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HOW TO CITE:
Strand M. Ocean equity as an ocean in which many oceans can coexist. *S Afr J Sci.* 2025;121(5/6), Art. #21517. <https://doi.org/10.17159/sajs.2025/21517>

ARTICLE INCLUDES:
 Peer review
 Supplementary material

KEYWORDS:
ocean equity, arts-based research, pluriversality, knowledge systems, cognitive equity

FUNDING:
Nippon Foundation Ocean Nexus

PUBLISHED:
29 May 2025



Ocean equity as an ocean in which many oceans can coexist

This Invited Commentary builds on PhD research undertaken by Mia Strand, whose first PhD paper entitled ‘Reimagining ocean stewardship: Arts-based methods to ‘hear’ and ‘see’ Indigenous and local knowledge in ocean management’ (Front Mar Sci. 2022;9, Art. #886632), co-authored with her supervisors, Nina Rivers and Bernadette Snow, was awarded National Champion for the Frontiers Planet Prize in 2024.

Significance:
This Invited Commentary builds on my PhD research which involved exploring the value of arts-based participatory research for more inclusive and equitable ocean governance in South Africa, specifically emphasising the need to better recognise Indigenous and local knowledge systems in decision-making processes. In this commentary, I call attention to the concept of cognitive ocean equity and initiate a conversation about the role of arts-based research in embracing pluriversality in South African ocean governance.

Ocean equity

In this Invited Commentary, ocean equity is conceptualised as actively recognising and addressing historical and current injustices in ocean decision-making that continue to affect some people’s access to, benefits from and relationships to the ocean, to advance more just realities. It refers to tailored treatment, instead of equal treatment, based on the fact that not everyone has had (or have) the same opportunities as a result of histories and legacies of oppression, colonialism, Apartheid and other structural inequalities.¹ Similarly to Bam and Muthien, I have chosen to capitalise Apartheid throughout this commentary, to “highlight its significance in history and its continued impacts in South Africa and elsewhere”², particularly when it comes to inequities. In contrast to ocean equality, which often does not consider classifications of individuals “on the basis of certain personal characteristics” such as race, ethnicity, class and gender, equity seeks “redress of historic and systemic disadvantages”¹. Another way in which we can separate equality and equity is the concept and application of time. Whilst equality arguments and conceptualisations often focus on a better future – or a future where everyone is provided with the same opportunities – equity considers past and present realities, and how they continue to influence people’s advantages or disadvantages, and seeks to dismantle these systematic inequities.¹

Ocean equity can be considered according to various dimensions and aspects (see Figure 1), such as distributional equity focusing on access to marine benefits and distribution of marine harms, procedural equity focusing on opportunities for participation and meaningful engagement in ocean decision-making, and recognitional equity focusing on acknowledging people’s rights, values and cultures in ocean governance processes.³ In addition to these three common dimensions, some scholars also consider contextual equity as focusing on the pre-existing socio-economic and political conditions and structures that may influence people’s access to justice, and restorative equity focusing on mending and restoring relationships, whether human or more-than-human, which may influence people’s access to the other dimensions of ocean equity.⁴

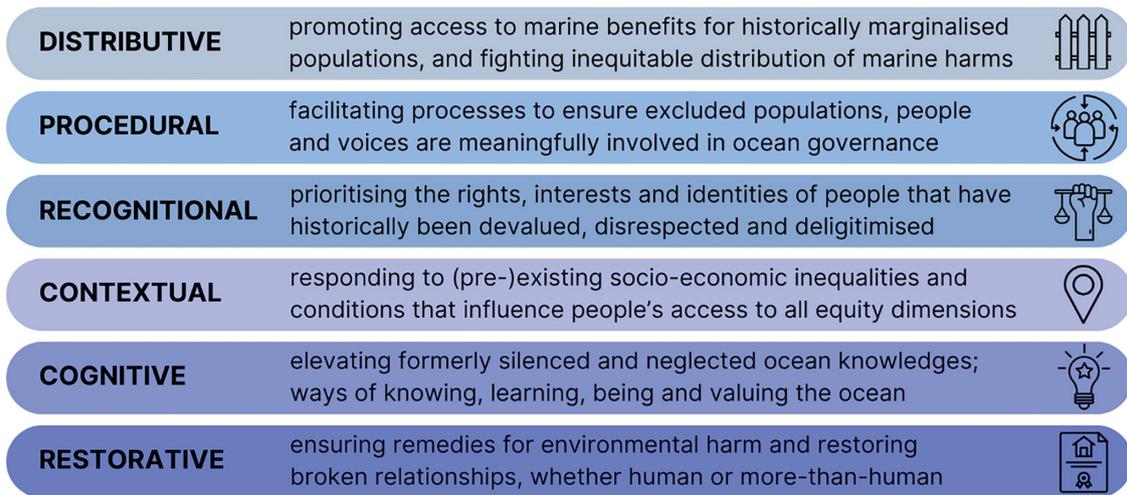
A sixth dimension is cognitive equity, which I propose refers to the recognition and elevation of formerly silenced and neglected ocean knowledges. Although cognitive equity is often grouped under the recognitional dimension, I argue here that we need to centre cognitive equity as its own dimension to consider ‘who’ is defining equity and justice in the first place and scrutinise what worldviews are underpinning these debates.^{5,6}

For example, Lobo and Parsons⁷ emphasise how ocean kinship and kin-centric relations to the ocean informed by Indigenous partnerships and sovereignty often struggle to emerge because of colonial legacies that privilege Western scientific knowledge in New Zealand and beyond. Similarly, Mulalap et al.⁸ convey how some Indigenous knowledge systems in the Pacific Ocean recognise humans as part of the ecosystem, and Hau’ofa⁹ articulates how Oceania communities see themselves as “people of the sea”, which is threatened by artificial borders imposed by imperialism and colonialism. Through creative and immersive storytelling, Yara Costa¹⁰ shares the story of ‘Nakhodha and the Mermaid’ from the Island of Mozambique, elevating often silenced or excluded slave memories, and highlighting stories of how African coastal populations are inequitably affected by global warming consequences.

In the context of Indigenous knowledge systems and histories in South Africa, Bam and Muthien² argue that the task of attaining cognitive and restorative justice includes “know[ing] the truth of over 300 years of colonial oppression, enslavement, land dispossession, economic exploitation, violence and consequent losses over deep time”. Once knowing this, it also involves addressing these injustices through policies, research, management plans and actions that actively seek to promote, elevate, and prioritise people and populations (and their rights, knowledge systems and ocean connections) that have been and continue to be marginalised through these intersectional forms of oppression, exploitation and violence.

Specifically considering conservation practices in South Africa, Musavengane and Leonard¹¹ emphasise that social equity and race “have been thought of as key factors in determining who will participate in conservation”, and that “conservation practices in post-Apartheid South Africa are still exclusionary for the majority black population”. Our research in Algoa Bay¹² similarly found that Indigenous and local communities continue to experience exclusion from ocean decision-making and lack of access to important ocean areas and cultural practices. The presence of paywalls and fenced-off areas reminded co-researchers of “institutionalised racial segregation during colonialism

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Source: This figure is inspired by and adapted from Strand⁴

Figure 1: Six dimensions of ocean equity, understood as addressing inequity.

and Apartheid”, and these barriers limit the transfer of ocean knowledges to the younger and future generations, and people’s opportunities to sustain, restore and build “connections to the coast for themselves, their families and communities”¹².

The importance of considering cognitive equity on its own also ties to the weight it carries for deconstructing, challenging and complicating coloniality of the ocean¹³, particularly in a South African context. The literature indicates how marine science and ocean governance continue to pursue top-down, didactic, positivistic, context-independent processes that largely rely on economic or conservation-based priorities.^{3,7,12-16} This often results in disregarding the realities and contextual ocean knowledges and connections of Indigenous and local communities that rely on the ocean for cultural heritage, well-being, health, spiritual connections, identity formation, traditional healing, religious practices and livelihoods. In fact, many of these extractive or conservationist approaches to ocean governance stand in stark contrast to worldviews that see humans as part of the ocean, and therefore interdependent on a healthy ocean for well-being, survival and community.

Pluriversality as an ocean in which many oceans coexist

The process of cognitive equity embraces pluriversality. The notion of pluriversality and ‘the pluriverse’ is often traced to the Zapatista

movement in Chiapas, Mexico, and Mignolo¹⁷ argues that “it was the Zapatistas’ own decolonial political vision of *a world in which many worlds would coexist* that announced the pluriverse” [emphasis added]. Recently, this was also highlighted by scholars in sustainability transformations research, arguing that we need relational approaches to better advance “practices of transformations as ‘walking together in a world of many worlds’”¹⁸.

Pluriversality refers to the dismissal of the concept of *universal* knowledge or truth, and rather acknowledging and celebrating that there are plural or multiple truths, answers, and ways of knowing, being in, and valuing the world.¹⁹ Pluriversality is a process of “deconstructing the myth of universality”²⁰, and it refers to knowledges as opposed to knowledge to recognise that knowledges are underpinned and building on different cultures and that no culture is hegemonic or universal¹⁹. Analysing the concept and process of pluriversality in African universities, Gwaravanda and Ndofirepi argue that:

... the Western epistemological paradigm is used in African universities to construct models of knowledge that view propositional knowledge as universal, objective, scientific, abstract, neutral, ahistorical, disembodied, faceless and transcultural.²⁰

The aim of pluriversality, then, is therefore an inclusive approach to knowledge validation and valuation, to open up epistemic dialogue,

promote “capacity to respect other knowledge claims” and challenge the “principle of the excluded middle where knowledge is classified as either scientific knowledge or no knowledge at all”.²⁰ Instead of promoting the marginalisation and displacement of specific or existing knowledges, pluriversity of knowledges rather aims to “accommodate seemingly opposed epistemological paradigms”.²⁰ However, to ensure that all knowledges achieve an ‘equitable’ role in this accommodating pluriversity, I argue that we need to actively prioritise, elevate and centre knowledge systems that have been historically (and/or are currently) undermined, discredited, devalued, excluded or silenced.

Here I argue that arts-based research can assist in advancing cognitive equity through ocean pluriversity, understood as an ocean in which many oceans can coexist.

The role of arts-based research for ocean pluriversity

Art has the power to open up the mind to imagination, to encourage empathy between human and more-than-human beings, and to allow us to view the world from contrasting perspectives and frames. Music, photography, theatre, poetry, storytelling and murals, for example, can elevate our sense of happiness and belonging, instil emotions such as sadness, hope, curiosity and fear, and transport us to a different place in time and space. Arts-based research refers to a process where artforms play a role in knowledge production, expression and data formation.²¹ The art itself is not the end product, but a means of communicating stories and experiences.²² Arts-based research methods have been celebrated and promoted for their ability to open up discursive practices for marginalised and silenced knowledge systems.²¹ By providing and encouraging people to share and own their stories in various shapes and forms, the methods can offer opportunities for people who have been historically silenced on environmental issues and decision-making to share their priorities and interests.²³ As pointed out by Erwin²⁴, storytelling processes can become a political act to develop “counter-hegemonic narratives” that are important to disrupt, make messy and expand on dominant exclusionary practices and “reimagine anew alternative ways of seeing and being”.

This theoretical basis formed the basis for my PhD, exploring the value of arts-based participatory research for more equitable ocean governance in South Africa.⁴ Collaborating with 48 people as co-researchers in the contexts of Algoa Bay (Eastern Cape) and Mandeni (KwaZulu-Natal), we found that centring photography and storytelling in the research can convey and promote an ocean in which many oceans coexist. The stories emerging from the research processes in Algoa Bay and Mandeni highlighted the importance of a healthy ocean for spiritual connections and well-being, for food and livelihoods, for a sense of freedom and peace, and for the transfer of cultural heritage and Indigenous knowledge systems; alongside and within stories of livelihoods and interdependence, were stories of spiritual connections and traditional healing; alongside and within lived experiences as subsistence fishers and commercial scuba divers, were lived experiences of mental well-being and the passing down of generational knowledge.⁴

The research showed that the arts-based processes in Mandeni and Algoa Bay were valuable in conveying multiple, overlapping, diverging and plural ocean knowledges all at once through the photostories and exhibitions.⁴ The exhibitions functioned as a story in which many stories could coexist, therefore embracing a more inclusive valuation of various ocean knowledges, and allowing the emergence of multiple meanings.^{21,25} In contrast to exclusionary practices and visions, we found that the arts-based methods helped to make otherwise intangible ocean knowledges and connections more tangible, which I argue is necessary to bridge the gap between local knowledges and knowledge systems, marine science and decision-making. Bridging is the process of finding common ground between heterogeneous groups and is vital to co-develop sustainable solutions through social learning and unravelling, meshing and ravelling in transdisciplinary knowledge co-production between academic and non-academic knowledge holders.^{4,26}

However, instead of promoting the need to *integrate* various knowledge systems into one ocean story, cognitive equity as ocean pluriversity rather promotes the need to recognise and value that there are many

ocean stories. The arts-based research process provided an opportunity to elevate and centre formerly silenced, and currently excluded, ocean stories, without necessarily marginalising or devaluing existing dominant ocean stories. As emphasised by Mignolo¹⁷, “Western universalism has the right to coexist in the pluriverse of meaning”. Instead of one universal ocean knowledge, “Western cosmology would be one of many cosmologies, no longer the one that subsumes and regulates all the others”¹⁷.

So what? What is the way ahead?

Focusing on cognitive equity in ocean governance is vital to ensure that we are not perpetuating or reproducing inequities of ocean pasts. The colonial legacies of ocean conservation and governance continue to privilege “Western ways of thinking”³, reproduce extractive research practices²⁷, uphold racist practices and policies^{11,28}, and exclude Indigenous Peoples and local communities from ocean decision-making, knowledge creation and ocean areas^{29,30}. This means that, to advance towards the reality of a pluriverse of oceans, discursive space needs to be made for non-dominant ocean stories and cosmologies, and cognitive equity should be prioritised to actively elevate formerly and currently silenced and neglected ocean knowledges.

To advance ocean pluriversity and cognitive equity, we need to scrutinise whose knowledges and interests are currently informing ocean governance, and actively pursue re-storying practices led by Indigenous Peoples and local communities whose knowledges have been marginalised in ocean decision-making. I argue that art and arts-based methods can play an important role here, and we should therefore actively fund, promote and pursue arts-based research and practices, particularly led by Indigenous and local communities themselves. Art-based methods are increasingly used to imagine better ocean futures, and it is therefore critical that these processes are centring cognitive equity as an ocean in which many oceans coexist.

Acknowledgements

This Invited Commentary builds on my PhD research, which explored the value of arts-based participatory research for more equitable ocean governance in South Africa. I thank and acknowledge all the co-facilitators, co-researchers and colleagues who made that journey possible. I also acknowledge the incredible support and supervision from my PhD supervisors, Dr Nina Rivers and Prof. Bernadette Snow.

Funding

I receive funding from the Nippon Foundation Ocean Nexus. The PhD research which inspired this Commentary was funded by the South African Research Chairs Initiative through the South African National Department of Science and Innovation (DSI)/National Research Foundation (NRF); a Community of Practice grant in Marine Spatial Planning [UID: 110612]; the South Africa–Norway Research Co-operation on Blue Economy, Climate Change, the Environment and Sustainable Energy 2018–2023 [project number:13591000]; the ACEP Smart Zone MPA Project [UID: 129214], and the One Ocean Hub [grant number: NE/S008950/1].

Declarations

I have no competing interests to declare. I have no AI or LLM use to declare.

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