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Journal of Environmental Policy & Planning

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/cjoe20

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**To cite this article:** Voyer Michelle, Delisle Aurélie, Harden-Davies Harriet, Caldeira Mariana, Sant Gail, Boehme Tillmann, Boso Delvene, Chewying Robert, Lopes Vanessa, Guilhon Maila, Bowles Dora, Neihapi Pita, Saeni-Oeta Janet, Sekinairai Alumita, Solitei Makrita, Stewart Wally, Timiti Tarateiti & Ride Anouk (17 Oct 2024): Cross-cultural learning as a foundation for reimagining ocean governance, Journal of Environmental Policy & Planning, DOI: 10.1080/1523908X.2024.2415363

**To link to this article:** https://doi.org/10.1080/1523908X.2024.2415363



Published online: 17 Oct 2024.

JOURNAL OF ENVIRONMENTAL POLICY & PLANNING
https://doi.org/10.1080/1523908X.2024.2415363



# Cross-cultural learning as a foundation for reimagining ocean governance

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**ABSTRACT**

Research is a key tool that can contribute to the transformation of governance systems and help uncover solutions to our planetary crises. In recognition of the need for research itself to be transformed, researchers and research institutions are increasingly being challenged to move away from unidirectional approaches to partnership building, to decolonise science, and to be aware of individual and institutional positionality and established power relations. Yet the ways and means of doing so are poorly articulated and often extremely challenging. This paper seeks to explore the practical realities of engaging with a reflexive approach to research, through three distinct case studies which examine the critical role that cross-cultural interactions can play in triggering social learning and transformative change. Across all three case studies, we found that engaging across diverse, cross-cultural and knowledge interfaces has profoundly influenced the projects and partnerships in which we are involved, by shifting perceptions, challenging established norms and triggering reorientation and redirection in institutional rules and behaviours. Yet we also highlight the many challenges and mistakes we made along the way. As such, we offer suggestions on how the reflexivity might be better supported and nurtured within institutional research structures.

**ARTICLE HISTORY**
Received 26 September 2023
Accepted 7 October 2024

**KEYWORDS**
Reflexive governance; sustainable development; reflexivity; positionality; ocean governance

## Introduction

There have been many calls for transformational change in ocean governance in response to the multiple planetary crises which are impacting ocean health and human wellbeing and livelihoods. Yet despite a global recognition of the need for change, the concept, process and desired outcomes of transformation remain poorly understood and articulated (Evans et al., 2023). As outlined in Van Leeuwen et al. (2024) transformative marine governance requires reflexivity, with reflexivity theorised as a process of reflection and change which incorporates three elements. Firstly, reflexivity requires a trigger or stimulus for reflection, usually involving a recognition of an unwanted outcome or adverse event. Secondly, a process of learning and reflection is

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required to understand the problematic ideas, processes and practices that create systemic barriers to more sustainable futures. Finally, the capacity to enact change is required to address these barriers and to identify the institutional pathway towards creating that change.

Reflexive governance recognises that constituent parts of the governing system will be required to undergo transformation. As such critical examination is required across all institutional actors involved in these systems. This includes the academy, science itself and the individual researchers involved in the generation of knowledge which underpins contemporary governance (Turnhout, 2024). This paper adopts a theoretical understanding of reflexive ocean governance put forward by Van Leeuwen et al. (2024) and seeks to apply it to the research context, through an examination of the three constituent elements; a trigger, social learning and transformational change within a research context. The following sections will briefly explain the three elements of reflexivity before introducing the approach we used to explore their application to three distinct research partnerships.

## Reflexive triggers

The first element of reflexivity introduced by Van Leeuwen et al. (2024) is the trigger for reflexivity. This they define as *the process of self-confrontation when faced with unintended side effects that cannot be ignored (p4)*. In a marine governance context, these triggers can include the multitude of crises facing oceans and the communities that rely on them including resource use conflicts, natural disasters and mass extinctions which force active attention to the question of 'what is going wrong' within existing governing processes.

Within academic systems and research institutions, one 'trigger' for reflexivity is a heightened recognition of the influence of personal factors such as resource dependency, cultural background and values and worldviews on interpretations and perceptions of risk and the ways in which sustainability problems and potential solutions are defined and prioritised. Subsequently, there is increasing recognition of the need to be aware of individual and institutional positionality and established power relations and how they influence academic outcomes and practice (Wassénius et al., 2023). For example, positionality literature and practice encourage reflexivity at an individual level, drawing attention to power asymmetries that exist between researchers and the researched (Bilgen et al., 2021; Le Bourdon, 2022). At a broader level, the privileging of particular forms of knowledge, such as environmental sciences, has been critiqued as an obstacle to transformational change, separating humans from nature and perpetuating the myth of neutrality and objectivity in research and decision-making (Turnhout, 2024).

Ravera et al. (2023) argue that the first step towards transformation is the act of becoming 'aware of' and to challenge established parameters and hierarchies. The growing body of literature that critiques established academic norms, and calls on scholars to interrogate their positionality, guard against 'helicopter science' and develop more inclusive approaches to research suggest these reflexive 'triggers' have been met and academia has begun the process of looking in on itself (Adame, 2021; Gonda et al., 2021; Kuokkanen, 2010; Rose, 1997; Sundberg, 2015). Despite this, the process and practice of enacting and acting upon this reflexive practice in meaningful ways remains difficult, often opaque and always complex (Gonda et al., 2021; Rose, 1997).

## Social learning

The second and cognitive element of reflexivity introduced by Van Leeuwen et al. (2024) is social learning. They argue that the trigger of an unintended outcome, a disrupting event or a social movement or an environmental pressure point can lead to a period of reflection and learning, including a conscious re-examination of the existing governing system.

Social learning has been conceptualised as incorporating three interconnected 'loops' of learning (Tosey et al., 2012). Single-loop learning involves drawing lessons from past behaviour without necessarily interrogating or correcting underlying drivers or past errors or failures. It is often largely focused on individual (own) behaviour or practices. Double loop learning extends the lesson-drawing process by examining the assumptions and values that inform and direct past actions which may have led to failures and includes

examination of broader societal frames and norms. Finally, triple-loop learning extends this idea to examine how we learn, and the underlying epistemological positions that may influence the process of learning, including broader powerful social and governing structures and paradigms (Tosey et al., 2012; Van Leeuwen et al., 2024).

Within academic and research institutions, the 'triggers' to engage in reflexivity at both planetary and institutional scales, have led many scholars from across diverse disciplinary areas to begin to interrogate the role of research and research practices in perpetuating or entrenching existing power imbalances and unsustainable practices. While researchers are being encouraged to understand and be transparent about their positionality (which can be understood as single-loop learning), there has been a concurrent focus on challenging and unsettling the social and cultural norms that underpin dominant scientific constructs and processes of academic inquiry (which could be understood as double loop learning) (Wassénius et al., 2023).

Triple-loop learning in academic systems has been increasingly guided and supported through decolonising and feminist methodologies. These movements have challenged the research community to turn attention towards the ways in which colonial and patriarchal models of governance perpetuate unjust practices and valorise some forms of knowledge (such as western science) over others (Fischer et al., 2022; Hills et al., 2019; Von Der Porten et al., 2019). Instead, they focus on knowledge as 'contextual, relational and intersectional' (Bilgen et al., 2021) and encourage a movement away from colonial and hierarchical methods of research towards knowledge co-construction and a recognition of the plurality of values (Mcallister et al., 2019; Reid et al., 2020; Wheeler et al., 2020). Decolonising and feminist approaches have therefore been influential in promoting greater engagement with triple-loop learning by inspiring an expansion in reflexive practice beyond the scale of individual learning. However, it should be noted that there have been critiques that this focus – if tokenistic or simplistic – can in fact distract attention from, or worse undermine, the primary aim to deconstructing unjust systems and providing restitution for past (and current) harms (Louis, 2007; Moosavi, 2020; Tuck & Yang, 2021). This highlights the critical importance of the third element of reflexivity; transformational change.

### *Transformational change*

According to Van Tatenhove (2017), the essence of reflexive governance is the process by which the fundamental 'rules of the game' for governance are challenged, reimagined and transformed. Social learning is required to raise collective awareness of entrenched patterns of governance, and the ontological and epistemological assumptions that sit beneath them. But for social learning to translate into transformational change these learnings must be expanded to challenge and inform broader social, political and research groups and decision-making forums (Wassénius et al., 2023).

In their detailed examination of transformative change, Van Leeuwen et al., (2024) propose a multi-level dynamic between reflexivity and transformative governance change. The first level involves reflexivity at the actor level which leads to change in policy practices. The second, level of change occurs at the level of governance institutions and the third at the structural level of the political (or societal) system at large.

Reflexive governance has therefore been theorised as a process of internal critical reflection, at both personal and institutional scales, which contributes to transformational change in governance systems through processes of social learning and the reorientation of systems, processes and power dynamics (Van Leeuwen et al., 2024). For transformation to occur, multiple opportunities for transformation need to align, including an institutional and societal environment which facilitates and encourages reflexivity, the capacity for actors to reimagine different ways of doing things, and political power to enact change or experiment with alternative approaches.

### *Reflexivity in ocean governance research*

Within the academic and research community, we see evidence of emerging engagement with at least two aspects of reflexivity. Firstly, the academy has been triggered to reflect on our research practice through a

growing awareness of the adverse impacts of research which further marginalises alternative knowledge systems and entrenches existing power imbalances (Kuokkanen, 2010; Louis, 2007; Sundberg, 2015). Secondly, many scholars engaged in environmental research are increasingly participating in a process of learning and reflection, often supported or inspired by decolonising, feminist and transdiscplinary methodologies (Gonda et al., 2021; Ravera et al., 2023; Rose, 1997). The third component of reflexive governance – transformational change – can be difficult to assess. For example, there are significant difficulties in drawing causal links between shifts at an individual level with the more fundamental and systemic change required for transformation (Rose, 1997). However, we argue that there are significant opportunities for change within academic systems and a focus on oceans and ocean research and governance, in particular, creates unique opportunities to influence and enact that change.

The relative youth of many of the governance mechanisms currently being used or under development within ocean spaces creates opportunities for transformational change. Emerging approaches to ocean governance such as the Blue Economy and the Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction exemplify the opportunities for reflection and learning – and new models of ocean science – to inform modern governance approaches. In addition, the transboundary and fluid nature of ocean spaces and the shared governance responsibilities this engenders, can arguably facilitate more cooperative and collaborative approaches that are essential to social learning.

We argue that the ocean governance academic research and development science community is currently undergoing a period of reflection and social learning – in part in reposponse to broader societal pressure and activist movements within civil society, Indigenous groups and the environment movement. This reflective period has the potential to contribute to transformational change, not just within the academy but also within the broader governance systems which its research services. The ability to capitalise on this reflexive process and transform social learnings into change will be dependent on a range of factors not least of which is the ability to unsettle existing power dynamics and demonstrate tangible social and environmental outcomes. Yet despite the recognised need to engage in reflexivity and social learning, the practical realities of doing so are poorly understood and rarely critically examined (Rose, 1997).

The ways in which reflexivity, and associated reflexive governance processes, are initiated, sustained and supported requires further attention. At present, there is an absence of practical examples which demonstrate how reflexive approaches might be operationalised. There is a need for experimentation, for risk taking which involves trying new (and ancient) ways of conducting research which makes room for failure and learning from failure (Gonda et al., 2021; Rose, 1997).

This paper aims to expand on theoretical understandings of reflexive governance through the examination of reflexive research processes in practice, building on the experience of the authors. We examine three practical examples of experimentation with research practices which attempt to engage with reflexive processes, and which make space for ongoing individual and social learning. These examples all centralise the role of discomfort, acknowledged through cross-cultural exchange, as a trigger for reflexivity. We argue that the discomfort created by engaging with alternative ways of being, doing and knowing may also create space for inspiration, creativity and momentum, energy and hopeful pathways towards change.

Our three case studies bring together the experiences of three cross-cultural teams working in ocean governance. The first two case studies are long-standing research collaborations, and the third an emerging and relatively recently established research network. We use a personal and group reflexive process within and across the three teams to explore how the sharing of knowledge across cultural backgrounds has triggered reflexivity, encouraged social learning, unsettled established norms and facilitated tangible and intangible shifts in research or governance activities. These case studies are all works in progress and through this paper, we aim to present honest reflections on the difficulties we encountered and how we navigated them (or continue to navigate them). We aim to be explicit on the question of *how* we engaged with reflexivity, including the triggers of the reflexive process, the process of social learning and the honest realities of where we think we achieved change and where we think we did not. In this way, the paper explores how the broader academic and research community can engage productively and purposively with reflexivity.

## Methods

This paper was built through a co-design process based on iterative reflection, ongoing discussions and regular examination within and across the research teams. Throughout the writing process, each team was encouraged to meet regularly to discuss some key research questions. In addition, a number of informal meetings and workshops were held across the project teams with lead authors. Through this process, we built shared reflections within the individual case studies, as well as across the case studies around some core areas of interest, which we refined into the three areas of inquiry associated with the elements of reflexive governance:

1. *Triggers for reflexivity*: what were the aims and objectives of the cross-cultural project or programme in which co-authors were involved, how did the project start?
2. *Process of social learning and reflection*: what were the different 'positionalities' in the groups, including the established norms or beliefs central to the individuals and groups cultural identities? How did working in the cross-cultural environment provide opportunities and challenges for learning, and how that influenced the work, beliefs, and thinking of individuals, the group and other external factors,
3. Transformational change: Did these learnings influence the institutional arrangements or protocols of the projects? What 'worked' and what did not? What institutional factors supported or inhibited change? What lessons are relevant for ocean and coastal governance and research and science more broadly?

Part of this iterative process involved a critical examination of the terms and language employed in the development of this paper. Some authors indicated a preference to avoid terms such as 'development' and 'capacity building' because it was felt that these terms implied a meaning of unidirectional, top-down provision of resources, and a process weighed down by inherent inequities – rather than the multi-way partnerships in which authors feel they are engaged, and which they considered to be more conducive to effective outcomes. At the same time, the authorship group recognise that these terms are commonly used in both the academic literature and governance dialogues and there is a need to engage with them in order to effect change. We therefore use such terms, sparingly and while acknowledging the need to reflect on the power structures that underpin them, focusing attention on the cross-cultural nature of the case studies as a pool for combined expertise and place for new solutions, and we offer recommendations to advance the theory and practice of development and capacity building in the context of oceans.

All project team members who participated in these reflections are listed as co-authors – in order to recognise the spirit of this collaboration as a co-designed, reciprocal process rather than a researcher-research subject relationship. Given the individual teams associated with each case study all involve groups of both academic researchers and research partners, the authorship group is large and the level of engagement within and across those groups varied considerably. The level of involvement of individuals within each team was discussed and managed within each case study group in accordance with ethics requirements associated with those projects. The capacity for the individuals associated with the three case studies to interact with each other was limited due to diverse priorities and time zones and other logistical challenges of managing such a large and geographically dispersed group. Therefore, the primary responsibility for research design, data collection and write-up was undertaken by the academic leads of each of the three projects in consultation and partnership with their project teams. Despite this, we regard all authors as being on equal footing for this paper given all have contributed to the processes of reflexivity and social learning which underpin this paper.

The first case study is a community-based fisheries management programme in the Pacific called the Pathways programme for short. The programme started in 2014 as a partnership between three Pacific Island national fisheries Ministries in Kiribati (MFMRD), Solomon Islands (MFMR) and Vanuatu (VFD), a Pacific regional organisation – the Pacific Community (SPC) – and two research organisations – the WorldFish Centre and the University of Wollongong (UoW); and has been financially supported by the Australian Centre for International Agricultural Research and the Australian Department of Foreign Affairs and Trade. The aim of this 'research for development' programme is to foster sustainable coastal fisheries management through inclusive strength-based community-based approaches.

The second case study is a collaboration between researchers and Indigenous community members in New South Wales (NSW) Australia. Since 2017, a small team of academics from diverse cultural backgrounds has been working with the Joonga Aboriginal Land and Sea Corporation, located in Walbunja Country on the NSW South Coast. The team has been engaged in co-designed research and capacity development focused on Aboriginal economic development and Sea Country management planning. The project is a component of a broader research project funded by the Australian Research Council (ARC) and the Nippon Ocean Nexus programme, which seeks to explore how Aboriginal ontological and epistemological approaches might inform, reform and add value to conventional models of ocean governance, through the lens of reflexivity and co-design.

The third case study is an international ocean governance research and professional development initiative – the Ocean Voices Program (OVP). OVP was established in 2022, with the aim to inform and transform international ocean policy for sustainable and equitable ocean futures. OVP is funded by the Nippon Foundation, hosted at University of Edinburgh, and partners with individuals and institutions worldwide through customised professional development Fellowships nested in local communities, collaborative interdisciplinary research networks, and co-created projects and partnerships to amplify diverse voices in the development and implementation of international ocean law and policy processes.

## *Case study 1: community-based fisheries management in the Pacific region*

### *Trigger for reflexivity*

The Pathways project, now in its third phase, is identified as a 'Research for Development' or 'Research in Development' (Douthwaite et al., 2017) programme founded on the principles of participatory action research. The programme started in 2014 to foster community-led coastal fisheries management in the Pacific. Financially supported by the Australian government, the start of the project in 2014 was the result of long-established relationships and connections between all organisations. Over the nine years of establishment, the project has grown to currently comprise 20 staff members who support more than 100 coastal communities in Kiribati, Solomon Islands and Vanuatu to establish and maintain community-led coastal fisheries management[1] arrangements adapted to their context.

The story of the project is linked to the development and growth of partnerships between and within three main actors including (i) communities in the three Pacific Island countries, (ii) the fisheries practitioners in the national fisheries agencies, and (iii) researchers from the social and biological sciences – a group further sub-divided into national and international researchers. These three main groups of actors each operate within a broader institutional context that spans levels of governance from the local to the regional, research-based, and University-based priorities and hierarchical processes as well as donor priorities and timelines. All these ongoing partnerships are finally nested within broader processes supporting co-governance centred on bottom-up approaches and adaptive management of marine resources while having a dual purpose in achieving both research and development outcomes.

The diversity of actors within the programme contributes to several moments of reflexivity for all. The programme was inherently based on the premise of 'learning by doing' such as in a cycle of adaptive management. Communities were often prompted to reflect on the governance of their marine resources through project activities and during agreed management reviews. The project team composed of national and international researchers would incorporate reflections during annual meetings which became an inherent feature after the first phase of funding concluded. Other triggers for reflexivity included a reflection on the ways of working during the Covid-19 pandemic which allowed project members to reflect on the way their model of work was functioning.

### *Social learning and reflection*

Each team member reflected on the need to acknowledge how their diverse identities shaped by different ethnicity, genders, ages, lengths of association to the project, disciplinary backgrounds and roles within the project were central to their positionality. The team reflected that a strong starting point for reflexivity was to

acknowledge each other's differences and how power and agency (realised and perceived) influenced how diverse members in the partnerships felt about their involvement within the project. All team members experienced power and agency in two ways (holding power or being in a position of low power). The multiple settings of the programme in different geographical locations and the inherent interactions with multiple actors at different scales of governance (from community members to senior officials and donors) create instances of varying experienced and perceived power for a same individual. Acknowledging to themselves and allowing safe spaces for all team members to acknowledge to each other how they feel about their own power within the group and towards multiple actors in the programme allowed team discussion to confront and find collective solutions to lessen instances of power inequities or at least acknowledging inherent power inequalities. Such platforms for discussion although created within the project as points of reflection need time to flourish, and our group emphasised that certain discussions around power and agency can be acknowledged in group settings at the onset of the project while others need time.

Time was seen as an enabler for our team not to only understand the natural and social systems at hand in the domain of coastal fisheries management in the Pacific but also as a key enabler to allow relationships among different actors to grow. In itself the programme has had the benefit of long-term financial support which allowed team members to focus on understanding the realities of small-scale fishers. Time was a factor that allowed personal and project-based relationships to flourish and provided team members the opportunity to observe commitments from one another that led to mutual trust and respect. For instance, in-country project team members reflected on the need to observe how external researchers would commit towards co-production and respect of in-country team members' knowledge while also reflecting on how communities as core recipients of support also needed time to observe if those same in-country project team members would commit to long-term engagement in meaningful and community-driven bottom-up approaches as opposed to government-led approaches with community input. Meaningful (as defined internally by core actors) signs of commitment, long-term outlook, persistence even when difficulties arise and being receptive to 'listening' as opposed to 'hearing' each other voices were seen as key enablers to the relationships and thus in building a common and shared project.

We identified that the building of relationships among team members (i.e. most co-authors have worked together since the onset of the project) allowed for reflexivity to be an individual exercise of self-reflection but importantly extended to an exercise of reflection between core actors. The exposed shared core values allowed us to create safe spaces for dialogue where everyone could be open to express their own strengths and vulnerabilities to all or a select group. These moments were either created through the project or organically happened between team members. It was during those moments that reflexivity around the co-governance of marine resources took place. Dialogues were made successful when the different actors came without pre-positioning themselves to a particular result and were accepting of the potential of being influenced by the discussion and by changing their outlook, priorities, and processes as a result. The creation of annual internal project-wide reviews enabled all team members to openly share their lessons, reflect on how those lessons fit into their ways of knowing and doing and collectively evaluate the need for recalibration of project implementation in their own settings.

### *Change and barriers to change*

The in-country project teams reflected on the uniqueness of the programme to not advocate for a 'right way' of doing marine resource management but rather by integrating the learnings of the project within regional and country priorities. A cornerstone of the programme is to broker knowledge between different actors so that lessons and knowledge generated through research and community-led activities are shared to different audiences. This translation of lessons for wider social learning requires investment for project teams to go beyond traditional research outputs.

Moments of reflections between peer groups in each country allowed existing policy processes around coastal fisheries governance to be questioned and adapted due to an enabling environment that was based on the premise that all voices would be given equal focus and value. To do this in practice required the team to reflect on how workshops were structured in a way that was not conducive to non-researchers and

non-government partners. For a project held on supporting community views, it took some failures to recognise that although language requirements and non-jargon were the norm; they were often seen as being not sufficient by project members in creating an equal environment. However, more than inclusive language, the format of multi-partner workshops led community members to feel that they were attendees or recipients of knowledge more than equal participants in setting discussions on coastal governance. In Kiribati, this led researchers and government partners to let go of being the drivers of discussion but rather to give autonomy and trust to community actors in being in the driver seat.

We also identified that reflexivity should also happen within peer groups outside of the influence of others. Throughout the project, we reflected about the need for learnings on community-led coastal fisheries governance to be shared vertically between peer groups but importantly to also be shared horizontally within peer groups. Team members acknowledge that these horizontal moments of reflections were made possible through the support of networks. Networks of communities and networks of fisheries practitioners involved in community-led fisheries management allowed those actors to openly share their own perspectives to individuals who face the same opportunities and challenges away from input from other actors. Reflexive marine governance was thus achieved in our case study by the creation of moments of focused dialogues through the sharing of views, experiences and learnings that will influence both vertical and horizontal processes. Those dialogues become more meaningful in their depth thanks to commitment by all in time, trust, learning, striving for equity and mutual respect.

## *Case study 2: community-based, community-driven and Indigenous-led 'blue economies'*

### *Trigger for reflexivity*

Joonga Aboriginal Land and Water Corporation (JAWLC) and the University of Wollongong's (UOW) Blue Futures began their collaboration in 2017, when a member of the NSW Aboriginal Fishing Rights Group attended a Blue Economy symposium at the University. The Fishing Rights Group was at that stage building the idea of a complementary companion organisation (which eventually became JAWLC) that would focus on Aboriginal economic development opportunities on Sea Country.[2] The collaboration was therefore initiated by a member of the Fishing Rights group because of a recognition that a university partner may be useful for their longer-term objectives. Despite this, not all members of the group were immediately on board. Other members of the group were suspicious of people that they referred to 'do gooders' that often attempt to align themselves with Aboriginal organisations such as theirs. These were people who meant well but who are ultimately driven by their own agendas.

It is difficult to pin down a moment in time that was the 'trigger' for reflexivity in the collaboration that followed, and this was different for different members of the team. Critically, during that time the UOW team underwent repeated and ongoing cultural immersion, including formal and informal training and mentoring from Indigenous colleagues within their institution, through the UOW Jindaola programme (Kennedy et al., 2019) and associated activities. These activities were separate from the JALWC collaboration but significantly informed it, undoubtedly acting as a trigger for the reflection that followed. This is because these activities enhanced the cultural competence of the team and exposed them to practical ways to decolonise their research and engagement approaches. However, there were also some early 'failings' in the collaboration that resulted in delays and a period of reflection about the aims and objectives of the partnership. This primarily involved an initial rejection of the plans and ideas that UOW had helped develop with JALWC by members of the broader Walbunja community of the NSW South Coast (the ancestral lands of the JAWLC).

Yet, despite this set back the story of the development of this collaboration is ultimately a story of perseverance, patience and forgiveness. Members of both the UOW and JALWC undertook a period of reflection on the learnings and some structural reforms to the process of engagement and team make up and membership. The failure of these earlier plans was identified as a misalignment between the JALWC and broader Walbunja community aspirations and ideas and the approach of the UOW partners at that time in addressing them.

### *Social learning and reflection*

The UOW and JALWC undertook repeated and regular engagement, and over time were able to build a mutual understanding around what JAWLC was trying to achieve and where the university might 'fit' into those plans. The primary aim of the JAWLC has always been to elevate grassroots Aboriginal voices into ocean governance on the NSW South Coast, through a Sea Country management planning process. However, they considered it critical that there be an initial focus on building a social enterprise that created jobs on Country for Aboriginal people. This was designed to build credibility for JAWLC amongst politicians, Government and the wider community and to provide income that would allow JAWLC to be self-sufficient, reducing their reliance on Government grants and other sources of income.

It took some time for the role of the UOW team in this broader agenda to become apparent, and perhaps even longer for some members of the UOW team to let go of the instinct to attempt to shape and guide that agenda. The critical turning point for the UOW team members came through a shift towards a more relational approach to working with JAWLC, informed by their learnings through the UOW Jindaola programme. Once the team was able to recognise the critical role that reciprocity plays in a relational approach to research they were able to also see that their role was not to guide or advise, but to support and enable. This required the UOW team to recognise that they did not hold all the skill sets that JALWC required and they subsequently expanded to bring in members who could be actively and intimately involved in the business planning and development process with the JALWC.

The process of reflection, triggered by both a period of cultural competency training and the early set backs and failures, therefore resulted in two significant changes to the approach to the collaboration. The first involved embracing a more relational approach, which required team members to step outside of accepted academic norms, and in the words of JALWC members, 'getting their hands dirty, paying interest' and listening. The second significant change involved forming a strong commitment to a strength-based approach. A strengths-based approach emphasises on the positive aspects and resources that individuals or communities possess, aiming to build those strengths, assets, and capabilities to address challenges and achieve desired outcomes.

### *Change and barriers to change*

With the help of the renewed UOW team, JAWLC developed a business model and won a series of grants, with each grant contributing to the development of the social enterprise business model in the forms of assets (such as the purchase of vessels) and growth and the employment of Aboriginal people in jobs on Country (in total 12 young adults from the community now work on Country). The business they subsequently developed, which is now operating at a surplus with a turnover close to 1 million dollars and a ½ million dollar worth of assets, has the autonomy to set their own agenda and create their own narrative.

These activities, which could not be considered research activities in the conventional sense, were nonetheless contributions that were judged to be of the most value to the JAWLC. They assisted JAWLC to deliver on their aspirations and were therefore considered essential enablers of the wider research programme, which aims to learn from Indigenous models of governance and development. In this way, the team experienced shifts in how they perceived the role and value of research, from one in which 'detached' researchers observe and record the processes of governance and development, to one in which research, and researchers, are positioned as an active agent within a process of transformation and change.

There have been, however, a number of institutional barriers that have caused frustration and delay in the activities JAWLC and UOW. For example, it is common for university systems to position Aboriginal people engaged in research as marginalised and vulnerable, and additional (and appropriate) layers of protection have been developed to guard against exploitation and appropriation. However, we found it was not always easy to navigate these processes (for example ethics approvals) as they are inherently built from the construct of Aboriginal participants as vulnerable research subjects rather than partners who are leading and directing the research, embedded within their communities, with established cultural and ethical protocols and customs. This caused significant delays in securing ethics approvals, which led to the erosion of the credibility of the

project in the wider Aboriginal community. Rebuilding this trust has been a priority of the two teams since ethics approvals have been obtained.

Inherently, the collaboration between JAWLC and UOW is built around a strengths-based approach, with JALWC positioned as project leaders who identify the nature and scope of the work that the two teams work on together. Research is often predicated on the idea that the research outcomes and outputs will provide the benefits that will make participation and collaboration worthwhile for research subjects. A reciprocal approach to research positions the researcher as a partner and collaborator, with an obligation to support and enable transformational change, not just to observe and record it. The teams have actively worked to recognise the agency of JALWC and avoid narratives that disempower or entrench disadvantage.

Collectively as a group, we have acknowledged that relationships take time to develop, and relationships based on trust and mutual respect have been fundamental to the success of our research collaborations, especially when the partners stem from a different ontological and epistemological background. However, there is often little room for building or nurturing relationships within academic systems bounded by constrained timelines and conventional academic outputs.

## *Case study 3: internationally dispersed networks connecting local voices to international law and policy: ocean voices fellowship programme and research network*

### *Triggers for reflexivity*

OVP was formed as a result of reflexivity within the international ocean governance community which has increasingly recognised the need to move towards a greater focus on equity and diversity. Launched in 2022, OVP was established in response to the need to challenge existing power imbalances and amplify diverse perspectives in ocean governance. Ocean Voices was designed to give individuals from varied nationalities, ages, backgrounds and stages of career access to supportive research networks and collaborative opportunities. The programme focuses especially on creating spaces to bring different voices, usually marginalised, and to open doors to decision-making spaces, allowing these diverse voices to actively contribute to policy discussion and solutions.

The aims and membership of OVP provided more triggers for reflexivity during its 25 months of operation. At its core, OVP is fundamentally concerned with individual training and development combined with institutional strengthening with a particular focus on developing countries; providing a space to reflect on power imbalances in ocean governance and terminologies around capacity building/development. At the membership level, diversity is of fundamental relevance for OVP. OVP spans geographic, cultural and linguistic diversity arising from the spread of partners over 12 countries, predominantly from the global south. OVP bridges generational diversity and various career stages, from early to senior. OVP spans diverse approaches to advancing, exchanging and applying knowledge through a network of people working in different disciplinary and ontological dimensions. This diversity within the group allowed reflexivity around the appropriate use of language, ways of working and knowledge systems.

### *Social learning and reflection*

OVP is composed of very diverse groups of individuals from which two sub-groups can be distinguished – the fellows and the programme office members. Reflecting on individual positionalities and power relations in such a group, OVP is centred and developed according to the perspectives of the members, especially the fellows. Throughout the fellowship, fellows and the programme office discuss what would be beneficial for fellows' professional development and research. As a result, the programme includes identified needs in the fellowship programme to equip fellows with their desired skills via the delivery of special sessions and through exchange with experts. Fellows gain hands-on experience on the role of the programme office by being part of the nomination and review process when recruiting new fellows for the following year. All members are also in the process of developing a co-designed reporting and review framework that celebrates individual and programmatic outcomes.

OVP could arguably be considered a capacity-building/development initiative since it is fundamentally concerned with individual training and development. During the first year of OVP, members reflected on the meaning and use of this concept, since some of the fellows view the term capacity development as having colonial connotations and to reinforce problematic power dynamics. The proliferation of 'capacity building' to denote equitable partnerships highlights the challenges associated with such terminology and the need for clarity regarding the language used in such initiatives. OVP has engaged in dedicated discussions focusing on the terminology used to define the programme. These discussions were prefaced with a collective acknowledgment that participants were committed to practicing active listening and meaningful interactions. As a group based on linear relationships avoiding hierarchical positions, members opted to avoid the term capacity building where possible in internal OVP communications and decided to adopt alternative terminologies that better reflect group interactions and fellows' views. In this case, the term 'partnerships', emphasising the two-way nature of the relationships formed, was ultimately considered more appropriate.

To accommodate the diversity of views, perspectives and experiences within the group membership, OVP organised 'safe spaces' for discussion. These 'safe spaces' are meant to strengthen relationships among members, creating trust, and a way in which members aim to let go of vertical relationships to foster discussion. The 'safe spaces' foster innovative thinking to ocean issues while allowing researchers, especially those at the beginning of their careers and from developing countries, to be integrated into decision-making processes. Creating informal safe spaces, such as meetings with professionals to debate themes regarding ocean governance without social or organisational hierarchy, enables interpersonal connections and knowledge exchanges, removing barriers that limit expressions of knowledge and worldviews. Those safe spaces also facilitate professional networking by offering the chance for early careers to be connected to professionals worldwide with different backgrounds. These professionals then act as entry points for fellows to provide their expertise in varied environments, such as the new agreement for areas beyond national jurisdiction and the new plastics treaty. The importance of networking is highlighted as a significant step for current and future collaborations among early-career fellows, providing the opportunity to fellows to stay engaged in processes of negotiations as well as in knowledge production.

To challenge existing power imbalances and amplify diverse perspectives in ocean governance, OVP is trying different approaches to provide members with opportunities to learn from one another. One of the important elements OVP supports is bringing together individuals from different backgrounds and cultures to promote cross-disciplinary and cross-cultural solutions to global ocean governance challenges, reflective of local needs and realities. OVP enables fellows, originally from developing countries, to be based in the location of their choice, staying embedded in their own communities, and connecting remotely through virtual interactions and in-person events including international meetings and negotiations. This model is particularly important and relevant when considering that the fellows can impact their own communities and share their knowledge and capacity among others, staying integrated and aware of their own nations' necessities to better communicate this in international decision-making forums. Many fellows are also engaged with their local governments, providing expertise and recommendations for their national legal frameworks as well as representing their nations in political events, promoting their autonomy and supporting a more integrative and inclusive environment. This support provided aims to increase the participation of fellows in decision-making processes, aiming for a more balanced model of governance.

### *Change and barriers to change*

OVP has only been operating since 2022. During its inaugural year, OVP facilitated participation in over 70 events, fostering increased engagement among fellows. Additionally, eight individuals represented the programme in nine intergovernmental meetings spanning six distinct international ocean governance processes, thereby advancing the representation of diverse groups at the international level.

Even at this early stage, members have tried to learn and adapt as a group. Long-term efforts to challenge unequitable power systems in international ocean governance involve equipping OVP fellows with the necessary skills and spaces to remain active in decision-making. OVP provides opportunities for networking, mentoring and integration among members to foster relationships and ensure future collaborations. Additionally,

the programme offers technical and specific knowledge on how to make recommendations at national and international levels, understand the international structure of ocean governance, explore possible pathways to leverage careers, and secure funding for attending relevant conferences and workshops.

However, most of the network members are early-career researchers. Capacity development/building or 'two-way partnerships' might in this instance require long periods of support. This timespan contrasts with the limited funding for both the programme and the fellows. OVP acknowledges this limitation and is continuously seeking ways to extend and enhance the support the Fellowship provides to ensure the sustained development of fellows' careers. One of the strategies is to focus on networking, as a pathway for future collaborations for fellows and other professionals.

A common understanding and an environment that reflects the different perspectives, knowledge, and cultures across the OVP network highlight the importance of shared values. Articulating these values is an iterative process that is not yet complete. Fellows acknowledge that respect to different views and values may be an initial step to challenge existing power systems, but it is still fundamental to raise the voice and the importance given to less represented groups. Encouraging horizontal hierarchies and reflecting on one's own positionality is crucial to ensure a community that fosters an environment of mutual learning and to gain confidence in one's own voices as vectors of positive change. OVP recognises the importance of two-way learning and listening to different perspectives to form relationships, link cultural backgrounds, and share experiences through open discussions. When considering positionality, 'spin-off' initiatives, such as the emergence of conversation series in communities led by OVP fellows, have been of great value as a tool for cross-cultural learning.

Although the programme is composed by multi-cultural background, this also represents a challenge. While the sole working language of OVP is currently English, OVP recognises that for many of the partners English is not their first language. Questioning the dominance of the English language and seeking new options is a crucial part of the OVP reflexive process. However, the challenging fact to seek other alternatives once English is still the most used language to communicate science and knowledge worldwide still remains. The language is a barrier and a facilitator, as it also allows the participants to communicate, share experiences, and different views, learning from one another.

Ocean Voices works to recognise and enhance the importance of forms of knowledge which have lacked recognition. Working on traditional knowledge and other forms of knowledge within traditionally western academic systems can create a challenge since there are not always access points that recognise the validity and importance of different forms of knowledge. Despite the wish to transform existing imbalances in power systems, this is a challenging topic when considering that researchers are operating in partnership with western universities and wish to publish in academic journals. Fellows have expressed that publishing in academic journals is a fundamental need to gain credibility in academia or in other professional fields related to ocean governance. Understanding the different ways to present research and where different forms of knowledge fit within academia remains as an area of continuous reflection for OVP. The programme continues to have open conversations on these topics and works to enhance opportunities for different forms of knowledge to be published and recognised.

## Discussion

Despite the significant variations in the context, scale and scope of these three case studies, a number of commonalities emerged in the reflections of the groups associated with the challenges and opportunities associated with cross-cultural learning. Table 1 summarises the key reflections of the three case study groups in relation to the three elements of reflexive governance.

### *Triggers for reflexivity*

External drivers and internal 'shocks' Wassénius et al. (2023) argue that academia is currently entering a phase of 'creative destruction', opening the way for the release of unsustainable practices and the reimagining and

**Table 1.** Cross comparison of case studies.

| | Case study 1 (Pathways) | Case study 2 (JALWC) | Case study 3 (OVP) |
|---|---|---|---|
| Trigger for reflexivity | 'Learning by doing' focus on adaptive management with regular formal and informal review and reflection mechanisms | Cultural competency training and impetus to decolonise research practices<br>Setbacks and rejection of initial attempts at collaboration | Calls for greater diversity of voices in global ocean governance<br>Practicalities of working across diverse geographical and cultural contexts |
| Social learning | Active reflection and discussion on individual and collective power and agency<br>The importance of taking time | A letting go of the need to control and direct, embracing strength-based and relational approaches.<br>The importance of taking time | Laying foundations for long-term relationships building around shared values, including through the development of a shared language and terminology |
| Transformational change | Structural changes to modes of working including workshop design<br>Greater leadership function of research partners | Tangible community outcomes, ongoing challenges in unsettling broader systemic and institutional barriers<br>Greater leadership function of research partners | Development of models of working and mechanisms to support horizontal learning across diversity |

reorganising of the norms of academia. This creates space for 'uncomfortable discussions' and radical changes in academic practices. Engaging with practical, tangible actions which trigger and encourage social learning and reflexivity will play a critical role in enabling this creative destruction.

At a broad scale, we argue that the increased emphasis on inclusive, equitable and co-created research practices is serving as an important trigger for reflexivity in academia. In some cases, this is being guided, challenged and disrupted by transdisciplinary, decolonising and feminist theory and methodologies. Across all three case studies, the initial motivation or objective was related to the need for more equitable and inclusive approaches to ocean governance. In various ways, these research collaborations were all developed to address the observed lack of 'entry points' for diverse voices in international and national scale policy processes (Spalding et al., 2023; Vadrot et al., 2022). An individual's knowledge may be relevant and important, but there may be barriers to entering top-down institutions that limit the ability to share knowledge and grow within their network. The academic community is increasingly recognising the need to work in interdisciplinary settings but also to make space for alternative perspectives and local realities, which do not necessarily align with westernised science traditions (Le Heron et al., 2020; Vadrot et al., 2022). This has encouraged the development of research activities such as those highlighted in our three cases. However, work is required to bridge the gap between inclusive research in practice, which is often highly localised or limited in scale, and more formal institutional arrangements and top-down ocean governance architectures – and this is a strong driver for the work being undertaken in case study 3.

Whilst the drive for more inclusive research approaches served as an important trigger for the work of all three case studies, additional 'internal' triggers' have guided greater reflexivity and social learning within each group. For case study 1, institutionalised requirements for regular reviews which form a component of the adaptive management cycle of this long-term research programme were embraced as opportunities for reflexivity. For case study 2, the internal shock associated with challenges in the early stages of the collaboration prompted reflection on whether the collaboration was meeting its desired objectives and triggered an extended period of reflection and a re-setting of the relationship between the research partners. Finally, in case study 3 early debate over the language and terminology employed by the group triggered reflexivity around the shared values of the group and the role and purpose of the collaboration.

### *Social learning: the strengths and challenges of relational approaches*

Social learning extends individual cognitive processes by acknowledging that these take place in a broader social or institutional system. According to Reed et al. (2010), social learning is defined as a change in understanding that goes beyond the individual to become situated within wider social units or communities of practice through social interactions between actors within social networks. Across all three case studies, there was a

strong emphasis on relationships as a foundation for successful collaboration, learning and reflexivity. The critical role of trust was emphasised by all three teams, as well as the importance of safe spaces in which team members feel comfortable to share their views, explore new ideas and be exposed to new ways of thinking. In these three cases, these relational aspects of learning have been critical to broader social leaning patterns within the teams.

Social learning was evident across all three case studies, with variability in the scale and extent evident between the more established research groups and the more newly established research network. This variability gives potential insights into the emergent nature of social learning. For the OVP group, the early days of the collaboration have focused on building a relationship of trust, mutual respect and shared purpose amongst the network members. Their case study highlights how language, jargon and theoretical terms can create barriers to social learning by inhibiting meaningful exchanges or understanding, and potentially exacerbating mistrust in individuals or institutions. Reflexive processes within that team have allowed for the development of practical responses to this challenge, as exemplified by their ability to reframe discussions around capacity development towards more strength-based and relational approaches. In this way, the group has begun the process of identifying exploitative processes and existing power imbalances in which their work is situated (Harden-Davies et al., 2022).

In the more established case studies, social learning has had to confront the practical and tangible expressions of uneven power symmetries within their groups and the work they undertake. For case studies 1 and 2 double loop learning was evident as the group – collectively and individually – renegotiated internal power relationships in response to setbacks and challenges. In both case studies, the academics relinquished the role of directing the activities of the research team in favour of greater leadership from research partners. In this way we argue that a 'hybrid' space of research was opened up that recognised the agency and knowledge of all parties involved in the research (Rose, 1997).

### *Transformational change: unsettling power dynamics and the role of temporal constraints and enablers*

The three case studies examined in this study all demonstrate the importance and value of social learning. The extent to which they have each been able to translate this learning into transformational change is difficult to measure, yet all three case studies demonstrate an impact on established norms and patterns of working within the academic system. Many of these impacts reflect the insights of Ravera et al. (2023), who identified the practice of reflexivity as the first key space for transformation, as a catalyst for identifying and challenging underlying hierarchies and paradigms. A commitment to an ethic or care – as another important step towards transformation – was also evident across all three case studies embodied in processes and practices of building trust and relationships within the groups. This approach has resulted in tangible demonstration of transformation within the groups, including the establishment of new – more horizontal – modes of working in all three case studies.

Yet as with Ravera et al. (2023), moving the impact of these internal transformations beyond the immediate projects or programmes into the social or political sphere can be constrained by the institutional mechanisms within which we work (Ananda et al., 2020). For example, single- and double-loop learning was considered to be inhibited by a focus on technical over relational aspects of learning. Systemic factors which fail to valorise or create space or time for relationship building and maintenance were also highlighted, for example, donor centred 'research for development' mechanisms aligned to western timelines and academic pressures to produce 'timely' scientific publications for research-based organisations (Wassénius et al., 2023).

The case studies also highlight how the drive for more inclusive and participatory approaches to research and ocean governance can act not just as a trigger for reflexivity and social learning but also an inhibitor. This was particularly evident in case study 3, which involves a network of academic scholars engaged in disciplinary areas outside of the social sciences. Members of the OVP reflected on the challenges involved in operationalising the 'task' of reflexivity which is widely recognised in the group as critical to their core objectives. With the network coming from diverse disciplinary areas, the group found that the language and practice of reflexivity are often inaccessible, complex and overly theoretical. Yet the group has instinctively embraced some of the

core components of reflexivity, including reflection, learning, and working together to develop the capacity for reorientation and redirection of existing social structures (Donati, 2010).

Finally, reconciling the need to 'take time' with the narrative that 'we have no time to waste' is a challenge for reflexive governance. All three case studies emphasised the critical importance of time in building relationships of trust. Time was also seen to be essential in creating opportunities for individual and social learning, and there was a sense that the time needed to be 'right' for institutional and social drivers to align in a way that created the necessary environment in which new (or old ideas reimagined) ideas might flourish. However, whilst recognising the important role that time plays in creating a nurturing environment for transformational change there was also a narrative of urgency and frustration amongst many of the team members given the crises that are now threatening natural and social systems the world over.

## Conclusion

Three case studies which operate at different scales and contexts within ocean governance reflected core values of reciprocity, relationships, trust, respect, time and learning as foundational to their ways of doing. These small cross-cultural networks can be considered as microcosms of the broader local, national and international communities in which we operate. While the degree to which the case studies we examined can contribute to broader transformational change remains to be seen, there are some practical insights that can be drawn from which may assist in triggering reflexivity and creating space for social learning within other settings.

For individual researchers, our findings support careful consideration of language, jargon and positionality. They also highlight how all involved individuals need to reflect on their research practices and protocols to ensure that partnerships promote safe spaces and encourage and value different forms of thinking, knowing, learning, perceiving and living. Finally, reflexivity needs to be recognised as an ongoing and evolving practice that requires regular moments of reflection and reviews of research practices. Case study 1 highlights the potential value of institutionalising reflexivity through formalised review processes embedded within adaptive management cycles.

At a broader institutional scale, the learnings from these case studies encourage institutional reflexivity around the nature of the relationship between research and subject. In all our case studies, the research team was able to reframe their role from provider to partner, aiming for a reciprocal approach which shared the benefits of the research – or the research network – broadly. More collaborative and co-designed research processes will be met by institutional barriers as they become more mainstream and therefore re-examination of academic and governance institutional settings is required, including reimagining metrics of success for academic research (Davies et al., 2021). Funding bodies will also need to explore ways in which reciprocal approaches to research might be incentivised, including through reinvention of funding systems to better accommodate diverse perspectives; provision of time and space for relationship building and maintenance; programme reporting measures that capture the value and impact of diverse perspectives; and flexibility for changes to research direction, methodologies and design based on learning and reflections. Finally, academic and governance institutions will be required to promote diversity by encouraging the participation from researchers that do not come from western academic backgrounds and exploring models for research dissemination and outreach that are inclusive of multiple knowledge systems.

Our three case studies are all small, relatively isolated groups in a large ocean governance institutional architecture. The scale and nature of the change they are capable of producing, and the extent to which they can influence a shift towards more reflexive governance approaches will depend on several factors, including the size of the networks they are connected to. Yet they create places for informed and respectful conversations, and the development of new ways of informing and implementing solutions which may ultimately inform new policy directions. We believe they demonstrate the ways in which an immersion in different ways of knowing and doing can trigger, sustain and inform reflexivity and provide inspiration which can guide a reimagining and transforming of ocean governance.

## Notes

1. Community-led fisheries management takes many forms in the Pacific and can be referred to by many acronyms. In this context, we refer to community-led approaches as ongoing activities led by communities to sustainably manage their coastal fisheries with or without a third party.
2. Sea country is an Australian Aboriginal concept that encompasses every part of the coastline, including freshwater, 'bitter' water and salt water, the land and beaches, the animals and plants, the seasons, weather and sky, and the people.

## Acknowledgements

The authors would like to acknowledge the larger teams from the case studies that were drawn and the following funding sources.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Funding

This work was supported by Australian Centre for International Agricultural Research [grant number FIS-2016-300]; Australian Research Council [grant number LP200300895]; Nippon Foundation.

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