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**“Ocean Literacy for an Ocean Constitution”**

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Manuscript Type:	Symposium/Special Issue Manuscript
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Keywords:	ocean literacy, marine social sciences
Abstract:	<p>Firmly cemented in history as a connector of people, a facilitator for trade and transport routes and a driver of culture and heritage, the ocean has directly influenced globalisation, and humanity more generally, for generations. While it was perhaps once viewed as infinite and insurmountable, globally, our oceans, coasts and seas have experienced unprecedented change in recent decades with climate change, loss of biodiversity, overfishing, among some of the challenges being addressed through contemporary ocean governance.</p> <p>Furthermore, and crucially as we continue to strive for sustainable ocean futures, the global ocean is increasingly recognised as a people space. This paper will explore the role of ocean literacy as we look towards achieving sustainable ocean futures.</p>

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### “Ocean Literacy for an Ocean Constitution”

Firmly cemented in history as a connector of people, a facilitator for trade and transport routes and a driver of culture and heritage, the ocean has directly influenced globalisation, and humanity more generally, for generations (Franke et al., 2021). While it was perhaps once viewed as infinite and insurmountable, globally, our oceans, coasts and seas have experienced unprecedented change in recent decades with climate change, loss of biodiversity, overfishing, among some of the challenges being addressed through contemporary ocean governance (Nash et al., 2020). Furthermore, and crucially as we continue to strive for sustainable ocean futures, the global ocean is increasingly recognised as a people space (Bennett, 2019). For many working with the ocean, its lure and wonder are perhaps somewhat taken for granted – indeed, most of us will have entered into our careers as ocean scientists, researchers, or practitioners because of a long-held, and probably childhood borne, love of and for the ocean (see Lotze, 2020 for more on this). And yet, for many outside of our watery sphere, that is not the case, with the disconnect between society and the ocean increasingly recognised as one the most pressing challenges (Potts et al., 2016). Recent years have witnessed a growing call for improved understanding of how people in different contexts view, value, connect with (or don't) and use the ocean, their perceptions and understanding of ocean issues and related management (see, for example, Lotze et al., 2018; Jefferson et al., 2014; Gelcich et al., 2014). These calls are echoed through the UN Decade of Ocean Science for Sustainable Development, launched in 2021, which aspires to transform the relationship between society and the ocean. As will be explored in other papers, the dual climate and ecological crises require rapid interventions and urgency if the predicted impacts are to be avoided or, at the very least, mitigated. But to do this, it must be acknowledged that ocean governance is not really about managing the ocean; rather, it is about understanding and managing people and their uses and impact on the global ocean.

**Whose ocean?** Amongst other aspirational goals, the UN Ocean Decade's underpinning strap line calls for '*ocean science for the ocean we want*'. Building on the notion of the ocean as peopled spaces and part of a complex socio-ecological system explored earlier, it is perhaps timely and necessary to consider who is included in this 'we' referred to here. When thinking about global ocean governance infrastructure, such as the UN Convention of the Law of the Sea, it must be recognised that while new instruments, such as marine spatial planning, marine protected areas, and even the UN Sustainable Development Goals have emerged in recent decades, the majority of decision-making infrastructure has been in place for many years – and could be described as being 'of its time' and perhaps in some ways 'out of date'. For example, while calls for improved understanding of the importance of marine

culture and heritage have been recognised in a UN Ocean Decade endorsed programme of activity<sup>1</sup>, UNCLOS does not reflect this, with no consideration of social values, of coastal communities and of cultural and heritage aspects, all of which are increasingly recognised as being core aspects of the ocean governance mosaic. As we think about ocean governance in the Ocean Decade, and beyond, the questions of 'whose ocean' and 'whose voice and values' must be asked and answered. The emergent international and interdisciplinary marine social science community provide a myriad of expertise and skills, and a suite of tools which can be employed for this very purpose (McKinley et al., 2022; Jefferson et al., 2021; McKinley et al., 2020; Bennett, 2019). Moreover, to ensure that the true diversity of values and connections are accounted for and considered, there is perhaps a need for a more transdisciplinary approach to be taken to ocean governance, with research and practitioners recognising the presence of numerous types of knowledge. There are therefore increasing calls for ocean governance to move towards a more co-developed, participatory process, which draw not only on the traditional natural and social science communities, but also on the expertise and insight which can be gathered from arts and humanities scholars, alongside the rich and varied knowledge and values of the ocean held by local and Indigenous communities the world over. Reflecting on this, social justice, equal access to resources and opportunities to participate and inclusivity of diverse voices and values must also be a central tenet of future ocean governance (Bennett et al., 2021; Worm et al., 2021).

**Looking towards sustainable ocean futures**, the relatively recent momentum gathering around the concept of ocean literacy appears to be an opportunity to redesign and rethink existing governance structures, resulting in something that is more inclusive, more equitable and more holistic. Defined at its very simplest as 'an understanding of the ocean's influence on you, and your influence on the ocean' (NMEA, 2020), ocean literacy has garnered significant attention in recent years since being positioned as a key mechanism for transforming the relationship between society and the ocean, within the UN Ocean Decade. In the last two decades, ocean literacy has, and is continuing to undergo a substantial evolution, building on its original roots of marine education and knowledge exchange to encompass a whole suite of dimensions (McKinley and Burdon, 2020). Moreover, while originally targeted as civil audiences, particularly those in close proximity to the coast, ocean literacy initiatives are increasingly recognising a broader set of audiences, ranging from school children, to businesses, to sustainable financiers and policy makers. As we continue to reflect on who gets to be involved in ocean discussions, there is also an opportunity to reconsider who gets to be viewed as a valid 'ocean' person or 'coastal community', recognising and championing the role and importance of the ocean in

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<sup>1</sup><https://www.oceandecadeheritage.org/>

every aspect of life and as part of the wider environmental system, harnessing the relatively fast paced growth in interest around ocean literacy as a pathway to foster and enhance marine citizenship but to play a significant role in ocean governance (Bennett et al., 2022; Buchan, 2021; McKinley and Fletcher, 2012). To successfully achieve this, we must create agency and foster stewardship, without paralysing people with fear or apathy. Embracing a realistic but ocean optimism approach (Borja et al., 2022) to communicating, education and empowering must be part of global strategies to realise the multiple goals of international goals and commitments, and to respond to the growing emergency facing our ocean, coasts and seas. Part of this will entail creating and funding programmes of work which operate across disciplinary, sectoral and policy boundaries; building capacity to support such inter, and transdisciplinary teams; and, critically evaluating and challenging the status quo.

**Achieving balance is challenging.** Not without critics, the UN Ocean Decade nevertheless sets out a welcome call to arms from the ocean community, seeking a transformed relationship between society and the ocean, embracing a broad definition of what ocean science might mean. With this in mind, perhaps, in addition to stimulating research and celebrating and championing the ocean, the Decade can afford us the much-needed opportunity to reflect on existing ocean governance through a critical lens. In the coming years, the Ocean Decade and the large-scale, multi-national events which will no doubt come alongside it, may act as a catalyst for the development of a new and improved ocean constitution for the future. What that might look like remains to be seen. There are strengths within existing governance infrastructure which should not be forgotten and could, and indeed must, be learned from, drawing expertise not only from the ocean sphere but from other areas of policy. An ongoing challenge within ocean governance relates to how existing tensions between growth, equity and sustainability can be balanced. There is no quick fix, and no one size fits all solution. However, there are examples of where innovative ways of assessing ocean values are being explored and tested (see for example the UKRI funded Diverse Values project<sup>2</sup>). What will be critical is that any truly forward-looking constitution for the ocean must learn from the past and must position the relationships between people, ocean and place at its centre.

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<sup>2</sup> [Integrating Diverse Values into Marine Management - Sustainable Management of Marine Resources \(smmr.org.uk\)](https://www.smmr.org.uk)

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