1. Introduction – governing oceans: what, why and how?[1]

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The ocean is the origin and the engine of all life on this planet
(Conservation International, 2015)

The importance of the oceans cannot be underestimated: thus effective ocean governance is imperative.
(Haas et al., 2021: 254)

INTRODUCTION

Oceans and marine spaces are essential for the health of the planet, global trade, and international security. Approximately, 70% of the Earth's surface is covered by water. Around 80% of world trade by volume travels across the seas and is processed in ports (UNCTAD, 2022). The blocking of the Suez Canal by the container ship *Evergiven* provided the world with a stark reminder of the importance of the oceans in our supply chains. Similarly, the Russian invasion of Ukraine, and the consequent halting of the ability to export grain from Ukraine across the Black Sea, have demonstrated the essential contribution of oceans as trading routes. But it is not only because of trade and economic development that oceans are vital to human life. According to Haward and Vince in 2008, the 'United Nations Food and Agriculture Organization (FAO) analysis provides a serious assessment of the state of the world's fisheries, and "reinforces calls for more cautious and effective fisheries management to rebuild depleted stocks" (FAO, 2007:7)' (Haward and Vince, 2008: 9). Since the publication of this report, the situation in the oceans has worsened. As the oceans become deoxygenated (Brietburg et al., 2018), more salinized, and ecosystems change as a response to human inputs, changes are expected in the patterns of wildlife – for example the movement of fish stocks and migration routes of sea mammals (Wensveen et al., 2019) – which will have significant implications for existing maritime disputes. The oceans are at risk and consequently present an existential threat to life on Earth.

Despite the crucial role oceans play in our lives, and the severity of the risks outlined above, outside key 'flashpoints' such as piracy (see for

example, Magunna, 2022), sovereignty disputes (Freeman, 2020; Hayton, 2014), challenges of migration (Kinugolu, 2023), and the competition in the Arctic (Reinke de Buitrago and Schneider, 2020; Byers, 2017), the majority of international relations scholarship has focused on the land, resulting in 'seablindness' (Bueger and Edmunds, 2017). Indeed, within the discipline of international relations, oceans, rather than being seen as the place of interaction, integral to the survival of all species, and are important subjects of the 'international' in their own right, they are often understood as places that demarcate the land from the land and are subject to different laws and customs.

Conversely, other disciplines, including international law, geography, development, biosciences, and others, have long paid attention to the oceans and how they are controlled, managed and regulated. Indeed a 2023 handbook on oceans governance law (Borg et al., 2023) highlights the abundance of scholarship on the oceans in a vast array of sectors. This volume highlights that international law, treaties, agreements and protocols pertaining to the oceans have stretched into almost every area of humans' activities on and in the oceans (Borg et al., 2023). Similarly, the work of Alan Boyle has identified that international law as been critical in the pursuit of climate action, both in evaluating whether agreements – such as the Paris Agreement (Boyle, 2018) – are being implemented and in considering how climate objectives can be pursued by drawing on the United Nations Convention on the Law of the Sea (UNCLOS) (Boyle, 2019). Similarly, James Harrison (2021) has identified that the use of the law and UNCLOS can aid the climate change regime.

Oceans are, therefore, fundamental to life on Earth. It has also long been recognized that the oceans face significant challenges as areas of declining biodiversity and increasing stress. These issues have long been the subject of research in a multitude of disciplines and there has been an abundance of international agreements relating to the oceans. Therefore, despite the lag in scholarship in international relations, the challenges of the oceans are increasingly the subject of study in a range of disciplines. So, what is the problem? According to Crowder et al., 'Problems in ocean resource management derive from governance, not science' (2006: 617). Vierros et al. (2020) note, 'increasing and widespread impacts in ABNJ have resulted in calls for improved management of high seas fisheries, shipping, use of marine genetic resources, deep-sea mining, and other activities'. Indeed, we contend that the issue at hand is that oceans are not subject to too little law (or an absence of science) but rather too little (effective) governance that can respond to the increasing challenges in the oceans.

TOO LITTLE GOVERNANCE?

Although we have centuries of experience of how humans have interacted on and in these maritime spaces, in the past 100 years the types of activities people conduct have changed substantially. One example of these changes is in the oceans as a place of (critical) infrastructures. Bueger and Liebetrau make the case for these changes clearly: 'If 100 years ago it was shipping lanes, ports and telegraphic cables, the acceleration of oceanic activities has led to a vast growth of infrastructures at sea' (2023: 1). They go on to outline that this has changed ocean activities in both breadth and depth. The activities of 100 years ago continue but shipping lanes are more congested, and fishing has become a billion-pound industry. At the same time, new activities are taking place, such as laying of telecommunications cables, positioning of offshore renewable energy turbines, and extracting fossil fuels and other natural resources (Bueger and Liebetrau, 2023: 1).

This deepening and broadening of what happens at sea then places stressors on how ocean governance operates and develops. The logic of these changes also challenges some previous wisdom and activities of governance at sea, as these activities cover spaces that span boundaries from sovereign territories to the high seas, and therefore straddle the reference points of *mare clausum* and *mare liberum*.[2] As David Attard outlined in the foreword of an edited collection,

> The 1982 United Nations Law of the Sea Convention (UNCLOS), often referred to as a constitution for the oceans, provides a formidable and sound basis for oceans governance regulating human marine activities. … It was difficult, if not impossible for the drafters of UNCLOS to have envisaged the complex ocean governance challenges which have developed in the past four decades. (Attard, 2023: xv).

Indeed, increasingly, the activities at sea are not seen as being successfully managed by international agreements or under the long-established practices of the freedom of the seas. Rather the oceans may be subject to the tragedy of the commons – wherein a wide range of individuals or collective actors have equal access to a resource, each will act in their own interests, and with an absence of control or authority, the resource will be depleted and may disappear. In the oceans, in areas beyond national jurisdictions (ABNJ) and in relation to biodiversity beyond national jurisdictions (BBNJ), this would not just be a 'tragedy' but a catastrophic event for life on Earth.

This environmental tragedy, and the associated threats to life in the oceans are also highlighted in the Sustainable Development Goals (SDGs). These include (but are not limited to), rising sea levels, increased salination, destruction of ecosystems through mining or land reclamation, and pollution.

These threats and their significance for life on the planet have been repeatedly recognized, not least through the pursuit of Sustainable Development Goal 14, life underwater (UNSDG, n.d.) which also contains specific targets for its achievement.[3] Despite these specific targets, and factoring in the effects of the pandemic in stymieing progress on these actions, we still appear to be some way from achieving this sustainable development goal. Writing in February 2020, Johansen and Vestvik argued:

> SDG 14 still awaits good implementation: four of the Goal's targets have 2020 as a deadline for substantial progress (these are protecting ecosystems, regulating fishing practises, establishing 10% of marine protected areas,[4] prohibiting fisheries subsidies). However, this progress is not evident. Capacity building and further research and knowledge are needed for the fulfilment of the Goal, while pollution and unsustainable fisheries are still untamed challenges. (Johansen and Vestvik, 2020: 1–2)

In their paper, Johansen and Vestvik (2020) go on to present the challenges of the lack of sufficient financial resources and the funding gap that will contribute to the problems in achieving Goal 14 and its associated objectives. The chapters of this volume partially agree with this assessment; however, they also identify other barriers to successful oceans governance (see Tembo (Chapter 3), Kong Mukwele (Chapter 8)). High among those is the political will of actors involved, the willingness or ability to address issues of the past that present governance challenges for the future, and the cohesion – or lack of it – of local, national, regional and global policies and lessons for implementation (see Tembo (Chapter 3), Withouck et al. (Chapter 5), Shucksmith and Withouck (Chapter 2)).

Note that it is not only through the SDG framework that the UN has worked to contribute to oceans governance and particularly to address the challenges of biodiversity. In June 2023, the international community, through the United Nations General Assembly, voted in favour of an agreement (June 2023) on biodiversity beyond national jurisdiction (UNGA, 2023). The creation of this agreement is historic; however, in order for its objectives to be realized, all the signatory states have to take domestic actions to ensure its provisions are upheld. Hence, there is an increasing need to explore and draw lessons from instances of governance that already exist.

Similarly, if we see governance not only in terms of codified agreements but also as the presence of opportunities to come together, communicate, and collaborate, as Kong Mukwele notes (Chapter 8), the UN has created many opportunities for the coming together of states, of which the prominent UN oceans conferences are one such example. As detailed in her chapter, it is easy to dismiss these events and actions as lacking political will and being ineffective; however, as she articulates through the example of transboundary

marine protected areas, there is evidence that there are 'multiplier effects' of small-scale successes that are then disseminated through the convening power and authority of entities including the UN.

It is not only in relation to environmental challenges, including in relation to biodiversity or ecosystems, where the tragedy of the commons is an increasing risk. As Bueger and Liebetrau go on to identify in respect to critical infrastructures, 'They are seen as objects that require particular forms of protection often in the frame of security or even by military forces' (2023: 1). There is therefore a global shift that may be taking place away from the practices of the global commons and the freedom of the seas towards sectors, places, and actors where there is a need to balance between freedom of action and greater control and protection, as well as enhance coordination between actors not traditionally in the same policy spaces.

As Carvalho, da Silva, and Medeiros (Chapter 6 in this volume) note, in the Brazilian context, it is the navy that has the lead in relation to maritime matters; however, increasingly it is important to recognize that 'institutional development of a complex system of agents in cooperation in the defence and security domain is determinant for regional peace and stability'. As a result, the achievement of security objectives is no longer possible without the integration of a multitude of actors across a large number of issue areas, from drugs trafficking to environmental protection. As Bueger and Liebetrau conclude, 'Integrating the different sectors and related policy fields is difficult to achieve and presents an enormous coordination challenge on a national but also regional level' (2023: 6). Where Carvalho et al. (Chapter 6 in this volume) stride towards a better understanding of how this integration can happen is through a sophisticated process of mapping interactions between agencies, identifying both where coordination happens and – perhaps more importantly – where it does not. As they note, this is a result of vast data collection and rigorous methodological innovation. However, the gauntlet of the coordination test remains significant.

In summary, if, as Crowder et al. noted in 2006, the problem was in governance, this problem has only become more acute in the intervening decades. As Roe argued, 'This governance failure stems largely from the intensification of globalisation which has accelerated in recent decades and exacerbated the inadequacies of traditional forms of maritime policy making' (2013: 168). This trend is likely to become even more pressing as rivalry between the United States and other great powers increases and draws in competition over the global commons and their resources and the (so called) rules-based international order is more significantly challenged.

As noted above, governance of the oceans has to span across multiple competing policy areas and identify processes, gaps, and mechanisms to overcome different and divergent interests. It also needs to find ways for actors (subject

to different hierarchies of authority) to cooperate, even in the absence of a singular directive political will. It also needs to engage with problems of the past and legacies of previous maritime eras and differing maritime cultures to ensure some stability of expectation of the endurance of governance models. It is at the intersection of all these problems of governance that this edited collection seeks to open and expand the debate. In this edited collection we seek to explore where there is evidence of governance of areas of activities in maritime spaces and identify where there are practices, frameworks, and procedures that may contribute to building a framework of oceans governance.

This is not a small endeavour, and our efforts will necessarily be incomplete. However, as the conclusion of this volume notes, the authors indicate that in adopting an approach which is akin to 'what works well', we can see evidence that governance has the potential to be built from the bottom up. But that may be more regional and local rather than global in scope. It is contingent on political will and the effective interaction between competing entities. In these pursuits significant benefits are found in applying innovative mapping techniques and in critically evaluating what already exists.

The remainder of this introduction briefly provides some key points of reference for the readers of the subsequent chapters including: the definition of the oceans and the use of terms including maritime and seas; understanding what governance is, who is involved and how the term is used; and finally, a summary of the chapters. The concluding chapter will then outline the lessons learned from discussion in each chapter, including how we might conceptualize the problem of oceans governance differently in different policy areas, how coordination might be facilitated, how the utility of mapping processes and the critical evalution of exisiting frameworks can be assessed, and how these chapters move towards answering the question at the outset of this introduction: what type of political space are the oceans and is it possible to create, implement and systematically evaluate an international framework to enable the oceans to be governed?

PROBLEMS OF THE DEFINITIONS OF OCEANS AND WHY THEY MATTER FOR GOVERNANCE

As readers will have noted from the above, the terms oceans, maritime and seas are seemingly used interchangeably in this introduction and across the wider literature. The first challenge, therefore, is in defining oceans. This is important because one of the problems of oceans governance in the 21st century is that the ability to mark lines between spaces and attribute them particular legal and governance frameworks is becoming more difficult. As the differentiation between different legal spaces becomes more fungible, a premise of oceans governance is also challenged.

A starting point is provided by Germond when he considers how to define maritime security: 'Maritime security refers to a geographical space, that is to say the sea, which has different characteristics compared to the land' (Germond, 2015: 141). Whilst this is undoubtedly accurate, it has limited conceptual utility for the definition of the oceans in this context, not least because defining oceans as a negative has the potential to reduce their diversity to a homogeneous 'other', which in turn oversimplifies the problem that faces this volume. A more accurate reflection of oceans may be found in this quote from Czerski:

> Ocean water isn't the same everywhere – the temperature, salinity, chemical passengers and the web of life it contains give each water parcel its own signature. The wind, changes in water density and the spin of the Earth drive the churn, creating layers, currents and carousels, giving the ocean its versions of forests, deserts, rivers and meadows. The biggest difference is that these ocean features are often mobile and seemingly capricious, popping up and fading away, journeying around the engine, growing and shrinking as the months, seasons and years pass. (Czerski, 2023)

The mobility of oceans is one of the great challenges of oceans governance. It is hard to define a boundary between oceans and seas by their properties; instead, more often oceans and seas are defined through their geographical reference points on land. For example, according to the National Oceans Service, 'In terms of geography, seas are **smaller** than oceans and are usually located where the **land and ocean meet**. Typically, seas are **partially enclosed by land**' (National Oceans Service, 2024, emphasis in the original). This service goes on to highlight that these terms are often used 'interchangeably', but there is a geographical distinction. For oceans governance this geographical distinction is also important as the proximity to land also affects the type of activities being governed, the relevant legal frameworks, and the risks or threats that are being avoided or mitigated.

The issue of proximity to land is found to be fundamental to the definitions of UNCLOS (1982) which gives the parameters of territorial waters, exclusive economic zones, contiguous zones, areas, and features, in relation to their position relative to the land. For example, the UNCLOS definition of territorial waters is: 'Every state has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles measured from baselines determined in accordance with this Convention' (UNCLOS, 1982: sec. 2, art. 3).

Hence the measure of oceans is not defined in terms of the intrinsic properties of the water, the life it contains or the biodiversity that it holds, but rather the proximity to fixed points measured from land. However, this is not the only contributing factor to these definitions. In considering contiguous zones, there is a part of the definition that is based on physical geography: 'The contiguous

zone may not extend beyond 24 nautical miles from the baselines from which the breadth of the territorial sea is measured' (UNCLOS, 1982: sec. 4, art. 33(2)). But the reason that a state may exercise control in a contiguous zone is the result of a need for a state to conduct or prevent a type of activity taking place:

> (a) prevent infringement of its customs, fiscal, immigration or sanitary laws and regulations within its territory or territorial sea;
> (b) punish infringement of the above laws and regulations committed within its territory or territorial sea. (UNCLOS, 1982: sec. 4, art. 33(1))

Hence, the first governance challenge for oceans is in these definitions, because they reinforce the oceans as places that are acted on or in rather than containing unique properties. When we look at the problems of governing fishing (Tembo (Chapter 3)) or the effects of positioning of oil or gas rigs (Shucksmith and Withouck (Chapter 2)), what is being sought to be managed are these inherently moving and movable properties, rather than the space of the sea. And the ability of a state to exercise control or authority is defined by the space rather than the objective that is being achieved. Similarly, activities that take place on the fixed seabed may alter the waters and therefore affect the ability and the willingness for a state or other actor to incur governance costs.

A first question then is whether oceans governance should be anchored to physical spaces in the oceans and as a consequence result in states having authority or authorities, or whether (as Moya Crawford of the D'arcy Thompson Simulator has passionately argued) there should be 'custodianship'[5] and activities in the oceans should produce obligations. This type of approach has the potential to move states away from thinking in terms of defining the ocean in relation to land to generate control and instead frame the ocean as having unique properties that generate obligations.

An associated point on the governance of states (and therefore the definition of what can happen in different areas of the oceans being defined by their proximity to states) is made by drawing on the example of shipping; Roe makes the argument that

> the influence that nation-based decision-making can have over a globalized sector can be erratic and at times ineffective. The shipping industry uses this conflict between globalization and domesticity to its advantage often trading off one jurisdiction against another and involving itself at different levels as and when it sees it to be beneficial. (Roe, 2013: 170)

Hence defining the oceans (and consequently designing governance from that definition) also produces and then reinforces both a multi-actor and multilevel governance problem. The complexity that has emerged as a result of both

globalization (and interconnectivity) along with the consequences of climate change (and therefore the necessity to try and control and prevent harm to the oceans) has exacerbated a set of pre-existing governance problems, which demand higher financial investments, greater political will, and greater coordination of both policies and practices.

A further aspect of this approach to defining oceans is raised by Barry Ryan in discussing the 'zoning' of the seas. In his 2019 *International Affairs* paper, he argues that 'The global zonal regime is a mode of oceanic governance that is anchored in the emergent and often contested logic of what constitutes maritime security: good order at sea' (Ryan, 2019: 1056). Identifying and exploring this relationship is valuable and important for this area of research, because Ryan enables the teasing out of the problematic evolution of oceans governance. The linkage between UNCLOS as the 'constitution of the oceans' and the historical setting of zones in the seas ties the origin of oceans governance to the history of empire, and particularly the imposition of the rules by powerful states seeking to achieve a narrow(er) set of interests. As Ryan makes the argument, 'the traditional claims of sovereign ownership or exclusive control, based on military *dominium* or *imperium*, which framed the history of the sea, no longer carry a normative force' (Ryan, 2019: 1056, italics in the original). Ryan goes on to argue that a solution to this problem is in more complete and contiguous zoning of the seas where it more completely reflects the patterns of governance on land (Ryan, 2019: 1057). Ryan offers examples of how this process of zoning is already underway, through the use of marine spatial planning tools within exclusive economic zones (EEZs) and then the ability to 'police' designated spaces within a wider EEZ (Ryan, 2019: 1070); similarly, we might see more 'pop-up' spaces of particular risks and therefore particular coordinated governance activities (Ryan, 2019: 1070).

This type of approach, which would generate a 'patchwork' of governance zones (Ryan, 2019: 1070), also subtly transforms an underpinning definition of the oceans. It moves the definition from places defined by the distance from land to places of particular characteristics, wherein the activities and unique properties of these parts of the world are governed more by what they are than what they are not. As noted in a number of the chapters of this volume, adopting different ways to 'see' the ocean and generate areas of difference through spatial mapping is a key emerging solution that contributes to ocean governance (see: Shucksmith and Withouck (Chapter 2), Carvalho et al. (Chapter 6), Withouck et al. (Chapter 5)). This type of approach to definition may be better able to dynamically respond to changes in characteristics such as fish populations and levels of salination as well as the temporary positioning of extractive industries or long-term energy generation.

WHAT IS GOVERNANCE AND HOW CAN IT BE RELATED TO OCEANS?

If the previous section has drawn towards what might be considered an 'ideal' or perhaps 'idealistic' view of what the oceans are and how these definitions might enable governance to take place – particularly in areas presently defined as EEZs or the high seas – then what is meant – or could be meant – by the term 'governance'?

In their book on oceans governance, Haward and Vince (2008) outline that 'Governance emerged in the 1980s as a conceptual tool to help explain developments in international relations and national politics that has moved beyond the traditional state-centred or bureaucratic model of administration' (Haward and Vince, 2008: 11). Governance, therefore, was a concept that was fleshed out in order to better reflect the reality of multilevel and multi-stakeholder contributions to the creation and implementation of processes to organize and limit actions in particular political spaces (Haward and Vince, 2008: 11). Its intention was to facilitate understanding and evaluation of political spaces.

Governance is a slippery analytical term used to describe a wide gambit of activities. In 1995, Finkelstein argued, 'we say "governance" because we don't really know what to call what is going on' (Finkelstein, 1995: 368). Similar arguments concerning the usage of the term 'governance' have been proffered by Fukuyama (2016) who identified that the term is 'applied promiscuously' (2016: 90) and Offe in 2009 (see also Fukuyama, 2016) who termed governance an 'empty signify' (Offe, 2009: 550). On the basis of these heavy critiques there is room to question whether it is possible or analytically useful to consider developments in 'oceans governance'.

Whilst not ignoring these valuable and prescient critiques, in this volume we start from a more deceptively simple definition arising from Huberts: '*governance* is about authoritative decision-making on collective problems and interests (policy-making), as well as the implementation of such decisions' (Huberts, 2014: 6). Offe (2009: 550) makes a similar case that governance is concerned with 'institutions' and 'processes'. Further to this Huberts goes on to note that governance is about making and implementing decisions, not about the contents of those decisions (Huberts, 2014).[6] Therefore, governance is about processes and actions. If we then incorporate the work of Fukuyama (2016; see also Offe, 2009), we need to consider who the actors are, where decisions are made, and what mechanisms for implementation exist.

These three components of governance then also need to be considered in relation to institutional and political capacity. According to Haward and Vince, 'The World Bank links governance to institutional capacity and to the effec-

tiveness of public organizations (World Bank, 2000)' (Haward and Vince, 2008: 12). Haward and Vince then develop a framework that follows Pierre and Peters (2005), and has four elements:

(1) a common set of priorities;
(2) coherence;
(3) policy implements and institutional structures;
(4) accountability. (Haward and Vince, 2008: 13)

To these four elements of a governance framework for developing governance structures we add the important ones of financial support, political will and either 'norm subsidiarity' (Acharya, 2011) or norm localization (Acharya, 2004). The principle of norm subsidiarity is that the processes that will manage the content of governance are devised at the lowest possible level of interaction so that the processes that emerge have 'buy-in' from all local stakeholders and actors, whereas norm localization seeks to ensure that globally developed norms are 'localized' to be fit for purpose in every local setting and therefore have greater chance for successful implementation.

According to Mahon and Fanning, 'there are at least 25 global governance arrangements relating to ocean EBM, and at the regional/sub-regional arrangements that are the subject of this study, some 165 are located at the geographic scale between these global arrangements and the national level' (2019: 5). Working our way down the different levels of implementation in all states we find a plethora of departments, regulations, agencies and charities, that inform and enact policies. Hence, the challenges addressed in this volume move beyond questions of whether there are sufficient processes to how effectively policies are implemented and work across governance boundaries. We argue that the key additions of subsidiarity, localization, financing, and political will are essential in understanding instances where governance has been effective and the moments when it has not. Similarly, these chapters indicate that the flows of successful practices of governance tend to 'flow-upwards' rather than downwards – that is learning lessons from small local communities that can then be applied to a wider range of places and then localized to different contexts appears to be more promising as a pattern of development for oceans governance.

SUMMARY OF THE CHAPTERS OF THIS VOLUME

The two quotes at the opening of this chapter identify the importance of oceans governance, yet effective management of the oceans as resources presents a panoply of governance challenges. Oceans are vast marine ecosystems that produce essential resources that are needed to sustain human, plant and

animal life. Yet, as noted above, the oceans present a number of governance challenges that result from the unique geography of the oceans, historical conceptions of the use of ocean and maritime spaces, and the multitude of different actors and interests that compete for limited and (for some) finite resources.

At the same time our ability to draw governance lessons from the past may also be curtailed; as noted by Shucksmith and Withouck in Chapter 2 of this volume, the nature of human activity and interaction with oceans has drastically changed in the past century. The ocean is no longer a place solely for demarcation of sovereign boundaries, transit for goods and warfaring, seafaring and fishing, but is now a complex economic space which is both being used as a source of resources but also a place for expanding international spaces of authority and action. Germond, writing on maritime security, has identified that the diverse uses of the maritime space are increasingly intertwined: 'Maritime security is increasingly linked to economic and environmental considerations, … the success of the *Blue Growth* strategy rests on a safe and secure maritime domain, which grants economic agents with the stability and certainty they expect to see before they make any investment' (2015: 138, emphasis in the original). Hence, although these activities are often competing for space to act in and on the ocean, they are also mutually interdependent and the oceans are places where competition between human actors is endemic at the same time that cooperation is essential.

Even in activity areas where there is a vast history of human–ocean interaction, such as fishing, it is far from straightforward to translate lessons from the past to current practices. As Tembo outlines in her chapter, despite the contribution of marine spaces to socio-economic development, 'coastal ecosystems were not recognized as a component that required consideration in development decision-making' (Tembo, Chapter 3). In her chapter she documents the tensions between different governance actors (in South Africa) in seeking to generate and implement legislation. Hence the competition between actors is not restricted to the international but also to the domestic policymaking spaces (this finding is also affirmed by other chapters in this volume).

As Withouck et al. (Chapter 5) note, the development of policy and legislation (regarding the positioning of oil and gas rigs) requires consideration of 'social, economic, and environmental considerations', but implementing the legislation that is produced from these interests can be aided by a process of special mapping that highlights the differences between these sets of interests.

The novel approach of marine spatial planning is also highlighted in the work of Miteva-Bölter (Chapter 7), where she considers the role of UNESCO-ICO in advocating this type of approach and understanding the interaction between international and national actors in contributing to oceans governance. In her chapter she notes that there are top-down pressures from UNESCO-ICO to adopt certain planning practices in relation to the oceans. However, in her

conclusion she also notes the move from advocacy for marine spatial planning as a technical policy instrument to a 'catch-all' policy agenda. Hence the chapter highlights a move from a technical base to generate practical technical solutions for specific problems in the marine environment towards a move to generate a broader and more inclusive governance model or framework. Hence, oceans governance faces challenges of competing visions of what the 'end-product' of governance of the oceans would look like – a series of technical pragmatic solutions to specific problems, or an overarching holistic framework that seeks to inform interactions across a range of areas and among different actors.

In their chapter Carvalho, da Silva and Medeiros provide an innovative approach to mapping governance activities in Brazil and across South America. In connecting to the framework elements set out above, this highlights what needs to be considered in relation to accountability and localization: 'Mapping together the big picture and tendencies promoted by those invisible frameworks and gaps (or routes of insecurity) in the South Atlantic basin can show us more of how ocean governance is evolving in the region' (Chapter 6). This mapping process then allows for better understanding of how, where and at what level, cooperation happens in the South Atlantic basin, which in turn allows for an evaluation of where there are successes and failures of cooperation to produce governance.

In thinking about governance processes, it should not go unnoticed that the present-day human actors are not the only ones of concern here. As Perez-Alvaro argues in her chapter (Chapter 4), 'The idea is that the sustainable management of the oceans should ideally include all uses and users, respecting all rights, interests and goals.' Hence, governance – and particularly because of the importance of accountability – in this space needs to consider the legacies of past human activity, the socio-cultural lessons that can be learnt from past human activity on the seas and the effects of cultural artifacts on contemporary challenges and contributions to local marine ecosystems.

Perez-Alvaro's argument also points to a fundamental challenge of the oceans – they are inherently international; whether the international dimension is focused on resolving or managing the debris of previous engagements in and on the oceans (in the case of shipwrecks and other artifacts) or whether it is concerned with the division of costs and consequence from the past, the problem is necessarily interactional. But, as Kong Mukwele's chapter identifies, the ability for transboundary initiatives to contribute to the creation and implementation of the governance of the oceans is also limited, although she highlights that adopting an ecosystem-centric approach through the deployment of transboundary marine protected areas (TBMPAs) is 'having multiplier effects towards the development of many others as marine biodiversity and its ecosystem are being protected and conserved' (Kong Mukwele, Chapter 8).

Each of the chapters of this volume therefore explores a different set of challenges that inform the picture of oceans governance, who creates it, and what it is intended to do. All of the chapters are clear in their critiques of existing approaches but all offer glimpses of hope for solutions to creating a more comprehensive path to oceans governance.

NOTES

1. Vanessa Newby as a driving force for this project discussed a number of ideas that inform this introduction. My thanks go to Vanessa to clarifying my thinking and enabling this project.
2. *Mare clausum* refers to waters that are 'closed' and under the legal jurisdiction and control of an identified state. *Mare liberum* refers to the 'high seas' where vessels from all states are free to travel and activities are subject to limited obligations but do include conventions such as the Saving of Lives at Sea (SOLAS).
3. UNSDG, n.d.:
   - 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.
   - 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.
   - 14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels.
   - 14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.
   - 14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.
   - 14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation.
   - 14.7 By 2030, increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism.
   - 14.A Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries.
   - 14.B Provide access for small-scale artisanal fishers to marine resources and markets.
   - 14.C Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want.
4. https:// www .sciencedirect .com/ topics/ earth -and -planetary -sciences/ marine -protected-area.

5. I thank Moya Crawford for this point. She has long made the argument that we should frame the concept of oceans governance in relation to being custodians rather than owners.
6. With thanks to Vanessa Newby for pointing towards this literature and editing this paragraph.

REFERENCES

Acharya, Amitav. 2004. 'How ideas spread: whose norms matter? Norm localization and institutional change in Asian regionalism', *International Organization*, 58(2), 239–275.

Acharya, Amitav. 2011. 'Norm subsidiarity and regional orders: sovereignty, regionalism, and rule-making in the Third World', *International Studies Quarterly*, 55(1), 95–123.

Attard, David. 2023. 'Foreword' in Simone Borg, Felicity G. Attard and Patricia Mallia Vella de Ferneaux (eds), *Research Handbook on Oceans Governance Law*, Edward Elgar Publishing, pp. xv–xvi.

Borg, Simone, Felicity G. Attard and Patricia Mallia Vella de Ferneaux (eds). 2023. *Research Handbook on Oceans Governance Law*, Edward Elgar Publishing.

Boyle, Alan. 2018. 'Climate change, the Paris Agreement and human rights', International & Comparative Law Quarterly, 67, 759–777.

Boyle, Alan. 2019. 'Litigating climate change under Part XII of UNCLOS', International Journal of Marine & Coastal Law, 34, 458–481.

Brietburg, Denise, Lisa A. Levin, Andreas Oschlies, Marilaure Grégoire, Francisco P. Chavez, Daniel J. Conley et al. 2018. 'Declining oxygen in the global ocean and coastal waters', *Science*, 359(6371), 1–13.

Bueger, Christian, and Timothy Edmunds. 2017. 'Beyond seablindness: a new agenda for maritime security studies', *International Affairs*, 93(6), 1293–1311.

Bueger, Christian, and Tobias Liebetrau. 2023. 'Critical maritime infrastructure protection: what's the trouble', *Marine Policy*, 155, 1–8.

Byers, Michael. 2017. 'Crises and international cooperation: an Arctic case study', *International Relations*, October. https://doi.org/10.1177/0047117817735680.

Conservation International. 2015. 'The ocean is the origin and the engine of all life on this planet. And it needs our help.' https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwixz4T2ls__AhU9QEEAHZ4fD8AQFnoECC0QAQ&url=https%3A%2F%2Fwww.thegef.org%2Fsites%2Fdefault%2Ffiles%2Fpublications%2FCI_Ocean_Factsheet.pdf&usg=AOvVaw2HJGijPZulqAfVZr4W7IKn&opi=89978449, accessed 19 June 2023.

Crowder, L. B., Osherenko, G., Young, O. R., Airamé, S., Norse, E. A., Baron, N., Day, J. C., Douvere, F., Ehler, C. N., Halpern, B. S., Langdon, S. J., McLeod, K. L., Ogden, J. C., Peach, R. E., Rosenberg, A. A., & Wilson, J. A. 2006. Sustainability. Resolving mismatches in U.S. ocean governance. *Science*, 313(5787), 617–618. https://doi.org/10.1126/science.1129706.

Czerski, Helen. 2023. 'The ocean is the engine of the Earth', *IAI News*, 18 May 2023, https://iai.tv/articles/the-ocean-is-the-engine-of-the-earth-helen-czerski-auid-2482, accessed 19 June 2023.

Finkelstein, L.S. 1995. What is global governance. *Global Governance*, 1, 367372.

Freeman, Carla P. 2020. ‘An uncommon approach to the global commons: interpreting China’s divergent positions on maritime and outer space governance’, *The China Quarterly*, 241, 1–21.
Fukuyama, F. 2016. ‘Governance: what do we know, and how do we know it’, *Annual Review of Political Science*, 19(1), 89–105.
Germond, Basil. 2015. ‘The geopolitical dimension of maritime security’, *Marine Policy*, 54, 137–142.
Haas, Bianca, Mary MacKay, Camilla Novaglio, Liam Fullbrook, Michael Murunga, Carla Sbrocchi et al. 2021. ‘The future of ocean governance’, *Reviews in Fish Biology and Fisheries*, 32, 253–270.
Harrison, James. 2021. ‘Litigation under the United Nations Convention on the Law of the Sea: Opportunities to support and supplement the climate change regime’ in I. Alogna, C. Bakker and J.-P. Gauci (eds), *Climate Change Litigation: Global Perspectives*, Brill, pp. 415–432. https://doi.org/10.1163/9789004447615_019.
Haward, Marcus, and Joanna Vince. 2008. *Oceans Governance in the Twenty-First Century: Managing the Blue Planet*, Edward Elgar Publishing.
Hayton, 2014. *South China Sea*. Yale University Press.
Huberts, L. 2014. ‘Introduction’ in L. Huberts, *The Integrity of Governance: What It Is, What We Know, What Is Done and Where To Go*, Springer, pp. 1–13.
Johansen, D., and Rolf A. Vestvik. 2020. ‘The cost of saving our ocean – estimating the funding gap of sustainable development goal 14’, *Marine Policy*, 112, 1–8.
Kinacioglu, Müge. 2023. ‘Militarized governance of migration in the Mediterranean’, *International Affairs*, 99(6), 2423–2441, https://doi.org/10.1093/ia/iiad232
Magunna, Aaron. 2022. ‘Multi-level maritime governance regimes and piracy: evidence from Southeast Asia’, paper presented at Oceans Governance workshop at HMS *President*, 28 November 2022.
Mahon, Robin, and Lucia Fanning. 2019. ‘Regional ocean governance: polycentric arrangements and their role in global ocean governance’, *Marine Policy*, 107, 1–13.
National Oceans Service. 2024. ‘What's the difference between an ocean and the sea’ published by the National Oceans Service, available https://oceanservice.noaa.gov/facts/oceanorsea.html (last updated 18 January 2024) last accessed 25 January 2024.
Offe, C. 2009, ‘Governance: An “Empty Signifier”?’, *Constellations*, 16, 550–562. https://doi.org/10.1111/j.1467-8675.2009.00570.x
Pierre, J., Peters, B.G. 2005. ‘Toward a Theory of Governance’, *Governing Complex Societies*. Palgrave Macmillan, London. https://doi.org/10.1057/9780230512641_2
Reinke de Buitrago, Sybille, and Patricia Schneider. 2020. ‘Ocean governance and hybridity: dynamics in the Arctic, the Indian Ocean, and the Mediterranean Sea’, *Global Governance: A Review of Multilateralism and International Organizations*, 26 (1), 154–175.
Roe, Michael. 2013. ‘Maritime governance and policy-making: the need for process rather than form’, *Asian Journal of Shipping and Logistics*, 29(2), 167–186.
Ryan, Barry. 2019. ‘The disciplined sea: A history of maritime security and zonation’, *International Affairs*, 95(5), 1055–1073.
UNCLOS. 1982. ‘United Nations Convention on the Law of the Sea’ published by the United Nations (UN) available at https:// www .un .org/ depts/ los/ convention _agreements/texts/unclos/unclos_e.pdf last accessed 25 January 2024.
UNCTAD. 2022. ‘Review of Maritime Transport 2022’, published by United Nations Conference on Trade and Development, available https:// unctad .org/ system/ files/ official-document/rmt2022_en.pdf last accessed 25 January 2024.

UNGA. 2023. 'Draft Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction', draft published 4 March 2023.

UNSDG. n.d. 'Goal 14: Conserve and sustainably use the oceans, seas and marine resources', https://www.un.org/sustainabledevelopment/oceans/, accessed 19 June 2023.

Vierros, Marjo K., Autumn-Lynn Harrison, Matthew R. Sloat, Guillermo Ortuño Crespo, Jonathan W. Moore, Daniel C. Dunn et al. 2020. 'Considering Indigenous Peoples and local communities in governance of the global ocean commons', *Marine Policy*, 119, 104039, https://doi.org/10.1016/j.marpol.2020.104039.

Wensveen, Paul J., Saana Isojunno, Rune R. Hansen, Alexander M. von Benda-Beckmann, Lars Kleivane, Sander van IJsselmuide et al. 2019. 'Northern bottlenose whales in a pristine environment respond strongly to close and distant navy sonar signals', *Proceedings of the Royal Society B*, 286, 20182592, http://doi.org/10.1098/rspb.2018.2592.