity, and social cohesion (Chan *et al.*, 2012; Pascua *et al.*, 2017). However, much of the CES literature remains embedded within Western scientific frameworks, often flattening or abstracting Indigenous spiritualities into "intangible values." In contrast, Vave *et al.* (2024) argue for recognizing Indigenous protocols such as funerary protected areas (FPAs) as legitimate and sophisticated forms of conservation. Their case study in Fiji demonstrates how death rites that initiate temporal fishing bans support ecological regeneration and foster moral and social renewal. The challenges of integrating Indigenous knowledge into marine protected area (MPA) planning are well-documented, particularly when MPA networks prioritize ecological connectivity over socio-spiritual connectivity (Asaad *et al.*, 2018). These insights strongly resonate with AA's use of *Vala* in New Ireland, where spiritual protocol and ecological management are inseparable.

Biocultural diversity is not only a descriptive concept; it is also central to contemporary debates on environmental conservation and sustainability. Biocultural restoration approaches, particularly in Indigenous territories, have demonstrated the capacity to achieve conservation outcomes while simultaneously revitalizing cultural practices. For example, in Hawai'i, restoration projects that prioritize culturally significant species and sacred forest systems also support ecological metrics such as species richness, sediment retention, and nearshore fisheries production (Delvaux *et al.*, 2025; Winter *et al.*, 2020). These findings confirm that species of high biocultural value often align with those of high conservation value, contradicting assumptions that community-led or culturally rooted restoration efforts are incompatible with biodiversity goals. Moreover, frameworks such as the "ridge-to-reef" restoration approach in Pacific Island contexts demonstrate how biocultural perspectives foster a holistic, interlinked understanding of land and sea stewardship (Delvaux *et al.*, 2025). Rather than imposing external conservation agendas, these approaches build on existing Indigenous governance systems and ontologies.

Spiritual ecology—an emerging interdisciplinary field that examines the relationship among religion, spirituality, and environmental stewardship—has contributed to expanding the conservation discourse. Authors such as Sponsel (2012), Kimmerer (2013), and Kealiikanakaooleohaililani and Giardina (2016) emphasize the importance of restoring the sacred in conservation work. The *Kuahu* practice (a traditional Hawaiian practice that involves creating a sacred altar or platform, used in rituals and ceremonies, that serves as a space for connecting with spiritual ancestors and the natural world) described in Kealiikanakaooleohaililani and Giardina (2016) offers a model of ritual-based

conservation education, where learners engage the sacred through physical altars, chants, and place-based cosmologies. This practice mirrors the pedagogical ethos of the *Ranguva Solwara Skul*, where conservation is taught not as a set of technical skills but as a relational and ethical mode of being. The climate and food security literature also positions traditional ecological knowledge as central to community resilience in Melanesia (Barnes *et al.*, 2019; Bell *et al.*, 2009).

Biocultural revitalization, therefore, is not only about conservation or cultural continuity; it is also about sovereignty. The resurgence of biocultural practices—through community protocols, land reclamation, or language revitalization—constitutes a form of political and ontological assertion. Legal tools, such as Biocultural Community Protocols (BCPs), enable communities to define access and benefit-sharing rules, assert control over traditional knowledge, and shape conservation policy in accordance with their priorities and values (Girard *et al.*, 2022; Raven and Robinson, 2022). In Colombia, landmark legal decisions have recognized rivers and territories as biocultural entities, granting them legal personhood and affirming the rights of Indigenous and Afro-descendant peoples to steward them (Nemogá *et al.*, 2022). These interventions reveal how biocultural revitalization advances not only environmental protection but also the struggle for Indigenous autonomy, self-determination, and justice. As the global community faces ecological collapse and cultural homogenization, supporting biocultural sovereignty is crucial for the survival of both human and more-than-human worlds.

AA's work advances a vision of conservation grounded in Indigenous governance and sovereignty that does not assume that traditional tenure and taboo emerged as a conservation strategy but rather that they emerged as a way to balance social relations between people, people and spirits, and people, spirits, and ecological systems (see Foale *et. al.* 2011). This aligns with broader critiques of colonial conservation and calls for Indigenous-led stewardship, as articulated by Kyle Powys Whyte (2018) and Jessica Hernandez (2022). These thinkers challenge the dispossession inherent in many protected area models and call for conservation that is accountable to Indigenous laws, protocols, and community priorities. AA models how localized governance structures can be activated and respected through conservation practice in Papua New Guinea, where land and sea tenure are still largely under customary ownership.

AA's methodology exemplifies what scholars have described as "research as resurgence" (Corntassel, 2012; Simpson, 2017). Research and conservation are not only about knowledge production or resource protection but also about the regeneration of Indigenous lifeways, languages, relationships, and futures. By centering *Vala* and the relational teachings of elders, AA enacts a form of conservation that is both reparative and future-oriented. This relational perspective resonates with what Suaalii-Sauni and Fulu-Aiolupotea (2014) describe as "wayfinding methodology"—a Pacific epistemological approach grounded in movement, memory, and oceanic connection. This literature affirms the central insight of AA's work: that conservation cannot succeed without cultural and spiritual resurgence and that the most innovative and practical conservation work is already happening in Indigenous communities, reweaving the strands of biocultural life.

This vision deeply resonates with other Pacific and Australian contexts. As Ballard and Wilson (2012) remind us in their discussion of "unseen monuments," many of the most significant heritage sites in the Pacific are invisible to outsiders because their significance lies in ongoing practices, secrecy, and ritual rather than material permanence. Similarly, AA's revitalization of *Vala* asserts that conservation cannot be reduced to protecting what is visible or materially "monumental" but must attend to those intangible, often hidden relations that bind people, spirits, and ecosystems. Marcia Langton's work further illuminates how property relations in First Nations Australia are not abstract rights but performative and ontological practices embedded in sacred geography (Langton, 2005). Her notion of the "landscape behind the landscape" parallels how New Islanders conceptualize *Vala* as a moral and spiritual ordering of space, in which sacred sites are not merely places to be preserved but nodes of ancestral presence and authority. Both Langton and AA highlight that Indigenous tenure systems emerge from sacred endowments that simultaneously constitute rights, obligations, and identities. Minnegal and Dwyer's (2017) *Navigating the Future* demonstrates how, in Papua New

Guinea, resource development reshapes not only political economies but also ontologies and epistemologies. The Kubo and Febi peoples, in anticipation of LNG wealth, recompose genealogies and histories to align with corporate and state categories. This ethnography reminds us that conservation, like extraction, compels communities to reorder the "social things" of their world to fit bureaucratic regimes. AA, however, offers a counter-practice: instead of reshaping genealogies to satisfy state or corporate logics, communities reassert genealogies and protocols of *Vala* as foundations for environmental stewardship. In both cases, anticipation and imagination reshape social worlds, but in AA's case, they do so in service of cultural resurgence rather than resource dependency.

Taken together, these comparative works affirm that Indigenous-led conservation in New Ireland is not an isolated experiment but part of a wider struggle over ontology, epistemology, and sovereignty. Ballard and Wilson's "unseen monuments" foreground invisibility and secrecy as valid heritage logics; Langton's "sacred geography" asserts that property is a sacred performance of being; and Minnegal and Dwyer's attention to ontological shifts under extractive anticipation shows how people creatively recompose identity and land relations (Ballard & Wilson 2012, Langton 2005, Minnegal & Dwyer 2017). AA's work aligns with these insights but also extends them: by revitalizing *Vala* and creating epistemic hubs like the *Ranguva Solwara Skul*, AA demonstrates that Indigenous sovereignty is enacted not only in resisting imposed frameworks but also in actively reweaving sacred, ecological, and cultural life into conservation practice.

The two sections above demonstrate that Indigenous sovereignty and biocultural diversity are not separate or parallel concepts within the work of AA but are deeply intertwined and mutually reinforcing. By revitalizing cultural practices like *Vala* and educational initiatives such as the *Ranguva Solwara Skul*, AA exemplifies how sovereignty is enacted not only through political and territorial autonomy but also through cultural resurgence, intellectual sovereignty, and the maintenance of sacred ecological relationships. These initiatives demonstrate that conservation, when grounded in Indigenous governance, is not merely a matter of environmental protection but a holistic process of reweaving social, cultural, and spiritual life. Through this approach, AA challenges colonial conservation paradigms that often overlook or marginalize Indigenous agency, instead foregrounding the importance of relational sovereignty and biocultural revitalization as foundational to sustainable and just environmental stewardship.

5. Methodological frameworks

The work of AA is rooted in a matrix of these theoretical commitments and methodological practices that reflect the lived realities and philosophical frameworks of Indigenous communities in New Ireland. Drawing on decolonial theory, Indigenous epistemologies, and relational ontologies, AA's approach transcends the technocratic paradigms of Western conservation to foreground kinship, reciprocity, and sacred obligations as the foundations of environmental stewardship. Here, Minnegal and Dwyer's (2017) ethnography offers a cautionary comparison. Their Kubo and Febi interlocutors engaged in list-making, mapping, and logo-design as epistemic strategies to satisfy corporate and state bureaucracies. These practices reconfigured ontology itself—"bringing into being different kinds of people and social entities." In contrast, AA's methodology of reintroducing *Vala* and establishing the *Ranguva Solwara Skul* resists such reformatting, instead, reasserting Indigenous temporalities, genealogies, and cosmologies as the basis of governance.

At the heart of AA's work is a refusal of the dualisms that dominate mainstream conservation discourse: human/nature, sacred/secular, science/tradition. AA operates within a framework that sees the world as deeply entangled—where humans, ancestors, spirits, animals, and ecosystems are all part of an interconnected web of life. This view aligns with what Kealiikanakaoleohaililani and Giardina (2016) describe as spirit-based relationships founded on "love, respect, care, intimate familiarity, and reciprocal exchange." In their article on Native Hawaiian *Kuahu* practice, Kealiikanakaoleohaililani and Giardina (2016) emphasize the altar as both a physical and spiritual space, a locus for setting intention, connecting with place, and recognizing non-human kin.

AA's *Ranguva Solwara Skul* functions similarly as a ritual and pedagogical space where Indigenous students, elders, anthropologists, and conservationists co-produce knowledge. This coproduction is not simply the synthesis of Western science and local knowledge but an ontological project that centers Indigenous values and worldviews as primary. Drawing on the work of scholars such as Linda Tuhiwai Smith (1999) and Leanne Betasamosake Simpson (2017), AA's methodology insists that Indigenous research must be accountable to Indigenous communities, governed by Indigenous protocols, and generative of Indigenous futures. This also mirrors Langton's insistence that Indigenous law and practice be understood as ontological systems in their own right, not as data points for external recognition (Langton 2005). Both in Cape York and New Ireland, schools and rituals become epistemic hubs where sacred obligations are renewed rather than translated into foreign categories.

Vala, the keystone of AA's conservation practice, is both a method and a cosmology. It is a customary protocol that governs clans' ethical, spiritual, and ecological responsibilities to their reefs and forests. As described in AA's internal documents and fieldwork reports, *Vala* designates certain areas as off-limits to extractive practices for periods determined through ceremonial and communal deliberation. These periods of prohibition are tied to ancestral obligations, seasonal cycles, and social agreements—not to externally imposed management plans. The significance of *Vala* is echoed in the findings of Vave whose research in Fiji demonstrates the ecological and social power of funerary protected areas (FPAs) (Vave, 2021, Vave *et. al.*, 2024). Like *Vala*, FPAs are initiated through cultural protocols linked to death rites and ancestral respect. Vave *et. al.* (2024) demonstrate how these closures yield ecological benefits while fostering community cohesion and intergenerational knowledge. Their work draws attention to the contrast between Indigenous temporalities, measured in nights of mourning, ritual cycles, and the life of the reef, and Western management timelines. Finally, the *Vala* also work to link the land and the sea in ways that are crucial for Indigenous revitalization (Delevaux *et. al.*, 2025).

Methodologically, AA's work is deeply ethnographic, relational, and iterative. It involves long-term relationships with communities, participatory workshops, customary storytelling practices, and cultivating ethical relationships rather than extractive data-gathering. It is also experimental, engaging young people in drumming, women's networks in intertidal knowledge sharing, and elders in co-teaching modules that weave traditional and contemporary skills. In all cases, AA's practice enacts "refusal"—a refusal to be translated into dominant conservation frameworks and instead to center Indigenous forms of governance, time, and care. It also draws on the Pacific ideas of weaving and reweaving (West & Aini, n.d.).

In their longstanding collaboration, the authors of this paper co-developed AA's core strategies for Indigenous-led conservation and cultural revitalization in New Ireland, Papua New Guinea. Aini, as the Indigenous founder and the managing director of AA, brings decades of experience in community-based environmental stewardship and spiritual-ecological governance. He leads the organization's engagement with local communities, elders, and youth, drawing on deep ancestral knowledge and relational epistemologies to revitalize practices like *Vala*, Rangama education, and traditional leadership systems. West, an anthropologist with nearly 30 years of fieldwork in Papua New Guinea and a professor at Barnard College, contributes through collaborative research, methodological development, and pedagogical integration. Together, they have established a transdisciplinary partnership that integrates Indigenous frameworks with decolonial research and ecological science, informing programmatic work and expanding opportunities for communities to articulate and enact self-determination.

Their collaboration also involves extensive co-authorship and co-teaching, reinforcing a model of ethical coproduction that centers Indigenous sovereignty and epistemology. West and her students support AA's programming through applied research, curriculum development, and logistical collaboration—work hosted through Barnard's institutional infrastructure, which manages grant compliance and fiduciary oversight. Aini and West's joint publications, alongside keynote addresses across international scholarly and conservation forums, have helped amplify the visibility and

credibility of Indigenous-led climate adaptation models. They also co-lead the development of methodological toolkits, documentation protocols, and community-based pedagogies at sites like the *Ranguva Solwara Skul*. These efforts ensure that AA's knowledge systems not only sustain local resilience but also influence broader conversations on biocultural diversity and ecological justice.

The authors' collaboration is grounded in a deliberate and reflective engagement with their distinct subject positions—Aini as an Indigenous man from New Ireland, Papua New Guinea, and West as a white woman anthropologist from the United States. Their work acknowledges the asymmetries of power, privilege, and historical responsibility that shape all transnational research and conservation partnerships. Aini brings to the collaboration his lived experience as a New Ilander deeply embedded in the cultural, spiritual, and ecological systems the project seeks to revitalize. His leadership reflects a commitment to Indigenous sovereignty and a refusal of externally imposed conservation paradigms. West, by contrast, approaches the work from her position as an academic situated within Western institutions and has spent decades cultivating long-term, accountable relationships in Papua New Guinea. Together, they strive to model ethical coproduction by centering Indigenous authority, redistributing resources, and foregrounding local knowledge systems.

This attention to positionality is not merely theoretical; it informs every aspect of how Aini and West build programs, conduct research, and engage with communities. Their partnership is rooted in mutual trust, dialogic practice, and a shared commitment to dismantling extractive forms of knowledge production. By explicitly addressing the legacies of colonialism in conservation and anthropology, they work to create alternative models that prioritize relational accountability over institutional prestige. West utilizes her position within the academy to support grant hosting, international dissemination, and training opportunities that amplify the voices and leadership of Aini and her colleagues at AA. Aini, in turn, ground the work in culturally resonant frameworks that ensure it remains relevant, respectful, and responsive to community priorities. Their collaboration offers one example of what it means to work across differences in ways that do not erase them but rather transform them into a source of strength for shared political and ecological goals.

6. The *Vala* practice and its revitalization

At the heart of AA's work is revitalizing *Vala*, a traditional practice of environmental stewardship, spiritual governance, and social responsibility. *Vala* is not a discrete "tool" in the Western conservation sense. It is a living, relational protocol rooted in ancestral obligations, cosmological beliefs, and kin-based ecological knowledge. *Vala* operates through locally agreed prohibitions, sacred closures, and ceremonial processes that establish a moral ecology of care. *Vala* manifests as community-agreed reef closures and forest taboos in its most practical form. These areas are not merely "no-take zones" but sacred geographies where access is restricted in alignment with ritual cycles, mourning periods, and obligations to ancestors. These designations arise not from external biological assessments but from internal community dialogue, elder deliberation, and the recognition of spiritual imbalance or ecological decline. When a reef or forest is placed under *Vala*, it becomes imbued with heightened spiritual presence. To violate a *Vala* restriction is not only to harm the ecosystem but to offend ancestral spirits and undermine community cohesion.

The revitalization of *Vala* in New Ireland is a response to both ecological degradation and the social fragmentation brought about by colonization, missionization, and market expansion. As detailed in AA's Full Circle Foundation reports and proposals, many communities had seen a decline in *Vala* observance by the early 2000s. Younger generations, increasingly disconnected from customary authority structures and spiritual teachings, were not being initiated into *Vala* practice. At the same time, overfishing, destructive extraction, and shifting tenure dynamics placed marine and forest systems under stress.

Beginning in the mid 2000s, AA, in partnership with community elders and youth, initiated a series of workshops, exchange programs, and storytelling sessions to reintroduce and strengthen *Vala*. These gatherings often occurred at the *Ranguva Solwara Skul* or during field visits to *Vala* sites.

Through storytelling in the *Rangama* (men's houses), ceremonial practice around the hearth, and intergenerational mentorship, community members re-engaged with the ethical dimensions of *Vala*. Young people learned the ecological rationale for closures and the spiritual and social obligations that underlie them. Recent efforts have expanded the network of *Vala* areas across Lovongai and the mainland of New Ireland. In 2023, community members from four marine management zones convened for exchange meetings facilitated by AA. Elders led discussions on the importance of language, cultural protocol, and the spiritual care of reefs. One Elder described how a *Vala* closure following the death of a clan leader led to a dramatic increase in fish biomass but, more importantly, a renewed sense of community identity and respect. These narratives show how *Vala* closures regenerate both ecological and social systems.

Importantly, *Vala*'s governance is not static. Communities adapt *Vala* protocols to contemporary realities—modifying timelines, integrating women's leadership roles, and incorporating new forms of ecological observation. Through this adaptation, *Vala* remains both ancient and emergent. In this way, it mirrors the funerary-connected protected areas documented by Vave (2021) in Fiji, where spiritual and cultural closures foster ecological benefits while strengthening local governance. *Vala* exemplifies the principle of coproduction as a conservation strategy, not only of knowledge but also of place-based futures. It calls for a relational ethic that refuses instrumentalization of nature and instead affirms the sacred, kincentric responsibilities that bind people to land and sea. It is an embodied expression of sovereignty that emerges not through resistance alone but through the joyful and reverent reactivation of ancestral practices.

7. *Ranguva Solwara Skul* as an epistemic hub

The *Ranguva Solwara Skul* is a physical space and a symbolic site of epistemological resurgence. Conceived as a place where Indigenous ecological knowledge, ceremonial practice, and intergenerational pedagogy could be revitalized, the school operates beyond the bounds of a conventional educational institution. It is a place of reweaving where the strands of cultural, spiritual, ecological, and social life are woven together after being unraveled by colonial and postcolonial forces. Established by AA in collaboration with local elders and communities and supported by funding partners, the school is designed to serve multiple functions: a site for hosting customary knowledge exchange, a safe space for community gatherings and ceremonies, and a laboratory for experimenting with Indigenous-centered conservation practices. Unlike externally designed conservation training programs, the curriculum and rhythm of the school are shaped by the communities it serves.

The school hosts regular workshops and informal meetings that bring together people from New Ireland, including representatives from *Vala* areas, elders from the Network of Traditional Advisors, youth from coastal villages, and women leaders engaged in intertidal and shoreline stewardship. Each gathering is intentionally structured around customary obligations and storytelling practices, including drumming, song, food preparation, and ritual enactments. In this way, the school becomes not just a site of teaching but a vessel for cultural transmission. The epistemology cultivated at *Ranguva Solwara Skul* resists the division between cognitive and spiritual knowledge. Participants learn through immersion, embodiment, and ritual attention. As with Kānaka Maoli *Kuahu* practice in Hawai'i, (Cupchoy 2024) sacred spaces of conservation learning produce a different kind of practitioner—one who is grounded in ecological metrics, reciprocal ethics, kin-based responsibilities, and spiritual discipline. The school operates in this lineage. It facilitates what scholars might call "onto-epistemology": the understanding that how one knows is inseparable from one's relationship to others, including the non-human world (Romm 2024).

One of the most significant impacts of the school is its focus on intergenerational mentorship. Each event includes dedicated time for youth to learn from elders through guided observation and active participation. This may involve reef walks, food-harvesting rituals, discussions of seasonal calendars, or sharing historical narratives related to specific landscapes. Through these practices,

young people are trained in environmental observation and management and apprenticed into ways of being that prioritize accountability, humility, and care. As Jojola (2013) noted, participatory mapping in Indigenous communities often functions as a form of cultural reaffirmation and political assertion.

In 2023, two women from New Ireland, who had recently graduated from the University of Papua New Guinea, returned to their home communities to conduct research and develop the honors thesis projects under the guidance of the authors of this article and the Elder educators working with the school. Their work focused on documenting women's fishing knowledge and investigating customary food taboos, research that supports conservation outcomes and strengthens women's cultural authority. This integration of academic inquiry and community-led practice exemplifies the school's role as a hybrid space of learning, one where Indigenous and institutional knowledge systems can coexist without hierarchy.

Importantly, the *Ranguva Solwara Skul* is also a space for regional governance innovation. Because many conservation meetings in PNG are conducted in urban centers or hotel conference rooms—places that are financially and symbolically inaccessible for many Indigenous leaders—the school offers an alternative. It centers Indigenous spatiality and temporality, hosting governance conversations around the hearth and in the forest rather than under fluorescent lights. This setting affirms the legitimacy of customary governance practices while enabling coordination among *Vala* custodians, reef guardians, and other grassroots actors. Ultimately, the *Ranguva Solwara Skul* is not merely a school, although it is also that. It is a ceremony in progress, a living archive, and a site of sovereignty. It enacts the idea that learning is sacred work and that conservation must be rooted in data and regulation, and in the careful tending of relationships with place, with story, with spirit.

8. Biocultural diversity in practice

The revitalization of biocultural diversity in New Ireland is not confined to conceptual frameworks or policy dialogues. It unfolds in lived practices, embodied knowledge, and the everyday interactions between people and place. Through AA's work with communities, biocultural diversity is enacted through the regeneration of language, reactivation of ancestral fishing techniques, protection of sacred sites, and the re-establishment of kinship-centric relationships with land and sea.

One of the most powerful examples of biocultural revitalization in action is the restoration of traditional stone weirs or fish traps, known locally as *polepole*. These structures—composed of coral rubble and often shaped into V- or arrowhead formations—have long histories across Oceania, with some dating back thousands of years (McNiven & Lambrides, 2021). On Lovongai Island, elders have led efforts to restore these traps as fishing tools and as cultural infrastructure. Their reconstruction has involved youth learning ancestral techniques, understanding tidal cycles, and engaging in rituals that honor the reef and its inhabitants. The use of ancestral technologies, such as *polepole*, is supported by archaeological and ethnographic research that shows these structures have long served as material expressions of ecological governance in Oceania (McNiven & Lambrides, 2021). These efforts are not simply about increasing fish stocks. This process of rebuilding weirs catalyzes conversations about respect, reciprocity, and spiritual obligations (West *et al.*, 2025). They serve as physical reminders of customary authority and the importance of ecological restraint, especially in an era when chemical and destructive fishing methods are undermining marine health. In this way, traditional fishing technology becomes a conduit for values-based conservation.

Language revitalization is another key dimension of biocultural diversity in practice. Each community visit by AA includes the intentional use of local languages and encourages youth to learn ceremonial vocabulary, place names, and expressions tied to ecological phenomena. Elders emphasize that language loss directly affects the capacity to maintain spiritual relationships with the land. Words are not neutral information carriers but vessels for moral codes, cosmologies, and kinship systems. In 2023, AA and its partners developed storytelling workshops where community members, especially women, shared narratives about intertidal gathering, reef etiquette, and seasonal

knowledge. These stories, some of which had not been publicly told for decades, reanimated connections to clan totems, plant relatives, and ocean currents. Participants recorded these stories through audio and visual documentation, creating a community archive for future generations and laying the foundation for more formal cultural education programs at the *Ranguva Solwara Skul*.

Biocultural diversity is also reflected in the participatory design of conservation areas. Rather than relying on top-down zoning, AA supports community-led mapping that incorporates spiritual sites, burial grounds, taboo zones, and areas associated with historical events. These maps often resemble story networks more than cartographic abstractions. Such maps resist flattening and instead reflect Indigenous ways of knowing territory, not just as space but as storied, lived, and moral landscapes. Through these practices, biocultural revitalization becomes a form of healing. It repairs ruptured relationships caused by colonization and climate change alike. It builds resilience not through technological fixes or donor-funded projects alone but through reinforcing cultural identities and spiritual protocols. As the *Ranguva Solwara Skul* grows and the *Vala* network expands, these lived expressions of biocultural diversity serve as both a compass and shield for navigating uncertain ecological futures.

9. Conclusion

The revitalization of biocultural diversity in New Ireland, led by AA, demonstrates a powerful reimagining of conservation that prioritizes Indigenous sovereignty and cultural resurgence. At the heart of this transformative model lies the practice of *Vala*—a relational protocol that intertwines ecological governance with spiritual and social obligations. *Vala* is not merely a conservation tool but a deeply rooted cultural practice that sustains both ecological health and community cohesion. As AA's initiatives illustrate, revitalizing *Vala* is a means of reclaiming sovereignty, not through political autonomy alone but through the reactivation of ancestral responsibilities and kin-based ecological care.

This research article has argued that conventional conservation models, often shaped by neoliberal and technocratic logics, frequently fail to account for the interconnectedness of cultural and biological diversity. Such models often reduce Indigenous communities to passive recipients of conservation interventions, overlooking their active roles as environmental stewards. By contrast, AA's work foregrounds relational sovereignty, a concept that recognizes the continuous and dynamic enactment of governance through everyday practices, cultural rituals, and spiritual engagements. In this sense, sovereignty is not a fixed state but a process sustained through lived relationships with land, sea, and community.

The *Ranguva Solwara Skul* epitomizes how educational initiatives can serve as epistemic hubs where ecological knowledge, cultural practice, and intergenerational mentorship converge. As an embodiment of relational sovereignty, the school rejects Western conservation paradigms that privilege technical knowledge over cultural practice. Instead, it nurtures a holistic pedagogy rooted in storytelling, ritual, and practical ecological stewardship. The school's emphasis on relational epistemologies underscores that effective conservation stems from maintaining cultural continuity and intergenerational knowledge transmission rather than imposing external management plans.

Furthermore, the restoration of traditional fishing practices, such as the *polepole* stone weirs/fish traps, demonstrates how material practices can serve as a conduit for both ecological sustainability and cultural identity. These practices are not merely about resource management but also about reinforcing social obligations and spiritual stewardship. As AA's work demonstrates, the restoration of biocultural diversity entails reweaving social, ecological, and spiritual life in ways that resist the fragmentation caused by colonialism, missionization, and capitalist expansion.

By situating conservation within the context of relational sovereignty, AA's initiatives challenge the colonial conservation paradigm, which often seeks to separate human activity from ecological management as political ecologists have identified (Youdelis *et al.*, 2021). Instead, AA affirms that ecological health and cultural vitality are inseparable. This insight is particularly

significant in the context of New Ireland, where conservation practices historically emerged from the interplay between social governance, spiritual obligations, and ecological stewardship. AA's approach not only addresses the environmental degradation linked to climate change and industrial exploitation but also fosters a form of cultural resilience that counters the erosion of traditional knowledge systems.

The article also demonstrates that biocultural diversity cannot be adequately preserved solely through conventional conservation metrics. Instead, it requires approaches that respect the complex interdependencies between people, ecosystems, and cultural practices. As seen in the resurgence of *Vala* and the educational practices at the *Ranguva Solwara Skul*, biocultural diversity revitalization is inherently political. It asserts the right of communities to define their environmental futures based on culturally grounded ecological practices rather than externally imposed standards.

Moreover, AA's model of conservation as cultural resurgence disrupts the neoliberal logic that often frames Indigenous communities as beneficiaries of externally designed conservation projects. Instead, AA positions these communities as active agents of change, drawing on ancestral knowledge to navigate contemporary environmental challenges. This reorientation aligns with broader movements advocating for decolonial conservation practices that prioritize Indigenous self-determination and challenge the historical dispossession inherent in conventional conservation models.

In synthesizing these arguments, this article contends that the restoration of biocultural diversity through Indigenous-led conservation in New Ireland exemplifies a radical and necessary shift in conservation practice. By embedding ecological stewardship within the relational fabric of community life, AA's work offers a compelling vision for how conservation can be restructured to honor cultural sovereignty, foster environmental resilience, and maintain the integrity of local governance systems. This model not only contributes to the scholarly discourse on decolonial conservation but also provides a practical framework for community-driven environmental stewardship in diverse cultural contexts.

This article contributes to and advances political ecology by foregrounding Indigenous sovereignty, spirituality, and relational ontologies as central to struggles over conservation, governance, and environmental justice. Building on political ecology's long-standing critiques of colonial conservation, neoliberal environmentalism, and the depoliticization of ecological knowledge, it moves beyond analyses of dispossession to demonstrate how Indigenous communities actively reconstitute political and ecological life through culturally grounded practices. In doing so, it extends political ecology's analytic scope by showing that power operates not only through markets, states, and conservation institutions, but also through spiritual obligations, ancestral law, and epistemic refusal. By theorizing relational sovereignty as a lived, everyday practice that binds social, spiritual, and ecological relations, the article challenges political ecologists to take seriously forms of governance and resistance that are not legible through secular or technocratic frameworks alone. AA's work reorients political ecology toward an Indigenous-centered understanding of conservation as cultural resurgence, demonstrating that struggles over nature are simultaneously struggles over ontology, knowledge, and the right to define environmental futures.

Ultimately, AA's initiatives demonstrate that revitalizing biocultural diversity is not solely an environmental endeavor but an act of reclaiming sovereignty, one that challenges the colonial legacies embedded in mainstream conservation practices. By rooting conservation within Indigenous ontologies and epistemologies, AA's work points the way toward more just and sustainable futures, where ecological care and cultural vitality are fundamentally intertwined. In doing so, it challenges the global conservation community to rethink its practices, acknowledging that genuine sustainability cannot be achieved without centering the voices, values, and governance systems of Indigenous peoples.

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