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Stewardship Beyond the State: Implications for the Regulation of Marine Genetic Resources in Areas Beyond National Jurisdiction

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I. INTRODUCTION

Marine genetic resources (MGRs) are natural resources with potentially significant intellectual and commercial value for use in medical and industrial processes. International regulation of MGRs ranges across a variety of regimes and instruments: the law of the sea (United Nations Convention on the Law of the Sea 1982[1] (UNCLOS)), biodiversity law (Convention on Biological Diversity 1992[2] and the Nagoya Protocol 2010[3]) and intellectual property regimes (ie the TRIPS Agreement 1994[4]). Each of these regimes may govern aspects of MGRs, but as yet we lack a holistic approach to their regulation.[5] Fundamentally, though, MGRs are a natural resource. As such, they fall into long-established patterns of contested use and control over valuable resources.

For most of human history, the natural world has been treated as a resource available for some of us to exploit in one form or another; it is regulated as the object of competing human claims. The uneven legacy of this approach is a natural environment that is heavily depleted and despoiled as we take and take, or pile use upon use for generation after generation. Whether it is through

[1] The United Nations Convention on the Law of the Sea 1982, 1833 UNTS 3.

[2] Convention on Biological Diversity 1992, 1760 UNTS 79.

[3] Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity 2010, UN Doc UNEP/CBD/COP/10/27, 29 October 2010.

[4] Agreement of Trade-Related Aspects of Intellectual Property, 1869 UNTS 299.

[5] Krabbe, *Bioprospecting and Deep-Sea Genetic Resources in a Fragmenting International Law* (University of Gothenburg, 2021).

individual tools of ownership or collective regimes of sovereignty, humanity has devised ways to rework the natural world to varying degrees, and with varying degrees of responsibility, in its own image. As some describe our situation, we live in the Anthropocene, a geological era defined simply by mankind's impact on the planet. We live in a failing environment of our own making.[6] In the face of a self-inflicted existential crisis, we are striving to rethink our fundamental relationship with the natural world. However, although we share a common concern in this endeavour, we lack a common language, common values and common solutions. For example, at that critical nexus between human and environment, only recently have some states committed to the idea that there should be a human right to a healthy environment.[7] This approach introduces into the language of rights the idea that human life depends not merely upon use of resources, but upon a healthy environment, and that human life and natural systems are mutually dependent notions. This points to the need to change the way we think of human–nature relationships. However, change is slow, and it is often resisted because it must occur against the backdrop of the deeply rooted structures and strictures of the law, and against the values that are embodied therein.

The challenge of redefining our relationship with the natural environment is brought into sharp relief in respect of the legal status of MGRs of the deep seabed. As a space that lies beyond the limits of national jurisdiction, the deep seabed is necessarily the domain of international law-making enterprises, in part under UNCLOS, in part under the 1994 Implementation Agreement and in part through the activities of the International Seabed Authority. As noted above, it is also shaped by international law more generally. In this law-making enterprise, individual human concerns are typically subordinated to those of the state. Although the international seabed area (the Area) is designated the common heritage of mankind, and activities therein must not cause harm to human life or the environment, the totality of rules is otherwise focused upon the rights and duties of states. In this regime, these rights and duties are the immediate focus of law, with humans and the environment relegated to mere objects of interstate relationships. At the same time, the heterogeneity of state interests and the fragmented forms of authority that exist in the Area generate new differences and fault lines that we must strive to overcome in the development of suitable governance regimes. In these circumstances, law becomes overly focused on the interests of states and not enough on the purposes or consequences of granting states some combination of rights and duties. Thus Articles 140–49 UNCLOS, on the common heritage of mankind, are left as a thin veneer of purpose on a body of rules otherwise concerned

[6] Cloutier de Repentigny, 'To the Anthropocene and Beyond: The Responsibility of Law in Decimating and Protecting Marine Life' (2020) 11 *Transnational Legal Theory* 180.

[7] Human Rights Council, Resolution Recognising a human right to a healthy environment, UN Doc A/HRC/48/L.32/Rev.1, 8 October 2021.

with the distribution of legal authority, and the commercial exploitation of ocean resources.[8] In the decades following the adoption of UNCLOS, we have struggled to develop fair, effective and appropriate governance frameworks for international spaces,[9] let alone frameworks that define human–natural environment relationships in marine spaces in any meaningful way. The point I wish to make is that when considering the regulation of deep seabed resources, we need to understand the deeper-lying normative structures that shape the law and understand these against the wider challenges facing the governance of the environment. As such, this chapter is concerned with exploring options for reimagining our relationship with the natural environment, and what implications this may have for the regulation of MGRs.

In recent years, this struggle to better articulate our relationship with the natural environment has been very evident in the developing regime for the conservation and use of marine biodiversity in areas beyond national jurisdiction (ABNJ).[10] This was manifest in the negotiation of a legally binding instrument on conservation and sustainable use of marine biodiversity in ABNJ, commonly referred to as the Biodiversity Beyond National Jurisdiction (BBNJ) Agreement.[11] Originally conceived of as a space where potentially valuable mineral rights could be exploited, the Area became the focus of debates about how to govern access to and use of the valuable MGRs derived from species that have evolved chemical and physiological properties that enable them to withstand the extreme conditions of heat and pressure that exist at great ocean depths. Access to and use of such resources may have profound effects on the development of medicines and other industrial products, and their consequent distribution across societies. Exploitation of such resources may also have a profound impact on poorly understood rare and vulnerable ecosystems.

One of the core issues that divided states during the BBNJ negotiations was that of determining which overarching principle(s) should govern the ABNJ regime. On the one hand, freedom of the high seas favours a more decentralised, liberal approach, where individual states are entitled to freely conduct research

[8] Ranganathan, 'Ocean Floor Grab: International Law and the Making of an Extractive Imaginary' (2019) 30 *European Journal of International Law* 573.

[9] See 'Symposium: International Law and Economic Exploitation in the Global Commons' (2019) 30 *European Journal of International Law* 541.

[10] Freestone, 'International Governance, Responsibility and Management of Areas Beyond National Jurisdiction' (2012) 27 *International Journal of Marine and Coastal Law* 191; Warner, 'Conserving Marine Biodiversity in Areas Beyond National Jurisdiction: Co-evolution and Interaction With the Law of the Sea' (2014) 1 *Frontiers in Marine Science* Art 6; Blanchard, Durussel and Boteler, 'Socio-ecological Resilience and the Law: Exploring the Adaptive Capacity of the BBNJ Agreement' (2019) 108 *Marine Policy* 103612; De Santo et al, 'Protecting Biodiversity in Areas Beyond National Jurisdiction: An Earth System Governance Perspective' (2019) 2 *Earth System Governance* 100029; Frank, 'Options for Marine Protected Areas Under a New Agreement on Marine Biodiversity of Areas Beyond National Jurisdiction' in Heidar (ed), *New Knowledge and Changing Circumstances in the Law of the Sea* (Brill, 2021) 101–23.

[11] Mandated in UNGA Res 69/292, UN Doc A/Res/69.292, 6 July 2015. For developments, see www.un.org/bbnj/.

and exploit the genetic potential of resources in the deep seabed unilaterally subject to some limits on reasonable use and due regard to the interests of other states. This follows a broadly liberal and exploitative tradition in the law of the sea. On the other hand, the common heritage of mankind favours a more robust institutional framework that seeks to ensure the benefits of exploitation are shared according to predetermined distributive benchmarks. It differs principally in that it favours community interests over individual state interests. Of course, both principles are framed exclusively in anthropocentric terms and concerned with some mode of exploitation. There are other principles potentially applicable to ABNJ, such as precautionary and ecosystem-based approaches, but these penetrate less deeply to the core of the issue as to whether we have more inclusive or exclusive forms of governance prevail. Freedom of the high seas or common heritage concern the basic status of the space, with subsequent principles providing guidance about how such space is to be used. Understanding how the Biodiversity Beyond National Jurisdiction negotiations addressed this point is important because the BBNJ Agreement will shape our future and fundamental relationship with the natural environment of the Area.

On 4 March 2023, states agreed the text of a binding agreement on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction.[12] Significantly, the BBNJ Agreement refers to the notion of 'stewardship' in its Preamble and this may open the way for a more transformative approach to defining our relationships with resources in ABNJ. This reference to stewardship provides the point of departure for the present chapter because it invites reflections on new ways of constructing our relationship with the natural environment and its resources in ABNJ. The draft text has already sparked some academic interest in exploring the meaning and content of stewardship as a legal principle.[13] Recently, Riding has advanced stewardship as a way of thinking about the governance of ABNJ – arguing that it can be used to reconcile the principles of common heritage and freedom of the seas.[14] She defines stewardship as a form of individual and collective responsibility to protect and preserve the environment for present and future generations, based upon principles of responsible use, cooperative management and equity.[15] Riding uses stewardship to synthesise and help frame existing environmental responsibilities. Whilst this has the advantage of grounding it in accepted rules and principles of international law, it does not interrogate more fundamentally

[12] 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 (adopted 19 June 2023) www.un.org/bbnj/ (BBNJ Agreement).

[13] Harden-Davies, 'Deep-Sea Genetic Resources: New Frontiers for Science and Stewardship in Areas Beyond National Jurisdiction' (2017) 137 *Deep Sea Research Part II: Topical Studies in Oceanography* 504; Harden-Davies et al, 'Rights of Nature: Perspectives for Global Ocean Stewardship' (2020) *Marine Policy* 104059.

[14] Riding, 'Redefining Environmental Stewardship to Deliver Governance Frameworks for Marine Biodiversity Beyond National Jurisdiction' (2018) 75 *ICES Journal of Marine Science* 435, 439.

[15] ibid 439.

how stewardship might be used to reframe our relationship with the natural world. If stewardship is to be of value, it must be more than the sum of its parts. To collapse stewardship back into existing rules and principles begs the question: so what? If those rules and principles exist anyway, then what value does stewardship add? In this chapter, I argue that more needs to be done to understand the content of stewardship. In other words, how can stewardship offer a better way of framing our relationship with the natural world, specifically in areas beyond national jurisdiction?

Whilst the broad line of argument in this chapter is that stewardship has the potential to transform how we frame our relationship with the natural world, this entails several steps. Most obviously, we need to consider more carefully the precise meaning of stewardship. Whilst it is novel for the concept to feature in an international agreement, stewardship does have some intellectual heritage and legal significance, so it is essential that we understand what this entails. To this end, I provide a brief typology of stewardship concepts, which shows some of the challenges of using such a value-laden term as stewardship (section III). To address such concerns, I then provide the parameters for an analytical framework for stewardship (section IV), which can be used to explore how stewardship could apply to the governance of ABNJ through the BBNJ Agreement (section V). This provides a guide to how the Agreement might usefully frame our relationship with resources in ABNJ. Before developing the notion of stewardship, I explain why this approach should be considered. In short, stewardship is a relationship that elevates the interests of the beneficiary (eg a person or the environment) above those of the steward (ie the state).

II. WHY STEWARDSHIP?

The horizontal structure of international law means it is ill-suited to advancing non-state interests. International law's primary social reality is one based upon sovereignty of the state, and the law is immediately concerned with the rights, duties and interests of states.[16] Any other human or environmental interests are only conveyed into international social reality through the medium of the state. Some form of domestic process of government feeds sub-national interests into the machinery of the state and this is indirectly fed into the international system. International interests are then formed through the interactions of states (and other international actors) in international fora, eg treaty negotiations. In this way, the creation of international norms is the product of the double aggregation of domestic and then state interests, and one where the international social reality takes on a life of its own. International law may service individual human interests (or environmental interests), but this is rarely

[16] Allott, '*Mare Nostrum*: A New International Law of the Sea' (1992) 86 *American Journal of International Law* 764.

done directly. Thus, rules on the protection of human rights or environmental goods are invariably framed in terms of interstate rights and responsibilities – rather than as direct commitments by states to individuals or the environment. For the most part, humans and the environment are the object of laws. This makes them subordinate to state interests since the benefit of any such entitlements or protections will usually depend upon the intermediary acts of states.

The prescription of environmental rights and duties in this tradition serves only to reaffirm the structural bias towards state-centred interests. Every time a new rule is agreed upon the use of some natural resource, the rule reinforces the state's pivotal role in determining the use of that resource. The Rio Declaration might have boldly stated that 'Human beings are at the centre of concerns for sustainable development',[17] but this does nothing to change the fundamental structure of international legal commitments.

Recognising the failure of traditional state-centric approaches to addressing environmental harm, there have been innovative efforts to reconceive our relationship with the natural environment that seek to subvert or move away from state-based approaches. For example, we have the idea of environmental rights, which seek to draw upon the structural and rhetorical power of human rights to drive the protection of environment. Human rights are rights that exists vis-à-vis the state and so seek to constrain sovereign power in accordance with fundamental moral considerations.[18] These rights may be defined as 'individual or group based human rights that afford protection to the environment, either directly or indirectly'.[19] Another approach is to vest nature or natural entities with rights of their own. Originating in academic debates,[20] this approach is gaining traction in many legal systems around the world. The Report of the United Nations Secretary General on Harmony with Nature 2019 provides both international recognition of this movement and a telling survey of legal and policy initiatives across the globe.[21] More recently, Harden-Davies et al advanced this approach as offering fresh insights into the challenges of governing BBNJ – linking this to the idea of ocean stewardship.[22] Arguably operating at a more ambitious scale is the Earth Systems Law movement, an approach to governance that responds to the fundamental role that humans play as part of a natural system (rather than its master).[23] Scholars in this tradition advance

[17] Principle 1, Rio Declaration on Environment and Development, A/CONF.151/26, 12 (Vol 1), 12 August 1992.

[18] Raz, 'Human Rights Without Foundation' (2007) Oxford Legal Studies Research Paper 14/2007.

[19] Barnes, 'Environmental Rights in Marine Spaces' in Bogojevic and Rayfuse (eds), *Environmental Rights in Europe and Beyond* (Hart Publishing, 2018) 53.

[20] This was the object of Christopher Stone's seminal article of 1972, 'Should Trees Have Standing?' (1972) 45 *Southern California Law Review* 450.

[21] UN Doc A/74/236, 26 July 2019.

[22] Harden-Davies et al (n 13).

[23] Biermann et al, 'Earth System Governance: A Research Framework' (2010) 10 *International Environmental Agreements: Politics, Law and Economics* 277; Kim and Mackey, 'International Environmental Law as a Complex Adaptive System' (2014) 14 *International Environmental Agreements:*

an idea of law that accounts for the interdependence of humans and natural systems and the complexity of such systems as factors that should shape how we govern human affairs. This more radically challenges the complicity of international law in environmental harm, taking the view that international law 'shuts out any meaningful involvement, incentivization and promotion of non-state actors in earth system governance at a time when such involvement is in fact critically required'.[24]

If nothing else, these approaches show the direction of travel and a move away from simplistic state-centric ways of thinking. They show the importance of holistic, cooperative approaches that view natural systems as intimately connected to human and social systems. Of course, this begs the question: why add stewardship to the list? Does this not complicate things? The response to this question is twofold.

First, given the diversity of natural conditions across the globe and the diversity of human experience, a diverse response to rethinking our relationship with the natural world should come as no surprise. Indeed, this diversity of approaches seems appropriate. In the absence of a grand unified theory of socio-ecological harmony, we should be open to a plurality of approaches. Pluralism leaves space for new ideas and creativity, leaves space for competing values to interact and play out, and allows space for adapting and calibrating solutions to fit different circumstances. Diversity is an important feature of modern pluralist societies.[25] This flexibility is particularly important in areas beyond national jurisdiction. Within the state, we might condition or structure how this plurality of approaches comes together. Structures of government, systems of law and the relatively lower scale of diversity in natural and social conditions might result in the scale of debate being easier to circumscribe. Beyond the state, in shared spaces such as the high seas, there is less homogeneity and so more complexity in interactions that construct social and legal relationships. Yet it is reasonable to infer that a higher degree of diversity within a society will make it more difficult to agree common ways of doing things. Thus, diversity is particularly important in creating space for compromise in ABNJ.

Second, stewardship as a concept operates at a deeper structural level than specific rules or principles. Stewardship has a long heritage and there is a rich and largely untapped body of scholarship that can be drawn upon to inform debates about how we can redefine our relationship with the natural world. Whilst scholarship is increasingly used to frame relationships with natural resources within states,[26] it is relatively untouched in international law

Politics, Law and Economics 5; Kotzé (ed), *Environmental Law and Governance for the Anthropocene* (Hart Publishing, 2017); Kotzé and Kim, 'Earth System Law: The Juridical Dimensions of Earth System Governance' (2019) 1 *Earth System Governance* 100003.

[24] Kotzé and Kim (n 23) 5.

[25] Rawls, 'The Idea of an Overlapping Consensus' (1987) 7 *OJLS* 1, 4–5.

[26] See, eg Leopold, *A Sand County Almanac* (Oxford University Press, 1949); Worrell and Appleby, 'Stewardship of Natural Resources: Definition, Ethical and Practical Aspects' (2000) 12 *Journal of*

literature. This is perhaps surprising, because stewardship is fundamentally concerned with the relationship between humans and natural resources, so it is unsurprising that it became a point of reference for resource-related issues during the BBNJ negotiations – ie responsible management of vulnerable, finite or shared natural resources. This is beginning to happen more widely. Thus, some initiatives in ABNJ are being framed in terms of stewardship – such as the Deep Ocean Stewardship Initiative.[27] However, these are not yet subject to mainstream legal analyses.

So, can stewardship be used to frame and direct the governance of ABNJ? Even if one sees value in alternative approaches or questions the need for a pluralistic approach, there are more mundane reasons to consider stewardship. Significantly, stewardship is a framing concept in the Preamble to the BBNJ Agreement, with states parties

> *[d]esiring* to act as stewards of the ocean in areas beyond national jurisdiction on behalf of present and future generations by protecting, caring for and ensuring responsible use of the marine environment, maintaining the integrity of ocean ecosystems and conserving the inherent value of biodiversity of areas beyond national jurisdiction.[28]

Stewardship is now part of the language of the BBNJ regime, so it will be a point of reference for future legal and policy initiatives.

III. WHAT IS STEWARDSHIP?

There is a growing literature on stewardship but it uses the term in quite different ways and in quite different contexts, so it is important to have a working concept of stewardship if we are to test its use in ABNJ. Stewardship operates as a concept at multiple levels;[29] it is at once an ethic, an approach, a principle and a way of framing legal obligations. This enables stewardship to work in different ways according to context. And since stewardship has a common thread of responsible use, this enables a flow of related ideas and values to move across discourse at different levels. Of course, these points require further articulation, so the next two sub-sections consider the typology of stewardship and the analytical structure of the legal concept of stewardship. The former explains the different conceptualisations of stewardship, whereas the latter advances a specific legal structure for stewardship.

Agricultural and Environmental Ethics 263; Mathevet et al, 'The Concept of Stewardship in Sustainability Science and Conservation Biology' (2018) 217 *Biological Conservation* 363.

[27] DOSI is a network of experts from across disciplines and sectors who collaborate to inform and advise on sustainable deep-ocean governance and management of resources. See www.dosi-project.org.

[28] BBNJ Agreement, Preamble, para 11.

[29] Nassauer, 'Care and Stewardship: From Home to Planet' (2011) 100 *Landscape and Urban Planning* 321.

A. A Typology of Stewardship

There are several useful reviews of the literature on stewardship. In broad terms, Welchman finds that stewardship has a long history associated with wise or responsible use.[30] More recently, Enqvist et al conducted a qualitative systematic literature review of stewardship in an environmental context, showing a significant growth in interest in the concept as some combination of an ethic, motivation, action or outcome.[31] The literature on stewardship is deepening and increasingly coalescing around specific challenges, such as the protection of landscapes[32] or ecosystems,[33] or governance of planetary systems.[34] Some of the literature is focused on practical initiatives, such as certification schemes for forestry or fisheries.[35] This diversity brings its own challenges, with some criticism being levelled at stewardship for its ambiguity.[36] Others have criticised stewardship for failing to deliver its promised benefits,[37] for representing an instance of greenwashing[38] or for carrying problematic intellectual baggage.[39] Critiques based on ambiguity can be found in legal analyses of stewardship and it is perhaps this line of criticism that is most harmful to stewardship since the doubt raised casts a shadow over the concept as a whole.[40] Although stewardship

[30] Welchman, 'A Defence of Environmental Stewardship' (2012) 21 *Environmental Values* 297.

[31] Enqvist et al, 'Stewardship as a Boundary Object for Sustainability Research: Linking Care, Knowledge and Agency' (2018) 179 *Landscape and Urban Planning* 17, 20.

[32] Plieninger and Bieling, 'The Emergence of Landscape Stewardship in Practice, Policy and Research' in Bieling and Plieninger (eds), *The Science and Practice of Landscape Stewardship* (Cambridge University Press, 2017) xiii–xiv.

[33] von Zharen, 'Ocean Ecosystem Stewardship' (1998) 23 *William and Mary Environmental Law and Policy Review* 1; Folke, Chapin and Olsson, 'Transformations in Ecosystem Stewardship' in Folke, Kofinas and Chapin (eds), *Principles of Ecosystem Stewardship* (Springer, 2009) 102–25.

[34] Steffen et al, 'The Anthropocene: From Global Change to Planetary Stewardship' (2011) 40 *Ambio* 739; Folke et al, 'Reconnecting to the Biosphere' (2011) 40 *Ambio* 719; Stuart Chaplin II et al, 'Earth Stewardship: A Strategy for Social–Ecological Transformation to Reverse Planetary Degradation' (2011) 1 *Journal of Environmental Studies and Sciences* 44.

[35] On forestry, see Pattberg, 'What Role for Private Rule-Making in Global Environmental Governance? Analysing the Forest Stewardship Council (FSC)' (2005) 5 *International Environmental Agreements* 175; Marx and Cuypers, 'Forest Certification as a Global Environmental Governance Tool: What Is the Macro-effectiveness of the Forest Stewardship Council?' (2010) 4 *Regulation & Governance* 408. On fisheries, see Constance and Bonanno, 'Regulating the Global Fisheries: The World Wildlife Fund, Unilever, and the Marine Stewardship Council' (2000) 17 *Agriculture and Human Values* 125; Jacquet et al, 'Seafood Stewardship in Crisis' (2010) 467 *Nature* 28; Gray and Hatchard, 'Environmental Stewardship as a New Form of Fisheries Governance' (2007) 64 *ICES Journal of Marine Science* 786.

[36] Roach et al, 'Ducks, Bogs, and Guns: A Case Study of Stewardship Ethics in Newfoundland' (2006) 11 *Ethics and the Environment* 43, 46–48.

[37] Christian et al, 'A Review of Formal Objections to Marine Stewardship Council Fisheries Certifications' (2013) 161 *Biological Conservation* 10.

[38] Dryzek, *The Politics of the Earth: Environmental Discourses* (Oxford University Press, 2005) 110.

[39] Palmer, 'Stewardship: A Case Study in Environmental Ethics' in Ball et al (eds), *The Earth Beneath: A Critical Guide to Green Theology* (SPCK, 1992) 67–86; Beavis, 'Stewardship, Planning and Public Policy' (1991) 31 *Plan Canada* 75.

[40] Lucy and Mitchell, 'Replacing Private Property: The Case for Stewardship' (1996) 55 *CLJ* 566, 584; Barnes, *Property Rights and Natural Resources* (Hart Publishing, 2009) 156; Barritt,

scholarship is maturing, as Bennett et al show, there remains a critical need to pin down and reflect upon the developing constructs of stewardship.[41] By way of trying to help clear up the conceptual ambiguity, a typology of stewardship approaches is presented, which can then better inform how we construct stewardship as a legal analytic concept.

From the wider academic literature on stewardship, it is possible to identify three ways of categorising stewardship, though noting that each category may relate to, or be influenced by, the others. These are outlined briefly, before noting what is distinctive about a legal concept of stewardship.

(i) Stewardship as an Intellectual Construct

Under this category, we can group a range of approaches that consider stewardship in the broad sense of an idea, be it within the framework of religious belief, philosophical or political thought, or potentially scientific commitments. Arguably, the oldest tradition of stewardship is that rooted in religious doctrines. Thus, man is 'given dominion over nature', and mandated to exploit land and other natural resources for his own benefit.[42] In Christian doctrine, man is not the owner of the powers; rather, he is a steward on behalf of God.[43] Although often seen in a Christian tradition, the underlying notions of responsibility to nature are not exclusive to particular belief systems, and notions of guardianship or respect for nature are found in several religions and in many indigenous cultures.[44] Some have sought to reconnect modern notions of stewardship to its religious or spiritual origins.[45] Stewardship in this tradition has occasionally received recognition by courts of tribunals.[46] However, most approaches tend to subsume this within broader moral or ethical accounts. The difficulty in drawing upon stewardship in this tradition is that it resists

'Conceptualising Stewardship in Environmental Law' (2014) 16 *Journal of Environmental Law* 1, 2; Riding (n 14) 438.

[41] Bennett et al, 'Environmental Stewardship: A Conceptual Review and Analytical Framework' (2018) 61 *Environmental Management* 597.

[42] Genesis I:28.

[43] Shelton, 'Dominion and Stewardship' (2015) 109 *AJIL Unbound* 132.

[44] Attfield, 'Environmental Sensitivity and Critiques of Stewardship' in Berry (ed), *Environmental Stewardship. Critical Perspectives – Past and Present* (T&T Clark, 2006) 76; Kawharu, 'Kaitiakitanga: A Maori Anthropological Perspective of the Maori Socio-environmental Ethic of resource Management' (2000) 109 *Journal of the Polynesian Society* 349; Appiah-Opoku, 'Indigenous Beliefs and Environmental Stewardship: A Rural Ghana Experience' (2007) 24 *Journal of Cultural Geography* 79; Ross et al, *Indigenous Peoples and the Collaborative Stewardship of Nature: Knowledge Binds and Institutional Conflicts* (Left Coast Press, 2011).

[45] Enderle, 'In Search of a Common Ethical Ground: Corporate Environmental Responsibility From the Perspective of Christian Environmental Stewardship' (1997) 16 *Journal of Business Ethics* 173; Patterson, 'Conceptualizing Stewardship in Agriculture Within the Christian Tradition' (2003) 25 *Environmental Ethics* 43.

[46] The Government of the State of Eritrea and The Government of the Republic of Yemen, Award of the Tribunal in the Second Stage of the Proceedings (Maritime Delimitation), 17 December 1999, para 92.

universalisation as a value or approach since its form and function are rooted in particular belief systems.

Stewardship is often framed as an ethical or moral imperative. Typical of this approach is Welchman, who treats stewardship as an ethic, a set of moral principles that affect a person's behaviour or how they conduct their activities.[47] For Welchman, the 'steward must possess and act from dispositions such as loyalty, temperance, diligence, justice and integrity, as well as intellectual virtues or technical skills such as prudence and practical rationality'.[48] The influence of the ethic is dependent upon the coherence and reception of those underlying values. But this is not uncontentious. As critics of stewardship argue, its pedigree includes religious, patriarchal, elitist or anthropocentric forms of control in varying degrees.[49]

(ii) Stewardship as a Form of Conduct

Here, stewardship is a form of observable behaviour whereby an individual acts in the best interests of a principal or collective cause, rather than out of immediate self-serving interests.[50] The behaviour may be connected to an underlying moral or ethical position. In this sense, the behaviour is ethically informed action. Hernandez defines stewardship as 'attitudes and behaviors that place the long-term best interests of a group ahead of personal goals that serve an individual's self-interests'.[51] Similarly, David et al observe that a steward is someone 'whose behavior is ordered such that pro-organizational, collectivistic behaviors have higher utility than individualistic, self-serving behavior'.[52] Of course, behaviours cannot simply be posited or assumed to exist; they are the product of social and institutional contexts, and we must think about how behaviours are informed and changed through legal, social or other conditions. As Hernandez argues, stewardship is fundamentally an other-regarding perspective, so there is a close connection between the individual psychological motivations to act and external circumstances that shape other-regarding values.[53]

Related to this is the idea of stewardship as an occupation. According to this approach, a steward is employed to look after a thing in return for financial or other benefits. Here, stewardship would be a specific legal or practical arrangement determined by the terms of a contract, employment or agency

[47] Welchman (n 30). See also Palmer (n 39) 63.
[48] Welchman (n 30) 299.
[49] Palmer (n 39) 67–86.
[50] Di Paola, 'Environmental Stewardship, Moral Psychology and Gardens' (2013) 22 *Environmental Values* 503.
[51] Hernandez, 'Promoting Stewardship Behavior in Organizations: A Leadership Model' (2008) 80 *Journal of Business Ethics* 121.
[52] Davis, Schoorman and Donaldson, 'Toward a Stewardship Theory of Management' (1997) 22 *Academy of Management Review* 20, 24.
[53] Hernandez (n 51) 181.

agreement. Typical examples include environmental stewardship schemes that pay landowners to enhance the quality of land or resource systems.[54] This may be contrasted with voluntary stewardship, as informed by a personal ethic, as described above.

(iii) Stewardship as a Practical Arrangement

The third way of framing stewardship is as practice. Although there may be overlaps with stewardship as a way of thinking or acting, stewardship as practice is distinct in that it aims to establish a practical arrangement for the pursuit of stewardship values. Stewardship as practice focuses on practical or institutional arrangements that are intended to deliver stewardship. It is not possible to exhaustively map such stewardship arrangements, but some examples are provided.

Stewardship may take the form of a policy, either as a specific goal or a broad set of objectives. There are many examples of stewardship policies, at the global, national or local level.[55] At the global level, the United Nations Millennium Declaration resolves 'to adopt in all our environmental actions a new ethic of conservation and stewardship'.[56] An example of national policy is the US Stewardship of the Ocean, Our Coasts, and the Great Lake.[57] This presidential policy sought to enhance the quality of the natural environment, with related benefits for the security and prosperity of current and future generations. This, in turn, was fleshed out according to the Recommendations of the Interagency Oceans Policy Task Force.[58] Here, policy sets out a guide to action for public decision-makers, as opposed to a specific set of binding legal requirements. There may be little to distinguish stewardship from its use as an idea, although it is clear that specific policy statements will articulate the content of stewardship in greater detail. Thus, US policy advances 10 objectives and articulates four modes through which stewardship will be promoted. Although this policy approach seems to have languished in recent years, it will be reinvigorated through the establishment of the Ocean Policy Committee as a permanent, statutory, inter-agency cooperative body.

Stewardship arrangements may take specific legal forms. For example, in the UK, a regime of Environmental Stewardship agreements for managing land is established under statute. Under such agreements, a person with an interest in land or landholder is required to carry out specified activities to further

[54] Dobbs and Pretty, 'Agri-environmental Stewardship Schemes and "Multifunctionality"' (2004) 26 *Applied Economic Perspectives and Policy* 220; Courtney et al, 'Investigating the Incidental Benefits of Environmental Stewardship Schemes in England' (2013) 31 *Land Use Policy* 26.

[55] See, eg Bennett et al (n 41).

[56] UN General Assembly Resolution 55/2, 8 September 2000, para 23.

[57] Executive Order 13547, 19 July 2010, https://obamawhitehouse.archives.gov/the-press-office/executive-order-stewardship-ocean-our-coasts-and-great-lakes.

[58] https://obamawhitehouse.archives.gov/files/documents/OPTF_FinalRecs.pdf.

environmental protection in return for payments.[59] Thus, stewardship is advanced through a contractual arrangement. In Australia, the Product Stewardship Act 2011 establishes a system that seeks to reduce the environmental impact of manufactured products. Such statutory regimes develop specific rules governing the use of things and may combine regulatory incentives with voluntary arrangements that advance a broader set of environmental objectives. In a marine context, stewardship is most frequently associated with product certification schemes designed to enhance the traceability and good environmental province of seafood.[60] There also exist more general arrangements that can be accommodated within the category of stewardship although they are often designated otherwise. For example, in the USA, public trust doctrine establishes a form of public property holding that renders certain resources (usually waterways or coastal areas) inalienable and subject to certain governmental responsibilities.[61] At a more general level, the legal concept of trust is perhaps the best analogue for stewardship. Here, a person holds property as a nominal owner for the benefit of others.[62] This provides some of the conceptual underpinnings to the common heritage of mankind. It is stewardship as a legal arrangement in respect of natural resources that is of most interest to us because it is this form of stewardship that is being advanced as a way of reframing our relationship with the oceans.

B. Instrumentalising Stewardship

Although stewardship may be viewed in different ways, a common thread running through the different approaches is the idea that the steward acts responsibly – either in respect of the environment or others or in collective concerns – which may include the environment. The origins of stewardship beliefs or values may be diverse, but they can shape both individual action (through cognitive influences) and collective action through public policy and law. A key point is that if stewardship is to be delivered, then this will in part be through legal regimes, since this provides part of the institutional capacity to deliver stewardship.[63] This is not to deny the relevance of other enablers of stewardship, but it is important to focus on its specific legal attributes particularly if we are to respond to the criticism that stewardship lacks a meaningful content.

When we look at stewardship as a legal arrangement, then it is helpful to consider it in terms of specific legal relationships. This is because stewardship is

[59] The Environmental Stewardship (England) Regulations 2005.

[60] Blasiak, 'Evolving Perspectives of Stewardship in the Seafood Industry' (2021) 8 *Frontiers in Marine Science* 676.

[61] Sax, 'The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention' (1970) 68 *Michigan Law Review* 471; Klass, 'Modern Public Trust Principles: Recognizing Rights and Integrating Standards' (2006) 82 *Notre Dame Law Review* 699.

[62] For an international law perspective, see Redgwell, *Intergenerational Trusts and Environmental Protection* (Manchester University Press, 1999).

[63] See Bennett et al (n 41) 600 and 608.

not a monolithic concept. As a form of holding, like other forms of property, it is a bundle of variable interests and so can be adapted to suit different circumstances. This is considered in the next section.

IV. ANALYTICAL STRUCTURE OF STEWARDSHIP

The typology above shows that stewardship can be understood in terms of subject matter, actors, motivations and capacity. This draws upon Barritt's elegant conceptual framework for understanding stewardship.[64] Barritt shows that stewardship has four core dimensions: the object of stewardship; the duty holder; the beneficiary; and the nature of the duty. Specific applications of stewardship may vary or qualify these dimensions to achieve different ends, but they must exist to some degree for stewardship to retain some functionality. Underpinning this is a set of values that influence the content and intensity of the duty.

It is not clear that this is a complete structure, since it does not explicitly account for the institutional context within which stewardship arises. However, this could be regarded as an exogenous constraint on how stewardship functions, rather than something inherent in the structure of stewardship as a legal relationship. More importantly, the fourfold account does not say to whom the steward is accountable – as distinct from the beneficiary. For this reason, we should add another dimension to Barritt's approach: the account holder. Who ensures that the steward acts responsibly? When we elevate stewardship concepts to the international level, this raises important challenges, particularly if it is the state individually or collectively that is the duty holder. Who, then, holds the state as steward to account? I return to this question below in section IV.E.

A. Object of the Duty

In theory, stewardship can be applied to anything: land, natural resources, intangible assets, people. It can apply to a part of the environment, such as a river or an ocean, or the planet as a whole.[65] It might apply to an individual species or a habitat, or some combination of these. Stewardship is a socially constructed relationship between people in respect of a thing. Whilst this suggests that whilst the social element is critical, one cannot ignore the influence the material object of stewardship has on the construction of the stewardship relationship.[66]

[64] Barritt (n 40).

[65] Brown Weiss, 'In Fairness to Future Generations and Sustainable Development' (1992) 8 *American University Journal of International Law and Policy* 19, 20.

[66] ibid 4.

The determination of a thing – defining it or its boundaries – is a critical issue to working out a stewardship regime. Imprecision in the object of stewardship will make it difficult to determine the impact of any rule or policy of stewardship. If we look at a couple of examples, this becomes clear. Stewardship is often framed in terms of land. However, what is land? It may be viewed as a geographic space, but equally it may be viewed as a composite of different physical features, such as surface soils, subsoils, minerals, buildings, flora and fauna located on the land. Most things can be disaggregated into their component parts – so this begs the question: should the object be the whole or its component parts? The converse is also true: some natural resources can be aggregated into larger resource systems. Thus, a protected natural habitat may comprise a range of natural features, including bodies of water or land and resident species of flora and fauna. An ecosystem might also be viewed as the object of stewardship. Here, we are focused on a 'functional entity or unit formed locally by all the organisms and their physical (abiotic) environment interacting with each other'.[67] Yet this also involves definitional challenges, because the functional unit may be defined according to its functional processes (ie means) or the services those means deliver (ends).[68] For example, pollination or photosynthesis are means to an end (food production). How such factors are used to define the ecosystem impacts upon how we determine the boundaries of a system and how we determine any stewardship responsibilities.

Closely related to this is the question of how social and equitable values influence the determination of ecosystems. It is common to understand ecosystems in terms of a range of provisioning, cultural, regulating and supporting services, each of which may involve value judgement about their significance. In short, our constructs of ecosystems are produced knowledge and so are influenced by sites, traditions and practices of knowledge construction.[69] This, in turn, influences how stewardship is constructed. In simple terms, the more complex and large scale the object of stewardship, the more challenging any claim to define it as the proper object of stewardship.

The fact that there is an object of stewardship entails prior questions about how the boundaries of that object are drawn. As Barritt observes, we should also reflect on the explicit and implicit choices that we make about how we define the object of stewardship.[70] It is perhaps impossible to account for all the different objects of stewardship. Instead, we should be explicit in accepting this, and instead focus on how different attributes of a thing may impact upon the way stewardship can or should be constructed. The following variables need to be carefully considered to fully understand and analyse the impact of the

[67] Tirri et al, *Elsevier's Dictionary of Biology* (Elsevier, 1998).

[68] Wallace, 'Classification of Ecosystem Services: Problems and Solutions' (2007) 139 *Biological Conservation* 235.

[69] Schutter and Hicks, 'Speaking Across Boundaries to Explore the Potential for Interdisciplinarity in Ecosystem Services Knowledge Production' [2021] *Conservation Biology* 1198.

[70] Barritt (n 40) 6. See also Palmer (n 39) 63.

nature of a thing on the construction of stewardship: the location, size, precision and physical attributes of the thing, and the limits of our knowledge of it. This has consequences for how stewardship would apply to ABNJ.

At present, the object of stewardship duties is not precisely delimited in the BBNJ Agreement text. Stewardship is initially framed in the Preamble in terms of 'the ocean in areas beyond national jurisdiction'. This includes both the high seas and the Area – and is suggestive of a holistic approach. Stewardship so defined would demand the involvement of all states since the oceans are common to all states. It could also entail responsibilities for numerous other actors that have competence to govern parts of ABNJ, such as the International Seabed Authority and regional fisheries management organisations. It would potentially include other actors with an interest in ABNJ to the extent that they are able to participate in the proposed BBNJ regime. However, the BBNJ Agreement text also asserts a more limited remit, so applies to the conservation and sustainable use of marine biological diversity in ABNJ.[71] Marine biological diversity is not actually defined in the Agreement's text, but if one looks at wider definitions, then this includes not just the components of diversity, but also the quality of variability within a system.[72] This entails wider consequences for stewardship since variability depends upon connections and qualities between components of systems. So, even a more limited object of stewardship may entail quite complex responsibilities for the stewards. Although the Preamble refers to oceans, the BBNJ Agreement text also has more specific points of focus, with provisions focusing only on 'marine genetic resources'. MGR is defined as 'any material of marine plant, animal, microbial or other origin containing functional units of heredity of actual or potential value'.[73] It includes resources both in situ and ex situ, but does not include fish as a commodity. It does not apply to pure research – only to resources for utilisation purposes, resources collected or accessed. As a result, the BBNJ Agreement may provide greater focus and perhaps more limited responsibilities of stewardship. In any event, greater clarity on the scope of stewardship duties would improve the effectiveness of the proposed regimes. It is possible that stewardship may operate at different scales, from the global ocean level down to the specific location and use of an individual component of genetic resource. If this is the case, then care is needed to ensure that stewardship duties reflect these nested objects of stewardship.

B. Duty Holder

If stewardship is a duty, then who is the duty holder? Much of the literature on stewardship is concerned with land and the resources thereon, so it is no

[71] BBNJ Agreement, Art 2.
[72] Barnes, *Property Rights* (n 40) 136.
[73] BBNJ Agreement, Art 1(8).

surprise that landowners are most often addressed as the potential holders of a duty of stewardship. However, this is too narrow a category of persons responsible for stewardship. If stewardship is about some form of responsible use of a thing, then stewardship should extend to a wider category of persons who may enjoy control over the object of stewardship. This could include any category of property owner, or anybody with authority to exercise control over a thing. As discussed below, ownership is a complex set of legal relationships, and more than one person may have a legal interest and ability to use a thing. Accordingly, all of these persons can in principle be subject to certain responsibilities in respect of the use of that thing. If we remember that property is a bundle of incidents, which may vest in one or more persons, then any person having some degree of authority over one or more of the incidents of ownership may be considered as a potential steward. Indeed, if stewardship is framed in terms of how we use or interact with the environment, then stewardship touches upon any person who may use or interact with the environment. For example, I may have the right to use a piece of land belonging to another person for the purpose of exercising a right of way. This right of way not only limits the rights of the landowner – but also imposes a wider set of responsibilities to not disturb wildlife or interrupt the amenity interests of others. This shows that duties may be varied and contextual, and may correlate with the other dimensions of stewardship.

Within states, the steward can include landowners and any other property owner, as well as individuals and other legal persons enjoying rights or use of a thing. This includes the state, but it also extends to public authorities, companies, communities, indigenous peoples and other forms of social organisation. This wider category of stewards is reflected in practice. For example, landowners may enter into stewardship agreements with the state concerning the use of their land.[74] In some states, oil companies are required to manage their assets in accordance with a set of stewardship expectations.[75] Forest stewardship plans and contracts have been used between government bodies and landowners or service providers to direct resource use towards public benefits.[76] Indigenous peoples may act as stewards over land.[77] Private companies can establish stewardship schemes that introduce checks on the quality of products entering supply chains, such as for seafood.[78] Local communities have established

[74] eg UK Environmental Stewardship scheme, www.gov.uk/guidance/environmental-stewardship.

[75] www.ogauthority.co.uk/exploration-production/asset-stewardship/expectations/.

[76] See www.fs.usda.gov/managing-land/forest-stewardship/program. See also Mattor et al, 'Assessing Collaborative Governance Outcomes and Indicators Across Spatial and Temporal Scales: Stewardship Contract Implementation by the United States Forest Service' (2020) 33 *Society & Natural Resources* 484.

[77] See Hasteh, 'Analysis of the Duty of the State to Protect Indigenous Peoples Affected by Transnational Corporations and Other Business Enterprises' (23 February 2012) E/C.19/2012/3; Dawson et al, 'The Role of Indigenous Peoples and Local Communities in Effective and Equitable Conservation' (2021) 26 *Ecology and Society* article 19.

[78] See, eg the work of the Marine Stewardship Council, www.msc.org. See further Karavias, 'Interactions Between International Law and Private Fisheries Certification' (2018) 7 *Transnational Environmental Law* 165.

water stewardship programmes.[79] Coastal state responsibilities in the exclusive economic zone (EEZ) are often cast as stewardship responsibilities, blending use rights with conservation and management duties.[80] Stewardship has also been used to frame marine protected area responsibilities,[81] and the use of ocean space more generally.[82]

A state's stewardship responsibilities may also operate beyond the state in respect of any things in which the state enjoys a use interest. As noted above, stewardship features in the Preamble of the BBNJ Agreement. It is also used to frame other responsibilities, such as for the Arctic region[83] or Antarctica.[84] In 2014, five governments signed the Hamilton Declaration on Collaboration for the Conservation of the Sargasso Sea, an area of the high seas that provides a critical habitat for many vulnerable species.[85] The Declaration established the Sargasso Sea Commission (the Commission), with a mandate to 'exercise a stewardship role for the Sargasso Sea and keep its health, productivity and resilience under continual review'.[86] As Balton has observed, the Commission has a limited mandate and so cannot adopt binding decisions,[87] and this limits its ability to act as a steward. This points to the importance of better developed legal mechanisms to support stewardship. This challenge, as well as the risk of unaccountable stewardship, is echoed in critiques of other international spaces. For example, Henricksen notes that stewardship appears to have been used as a means of legitimising the intervention of the Arctic coastal states, rather than as a device to frame a special set of legal responsibilities.[88] Of course, this opens important questions about the basis of responsibilities in law, since these will generally depend upon the existence of a recognised competence to act, so duties may entail some prior authority to act. Logically, one cannot be expected to act in a way which exceeds one's competence or capacity to act.

The BBNJ Agreement text is clearly intended to place primary responsibility for stewardship upon states. Each obligation in the agreement text is directed

[79] See, eg Isundwa and Mourad, 'The Potential for Water Stewardship Partnership in Kenya' (2019) 12 *Arabian Journal of Geosciences* 389.

[80] See Clingan Jr, 'The Law of the Sea Convention: International Obligations and Stewardship Responsibilities of Coastal Nations' (1992) 17 *Ocean & Coastal Management* 201.

[81] Sand, 'Marine Protected Areas and Ocean Stewardship: A Legal Perspective' (2018) 19 *Biodiversity* 1.

[82] Steinberg, 'Lines of Division, Lines of Connection: Stewardship in the World Ocean' (1992) 89 *Geographical Review* 254.

[83] Henricksen, 'The Arctic Ocean, Environmental Stewardship, and the Law of the Sea' (2016) 6 *UC Irvine Law Review* 61.

[84] Vanstappen, 'Legitimacy in Antarctic Governance: The Stewardship Model' (2019) 55 *Polar Record* 358.

[85] Adopted 11 March 2014 by the Azores, Bermuda, Monaco, the UK and the USA. See www.sargassoseacommission.org/storage/documents/Hamilton_Declaration_on_Collaboration_for_the_Conservation_of_the_Sargasso_Sea.with_signatures.pdf.

[86] ibid Annex II, para A.

[87] Balton, 'Strengthening the Stewardship of the Sargasso Sea' in Barnes and Long (eds), *Frontiers of International Environmental Law: Oceans and Climate Challenges* (Brill, 2021) 490.

[88] Henricksen (n 83) 82.

at states. However, the text also implicates other actors. First, it is intended that the Agreement 'does not undermine relevant legal instruments and frameworks and relevant global, regional, subregional and sectoral bodies'.[89] Whilst this preserves existing competences, by implication it draws them into the orbit of the Agreement since cooperation will be required to ensure integrated and coordinated governance of ABNJ. There are 19 intergovernmental bodies with some governance responsibility for the high seas or the Area.[90] However, none has cross-cutting governance competence, so duties cannot be the sole responsibility of states individually, nor of sectoral bodies. Effective stewardship will need to have cooperative arrangements between different actors. Second, there are references in the text to collaboration or coordination with international organisations.[91] Other provisions provide for consultation or cooperation with a range of bodies, including Indigenous Peoples and local communities, civil society, the scientific community and the private sector.[92] The clearing-house mechanism for making research and data available shall be managed by a number of possible bodies, including specialised mechanisms or

> the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization, in association with relevant organizations, including the International Seabed Authority and the International Maritime Organization, and shall be informed by the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology.[93]

Again, given the range of potential actors involved in governing aspects of ABNJ, this will require careful delineation of responsibilities and coordination of any stewardship responsibilities.

C. The Beneficiary of Stewardship

If stewardship is responsibility, then this responsibility is owed to someone or something. In the wider literature on stewardship, the beneficiaries are usually identified as groups or communities rather than individuals, since the aim of stewardship is to counter some of the individualistic tendencies that give rise to environmental degradation. However, there is the potential for stewardship to be wider than this. For example, recent developments in thinking about rights of nature, as well as legal developments in some states, show that the environment can be the beneficiary of duties. This has only begun to be used as a template for rethinking human–ocean relationships.

[89] BBNJ Agreement, Art 4(2).

[90] PEW, *Mapping Governance Gaps on the High Seas (Chartbook)* (August 2016) www.un.org/depts/los/biodiversity/prepcom_files/PEW_MappingGovernanceGapsontheHighSeas_final.pdf.

[91] See BBNJ Agreement, Arts 51(4), 52(5) and 52(8).

[92] ibid Arts 7(J) and (k), 13, 19(2), (3) and (4), 21, 24(3), 26(5), 31, 32(3), 35, 37(4), 4192), 44(1)(b), 48, 49(2) and 51(3)(c).

[93] ibid Art 51(4).

There are three categories of beneficiary of stewardship: current generations; future generations; and the environment. The first category, current generations, is the one that is most commonly recognised in law. In principle, this might extend to some categories of persons who possess legal agency: states, non-state actors, public authorities, companies, communities, indigenous peoples, and other forms of social organisation and individuals. There are many examples of such persons being regarded as beneficiaries of duties. For example, we might refer to a quite extensive range of legal duties owed by states to other states or persons in respect of the environment.[94] Although this focuses on states, there are examples of other beneficiaries in international instruments. Peoples are recognised as the beneficiaries of responsibilities to use natural resources.[95] Indigenous peoples are the beneficiaries of states' commitments under Articles 29 and 32 of the UN Declaration on the Rights of Indigenous Peoples to establish environmental rights as well as to provide mechanisms to mitigate adverse environmental impacts.[96] Individuals are increasingly the object of environmental rights. This is reflected in Principle 1 of the Stockholm Declaration,[97] Principle 7 of the Rio Declaration[98] and Article 24 of the African Charter on Human and Peoples' Rights.[99] Recently, the Human Rights Council adopted a resolution recognising for the first time a general human right to a clean, healthy and sustainable environment.[100] There is no general standard of responsibility towards such beneficiaries. The extent of any such beneficial interests will be determined according to content.

As a matter of international law, it useful to distinguish between beneficiaries that are subjects of the law and those that are objects, since the latter frequently do not enjoy the capacity to secure the protection of their beneficial interests. Also, not all beneficiaries will be treated in the same way. For example, differential commitments may entail greater or lesser degrees of responsibility towards different beneficiaries.[101] Thus, developing states may enjoy varying degrees of support according to need.

The second category of beneficiary is that of future generations. Future generations have always posed a challenge in law since present obligations to future generations constitute obligations for which there are no correlative

[94] See generally Birnie, Boyle and Redgwell, *International Law and the Environment*, 3rd edn (Oxford University Press, 2009) ch 3.

[95] UN General Assembly Resolution on Permanent sovereignty over natural resources, Resolution 1803 (XVII), 14 December 1962.

[96] UN General Assembly Resolution 61/295, UN Doc A/RES/61/295, 13 September 2007.

[97] Declaration of the United Nations Convention on the Human Environment 1972, UN Doc A/CONF/48/14/REV.1.

[98] Declaration of the United Nations Convention on Environment and Development 1992, UN Doc A/CONF/151/26/Rev.1.

[99] African Charter on Human and Peoples Rights 1981, (1982) 21 ILM 52.

[100] HRC, The human right to a safe, clean, healthy and sustainable environment, Resolution 48/12, UN Doc A/HRC/48/L.23/Rev.1, 5 October 2021.

[101] French, 'Developing States and International Environmental Law: The Importance of Differentiated Responsibilities' (2000) 49 *ICLQ* 35.

rights, because there are no determinate persons to whom the right attaches. Also, adding future generations into the mix of interests entails new challenges of weighting different interests.[102] However, this has not prevented commitments to future generations emerging in law. For example, Principle 3 of the Rio Declaration, Article 1 of the Aarhus Convention[103] and Article 3 of the United Nations Framework Convention on Climate Change[104] all speak to the interests of future generations. More generally, legal commitments to conserve or manage a resource will have some unarticulated future-looking dimension, since this is inherent in the temporal nature of legal commitments. The category of future generations tends to exist as a group and there appear to be no examples of differentiation between categories of future generations in the same way that present generations are considered. One critical issue is a lack of representation in legal fora, especially judicial proceedings, which makes the implementation of duties to future generations more problematic.[105] Interestingly, this barrier is being overcome in the context of rights of nature, as will be discussed next.

The third category of beneficiaries is the environment. At least originally, stewardship was conceived as an anthropocentric value, focusing on how humans can use things for their benefit. This has led to criticism of the concept for separating out a necessary relationship between human and environment, and for devaluing the environment in this relationship.[106] Rights of nature have emerged as an alternative way of framing environmental protection. Such rights recognise the legal standing of some natural features or ecosystems, and require steps to be taken to protect those features from harm or to restore those features if degraded. A number of states have recognised rights of nature within their constitutions or domestic legislation, including Ecuador,[107] Bolivia[108] and New Zealand.[109] There has also been some litigation giving effect to such rights, most recently by the Constitutional Court of Ecuador, which ruled that plans to mine in a protected forest violated rights of nature.[110] In 2010, Bolivia hosted the World People's Conference on Climate Change and the Rights of Mother Earth, which resulted in the adoption of the Universal Declaration of

[102] Posner, 'Agencies Should Ignore Distant-Future Generations' (2007) 74 *University of Chicago Law Review* 139.

[103] Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters 1998, (1998) 38 ILM 517.

[104] United Nations Framework Convention on Climate Change 1992, (1992) 31 ILM 581.

[105] Birnie et al (n 94) 121.

[106] Palmer (n 39) 70–74.

[107] See Constitution of Ecuador 2008, ch 7, https://pdba.georgetown.edu/Constitutions/Ecuador/english08.html.

[108] See Ley de Derechos de la Madre Tierra 2010, https://bolivia.infoleyes.com/norma/2689/ley-de-derechos-de-la-madre-tierra-071.

[109] Te Urewera Act 2014, www.legislation.govt.nz/act/public/2014/0051/latest/whole.html.

[110] Caso No 1149-19-JP/20, 10 November 2021. See also, Opinion STC4360 of the Supreme Court of Columbia of 12 April 2018, www.cortesuprema.gov.co/corte/wp-content/uploads/2018/04/STC4360-2018-2018-00319-011.pdf.

the Rights of Mother Earth.[111] The Report of the United Nations Secretary General on Harmony with Nature 2019 provides both international recognition of this movement and a telling survey of legal and policy initiatives across the globe.[112] Recently, Harden-Davies et al advanced this approach as offering fresh insights into the challenges of governing BBNJ – linking this to the idea of ocean stewardship.[113] Notably, the authors point to how the benefits from exploitation of MGRs should be used to contribute to conservation and sustainable use.[114]

These three categories of beneficiary are not necessarily discrete categories. This means stewardship of an ocean resource may be simultaneously directed at some or all of these types of beneficiaries. Frequently, instruments are silent on the actual beneficiary of a duty. For example, in Article 194 UNCLOS, it is written that states

> shall take, individually or jointly as appropriate, all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities.

States are implicit as the beneficiaries of a duty – since the commitment is contained within a multilateral agreement. The environment benefits from protective measures, although only as the target of actions. Future generations are not mentioned, nor do they feature as part of the text of the convention. However, they are at least passive recipients of a healthier marine environment since protective measures are inevitably prospective. The use of the threefold distinction is to draw attention to the structural and practical implications of stewardship for different beneficiaries.

As noted above, beneficiaries are usually identified as groups, rather than as individuals. Thus, Lynton Caldwell insists that in order to embrace stewardship, 'society must shift its focus from the rights of the … [individual] to the communal rights of society'.[115] This is an important dimension to stewardship because it points to the ideas of connectivity of human/ecological systems that underpin the reasons for enhanced environmental protection. Protection is not merely about individual interests, it is about the disaggregate but interdependent interests that exist between humans, and also between humans and natural systems.

The beneficiaries of the BBNJ Agreement are clearly identified upfront to include both present and future generations.[116] Many benefits are indirect,

[111] https://pwccc.wordpress.com/programa/.
[112] UN Doc A/74/236, 26 July 2019.
[113] Harden-Davies et al (n 13).
[114] ibid 8.
[115] Caldwell, 'Land the Law: Problems of Legal Philosophy' (1986) *University of Illinois Law Review* 319, 323.
[116] BBNJ Agreement, Preamble.

resulting from the broader public benefits of improving governance in ABNJ. One specific area of defined benefits includes those resulting from the use of MGRs.[117] Part of the BBNJ Agreement sets out quite detailed provisions explaining how such benefits include a range of monetary and non-monetary benefits.[118] They should be shared equitably.[119] However, these are proving to be difficult issues to resolve.[120] Interestingly, such resources should be used to build 'the capacity of Parties, particularly developing States Parties, in particular the least developed countries, landlocked developing countries, geographically disadvantaged States, small island developing States, coastal African States, archipelagic States and developing middle-income countries'.[121] This opens up the possibility for differentiated benefit sharing through an access and benefit-sharing committee whose composition will take account of gender and equitable geographic distribution, including from least developed countries.[122] However, we should be cautious about this because experience suggests that the law of the sea has not done enough to properly advance differentiated responsibilities.[123]

The Preamble of the BBNJ Agreement appears to frame the environment as a beneficiary of 'stewardship duties'. However, it is generally treated as an indirect beneficiary of commitments that states undertake vis-à-vis other states. There are few specific references to the environment as being an immediate objective of protective measures. The most important of such commitments relate to the use of marine protected areas. Thus, Article 17 includes in the objectives for area-based management the aim to 'Conserve and sustainably use areas requiring protection, including through the establishment of a comprehensive system of area-based management tools, with ecologically representative and well-connected networks of marine protected areas'.[124] It further provides for the objective to 'Protect, preserve, restore and maintain biodiversity and ecosystems, including with a view to enhancing their productivity and health, and strengthen resilience to stressors, including those related to climate change, ocean acidification and marine pollution'.[125] The Preamble refers to 'maintaining the integrity of ocean ecosystems and conserving the inherent value of biodiversity of areas beyond national jurisdiction'. This is potentially important since it focuses less on any instrumental value of nature and more on its intrinsic value. Similarly, Article 14(1) provides that benefits from MGRs may

[117] ibid Art 9(a).
[118] ibid Art 14.
[119] ibid Part II and Art 14(1).
[120] See Riding (n 14) 441.
[121] See BBNJ Agreement, Art 9(b).
[122] See also ibid Art 15(2).
[123] See further Barnes, 'Global Solidarity, Differentiated Responsibilities and the Law of the Sea' (2020) *Netherlands Yearbook of International Law* 107.
[124] BBNJ Agreement, Art 17(a).
[125] ibid Art 17(c).

'contribute to the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction'. This could be used to reinvest gains back in nature. However, the challenge here will be representing such interests. Whilst there is an access and benefit-sharing committee, this is focused on the distribution of benefits between states, such as monetary payments, and not on reinvesting benefits back into environmental improvements per se. The BBNJ Agreement falls short of establishing strong rights of nature when compared to some terrestrial regimes.[126] Given the lack of connection that specific communities or peoples have with spaces or resources in ABNJ, there is likely to be weaker protection of such interests than for terrestrial spaces where people have much stronger cultural and material bonds.[127]

Beyond the provision on marine protected areas, there are some other references to direct responsibilities to protect the environment. The Preamble refers to the obligation to protect and preserve the marine environment contained in UNCLOS, and Article 27(b) provides that the objectives of Part IV, on environmental impact assessments, is to 'Ensure that activities covered by this Part are assessed and conducted to prevent, mitigate and manage significant adverse impacts for the purpose of protecting and preserving the marine environment'. However, beyond these provisions, there is no general duty to protect the marine environment to be found in the text; there is merely the preambular reference back to UNCLOS duties. The approach of the Agreement is to focus on conservation-sustainable use, rather than preventing harm per se.

D. The Content of the Stewardship Duty

The analysis so far reveals stewardship to be a highly contextual concept and that the responsibilities of a steward will depend upon the object of the stewardship, the extent of the steward's rights or interests in a thing and the range of beneficiaries. It will also depend upon the supporting legal regime – domestic or international law. This means that a complete account of stewardship duties is not possible. Instead, a schematic account of stewardship duties is provided. This draws upon the typology of stewardship discussed in section III above. Stewardship, broadly speaking, is a duty to look after something. To help explain this, Barritt organises stewardship into three categories: custodial, managerial and proprietorial duties. However, she accepts that there is some overlap between these approaches.[128] Stewardship duties exist on a spectrum ranging from the minimum content of custody to more strongly framed proprietary duties. These three modes of stewardship are considered in turn.

[126] See text accompanying nn 107–15 above.
[127] On the limits of environmental rights in marine spaces, see Barnes, 'Environmental Rights' (n 19).
[128] Barritt (n 40) 15.

Custody is defined as 'keeping, guarding, care, watch, inspection, preservation or security of a thing'.[129] The impetus for custody is to act for the benefit of a thing (eg children or the environment), rather than as a matter of self-interest. There are legal templates for custodial duties in existing legal systems, both domestic and international. For example, the legal concept of bailment entails a duty to take reasonable care of things that are given into your possession.[130] In the USA, the public trust doctrine, which applies inter alia to coastal areas, establishes a fiduciary relationship by the state over certain resources.[131] It does not depend upon ownership, and hence can explain stewardship in the absence of property rights. Notably, arguments to extend the public trust to the EEZ have been made by some commentators.[132] At a larger scale, Brown Weiss has called for planetary trust.[133] Arguably, the idea of trust can be used to frame commitments such as that found in the Convention on Biological Diversity to 'conserve and sustainably use biological diversity for the benefit of present and future generations'.[134] Interestingly, Barritt uses the idea of trust to frame such commitments because it is able to reflect the other-regarding-type responsibilities to the environment that exist at all levels, from the individual to the state. At the international level, this is reflected in a turn towards conceiving of the state as a fiduciary of those who are in its care.[135]

Such an approach is compellingly advanced by Benvenisti, who argues that other-regarding responsibilities are part of the normative justifications for the exercise of sovereign power. Thus, sovereigns (states) are global trustees of humanity.[136] At a minimum level, other-regarding obligations entail consideration of the interests of other states or actors because individual states can rarely act alone or without consequence for others in a world based upon material and political interdependence.[137] A stronger account of other-regarding

[129] ibid 15.

[130] See *Coggs v Barnard* (1703) 92 ER 107. See further Autor, 'Bailment Liability: Toward A Standard of Reasonable Care' (1987–88) 61 *Southern California Law Review* 2117.

[131] Sand, 'Public Trusteeship for the Oceans' in Ndiaye and Wolfrum (eds), *Law of the Sea, Environmental Law and Settlement of Disputes: Liber Amicorum Judge Thomas A Mensah* (Martinus Nijhoff, 2007) 521.

[132] Nanda and Ris Jr, 'The Public Trust Doctrine: A Viable Approach to International Environmental Protection' (1976) 5 *Ecology Law Quarterly* 291; Jarman, 'The Public Trust Doctrine in the Exclusive Economic Zone' (1986) 65 *Oregon Law Review* 1; Osherenko, 'New Discourses on Ocean Governance: Understanding Property Rights and the Public Trust' (2007) 21 *Journal of Environmental Law and Litigation* 317.

[133] Brown Weiss, 'The Planetary Trust: Conservation and Intergenerational Equity' (1984) 11 *Ecology Law Quarterly* 495.

[134] United Nations Convention on Biological Diversity 1992, 1760 UNTS 79, Preamble.

[135] Peters, 'Humanity as the A and Ω of Sovereignty' (2009) 20 *European Journal of International Law* 513; Waldron, 'Are Sovereigns Entitled to the Benefit of the International Rule Of law?' (2011) 22 *European Journal of International Law* 315, 325; Fox-Decent, *Sovereignty's Promise: The State as Fiduciary* (Oxford University Press, 2011); Criddle and Fox-Decent, *Fiduciaries of Humanity: How International Law Constitutes Authority* (Oxford University Press, 2016).

[136] Benvenisti, 'Sovereigns as Trustees of Humanity: On the Accountability of States to Foreign Stakeholders' (2013) 107 *American Journal of International Law* 295.

[137] ibid 298, 303.

commitments entails a duty to act in a way that not only refrains from harming the interests of others, but also actively includes such interests, including that of global welfare.[138] Thus, harm is defined as omissions that fail 'to move the current status quo towards an increase in global welfare'.[139] There are examples of international tribunals upholding such duties, but Benvenisti is cautious about reading too much into such interventions, given the questions of legitimacy that this raises when tribunals review and intervene in the policy decisions of sovereigns.[140]

Managerial stewardship entails more active responsibilities towards others or the environment.[141] It means actively caring for or managing a resource in a particular way. It describes not just the duty, but the quality of that duty. Thus, it is *careful* management of resources or *conservative* use of things. This may, for example, entail using no more than is necessary of a resource rather than fully exploiting it. Management dictates how things are used and so can provide a more directed way of meeting others' needs.[142] This allows for a more flexible application of management stewardship. Typically, management is applied to the use of things that are owned, but, as Welshman argues, management may also focus on how individuals or other actors conduct themselves, and so it need not depend upon a proprietary interest in the thing being used.[143] However, the specific nature of management duties means that it depends upon such duties being expressly stated. Whereas custody of things can be inferred from a fundamental need to be other-regarding, management entails specific responsibilities and so will depend upon the existence of specific legal mechanisms to articulate and deliver stewardship.

The managerial approach has its counterpart in international law. Chayes and Chayes advance it as part of their New Sovereignty, where they argue that compliance with law is predicated on an interactive process of justification, discourse and persuasion.[144] In this sense, sovereignty is not freedom, but rather a product of these interactions. The 'manager' is the regime of international law (typically a treaty regime), and it plays an active role in modifying preferences, generating options, directing the normative development of the law and shaping compliance.[145] Interestingly, non-compliance in such a regime is frequently the result of ambiguity and indeterminacy in legal texts, pointing to the importance of clearly delimited responsibilities.[146]

[138] ibid 328.
[139] ibid 329.
[140] ibid 332.
[141] Barritt (n 40) 17. See also Roach et al (n 36) 50.
[142] Lucy and Mitchell (n 40) 597.
[143] Welchman (n 30) 302.
[144] Chayes and Chayes, *The New Sovereignty: Compliance with International Regulatory Agreement* (Harvard University Press, 1998).
[145] ibid 110.
[146] ibid 15, 123.

The third form of stewardship is proprietary stewardship.[147] Stewardship in this tradition focuses on the idea that certain responsibilities are inherent in the ownership of things. What distinguishes stewardship from private property is its emphasis on other-regarding duties. More specifically, stewardship is a form of holding subject to overriding duties of conservation and preservation.[148] Conservation is the keeping of resources for posterity, as distinct from preservation, which is the saving of resources from harm.[149] Most legal systems entail limits on the use of property to ensure harm is not caused to others or so that certain public interests are met. A recent example of whether this can be structured towards distinct public benefits is the regime of conservation covenants under the UK's Environment Act 2021, which enables landowners to agree with a responsible body to introduce use conditions on their land for the public benefit.[150] Where difficulties arise is in explaining the nature of such duties. As I asked in some earlier research: is stewardship 'merely something that is grafted onto existing property structures, or is [it] a distinctive form of holding?'[151] The former view is reflected in the work of scholars like Yannacone,[152] Karp,[153] Hunter[154] and Rodgers.[155] The latter is seen in the work of Lucy and Mitchell, who argue that stewardship cannot be reconciled with private ownership because it fundamentally challenges the idea that the owner possesses the full extent of rights of exclusivity, enforceability and transferability that inhere in private property.[156] We need not be detained by this debate too long. If we recall that property is a variable bundle of interests, then it is possible to weigh and construct forms of property in different ways. This flexibility allows for different forms of holding to be adapted to different situations, and it is compatible with the idea that stewardship operates in a highly contextual way.

The proprietary model of stewardship can be extended to international law.[157] Redgwell has shown that international law structures and limits the control of resources in terms analogous to property.[158] This echoes the earlier

[147] Barritt (n 40) 18.

[148] ibid 157–59.

[149] Passmore, *Man's Responsibility for Nature*, 2nd edn (Duckworth, 1980).

[150] Environment Act 2021, Part 7c. See further the Law Commission, *Conservation Covenants* (Law Commission Report No 349, 2014) https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jsxou24uy7q/uploads/2015/03/lc349_conservation-covenants.pdf.

[151] Barnes, *Property Rights* (n 40) 159.

[152] Yannacone, 'Property and Stewardship: Private Property Plus Public Interest Equals Social Property' (1978) 23 *San Diego Law Review* 71, 74.

[153] Karp, 'A Private Property Duty of Stewardship: Changing Our Land Ethic' (1993) 23 *Environmental Law* 735.

[154] Hunter, 'An Ecological Perspective on Property: A Call for Judicial Protection of the Public's Interest in Environmentally Critical Resources' (1988) 12 *Harvard Environmental Law Review* 311.

[155] Rodgers, 'Nature's Place? Property Rights, Property Rules and Environmental Stewardship' (2009) 68 *CLJ* 550.

[156] Lucy and Mitchell (n 40) esp 584.

[157] See further Barnes, *Property Rights* (n 40) 224–48.

[158] Redgwell, 'Property Law Sources and Analogies in International Law' in McHarg et al (eds), *Property in the Law in Energy and Natural Resources* (Oxford University Press, 2010) 100.

work of Hersch Lauterpacht, in which he advanced the object theory of state territory, which treats the territory of the state akin to the property of the state.[159] This is reflected in the idea of permanent sovereignty over natural resources (PSNR). In the leading account of this concept, Schrijver shows how PSNR moved from being framed initially in terms of nationalism and pragmatic use of resources towards a regime of international cooperation, and then, more recently, into a regime where the focus was on balancing rights and duties in a world where interdependence (both between states and upon resources) is the dominant theme.[160] Whilst not quite advancing a theory of stewardship, where responsibilities take priority over rights, it serves to help locate and articulate the important limits that international law imposes upon the use of things.

At its heart, stewardship is fundamentally an other-regarding set of responsibilities, whether they derive from a fiduciary, managerial or proprietary relationship. There are elements of a fiduciary relationship towards MGR in the BBNJ Agreement. This includes benefit sharing, capacity building for developing states, the promotion of knowledge and technology transfers.[161] However, these are broad objectives and not duties, so they amount to weak other-regarding custodial responsibilities. Stronger other-regarding duties are required to account for the interests of coastal states when MGRs are also located in areas within national jurisdiction.

Other-regarding duties are provided for variously in the BBNJ Agreement, with varying degrees of legal force. For example, Article 9 provides for softer commitments (objectives, not duties) to use the benefits of MGR to build capacity.[162] Article 11(6) asserts:

> Activities with respect to marine genetic resources of areas beyond national jurisdiction *are in the interests of all States and for the benefit of all humanity*, particularly for the benefit of advancing the scientific knowledge of humanity and promoting the conservation and sustainable use of marine biological diversity, taking into particular consideration the interests and needs of developing States. (emphasis added)

This does not establish a duty; rather, it asserts a normative position as if it were a given – which is clearly not the case. The most important set of other-regarding commitments is found in Article 14, which provides that the benefits from MGR activities shall be shared in a fair and equitable manner. It is important to stress that this sets out a framework of considerations and a decision-making process. As such, the effectiveness of other-regarding actions will depend upon how the Agreement is implemented. Monetary benefits from commercialisation of MGR shall be shared fairly and equitably through the

[159] Lauterpacht, in Lauterpacht (ed), *International Law: Being the Collected Papers of Hersch Lauterpacht* (Cambridge University Press, 1970) 367.
[160] Schrijver, *Sovereignty Over Natural Resources: Balancing Rights and Duties* (Cambridge University Press, 1997).
[161] BBNJ Agreement, Art 9.
[162] ibid Art 9(b).

financial mechanism established under Article 52.[163] Non-monetary benefits shall be shared in the form of access to samples, digital sequence information, FAIR (findable, accessible, interoperable, and reusable) scientific data, transfer of technology (according to the terms of Part V), capacity-building support, technical and scientific cooperation, and other forms of benefits as may be determined by the Conference of the Parties – taking account of recommendations of the access and benefit-sharing committee.[164] Whilst technology transfer should account for the capacity and needs of developing states,[165] the provision of technology will depend upon further cooperative measures,[166] and it is still likely to take place on a largely commercial basis. There are some protections for traditional knowledge holders, with a duty to ensure that resources are not accessed without prior and informed consent, and involvement of indigenous peoples and local communities.[167] Given that many resources will be exploited by private persons, states are required to adopt the 'necessary legislative, administrative or policy measures, as appropriate, to ensure the implementation of this Agreement'.[168] The effectiveness of the Agreement will depend heavily on the extent to which such implementing measures affectively shape private rights and responsibilities under domestic law.

Although the text of the Agreement has been finalised, it is important to note that much will depend upon the more specific rules or guidance that will emerge from the institutional procedures established under the Agreement, including the functions of the Conference of the Parties and the clearing-house mechanism.[169] Here, the stewardship function vests in the institutional machinery of the BBNJ instrument, rather than in individual states. These mechanisms may serve to exert a managerial influence on duty holders by subjecting them to interactions that challenge and influence their behaviour towards other-regarding objectives.

It is perhaps the proprietary account of stewardship that is most revealing about the limits of the BBNJ Agreement's commitments to stewardship. Indeed, few stewardship responsibilities can be identified in this mould in the Agreement. Whilst states' other-regarding commitments can be identified in terms of custodial or managerial responsibilities, the text does not directly address states' interests in MGR in proprietary terms. This is unsurprising, given that sovereignty does not extend to ABNJ, and so analogues of ownership, such as permanent sovereignty, do not easily apply to commons spaces.[170]

[163] ibid Art 14(3).
[164] ibid Art 14(2).
[165] ibid Art 41.
[166] ibid Art 43.
[167] ibid Arts 7(j) and (k), 13, 44(1)(b) and Annex II(iii).
[168] ibid Art 53. See also Art 14(11).
[169] On the role of the Conference of the Parties, see BBNJ Agreement, Arts 6, 14(2)(h), 14(5)–(7), 15(2)–(6), 16(1) and (3) and Part VI. On use of the clearing house mechanisms, see Arts 11(3), 12, 13, 15(3)(d), 15(4), 16, 29(5) and (6), 31(1)(a) 32, 33, 34(3), 36(2) 37, 42(4) and 51.
[170] This is specifically excluded under the BBNJ Agreement, Art 11(4).

Also, it would have meant directly resolving the fundamental conflict of views between states favouring either freedom of the high seas or the common heritage that plagued the negotiations. It is notable that both principles that concern the status of the ABNJ feature in the list of general principles in Article 7. The agreement maintains the position under UNCLOS that the Area is not susceptible to sovereign claims. Article 11(4) of the BBNJ Agreement provides that no state may claim or exercise sovereignty or sovereign rights over MGR in ABNJ. Nor shall any such claims be recognised. Furthermore, the collection in situ of MGR shall not constitute the legal basis for any claim to part of the marine environment or its resources. The agreement prohibits the emergence of property rights in ABNJ or its resources.[171] This does not deny control; it merely ensures that ABNJ is subject to collective governance.

It is notable that the final text is quite silent on the question of property rights in general and intellectual property rights in particular.[172] During the negotiations, such provisions were the object of considerable debate. Earlier draft provisions sought to ensure that intellectual property rights were governed in a way that did not undermine the objectives of the Agreement, such as benefit sharing,[173] and that applications for intellectual property rights would not be approved if they did not comply with the Agreement. In part, the disappearance of provisions on property rights, including the provision on technology transfer, reflects the desire of the parties to prevent the BBNJ Agreement from impinging upon the mandates of other international bodies. In part, it shows that states were unable to agree upon the normative priority between questions of private property and wider benefit sharing. This is symptomatic of wider challenges of addressing regime complexity.[174] This deliberate excision of property issues from the text suggests that when potential stewardship commitments reach beyond the state, they may come up against strong resistance from well-established regimes of private property. This is not to suggest that such issues have been resolved; far from it. It is clear that such issues will return to the surface when the Agreement becomes operational, either through the clearing-house mechanism or other cooperative mechanisms. These mechanisms will be important sites for the development of meaningful stewardship obligations, as they apply to modalities of resource access, use and benefit sharing, as well as technology transfer.

[171] BBNJ Agreement, Art 11(5).

[172] See Krabbe, 'A Long Discussion Based on a Limited Perspective: Evaluating the Marine Genetic Resource Discussion and the New Rules Under the Law of the Sea', ch 3 of this book.

[173] Revised draft text of an 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, 18 November 2019, A/CONF.232/2020/3, Art 12(1).

[174] Alter and Raustiala, 'The Rise of International Regime Complexity' (2018) *Annual Review of Law and Social Science* 329.

E. Accountability for Stewardship

The beneficiaries of stewardship may seek to enforce their stewardship interests through legal claims. However, the means of protecting beneficial interests assumes the existence of two things: first, the existence of legal persons able to assert their beneficial interests; and second, the availability of institutions capable of determining such interests, ie courts. Legal accountability for stewardship only works if the beneficiary is a recognised legal person with the standing to pursue legal remedies. Further, such remedies depend upon the existence of some court tribunal or other mechanisms capable of protecting the beneficial interests. However, these circumstances do not prevail in every situation, thereby weakening the accountability of the stewardship duty holder. For example, in the context of environmental stewardship, the environment may be defined as a beneficiary but it may lack legal standing to bring a claim, and other persons may not have an interest or capacity to act on behalf of the environment. This presents a challenge at both the domestic and international levels, where rights of standing are often limited. Particularly at the international level, there may not be courts suitable for resolving claims that stewardship duties are not being met. Furthermore, if the state is the holder of stewardship responsibilities (either individually or collectively), as will be the case for stewardship of international spaces or resources, then questions must be asked about how the state or groups of states can be held to account. At the international level, the absence of strong institutional machinery to support stewardship may weaken the concept to a significant degree. Of course, accountability does not only depend upon one's ability to advance one's interests and rights in court; there may be other processes by which accountability is advanced, such as political dialogue. Development of a wider concept of accountability of actors in international law goes beyond the scope of the present chapter, but a couple of key observations can be made on how accountability relates to stewardship.[175]

Although states may be held to account according to the law of state responsibility, this is an option of infrequent resort. Accountability as used in international law involves justifying one's actions and being held to account for those actions.[176] Accountability thus understood is more usually located within governance arrangements where decision-makers are required to give explanations for action and justify behaviour (giving account).[177] A stronger version of accountability focuses on 'holding to account'. It depends not only upon the existence of some process where the decision-maker is required to give account,

[175] See further Curtin and Nollkaemper, 'Conceptualizing Accountability in International and European Law' (2007) 36 *Netherlands Yearbook of International Law* 3; Boström and Garsten (eds), *Organizing Transnational Accountability* (Edward Elgar Publishing, 2008). On accountability for marine resource regulation, see Rosello, *IUU Fishing as a Flag State Accountability Paradigm* (Brill, 2021).

[176] Mulgan, '"Accountability": An Ever-Expanding Concept?' (2000) 78 *Public Administration* 555.

[177] ibid 555.

but also some process where an assessment or judgement of that account is provided.[178] If stewardship is to be meaningful, then it depends upon this second, stronger version of accountability. Central to this version of accountability is the need for a clear account of the stewardship relationship to be defined in law. This means specifying as clearly and certainly as possible each of the previous elements of stewardship. In every legal system, accountability is framed first and foremost as accountability to the law.[179] This is only effective if the law clearly determines the standards and means of accountability. This means, for example, in the context of the BBNJ Agreement, there must be clearly delimited standards of conduct applicable to states or other actors who assume stewardship responsibilities or are designated as stewards. This, in turn, means ensuring that rules of procedures for the Conference of the Parties, Secretariat, Clearing House, and Scientific and Technical Committee strengthen their responsibilities through procedural safeguards, including transparency, access to information and accountability for decisions. These fora should ensure that stewards of ABNJ or its resources and the beneficiaries of such resources are brought together in a way that enables the actions of the former to be scrutinised and evaluated by the latter. Stewardship depends upon a dynamic between these two sets of actors. This is challenging generally at the level of international law because most international fora focus on interstate dynamics and do not accommodate other actors, or do so only indirectly. In the context of the BBNJ Agreement, this means the creation of procedures that are inclusive of non-state actors. It also means procedures that can represent the interests of beneficiaries and enable them to engage states or others in ways that assess their conduct and which can require them to change their behaviour if such behaviour falls short of established stewardship standards.

In the BBNJ Agreement text, there are two sets of procedures that might enable accountability for the use of MGRs: Article 16, on monitoring, which is central to accountability for the use or stewardship of MGRs; and the Part VI provisions on institutional arrangements.

Article 16 states that monitoring and transparency of MGR activities shall be secured through the clearing-house mechanism, according to procedures adopted by the Conference of the Parties. It then calls upon the Conference of the Parties to 'determine appropriate, guidelines for the implementation of [monitoring provisions]'. The precise extent of information to be provided to the Clearing House is not stated, but it should include a detailed account on how MGR activities are monitored. Although monitoring seems relatively light touch and focused on processes for gathering information, without obvious opportunities for engagement by non-states actors, it is reinforced through other mechanisms. For example, the proposed Scientific and Technical Body is expert

[178] Brunnée, 'International Legal Accountability Through the Lens of the Law of State Responsibility' (2005) 36 *Netherlands Yearbook of International Law* 3.
[179] See, eg Waldron (n 135) 316–17.

driven, with the possibility of representation from Indigenous Peoples and not a wider range of beneficiaries.[180] More significant is the proposed duty upon states parties to submit reports to the access and benefit-sharing committee, who, in turn, report to the Conference of the Parties.[181] This at least may entail some duty to give an account of conduct in ABNJ and so meet the weak version of accountability. Where this becomes more meaningful is in respect of the interface with the monitoring and review requirements in respect of other activities in ABNJ (ie area-based management measures, environmental impact assessment and capacity building).[182] This is important because states will have to rationalise not just their regulation of MGRs, but their wider conduct in ABNJ in such accounts. This seems to be envisaged as part of the clearing-house process,[183] but is reinforce by the general reporting requirements under the Agreement. It will draw into the accounts of resource use wider commitments and interests, and these will need to be reconciled with each other.

Institutional arrangements are set out in Part VI of the Agreement. The Conference of the Parties is intended to be the principal governance mechanism of the BBNJ regime.[184] As such, it will have a broad, although unspecified, responsibility for ensuring that stewardship commitments are met. Much of this responsibility for stewardship will be done indirectly by controlling procedures and guiding conduct within the proposed regime. Thus, it will determine how subsidiary bodies such as the Scientific and Technical Body or the Clearing House operate.[185] It shall monitor the implementation of the regime and has the powers to issue decisions or recommendations, promote cooperation, establish new subsidiary bodies and control budgets.[186] The Conference of the Parties is supported in this by an Implementation and Compliance Committee (ICC).[187] The ICC is a facilitative body, so operates in a non-adversarial and non-punitive way. Its main function is to consider individual and systemic issues of implementation and to make periodic reports and recommendations to the Conference of the Parties. Compliance committees in other environmental agreements indicate the potential for such a body to enhance the accountability of states for delivering upon their commitments.[188]

The wide range of powers bestowed upon the Conference of the Parties may result in strong accountability for activities in ABNJ. Or it may not. Much

[180] BBNJ Agreement, Art 49.
[181] ibid Art 16(2) and (3).
[182] ibid Arts 26, 35–37 and 45.
[183] ibid Art 51(3).
[184] ibid Art 47.
[185] ibid Art 47(4).
[186] ibid Art 47(6).
[187] ibid Art 55.
[188] eg the Aarhus Compliance Committee. See Ryall, 'The Aarhus Convention: Standards for Access to Justice in Environmental Matters' in Turner, Shelton, Razzaque, McIntyre and May (eds), *Environmental Rights: The Development of Standards* (Cambridge University Press, 2019)116; Samvel, 'Non-judicial, Advisory, Yet Impactful? The Aarhus Convention Compliance Committee as a Gateway to Environmental Justice' (2020) 9 *Transnational Environmental Law* 211.

will depend upon how the states make use of such powers and respond to the monitoring and reporting requirements. As with much of the rest of the BBNJ Agreement, the institutional part is a framework. Detailed procedural rules remain to be worked out. Absent strong other-regarding commitments to steward resources, there is a risk that such powers will not be directed to stewardship responsibilities; they will be susceptible to the promotion of more limited self-interests of powerful actors.[189] The fact remains that the Conference of the Parties remains very much focused on the interests of states, so is vulnerable to the charge that it may ignore those without a voice, such as future generations or the environment, but also current generations that lack a strong voice in international fora.

V. APPLYING STEWARDSHIP TO MGRs: SOME FINAL THOUGHTS

More research is required to develop a more complete account of stewardship under international law, but at this stage we can at least see the outline and potential for such a theory of stewardship as a principle or concept of international law. As Riding has argued, it presents a different way of reframing the existing balance of rights and duties in respect of BBNJ.[190] However, if stewardship is to really make a difference, it must amount to more than a restatement of existing duties. This entails a clear understanding of the structure and implications of stewardship. In particular, stewardship needs to represent both a shift in thinking and a change in how other-regarding interests are acted upon by states and other actors.

Stewardship can be delimited according to the object of stewardship, the duty holder, the beneficiary and the nature of the duty. It also entails mechanisms for holding stewards to account. The potential object of stewardship has a material impact upon the construction of the stewardship: thus, the location, size and precision of the object as well as its physical attributes, in part determine the scope of the stewardship duties. This is important for ABNJ in general and MGRs in particular, since it determines both who can and who should act as stewards. Furthermore, the fact that stewardship in the BBNJ Agreement is broadly directed at all of ABNJ suggests that it extends to both wider ocean space and individual resources. If so, then states and other actors need to ensure that the stewardship responsibilities at each level are coherent.

A range of actors can take up stewardship responsibilities, but the extent of their responsibilities will be limited to their authority to act. States may have the widest authority to act as stewards, but there is also scope for stewardship

[189] See, eg Martin, 'Interests, Power, and Multilateralism' (1992) 46 *International Organization* 765; Benvenisti and Downs, 'The Empire's New Clothes: Political Economy and the Fragmentation of International Law' (2007) 60 *Stanford Law Review* 595.

[190] Riding (n 14).

to vest in intergovernmental organizations and other bodies. Given activities in ABNJ will involve private persons, care needs to be taken to ensure such actors also conduct themselves faithfully towards the objectives of the BBNJ regime. At present, the BBNJ Agreement is largely focused on states, and its designation of responsibilities to other actors is rather ill-defined. Accordingly, much will depend on how states engage with these other actors through the BBNJ Agreement or in other fora, and how they implement BBNJ commitments in domestic law.

The beneficiaries of stewardship should include a wide range of legal persons, including present and future generations, as well as the environment. The BBNJ Agreement designates the first two categories as the beneficiaries of stewardship, but is silent on the environment as a beneficiary, at least directly. The challenge with respect to beneficiaries is not so much their designation as establishing mechanisms that allow non-immediate interests (future generations, the environment and, to a lesser extent, non-state actors in the present) to hold stewards to account for their responsibilities. Stewardship is fundamentally an other-regarding set of responsibilities. These responsibilities, at a minimum level, may be inferred from the basic conditions of cooperation and interdependency inherent in the international legal system. According to a custodial or fiduciary account of sovereignty, states can rarely act alone or without consequence for others in a world based upon material and political interdependence. This should drive other-regarding action. Stronger other-regarding responsibilities may be attributed to states and other actors within the managerial structure of treaty regimes or according to proprietary notions of sovereignty. Whilst some management of stewardship action may be possible through the BBNJ process, the specific challenge that MGRs pose to stewardship comes from the existence of strong private property-orientated accounts of intellectual property. These tend to resist the imposition of stewardship responsibilities that direct the use of such rights towards others. This is something that states will have to address when developing the rules of procedures for the BBNJ institutions while implementing the BBNJ Agreement. Finally, stewardship entails strong institutional processes to enable stewards to be held to account. Whilst the BBNJ Agreement indicates strong potential here, there is a risk that this could be hampered by the absence of clearly defined stewardship duties and a potential lack of engagement in such processes by the beneficiaries of stewardship. This is a critical issue if the Agreement is to advance the interests of those without a voice, such as future generations or the environment, or those without a strong voice, such as developing or disadvantaged states. One hopes that some of these issues are developed under the BBNJ Agreement in a way that helps to realise a strong stewardship regime. Otherwise, stewardship will remain an empty form of rhetoric and not a regime that advances the solidarity required for governing a critical common space and its resources.