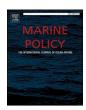
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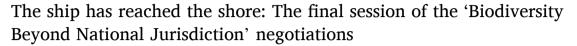
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Full length article



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ABSTRACT

The negotiations for a new legal instrument for Biodiversity Beyond National Jurisdiction (BBNJ) concluded in March 2023 with a successful, and somewhat surprising, finalization of a treaty. The BBNJ treaty is a remarkable achievement. But these outcomes – the circumstances of finalization and the content of the final agreement – are complicated to explain. They are the result of the complex interactions between different avenues of influence and constraint, a broad and multifaceted set of interested parties, and the shifting modalities and pressures that characterized the negotiations. This paper is the sixth in a series of analyses that help explain the outcomes of the BBNJ process by tracing the patterns and trends that shaped negotiations at each inter-governmental conference (IGC). We use a combination of process tracing, narrative coding, and ethnographic methods in order to construct a thick description of the negotiations that sheds light on the drivers and shapers of the process. In this analysis, we focus on the role of diplomatic practices in a pressurized environment, and the assignment of particular functions and decisions to as-yet-unconstituted BBNJ bodies, such as the Conference of Parties. The paper concludes by considering the future implementation of the BBNJ agreement, and associated research agendas.

1. Introduction

Peter Thomson, UNSG's Special¹ Envoy for the Ocean, said in a tweet March 6th 2023, two days after the conclusion of the resumed fifth session of the intergovernmental conference (IGC) for a new legally binding instrument to govern 'Biodiversity Beyond National Jurisdiction' (BBNJ), "All congratulations due to BBNJ President Rena Lee... multilateralism is opening the doors to reversing the decline in the Ocean's health. Now the real work begins." The "real work" - after adoption and ratification – includes the domestication of BBNJ rules to apply them to private actors under states' control and jurisdiction, and the creation and operation of BBNJ bodies. States must use BBNJ mechanisms to propose and designate Area Based Management Tools (ABMTs) including Marine Protected Areas (MPAs). The same mechanisms must also be used to conduct, review, and report on Environmental Impact Assessments (EIAs), to ensure notification and benefit-sharing around Marine Genetic Resources (MGRs), and to "ensure" capacity building (CB) and "cooperate to achieve" the transfer of marine technology

(TMT). So, whether the treaty is actually effective at achieving its goals of conservation and sustainable use of marine biodiversity in Areas Beyond National Jurisdiction (ABNJ) remains to be seen. But the finalization of an agreement in the over-time of the resumed IGC-5 was a major accomplishment. Just days, and even hours, earlier, this outcome was highly uncertain, as the chasm of polarized opinions, hopes and demands was deep and seemingly impossible to bridge.

This paper explores the multilateralism that led to a finalized BBNJ agreement, with an eye to identifying the patterns and trends that shaped the final outcome. The fifth session had resumed at the United Nations headquarters in New York on February 20, 2023. Alternatively referred to as "IGC-5bis," "IGC-5 +" and "IGC-final," the session was officially a resumption of IGC-5, which concluded in August 2022 without successful finalization of an agreement [43]. The disappointment of IGC-5, combined with a significant amount of informal intersessional work, supported a general sense of purpose and optimism as the negotiations resumed in February. Negotiations were based on the "further refreshed draft text" (FRDT) released on the final day of IGC-5

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^{1 &}quot;we have a window of opportunity to seal the deal and we must not let this opportunity slip through our hands" -Rena Lee, evening plenary on Friday 3/3

in August (A/CONF.232/2023/2). Yet as the first week dragged on, progress began to feel elusive, as the degree of entrenchment in divergent positions resurfaced. On Saturday after the first week, in the late afternoon, President Rena Lee introduced an updated draft text (UDT) that still contained a large number of brackets, options, and even new text proposals introduced during the previous week. The understood goal had initially been to finalize an agreement by Wednesday of the second week, allowing time for 'legal scrubbing' and the translation of the treaty into the other 5 official U.N. languages. With the updated text, hopes for this aim dwindled.

Though the Wednesday goal ended up being too ambitious, it did drive the pace of negotiations during the second week, which picked up in two ways. Sessions increasingly went over time, and for longer amounts of time, and delegations made decisions (and concessions) on bracketed text faster than in previous sessions. Over the course of the second week, text was 'cleaned' on issues of lower salience, increasingly revealing the areas of deepest divergence which were pushed to negotiations in smaller sessions. More difficult topics were taken up in closed consultations, although daily Plenary meetings summarizing the conclusions of the previous day facilitated some transparency. When delegates entered the room on Friday morning, March 3rd, the last scheduled day of the resumed IGC-5, predictions about whether a treaty would be finalized were mixed. During the plenary session at 5 pm, President Rena Lee advised delegates and observers to "raid the vending machines" for simultaneous consultations (closed) and intermittent informal informals, which would stop and start in keeping with the progress of the consultations. Closed sessions and consultations then continued for 36 h straight, with a dramatic conclusion on the evening of Saturday, March 4th. The last several hours took place in fully closed sessions and consultations, but the emerging details of these final hours from social media updates by delegates and conversations with delegates afterwards suggest that finalization involved bold and creative maneuvering by regional country coalitions over a central compromise involving principles, voting thresholds, benefit sharing, and financial mechanisms.

This article helps to explain the outcome of the resumed IGC-5, in particular the treaty design that emerged and the ways in which it reflects a series of key compromises made in the second week of the session. This is the sixth article in a series of analysis papers that have traced the patterns and trends shaping the BBNJ process during all the negotiation sessions since 2018 [5,21,22,41,43]. The series, and this paper, contributes to an ever-growing literature on the BBNJ process, the governance approaches adopted by the treaty, and their impact on the existing regimes for the ocean and biodiversity (see especially [2,7, 9-12,14,15,17,24,26-29,32,34-36,44]; [40,16,23]). The next section briefly outlines our methodology, after which we introduce the general themes that will be traced through the body of the paper in Section 3. Sections 4-5 detail the development of particular Parts of the treaty, in order to shed light on the factors that influenced their design. In the concluding section, we consider the future of the BBNJ regime, including opportunities and needs for future research, and discuss whether this indeed could be the "Once and Future Treaty" (Tiller et al., 2018).

2. Methods

Throughout the series of articles we have published on the BBNJ negotiations, our overarching research question has been "what explains (or will explain) the outcomes of the final BBNJ agreement?" Outcomes include the specific treaty design and content, but also the circumstances of finalization, how many (and which) states will choose to ratify, and the assignment of decision-making responsibility to the Conference of Parties (COP) and other BBNJ bodies. As interdisciplinary social scientists, we are especially interested in tracing the ideas, actors, and interests that influence the negotiations and shape the treaty. Our overarching goal is to generate an explanatory narrative that sheds light on the BBNJ process and outcomes, situated within the broader literatures on regime creation and effectiveness, and the progressive development of the UNCLOS³-centered ocean governance regime [20]. Each of our papers contributes to this question from a different angle, highlighting patterns and trends that become more or less evident or influential throughout different stages of the BBNJ process. This sixth analysis paper focuses on the BBNJ negotiations as diplomatic practice, highlighting among other things how the specific context and modalities of the resumed IGC-5 influenced the nature of the final compromises that enabled the finalization of the agreement.

Our research method is detailed in previous papers (especially [21] and [43]), but is essentially a combination of process tracing, narrative coding, and event ethnography. Process tracing involves developing theoretical ideas and concepts through observing patterns, trends, and sequences [1]. We draw mostly on theoretical concepts from Political Science and International Relations. Narrative coding supports process tracing, via systematic categorization of the large datasets of interventions that we have compiled during each IGC. 4 Ethnographic research methods rely on researchers "being there" as participants, "getting deeply into the rhythms, logics, and complications of life" as lived by the delegates to the negotiations [19,33]. Ethnographic approaches make us attentive to more "lived" aspects of the session, such as tone, mood, pauses, hunger, laughter, tears, and other elements that define the negotiations, but are not captured in a standard textual record. This combination of methods enables us to construct a richer overall understanding of how the negotiations work and how and why decisions are made.

Our research method has been shaped by the shifting modalities of the negotiations. In short, the further the negotiations have progressed, the less access observers have had to the discussions. Negotiations at the resumed IGC-5 took place through four types of meeting modalities: plenary working groups (open to all), 'informal informals,' (open to observers with access), small groups (closed to NGOs), and President's consultations (closed to NGOs). This hybrid format was an adjusted version of the modalities adopted during IGC-5, which were already at that time criticized as inequitable and inaccessible by delegates, while being recognized as necessary to the task at hand. The small groups and consultations were completely closed to observers, while the 'informal informals' sometimes took place in rooms too small to accommodate all observers. Although the plenary and informal sessions were available to registered participants via WebEx, our combination of methods required us to be there in the physical conference rooms as much as possible. It was therefore necessary for our research team to arrive early and take up minimal space in the rooms that we were allowed access to.

Our analysis draws on the discussions we could access, as well as

² It is important to note that there was also a new version of the FRDT that was circulated on December 12, 2022. Though these had the same names, there had been 347 changes made to this new version of the August agreed text. Although these changes were described as editorial, they became an issue at times during IGC5bis, where language had been changed slightly, and delegates were working with different versions of the FRDT. One example of a change that led to lengthy discussions between IG5 and IGC5bis was the capitalization of Indigenous Peoples.

³ United Nations Convention on the Law of the Sea, opened for signature 10 December 1982, 1833 UNTS 397 (entered into force 16 November 1994)

⁴ This dataset is embargoed until the adoption of the treaty, which represents the conclusion of the negotiation process. At that time, states can be identified in their interventions during informal informals, as indicated by President Rena Lee. The dataset will then be published and made accessible for other researchers.

other sources of information available to registered participants and information publicly shared on social media and elsewhere. The latter included sources such as informal anonymous conservations with delegates, advocacy materials placed in and around the sessions, text proposals posted on the BBNJ website, and the formal documents released by the negotiation leadership. During the plenaries and informal informals we transcribed interventions in Microsoft Word and Excel formats, coding information both as we go and after the fact. Combined, this is the content used for process tracing. At the request of the leadership, we cannot report the details of 'who said what' during the informal informals yet, which, unlike the plenary sessions, are not available via UNTV. In this paper, we therefore only identify specific speakers in cases where statements were made during plenary sessions, and/or were based on statements or text proposals that were made public when uploaded on the BBNJ website. Our database will be released, with approval from the President of the Conference, upon adoption and signature of the agreement at a later date. These restrictions were intended to enable delegations to discuss options and express degrees of flexibility more freely during the negotiations.

3. Negotiation under pressure

Negotiation practices shifted⁵ during the resumed IGC-5 in ways that reflected the pressure to finalize an agreement. The Facilitators - two of whom have been leading their issue areas since IGC-1⁶ and all of whom enjoy wide respect among delegates - played a more obvious and explicit role in moving things forward. Three new Facilitators were added for cross-cutting issues, a role which had previously been filled by President Rena Lee alone. This allowed Rena to invest her time as President of the negotiations in active consultations with delegates on sensitive issues, but also served other purposes: attaching specific focused leadership to smaller sets of related issues (General Provisions, Institutional Arrangements, and Dispute Settlement and Implementation and Compliance), and potentially insulating Lee from the perception that she is personally pushing things forward in ways that might displease some states and coalitions. 'Cleaning' the text was often driven by the Facilitators asking for quick responses, and interpreting a lack of objections as acceptance. It involved pushback on textual proposals that did not obviously facilitate a compromise, or which re-introduced text or ideas that had already been eliminated from the text. In this way, text proposals were somewhat pre-screened to prioritize creative solutions over re-assertions of parochial preferences that were unlikely to win consensus support. While these procedures were occasionally questioned, in general delegates rose to the challenge of formulating quick responses. It was common for delegates and groups to ask for a few minutes to consult via email, Whatsapp, and other expedients, after which they would come back with reactions from their larger coalition or from other colleagues.

Both external and internal pressure produced interactions between delegates, delegations, and coalitions that were heightened, strained, and otherwise intensified. External pressure came from the idea that the 'eyes of the world' were watching, the need to meet the 30×30 goal for protection of ocean space from the Kunming-Montreal Global Biodiversity Framework, and the connection between ocean health and climate change. Many states and coalitions seemed especially desperate to conclude an agreement, such as the Pacific Small Island Developing States (PSIDS) and the European Union (EU). Delegates increasingly

 $^5\,$ "It's not that I don't welcome new ideas, but they need to be ideas that drive people together…any ideas that get us to consensus are welcome." –President Rena Lee, during informal meeting with observer delegations, $2/20\,$

connected *their* flexibility on an issue to the need for *others* to be flexible elsewhere. In at least one instance, a regional coalition conceded and then re-asserted a preferred text proposal specifically because another regional group did not concede on their text proposal for the same article. At the end of the second week, delegates referred openly to the psychological and physical strain of late night and then all night negotiation sessions. During the last informal informals, observer delegations were less restrained in their reactions – when Rena Lee requested at 1:30 am on Saturday morning that the negotiations continue past 2 am, without interpretation, applause seemed to be led by the observer section. These various pressures drove a process of winnowing down the brackets and options to reveal the hard core lines of disagreement, which would be the essential components of a compromise package.

4. Elements of the BBNJ package

The late stage of negotiations meant that several cross-cutting issues, which had been repeatedly discussed, but generally negotiated around, finally had to be resolved, such as the inclusion of the principle of Common Heritage of Humankind (CHH) (formerly referred to as "Common Heritage of Mankind") in Article 7(b)⁸ as one of a list of enumerated General Principles and Approaches. The topic of CHH, which has been consistently polarized, produced some of the most passionate, strident, and apparently well-prepared speeches of the resumed IGC-5. The principle had appeared to have "lost ground" internationally during the 1990 s and early 2000 s, and its future applicability was understood to be limited (Vadrot et al. [44], 2-3; Brunnée [4], 563; Taylor [39], 357; McDorman [18], 202). By the resumed IGC-5 session, however, it was crystal clear that the developing world had re-embraced the concept as critical to an equitable and effective BBNJ agreement, and was unwilling to see the principle excluded from the agreement. Other examples of long-simmering disputes about the overall BBNJ package included the list of states recognized for special circumstances or consideration, and the particular rights of adjacent coastal states, including those surrounding 'high seas pockets.' New cross-cutting issues, like carve outs for disputed areas and whether to capitalize Indigenous Peoples, largely materialized in this final session.

During the two weeks of negotiations, divergent positions were also reflected in the draft versions that were circulated and negotiated. Not surprisingly, the final text in each of these areas generally reflects a moderate or weakened version of the strong versions proposed. Table 1 gives an overview of the different draft texts and how they differed in terms of strength of language ("shall") and divergence ("options" and brackets) of opinions. We chose to only focus on Institutional Arrangements as an example of cross-cutting issues for the purposes of this paper as an addition to the analysis of the four package items. This choice was both for space limitations and to align with the other articles in this series.

Compared with the draft that the resumed IGC-5 started with, the final version decreased in total word count, though this was – in terms of the packages - because of the EIAs section. The length of the text is not as much an indication of its potential strength as the inclusion of strong (precise and/or obligatory) language. All parts of the packages, with the exception of EIAs, also had an increase in the occurrences of "shalls", which could be an indication of this agreement going beyond a 'paper tiger' [41]. The rest of this section goes into detail on each of the package items and Institutional Arrangements, following the order of

⁶ René Lefeber (Netherlands) for EIAs; Janine Coye-Felson (Belize) for MGRs

 $^{^{7}}$ Kurt Davis (Jamaica) for General Provisions; Victoria Hallum (New Zealand) for implementation and compliance, and dispute settlement; Thembile Joyini (South Africa) for institutional arrangements

⁸ May 3rd 2023 version of the Draft agreement

⁹ This does not minimize the importance of Parts VII Financial Resources and Mechanisms, VIII Implementation and Compliance, IX Settlement of Disputes, X Non-Parties to this Agreement, XI Good Faith and Abuse of Rights, XII Final Provisions or Annexes I and II. We intend to investigate the conclusion of these areas of the agreement in future work.

Table 1
Versions of the treaty text negotiated during the resumed IGC-5 with changes. Red indicates that there is a negative trend and green that there is a positive trend (irrespective of arrows. An increase in "shalls" for example may indicate stronger language - whereas and increase in "options" indicates divergence of opinions).

Version	Section	"Options"	"Shall's ^b "	Bracketed "shall's"	Brackets (search "]")	Word count (incl titles)
IGC5	Full draft	10	344	8	283	20,501
Further Refreshed Draft Treaty (FRDT)	MGR	0	43	0	20	2 471
August 26th 2022	ABMT	0	62	0	31	3 056
	EIA	7	90	8	184	5 014
	CBTMT	0	23	0	3	1 628
	Inst. Arr.	1	33	0	2	1 938
Version	Section	"Options"	"Shall's"	Bracketed "shall's"	Brackets (search "]")	Word count (incl titles)
IGC5	Full draft	10 ↔	345 ↑	8 ↔	292 ↑	20,579 ↑
Further Refreshed Draft Treaty v2 (FRDT-2)	MGR	0 ↔	43 ↔	0 ↔	22 ↑	2 478 ↑
December 12 2022	ABMT	0 ↔	63 ↑	0 ↔	31 ↔	3 072 ↑
What happened to the Saturday version?	EIA	7 ↔	90 ↔	8 ↔	192 ↑	5035 ↑
Version	CBTMT	0 ↔	23 ↔	0 ↔	$3 \leftrightarrow$	1633 ↑
	Inst. Arr.	$1 \leftrightarrow$	33 ↔	0 ↔	$2 \leftrightarrow$	1944 ↑
Version	Section	"Options"	"Shall's"	Bracketed "shall's"	Brackets (search])	Word count (incl titles)
Updated Draft Text (UDT)	Full draft	11 ↑	383 ↑	10 ↑	661 ↑	23,827 ↑
Saturday February 25 2023	MGR	2 ↑	60 ↑	1 ↑	244 ↑	3 542 ↑
End of week 1 of IGC5bis	ABMT	1 ↑	76 ↑	1 ↑	53 ↑	3 827 ↑
	EIA	4 ↓	80 ↓	5 ↓	119↓	4 624 ↓
	CBTMT	0 ↔	27 ↑	1 ↑	71 ↑	1 995 ↑
	Inst Arr.	1 ↔	38 ↑	1 ↑	42 ↑	2 107 ↑
Version	Section	"Options"	"Shall's"	Bracketed "shall's"	Brackets (search])	Word count (incl titles)
1:30 am version	Full draft	5 ↓	324 ↓	4 ↓	287 ↓	19,626 ↓ ^c
Saturday March 4th 2023	MGR^d	N/A	N/A	N/A	N/A	N/A
	ABMT	$1 \leftrightarrow$	92 ↑	2 ↑	47 ↓	4 337 ↑
	EIA	1 ↓	84 ↑	1 ↓	54 ↓	4 745 ↑
	CBTMT	0 ↔	25 ↓	0 \	0 ↓	1 775 ↓
	Inst Arr.	0 \	38 ↔	1 ↔	29 ↓	2 149 ↑
Version	Section	"Options"	"Shall's"	Bracketed "shall's"	Brackets (search])	Word count (incl titles)
Draft Agreement ^e May 3rd 2023	Full draft	-	359 ↑	-	-	21,515 ↓
						(-936)
	MGR	-	52 ↑	-	-	3 302 ↑
						(+824)
	ABMT	-	75 ↑	-	-	3 537 ↑
						(+465)
	EIA	-	73 ↓	-	-	4 138 ↓
						(-897)
	CBTMT	-	25 ↑	-	-	1 795 ↑
						(+162)
	Inst Arr.	-	36 ↑	-	-	2 053 ↑ (+109)

^a For the purposes of this table, an "option" is a place in the draft text with multiple options, not the number of options in total. Each "option" could actually contain two or more options, and/or include options under options. For example, article A may have option 1 and option 2. That is counted as one "option" because it is one place with options. If there are two options under option 2, that is one more place with option.

the package items as listed in the final agreement.

4.1. Marine genetic resources

The MGRs topic has always¹⁰ been one of the more contentious and polarized, because of its connection to ideas of common ownership, and widely divergent assumptions about the magnitude of benefits involved [42]. This polarization is connected to the empirical reality that "marine biotechnology has been almost exclusively driven by highly industrialized countries" [3]. Whereas advanced developed states emphasize the need to incentivize 'bioprospecting' by private actors, the developing world insists on access to benefits from any exploitation of MGRs. The special challenge of resolving the MGRs section was evident throughout IGC-5bis, including in the high proportion of closed sessions, consultations, and small working groups. Indeed, one small island state delegate in a discussion on cross-cutting issues referred to the need to defer to

whatever the "big guns" in the MGRs discussion landed on, suggesting that the MGR issue area was prioritized by many delegations.

Entering into IGC-5bis, the most challenging topics in this issue area were questions around intellectual property rights (IPR) and monetary benefits at the utilization stage. This issue was therefore prioritized from the start, with the first parallel session being kicked off right after the plenary on day one. The Facilitator noted the positive progress during IGC-5, in that they had restructured and cleaned up text, but emphasized the major sticking points on monetary benefit sharing. Within that context, there were two specific tasks that needed to be dealt with during this final round of negotiations, namely articles ¹¹ around (1) the details around monetary sharing, with emphasis on articles 11, 11bis

b Includes [shall...] as in [shall consider...]

^c Since the full draft does not include MGRs, the numbers are inconclusive and therefore they are neither red nor green in this table.

 $^{^{}m d}$ MGR negotiations were not included in this draft because these negotiations were in consultations still.

^e Compared to the December 22nd version from 2022.

 $^{^{10}}$ "We need to move away from the poles and move towards the center"-Facilitator, MGR on Monday of the last week as they closed on the topic of monetary benefit sharing

¹¹ Article numbers are based on IGC5 Further Refreshed Draft Treaty v2 (FRDT-2) from December 12, 2022 since that was what the disucssions were based on during the negotiations. These are later updated in the May 3rd 2023 version where they no longer include "bis" and numbering is different compared to the earlier versions. The final article numbers from the May 3rd version are reflected in the footnotes below where these are referred to specifically.

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and 13¹²; and (2) Articles 8 and 9.¹³ The latter set of articles were relatively straightforward to resolve, at least compared to provisions dealing with financial contributions. For Article 8 on Application, there was general agreement that fish caught as commodities should be excluded from the provisions for MGRs, with the main question being how this distinction could be operationalized. There was also general support, by the end of the first week, for the inclusion of 'digital sequence information' (DSI) in Article 8 and throughout the MGRs section. This reflects trends in biotechnology, where users are becoming "less reliant on physical samples and, increasingly, working directly with genetic sequence data" [3]. One developing country coalition also noted the need for consistency with the Convention on Biological Diversity (CBD) decision 15/9 which standardizes the use of DSI and reflects agreement on the importance of DSI for benefit sharing.

On benefit-sharing, developing country coalitions maintained strong, and consistently unified, positions. The discussions started with the G77 + China coalition emphasizing that their positions reflected that of 134 U.N. member states – or $^2/_3$ of all potential parties – and that while their aim was not to obstruct the negotiations, their voices could not be ignored because they would not be able to agree to a final deal if their ideas were not reflected in the final agreement. The G77 + China emphasized that the articles that were key to them were 10 and 11 as these would ensure that the benefits from utilization of MGRs would be shared to support developing state parties in, among other things, increasing their scientific capacity. Specifically, the G77 proposal included milestone payments and royalties, described as "payments or contributions related to the commercialization of products," in addition to a tiered fee based on indicators of the aggregate level of MGR-related activities by a state party.

Part of the resolution of this issue involved the delegation of aspects of decision-making to BBNJ bodies. The MGR issue area is the only one with a dedicated committee, the Access and benefit-sharing committee created through Article 11bis. ¹⁴ The original proposal made by the African Group (with support from CLAM, CARICOM, and PSIDS) during IGC-4 was for an "Access and Benefit Sharing Mechanism" which would provide technical expertise and operationalize benefit sharing along the spectrum from access to utilization. During the resumed IGC-5 session, some developed states suggested changing the name from "mechanism" to "advisory committee," to more accurately reflect the reduced role they envisioned for the body, and this option was added to the UDT. There was some pushback from CLAM and the African Group on this change, although the main substance of the debate concerned the functions assigned to the new body, which in the end was named a "committee" rather than a "mechanism."

On the Monday of the last week, the G77 + China emphasized that they had moved their positions a lot over the past week, but they could not give up on their main issues, like DSI and specific provisions on utilization and commercialization of products arising from MGRs, without this we will not be satisfied with these negotiations. They emphasized that over the weekend when the UDT came out, they had managed to coordinate the positions of 134 countries – the G77 Chair looked at the room and asked whether they knew how hard that was to do – and they had done it in less than 24 h. They expressed frustration by saying that in the delegate's opinion – and they said with a smile that this was the way of Cuban democracy – the delegates were not moving at all now towards a treaty, though the group was meant to conclude the

agreement by the middle of that very week! They then invited the other delegates to start sharing their ideas - because their hope would be to see what they in turn would be able to present to the $\mathsf{G77}+\mathsf{China}$ at this point. They emphasized that they had done it twice the previous Thursday so they knew that they could do it - and the room laughed a bit at that again. The frustration was palpable from that side of the room at the lack of flexibility of other states in making similar commitments and concessions from their original standpoint.

Money and benefit-sharing were the most challenging areas for consensus building. At the beginning of the second week, a developing country coalition expressed concern about the lack of discussions on finance, and suggested taking the topic up in the MGRs discussions, which were also addressing monetary benefits. Discussions on financing and MGRs were connected, and moved largely to informal working groups and closed consultations. Progress (or change) on the MGRs part was not reflected in the UDT. Midway through week 2, President Lee introduced a compromise proposal for the MGRs and financing sections. The proposal was not generally embraced, although much of it resembles what ended up in the final treaty. One notable change was to completely eliminate the Article on Intellectual Property Rights, because of continued intransigent disagreement on how to address the relationship with other relevant agreements, especially as relates to developments at the World Intellectual Property Organization. So while the final text on MGRs and financing is fairly well-articulated, the compromise also entailed scratching parts of the treaty that were too difficult to conclude.

4.2. Area-based management tools

The creation of a mechanism for area-based management 15 tools (ABMTs) including Marine Protected Areas (MPAs) has been cited as vital to ensuring the completion of the "30 by 30" initiative, calling for 30% of the oceans to be designated as protected areas by 2030 [7]. While there is no formal legal connection between the 30 \times 30 pledge and the BBNJ agreement, the goal was very present in the minds of participants. One developing state proposed to add the 30 \times 30 goal into the preamble, but the suggestion received tepid support, and ultimately did not end up in the final treaty. A developed country representative explained, "as a general line we don't want to refer to other instruments or processes or bodies or agreements."

The ABMTs issue area was not an easy one to resolve, with informal sessions in the first week often appearing to move backwards in terms of adding both brackets and new text proposals. Three major issues characterized the discussions: (1) the relationship between the BBNJ and ABMT designations from existing IFBs, often referred to as 'recognition,' (2) the creation of an 'opt out' mechanism for states who oppose particular ABMT designations, and (3) the creation of a procedure for emergency measures, which may or may not be limited to 'fast track' ABMTs. While the relationship between BBNJ and other mechanisms had been up for discussion since the beginning of negotiations, the latter two issues were only introduced in later sessions.

The topic of recognition concerns the relationship between the BBNJ COP and other IFBs, in regards to the use of ABMTs. This connection between BBNJ and external bodies is a critical part of implementation. One of the objectives of the ABMT section is to "strengthen cooperation and coordination" in the use of ABMTs. The BBNJ agreement requires collaboration and consultation with relevant groups, including IFBs, when formulating ABMT proposals. There was also discussion about having a BBNJ process for the COP to recognize the ABMTs created by

¹² Article 11: Fair and equitable sharing of benefits (Article 14 in final version); Article 11bis: Access and benefit-sharing committee (Article 15 in final version) and Article 13: Monitoring and transparency (Article 16 in final version).

¹³ Article 8: Application (Article 10 in final May 3rd version) and Article 9: Activities with respect to marine genetic resources of areas beyond national jurisdiction (Article 11 in final version from May 3rd 2023).

¹⁴ Article 15 in final May 3rd version

^{15 &}quot;The main discussion is if we have to have an objection, how annoying can we make it to the country objecting while still framing it in a way that is acceptable to them? We saw two choices. Either we try and help shape it even if we don't like it or we can complain about it afterwards. We will likely do both."-regional group delegate, informal 2/22/23

IFBs external to the BBNJ system. The main utility of recognition, as explained by a delegate from a group of developed states, was the integrated and holistic lens of the ocean it represented, especially in light of the 30×30 goal. Others pushed back on recognition as a form of hierarchy, wherein the BBNJ COP would have superior authority to legitimate and evaluate ABMTs. The final agreement ended up being a form of "light recognition," where the COP "shall make arrangements for regular consultations to enhance cooperation and coordination" with IFBs.

The idea of an objection procedure, which would allow states to 'opt out' of an ABMT or MPA, was initially proposed by Japan (in a publicly available text submission) during IGC-4, and eventually incorporated in Art 19bis of the draft text introduced late in the resumed IGC-5. Whether or not states can object to, and thereby opt out of, a proposed ABMT is connected to the conversation around decision-making. Some states, such as China [6], preferred decision-making through consensus, thus rendering an objection procedure unnecessary. Others were open to the inclusion of an objection procedure, but only through a highly restrictive process that would require additional work from the objecting party, to ensure that objections were well-considered and adequately explained. This was a particularly strongly contested area of the text, so much so that according to one representative of a regional coalition, "the discussions held thus far have made no one happy, and I think this is a sign we are going in the right direction." Having an opt out mechanism to allow for progress in cases where consensus fails would prevent the gridlock seen in other existing IFBs [30], and over the course of IGC-5bis this idea slowly gained traction. The final decision was to allow approval by a 3/4 majority when consensus fails and allow objections in writing within 120 days of a decision. Such objections require explanation of the grounds (Article 23(5)), adoption of "alternative measures or approaches that are equivalent in effect" (Article 23(6)), and renewal every three years (Article 23(8)).¹⁶

The idea of emergency measures was introduced in IGC-5 by New Zealand, to address situations where a "natural phenomenon or humancaused disaster" is likely to have a significant impact on the marine environment and "cannot be managed in a timely manner" via the usual procedures of the BBNJ agreement or other relevant IFBs [43]. Emergency measures were initially included in a sub-paragraph of Article 48 on the Conference of Parties, but by the end of IGC-5 were moved to their own provision in the section on ABMTs (Article 24 in final May 3rd 2023 version), because other non-ABMT emergency measures were not seen as within the competence of the COP to adopt. Some cleaning up of this provision took place during IGC-5bis, such as removal of an ambiguous reference to "an activity" as a potential trigger. Much of the progress towards consensus took place in informal consultations led by Victoria Hallum of New Zealand, with advances being reported by the Facilitator Renée Sauvé in plenary sessions. One of the final outstanding issues related to the threshold for invoking emergency ABMTs, with references to "natural phenomenon or human-caused disaster" provoking expressions of uncertainty about what might precisely constitute an emergency situation. As in the EIA section, some disagreement revolved around different options for the thresholds for triggering emergency measures, with the delegates eventually settling on "serious or irreversible harm" over "significant adverse impact".

4.3. Environmental impact assessments

The section on EIAs has been consistently 17 challenging, and the Facilitator of the EIA informal informals was often visibly frustrated, disappointed, and concerned during the informal informals at IGC-5bis. Some central issues, such as the definition of EIAs, were resolved during IGC-5 (see Art 1(10)). Most of the main issues remained to be addressed in the resumed session, however, including: (1) the activities versus impacts approach to EIA obligations, (2) how to compare or assess EIA procedures from external IFBs, (3) the possible creation by BBNJ bodies of global minimum standards, guidelines, and/or guidance, (4) the use of a tiered approach to EIAs, associated thresholds, and the potential internationalization of decision-making at different tiers of the process, and (5) a 'call in' mechanism through which Parties could register concerns about an activity and associated EIA that is under the jurisdiction of another party. Although these issues are distinct, their resolution took the form of a package - mid-way through the first week, the facilitator referred to a triangle of compromise, a "zone of possible agreement" consisting of resolutions to thresholds, the tiered approach and decision-making, and the call-in mechanism.

The debate over the "impacts" versus "activities" approach animated much of the discussion during IGC-5, and persisted through IGC-5bis. The basic question is whether EIAs are necessary for any activities, including those taking place in Areas Within National Jurisdiction (AWNJ), that may have an impact in ABNJ. Though this difference in opinion between the "impacts" and "activities" approaches was long standing [14], Option II of the updated draft text, which would allow national EIA processes on activities from AWNJ with potential impacts in ABNJ, emerged as a compromise text. As in other aspects of the EIA section, the delegate from Trinidad & Tobago, speaking on behalf of CARICOM and a larger 'like-minded group' that included the African Group, PSIDS, Chile, Costa Rica, and the Philippines, led the way on identifying and proposing useful compromises. In the case of activities in ABNJ with potential for "substantial pollution of or significant and harmful changes" to the marine environment in ABNJ (a threshold decided as part of the larger compromise), the final result was a requirement for EIAs either under the BBNJ process or under national processes, with no particular requirement that national processes be equivalent to the BBNJ EIA process. States applying national EIA processes would, however, be held to requirements for monitoring, reporting, and information sharing.

Comparison between BBNJ EIA procedures and those of other IFBs (for the purpose of assessing non-BBNJ EIAs) remained an outstanding issue into the second week. EIAs are generally considered a requirement under customary international law, and any EIA regime in the ABNJ would be built on and integrated with existing IFBs, including UNCLOS [31,38]. Existing regional and sectoral institutions, such as RFMOs, the ISA, and IMO have their own processes for assessing environmental impacts. But one objective of the EIA part of the BBNJ agreement is to "Achieve a coherent environmental impact assessment framework for activities in [ABNJ]." What does coherence look like, and how could it be achieved? The key point of contention has been the metric of comparison between the BBNJ and other EIA processes, as a means to ensure that the EIA process undertaken is 'good enough' compared to the BBNJ standards. Options in the updated draft text included "functionally or substantively equivalent" and/or "comparably comprehensive, including with respect to such elements as the assessment of cumulative impacts." Compromise was reached by eliminating all qualifiers and

 $^{^{16}}$ Article numbers are from May 3rd 2023 version of the final agreement.

^{17 &}quot;There is only one ocean, there is not a place where we can do more things or less things. [.] We could have kept UNCLOS but we decided that was not enough, that is why we are here. So to always come back to the threshold in UNCLOS is really not what we are supposed to be doing. Always going back to UNCLOS could be dangerous."—Delegate from a developed state on the first day of informal informals on EIAs at IGC5bis

descriptors in favor of the simple (and ambiguous) phrase "is equivalent." This compromise paralleled the one reached for the question of the STB formulating "global minimum standards and guidelines" for EIAs. During the first week, the like-minded group led by CARICOM agreed to drop the "global minimum" in order to move past what had been a very contentious topic in IGC-5.

Resolution on the threshold for EIAs was tied up with the question of adding a screening phase. The idea of a "preliminary assessment" and a substantive threshold for conducting an EIA is well-established in customary international law, although the precise details are highly ambiguous ([37], 3). The discussion on steps and thresholds spanned Articles 22 (obligation to conduct EIAs), 24 (thresholds and factors for conducting EIAs), and 30 (process for EIAs). Support for Article 24(1) Option B, which used a single threshold (contained in UNCLOS) for a single step (conducting an EIA), persisted until the end of the second week. The Facilitator was able to announce agreement on the inclusion of a screening phase with a lower threshold on the final Friday. Screenings would be conducted when an activity "may have more than a minor or transitory effect on the marine environment or the effects of the activity are unknown or poorly understood." After screening, EIAs are required in the event that the activity "may cause substantial pollution or significant and harmful changes to the marine environment."18

4.4. Capacity building and the transfer of marine technology

The section on CBTMT¹⁹ was generally understood as the most near completion, with the fewest remaining brackets, options, and fundamental disagreements. This may be in part due to the fact that there is general agreement on the importance of technology in ABNJ [25] and the necessity of assisting developing countries in carrying out BBNJ obligations (De Santo et al., 2019; [8,10]). Developing countries continued to emphasize the need for this section to move beyond the voluntary, and generally unsuccessful, provisions for technology transfer contained in UNCLOS Part XIV [45]. Discussions revolved around finalization of the articles for modalities and types of CBTMT, and the requirements for monitoring and review. ²⁰ A major and consistent point of contention throughout the negotiations concerned the verbs used to define the obligations for CB and TMT. Delegates landed on parties "within their capabilities, shall ensure" for CB and "shall cooperate to achieve" TMT. These phrases struck a balance between the stronger "ensure" and "achieve" and the qualifiers "within their capabilities" and "cooperate to."

New issues emerged around new proposals by developing states, such as the inclusion of financial capacity building in Art. 46(1). Developed state delegations preferred the removal of the word "financial," clearly fearing that this would turn into a demand for money. Upon further discussion, it became clear that the idea was for assistance with building financial capacity within developing states. Such human and educational resources are also vital parts of capacity building [13]. This was more palatable, and the discussion moved to proposed changes for this part of the draft, with "financial know-how" and "fiscal" being introduced as compromises to the original text of "financial." Multiple delegations expressed their view that this was a productive

conversation, and the UDT included options for "financial and other," "financial know-how," and "fiscal." Eventually, the delegates would settle on "financial management," which seemed to both capture the intent of the article while making it clear that the financial support may not actually be of a monetary nature.

Another new debate focused on Article 45 (43 in May 3rd final agreement version), (Additional) Modalities for the transfer of marine technology, and the need to differentiate obligations and procedures depending on the type of technology concerned. A developed state delegate raised the issue that there were essentially two forms of technology: technology that was readily available on the open market, that simply required the money to purchase, and technology that was held by private industry as part of their research and development. They proposed an Article 45(1alt) (which appeared in the UDT) that made a distinction between the two, sparking a lively debate about what kind of technologies specifically were seen as necessary under the BBNJ agreement. The working text would eventually include a 1alt0, 1alt1, and 1alt2 of Article 45. Delegates worked hard to present a compromise on Article 45 eventually settling on 1alt0, several joking that they had dreams about the treaty and about that paragraph in particular. The final agreement does not distinguish two types of technology, but does include protections such as "due regard for...the rights and duties of holders, suppliers, and recipients of marine technology" (Article 43(4) in May 3rd 2023 version).

The last major issue to be resolved was related to the above. Some delegations, and one in particular, wanted biotechnology listed in Article 44(1) as a type of marine technology and thus part of the agreement. Other states did not approve of biotechnology being singled out, claiming it gave biotechnology undue weight in the agreement to be mentioned in this specific manner. Eventually, the compromise was to remove the mention of biotechnology from 44(1) and move it to Article 1 under the definition of marine technology. Such compromise, however, caused "heavy hearts" from the proponents of the inclusion of biotechnology, despite reassurance from other delegations that in some way this was a better conclusion for them. ²¹

5. "The ship has reached the shore" but will it be able to dock?

Recalling Peter Thomson's congratulations²² to President Rena Lee on steering the negotiation process to reach a multilateral agreement, the key message to remember is that "Now the real work begins." Scholars and practitioners alike began to turn their attention towards implementation, even before the resumption of IGC-5 [9]. Implementation will be shaped by what happens directly after finalization of the agreement, how BBNJ bodies will be constituted, and under what conditions and mandates they will operate. The final week of negotiations needed to resolve major topics, such as the identity and location of the secretariat, how often and where the COP will meet, decision-making procedures for the COP, the nature and utilization of assessed contributions, the ratification threshold for entry into force, the procedures for dispute settlement, and the procedures for amending annexes. Parts I and VI-XII together create much of the institutional architecture that activates and animates the provisions of the BBNJ agreement and answers these questions.

Article 66 on Ratification, approval, acceptance and accession details the path towards bringing the ship to actual shore, the first steps after finalization of the treaty. The BBNJ agreement will be open for accession by States and regional economic integration organizations starting the day after the date on which the Agreement is closed for signature, and will enter into force 120 days after the 60th State party has ratified and

¹⁸ In the May 3rd 2023 version, these were changed from Articles 22–28 (obligation to conduct EIAs), 24–30 (thresholds and factors for conducting EIAs), and 30–31 (process for EIAs).

¹⁹ "if we're serious about those goals and if we're serious about biodiversity being part of that solution, we need to be serious about invigorating this instrument with the language that allows the developing South to become the partners that the developed North needs to solve the problems of climate change and biodiversity loss, which is a problem that we in the global South really didn't create" - G77 member, 2/20

 $^{^{20}}$ Discussions are on the December 22nd 2022 version. Updated article numbers in the May 3rd 2023 version are specified.

 $^{^{\,\,21}\,}$ Article 45 was changed to 42 in the May 3rd 2023 final version of the treaty text.

 $^{^{22}\,}$ "The COP can decide anything, they can decide anything" – Developed state representative, informal on cross-cutting issues, 2/20/2023

acceded to it (Article 68). Once it enters into force, however, the COP, which will be tasked with substantial functions for the implementation of the BBNJ agreement. While in previous analyses we focused on other institutional bodies created by the BBNJ agreement, such as the Scientific and Technical Body and clearinghouse mechanism, at this final stage, the modalities and expectations for the COP are especially important to highlight.

The number and nature of decision-making functions assigned to the COP in the agreement is important to the success of the treaty, for two reasons. The first reason relates to reaching consensus on a final agreement, which states can and will ratify. Assigning functions and decisions to the COP can be a means of 'kicking the can down the road' on contentious issues, allowing delegates to reach consensus on the content of the BBNJ agreement. This essentially excludes controversial items from the negotiations. The flip side of this is the risk that states will not consent to future decisions on those issues. Indeed, one major developed state repeatedly expressed concern about being bound by future decisions made by a COP, which they could not predict in advance. Despite that risk, the pattern of 'kicking the can' seems to have occurred. At least one developed maritime state made the point explicitly, that delegates should "stick with the current text and let the COP decide these issues in the future" because "the more text we add, the more questions it raises." And indeed, the COP has been assigned significant decision-making functions across the agreement (Table 2). The COP is mentioned 119 times in the draft treaty text from March 27th, 2023.

The second reason COP functions and decisions matter to the success of the BBNJ agreement concerns whether it can actually achieve the goals of conservation and sustainable use. Whether and how the COP is able to make good decisions is critical to the effective operation of the agreement. Table 2 catalogs all the important functions assigned to the COP. Who ratifies the agreement (and formally joins the COP), what the COP decides for rules of procedure, and how it fleshes out the modalities of subsidiary BBNJ bodies will all be essential for determining whether the COP will be effective.

What we know now is that the COP will consist of the States Parties to the BBNJ agreement and will convene no less than one year (Article 47(2)) after the entry into force of the treaty. It will have ordinary meetings at regular intervals, and extraordinary meetings when necessary. The COP will meet at the location of the Secretariat (to be determined) or at the U.N. headquarters, and decide (via consensus) on rules of procedure and financial rules during its first meeting. The institutional form of the BBNJ COP reflects general trends whereby COPs "have come to be central venues for international law-making activities around collective concerns" (Brunnée [4], 569). The COP is notable among BBNJ bodies also because of its modalities for decision-making, which were an issue of significant contention during IGC-5bis, with some states pushing for exclusive consensus based decision-making, and others proposing specific voting thresholds as a fall-back option if consensus building failed. Compromises led to a complicated provision delineated in detail under Institutional Arrangements.

6. BBNJ research agendas

The BBNJ agreement is a remarkable achievement, despite its flaws and ambiguities. The BBNJ universe – including process, participants, institutions, and outcomes – will be an important topic for social science research and legal analysis for many years to come. Although the negotiation modalities often obstructed documentation, there is a wealth of data available through recordings, text proposals, statements, interviews, conference reports, and secondary literature. At least three databases of BBNJ interventions exist, and as the agreement is finalized and open for signature, this data will become open-access. The operation of the COP and associated BBNJ bodies will entail its own processes and outcomes, shaped by both the strictures of the treaty and the participation of its members.

 $\begin{tabular}{ll} \textbf{Table 2} \\ \textbf{Powers and functions of the COP in the different packages} - \textbf{May 3rd 2023} \\ \textbf{version.} \\ \end{tabular}$

Part of the treaty text	Article	Related to		
General provisions	6	Without prejudice		
MGR	14: (2(h)), 6,	Fair and equitable sharing of benefits		
	7,7 (d), 8, 9			
	and 10.			
	15: 2, 3 (f), 4	Access and benefit sharing committee		
	(c) and 6.	(ABSC)		
	16: 1 and 3	Monitoring and transparency		
ABMT	18	Areas of Application		
	19: 5 and 6	Proposals		
	21: 7 and 8	Consultations on and assessments of proposals		
	22: 1-7 (all)	Establishment of ABMT, including MPAs		
	23: 2, 3, 7 and	Decision making		
	10			
	24: 1, 3, 4 and	Emergency measures		
	5			
	25: 4 and 5	Implementation		
	26: 1, 2, 4 and 5	Monitoring and Review		
EIA	29: 2	Relationship between this Agreement		
LIA	27. 2	and EIA processes under relevant		
		instruments and frameworks and		
		relevant global, regional, subregional,		
		and sectoral bodies		
	34: 4	Decision making		
	37: 2	Review of authorized activities and		
	07.2	their impacts		
	38: 1-2	Standards and/or guidelines to be		
		developed by the STB related to EIA		
	39: 2 and 4	Strategic Environmental Assessments		
		(SEA)		
CBTMT	44:3	Types of CBTMT		
	45: 2–3	Monitoring and review		
	46: 2–3	CBTMT Committee		
Institutional	47: 1-8 (all)	Conference of the Parties		
Arrangements				
=	48: 1-4 (all)	Transparency		
	49: 2 and 4	Scientific and Technical Body (STB)		
	50: 1 and 4 (a-	Secretariat		
	f)			
	51: 2, 3(g), 4	Clearing House Mechanism		
Financial Resources	52: 4(a), 5, 6	Funding		
and Mechanisms	(e), 9–11,			
	14–16			
Implementation and Compliance	54	Monitoring and Implementation		
	55: 2–3	Implementation and compliance committee		
Final provisions	72:1	Amendment		

As noted in the introduction, the research capacity focused on the BBNJ has expanded rapidly, as evidenced by the trends in related publications. During the negotiations, delegates often referred to learning from the lessons of the past in ocean governance, particularly from the inadequacies of UNCLOS. Now, the BBNJ negotiations are part of the past, which we can still learn lessons from. As attention turns to the implementation process, we urge researchers to focus also on the negotiation process detailed here. Examples of potential research questions include: In what ways were the negotiations (in)equitable, and how did that affect the agreement? How transparent were the negotiations, and how did transparency affect negotiation dynamics? To what degree, and in what ways, were the negotiations influenced by private actors, including industry, scientists, and environmental groups? Who were the critical leaders behind the scenes, and what made them so effective? How did the intervention of President Rena Lee alter negotiation process and outcomes? The BBNJ is a rich and well-documented case of multilateral negotiations, and future research can make an important contribution to many different literatures and audiences.

CRediT authorship contribution statement

Elizabeth Mendenhal.: Conceptualization, Methodology, Investigation, Data curation, Writing – original draft, Writing – review & editing. **Rachel Tiller:** Conceptualization, Methodology, Investigation, Data curation, Writing – original draft, Writing – review & editing. **Elizabeth Nyman:** Investigation, Data curation, Writing – original draft.

Data Availability

The authors do not have permission to share data.

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References

- Andrew Bennett, in: Jeffrey T. Checkel (Ed.), Process Tracing: From Metaphor to Analytic Tool, Cambridge University Press, Cambridge, 2014, https://doi.org/ 10.1017/CB09781139858472.
- [2] David S. Berry, Unity or fragmentation in the deep blue: choices in institutional design for marine biological diversity in areas beyond national jurisdiction, Front. Mar. Sci. 8 (2021), 761552, https://doi.org/10.3389/fmars.2021.761552.
- [3] Robert Blasiak, Jean-Baptiste Jouffray, Diva J. Amon, Joachim Claudet, Paul Dunshirn, Peter S.øgaard Jørgensen, Agnes Pranindita, Colette C.C. Wabnitz, Erik Zhivkoplias, Henrik Österblom, Making marine biotechnology work for people and nature, Nat. Ecol. Evol. (2023), https://doi.org/10.1038/s41559-022-01976-0
- [4] Jutta Brunnée, Common Areas, Common Heritage, and Common Concern, in: Daniel Bodansky, Jutta Brunnée, Ellen Hey (Eds.), The Oxford Handbook of International Environmental Law, by Jutta Brunnée, Oxford University Press, 2008, https://doi.org/10.1093/oxfordhb/978019952153.013.0023.
- [5] Elizabeth M. De Santo, Elizabeth Mendenhall, Elizabeth Nyman, Rachel Tiller, Stuck in the middle with you (and not much time left): the third intergovernmental conference on biodiversity beyond national jurisdiction, Mar. Policy 117 (2020), 103957, https://doi.org/10.1016/j.marpol.2020.103957.
- [6] Wen Duan, China's participation in the discussion on marine protected areas in the BBNJ negotiations and its implications, Mar. Policy 145 (2022), 105266, https://doi.org/10.1016/j.marpol.2022.105266.
- [7] Veronica Frank, Options for marine protected areas under a new agreement on marine biodiversity of areas beyond national jurisdiction, in: Heidar Tomas (Ed.), New Knowledge and Changing Circumstances in the Law of the Sea, Brill | Nijhoff, 2020, pp. 101–123, https://doi.org/10.1163/9789004437753_008.
- [8] Iwao Fujii, Miko Maekawa, Nozomi Shimizu, Naohisa Kanda, Nariaki Mikuni, Kazunobu Suzuki, Izumi Tsurita, Miriam C. Balgos, Marjo K. Vierros, Implications of existing capacity building efforts for the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction: a case study of Japan, Mar. Policy 138 (2022), 105004, https://doi.org/10.1016/j. marpol.2022.105004.
- [9] Kristina M. Gjerde, Nichola A. Clark, Clément Chazot, Klaudija Cremers, Harriet Harden-Davies, Daniel Kachelriess, Cymie R. Payne, et al., Getting beyond yes: fast-tracking implementation of the United Nations agreement for marine biodiversity beyond national jurisdiction, Npj Ocean Sustain. 1 (1) (2022) 6, https://doi.org/10.1038/s44183-022-00006-2.
- [10] Harriet Harden-Davies, Diva J. Amon, Tyler-Rae Chung, Judith Gobin, Quentin Hanich, Kahlil Hassanali, Marcel Jaspars, et al., How can a new UN ocean treaty change the course of capacity building?", Aquat. Conserv.: Mar. Freshw. Ecosyst. 32 (5) (2022) 907–912, https://doi.org/10.1002/aqc.3796.
- [11] Kahlil Hassanali, Internationalization of EIA in a new marine biodiversity agreement under the law of the sea convention: a proposal for a tiered approach to review and decision-making, Environ. Impact Assess. Rev. 87 (2021), 106554, https://doi.org/10.1016/j.eiar.2021.106554.
- [12] Kahlil Hassanali, Negotiating the BBNJ agreement: exploring the Caribbean community's engagement from a blue economy perspective with special focus on environmental impact assessment provisions, World Marit. Univ. Ph. D. Diss. 19 (2022)
- [13] Alf H.åkon Hoel, Capacity building in marine science-added value of the BBNJ?", in: Myron H. Nordquist, Ronán Long (Eds.), Marine Biodiversity of Areas beyond National Jurisdiction, Brill | Nijhoff, 2021, pp. 213–230, https://doi.org/10.1163/ 9789004422438 012.
- [14] Fran Humphries, Harriet Harden-Davies, Practical policy solutions for the final stage of BBNJ agreement negotiations, Mar. Policy (2020), 104214, https://doi. org/10.1016/j.marnol.2020.104214
- [15] Eduardo Jiménez Pineda, The dispute settlement system of the future third UNCLOS implementation agreement on biodiversity beyond national jurisdiction (BBNJ): a preliminary analysis, Paix Et. Secur. Int. (9) (2021) 1–18, https://doi. org/10.25267/Paix_secur_int.2021.i9.1401.

- [16] Arne Langlet, B.M.Vadrot Alice, Not 'undermining' who? Unpacking the emerging BBNJ regime complex, Mar. Policy (2023), 105372, https://doi.org/10.1016/j. marnol 2022 105372
- [17] Deyi Ma, Jietao Zhou, The binding force of the BBNJ agreement on third parties, Ocean Coast. Manag. 212 (2021), 105818, https://doi.org/10.1016/j. ocecoaman.2021.105818.
- [18] Ted McDorman, Between Stability and Change in the Law of the Sea Convention: Subsequent Practice, Treaty Modification, and Regime Interaction, in: R. Donald Rothwell, G.Oude Elferink Alex (Eds.), The Oxford Handbook of the Law of the Sea, Oxford University Press, New York, NY, 2015, pp. 181–202.
- [19] Carole McGranahan, What is ethnography? Teaching ethnographic sensibilities without fieldwork, Journal 4 (2015), https://doi.org/10.22582/ta.v4i1.421.
- [20] Elizabeth Mendenhall, The ocean governance regime: international conventions and institutions, in: Paul G. Harris (Ed.), Climate Change and Ocean Governance: Politics and Policy for Threatened Seas, first ed., Cambridge University Press, Cambridge, 2019, pp. 27–42, https://doi.org/10.1017/9781108502238.002.
- [21] Elizabeth Mendenhall, Elizabeth De Santo, Mathias Jankila, Elizabeth Nyman, Rachel Tiller, Direction, not detail: progress towards consensus at the fourth intergovernmental conference on biodiversity beyond national jurisdiction, Mar. Policy 146 (2022), 105309, https://doi.org/10.1016/j.marpol.2022.105309.
- [22] Elizabeth Mendenhall, Elizabeth De Santo, Elizabeth Nyman, Rachel Tiller, A soft treaty, hard to reach: the second inter-governmental conference for biodiversity beyond national jurisdiction, Mar. Policy 108 (2019), 103664, https://doi.org/ 10.1016/j.marpol.2019.103664.
- [23] Elizabeth Mendenhall, Kahlil Hassanali, The BBNJ agreement and liability, Mar. Policy 150 (2023), 105549, https://doi.org/10.1016/j.marpol.2023.105549.
- [24] Fernanda Millicay, Marine genetic resources of areas beyond national jurisdiction and intellectual property rights, in: Tomas Heidar (Ed.), New Knowledge and Changing Circumstances in the Law of the Sea, Brill | Nijhoff, 2020, pp. 65–78, https://doi.org/10.1163/9789004437753_006.
- [25] Stephen Minas, Marine technology transfer under a BBNJ agreement: a case for transnational network cooperation, AJIL Unbound 112 (2018) 144–149, https://doi.org/10.1017/aju.2018.46.
- [26] Erik J. Molenaar, Multilateral creeping coastal state jurisdiction and the BBNJ negotiations, Int. J. Mar. Coast. Law 5 (2021) 1–54, https://doi.org/10.1163/ 15718085-BJA10042.
- [27] Natalie Y. Morris-Sharma, BBNJ and MGRs: practical solutions for benefit-sharing, in: Tomas Heidar (Ed.), New Knowledge and Changing Circumstances in the Law of the Sea, Brill | Nijhoff, 2020, pp. 79–98, https://doi.org/10.1163/9789004437753 007.
- [28] Joanna Mossop, Clive Schofield, Adjacency and due regard: the role of coastal states in the BBNJ agreement, Mar. Policy (2020), 103877, https://doi.org/ 10.1016/j.marpol.2020.103877.
- [29] Clement Yow Mulalap, Tekau Frere, Elise Huffer, Edvard Hviding, Kenneth Paul, Anita Smith, Marjo K. Vierros, Traditional knowledge and the BBNJ instrument, Mar. Policy (2020), 104103. https://doi.org/10.1016/j.marpol.2020.104103.
- [30] Emily S. Nocito, Jenna Sullivan-Stack, Elizabeth P. Pike, Kristina M. Gjerde, Cassandra M. Brooks, Applying marine protected area frameworks to areas beyond national jurisdiction, Sustainability 14 (10) (2022) 5971, https://doi.org/10.3390/ sul14105971
- [31] Alex G. Oude Elferink, Artificial Islands, Installations, and Structures. The Max Planck Encyclopedia of Public International Law, edited by Rüdiger Wolfrum and Max-Planck-Institut für Ausländisches und Internationales Privatrecht, Oxford University Press, Oxford; New York, 2012, pp. 661–665.
- [32] Alex Oude Elferink, Baine P. Kerr, Finding a nome for BBNJ the CBD, the LOSC, and the General Assembly: Complementary Alternatives?", in: Lucia Vito De, Alex Oude Elferink, Lan Ngoc Nguyen (Eds.), International Law and Marine Areas beyond National Jurisdiction, Brill | Nijhoff, 2021, pp. 174–204, https://doi.org/10.1163/9789004506367 008.
- [33] Raul Pacheco-Vega, Using ethnography in comparative policy analysis: premises, promises and perils, in: B. Guy Peters, Guillaume Fontaine (Eds.), Handbook of Research Methods and Applications in Comparative Policy Analysis, Edward Elgar Publishing, 2020, https://doi.org/10.4337/9781788111195.00027.
- [34] Ashley J. Roach, The BBNJ process: gaps and prospects for success, Ocean Yearb. Online 35 (1) (2021) 52–84, https://doi.org/10.1163/22116001_03501004.
- [35] Alex D. Rogers, Amy Baco, Elva Escobar-Briones, Duncan Currie, Kristina Gjerde, Judith Gobin, Marcel Jaspars, et al., Marine genetic resources in areas beyond national jurisdiction: promoting marine scientific research and enabling equitable benefit sharing, Front. Mar. Sci. 8 (2021), 667274, https://doi.org/10.3389/ fmars.2021.667274.
- [36] Yubing Shi, Settlement of disputes in a BBNJ agreement: options and analysis, Mar. Policy 122 (2020), 104156, https://doi.org/10.1016/j.marpol.2020.104156.
- [37] Yan Song, The obligation of EIA in the international jurisprudence and its impact on the BBNJ negotiations, Sustainability 15 (1) (2022) 487, https://doi.org/ 10.3390/su15010487.
- [38] Jinyuan Su, The adjacency doctrine in the negotiation of BBNJ: creeping jurisdiction or legitimate claim?", Ocean Dev. Int. Law 52 (1) (2021) 41–63, https://doi.org/10.1080/00908320.2020.1852841.
- [39] Prue Taylor, The common heritage of mankind: a bold doctrine kept within strict boundaries, in: David Bollier, Silke Helfrich (Eds.), The Wealth of the Commons: A World beyond Market and State, Amherst, Mass: Levellers Press, 2012.
- [40] Ina Tessnow-von Wysocki, Alice B.M. Vadrot, Governing a divided ocean: the transformative power of ecological connectivity in the BBNJ negotiations, Polit. Gov. 10 (3) (2022), https://doi.org/10.17645/pag.v10i3.5428.
- [41] Rachel Tiller, Elizabeth De Santo, Elizabeth Mendenhall, Elizabeth Nyman, The once and future treaty: towards a new regime for biodiversity in areas beyond

- national jurisdiction, Mar. Policy 99 (2019) 239–242, https://doi.org/10.1016/j.
- [42] Rachel Tiller, Elizabeth De Santo, Elizabeth Mendenhall, Elizabeth Nyman, Ian Ralby, Wealth blindness beyond national jurisdiction, Mar. Pollut. Bull. 151 (2020), 110809, https://doi.org/10.1016/j.marpolbul.2019.110809.
- [43] Rachel Tiller, Elizabeth Mendenhall, Elizabeth De Santo, Elizabeth Nyman, Shake it off: negotiations suspended, but hope simmering, after a lack of consensus at the fifth intergovernmental conference on biodiversity beyond national jurisdiction, Mar. Policy 148 (2023), 105457, https://doi.org/10.1016/j.marpol.2022.105457.
- [44] A.B.M. Vadrot, A. Langlet, I. Tessnow-von Wysocki, Who owns marine biodiversity? Contesting the world order through the 'common heritage of humankind' principle, Environ. Polit. 23 (2021) 1–25, https://doi.org/10.1080/ 09644016.2021.1911442.
- [45] Marjo K. Vierros, Harriet Harden-Davies, Capacity building and technology transfer for improving governance of marine areas both beyond and within national jurisdiction, Mar. Policy (2020), 104158, https://doi.org/10.1016/j. marpol.2020.104158.