Why Not Talk About Justice?

The Current Debate on Deep-Sea Mining (DSM)

Draft Paper

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by

Manuel Rivera[1] and Oscar Schmidt, IASS Potsdam

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1. Introduction

> *"There can be no doubt that an effective international regime over the seabed and the ocean floor beyond a clearly defined national jurisdiction is the only alternative by which we can hope to avoid the escalating tensions that will be inevitable if the present situation is allowed to continue. It is the only alternative by which we can hope to escape the immense hazards of a permanent impairment of the marine environment. It is, finally, the only alternative that gives assurance that the immense resources on and under the ocean floor will be exploited with harm to none and benefit to all."* (UN General Assembly, 1967, § 3)

These words, spoken by Maltesean ambassador Arvid Pardo before the United Nations half a century ago, indicate the initial parameters of a discourse about deep-sea usage and regula-

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[1] Corresponding author; manuel.rivera@iass-potsdam.de

tion which unfolded over the subsequent decades, reaching its most important legal expressions in the endorsement of the UN Convention on the Law of the Sea (UNCLOS) and the establishment of the International Seabed Authority (ISA). The precise words were uttered by Pardo after a recess that had to be taken after the main part of his speech, which had been very extensive and full of scientific and legal detail, and, addressing a committee that was anxious to proceed to a more imminent, pressing question––the Korean conflict––, he offered them as a résumé of what his proposals were all about. We have quoted them because they unmistakably articulate three main concerns: preservation of the marine environment, fair distribution of risks and benefits associated to the exploitation of its resources, and peaceful stability in the international relations that frame their appropriation. All in all, Pardo managed to embed these motives into a very––today we got to say: excessively––optimistic picture painting the “vastness of […] untapped wealth” lying on and beneath the seafloor and tinged with a range of fantastic innovations, from submarine fish farms behind air-bubble curtains to floating conduits which would transport phosphorite deposits over great distances. Some of these innovations he thought to “imminent,” which in retrospect was quite unrealistic, but one could say that his big picture still holds attractiveness and truth-value today, namely: a deep-sea which, if treated as a “common heritage of mankind,” is a promise of global equity both in procedures and material benefits, while, when falling prey to vested and hegemonic interests, runs the risk of becoming overexploited, polluted, and militarized.

Our paper departs from the prima facie observation that modern discourse about the deep sea beyond national jurisdiction was rooted in ‘narratives of promise,’ promises that combined innovation-driven wealth with its globally fair distribution, and environmental health with peaceful international cooperation. What we elaborate on is the fact that the motives of distributive and procedural global justice seem to have lost their central place in recent years, accompanied by the formation of a very peculiar special discourse centered on the pros and cons of deep-seabed mining (DSM). In this discourse, both advocates and opponents of DSM turn to ‘narratives of necessity,’ invoking global sustainability either as a justification for the kind of appropriation Pardo had warned against, or as a danger sign for any thinkable kind of usage. The resulting dichotomy between technologist fervor and conservationist resistance constitutes a chasm which swallows up global marine justice. In narrative terms, when it comes to the ocean floor, global marine justice remains close to a ‘non-story’ (Berg & Hukkinen, 2011, p. 153); there is hardly any positive rhetorical form which would show how it would work, what it would aim at, and what the ocean itself would look like if it took place.

In Section 4, we present the discursive features we have uncovered in our analysis, leading to some reflection and speculation in Section 5 about how to possibly alter them and pave new ways to talk about justice. This is preceded, in Section 3, by a brief presentation of the methodical scope of our study. We do not want to plunge in medias res, though, without having at least briefly explained how this particular study links up to a specific set of hypotheses we entertain about sustainability discourse in general, and to our peculiar approach to narrative analysis. This, we do in the following section.

2. Sustainability and Narrativity: Some Assumptions[2]

Building on an important psycholinguistic body of literature about the effects of transportation and identification that fictional stories exert on readers (see e.g. Cohen & Tal-Or, 2017; Green & Brock, 2000), and on the fact that the pronounced "experientiality of an anthropomorphic nature" these stories possess (Fludernik, 1996, p. 19) is to be found at a level of individual sentences or paragraphs as well (Greimas, 1986, pp. 173, 185), we have the right to assume that also non-fictional texts, and, for the matter, any non-fictional discourse beyond and across individual utterances and texts, will be composed of (or permeated by) what Algirdas Greimas called "micro-universes" or "small dramas" (ibd.) and what we denominate as micro-narratives. Each of these building blocks, as Kenneth Burke famously put it and as every journalist knows, will answer five essential questions, namely: Which actor [agent] performs which act, where [scene], how [agency], and with which purpose?—a 'pentadic' structure which mirrors what discourse performs at its macro-level (Burke, 1969). In our research projects, we cast a net of pentads over selected text corpora, assuming that, the 'thicker' these micro-narratives are and the more their individual positions (e.g., purposes or scenes) correspond to each other, the greater a "narrativity" the respective discourse will possess, i.e., the more it will be able to pull a reader or listener in and keep her attention, as a necessary condition for persuading her.

The importance of narrativity, understood in this manner, for an effective political rhetoric is evident, especially so in an age of digitally divulged information where readers jump from text to text and have a hard time to maintain attentional focus (Baron, 2017, pp. 16-18). For a sustainability rhetoric this is all the more important, as most sustainability issues—apart from climate change and the fight against poverty—still have a hard time to make the cut in the daily struggle for public attention and raise above informational noise (Barkemeyer, Givry, & Figge, 2018). Increasing the narrativity of non-fictional texts could make a difference, especially when the issues, like the one we deal with in this paper, seem temporally and/or spatially remote.

Yet we ought to assume, when analyzing discourse as a system of utterances that is stabilized beyond individual texts and speakers, and at least partially decoupled from their intentions and capacities (Jung, 2011), that narrativity as a structural feature is not indefinitely susceptible to individual manipulation. In the case of pentadic cells that assign motives to acts and agents, a central correlation is to be hypothesized between their respective "purposes" and the overall *motivational structure* the discourse impairs—which, in analogy to that of a person, is nothing else than its *value base* (Barnea & Schwartz, 1998, pp. 19-22; Schwartz, 1994). It is our hypothesis, which we are testing and differentiating in different fields of sustainability related content analysis, that sustainability discourse(s) are structured through three sometimes converging, sometimes competing value clusters, which correspond to three (out of four) main fields in Schwartz's theory of universal human values, namely *conservation, innovation, and justice*. There is no room in this paper to make this hypothesis plausible; it must suffice to say at this point that there is ample support for it to be found not only in the aforementioned general value theory, but also in the specific political history of "sustainable development" over the last 50 years, and in some empirical argumentative analyses like the one carried out recently by Carolin Schwegler (2018). Our own findings in this paper add further plausibility to this assumption. Before presenting them, we briefly explain how we got to them through narrative analysis, and thus their scope and limitations.

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[2] The approach presented in this short chapter is more thoroughly developed in Rivera and Kallenbach (upcoming); its normative and epistemological prerequisites have been set forth in Rivera and Nanz (2018).

3. DSM Study: Corpus and Methods

When, in the context of an extensive scoping study on the current applicability and possible re-interpretation of the Common Heritage of Mankind (CHM) principle (Christiansen et al., forthcoming), we became interested in analyzing discourse "on deep-sea mining," we set the course in a way that certainly pre-determined some of our results. We selected documents whose main topic were not (only) the high seas themselves, but DSM specifically. Not surprisingly, the discourse we explored showed being structured by the antagonism between DSM propagators and detractors, with a third group of texts at least attempting to avoid partisanship. Our results, therefore, could be in theory relativized by pointing out that, by sampling this corpus, we failed to appreciate a broader debate on the future of the deep sea beyond national jurisdiction in general and not centered in DSM. We would argue, however, that such a debate does hardly exist anywhere else.

Even the discourse on DSM is still predominantly expert-driven and not exactly mobilizing wider publics.[3] Although we included a media section in our sample—especially because of our interest in story-telling, which media reports are forced to perform by rules of their genre—, we therefore contented ourselves with a volume of text far smaller than those of the other speaker groups we took into account. We assessed 32 publicly available contributions from the last eight years (in English and in German), sampled in equal parts from all the relevant speaker groups, i.e., academia, civil society, politics, business, and the media. A further criterion for the selection of this qualitative, quoted sample, which claims no statistical representativeness whatsoever but whose dependability nonetheless eludes arbitrariness (Elo et al., 2014), was the equal representation of voices from advocates and opponents, as well as of mediating, or 'objective,' voices. "Equal representation" here refers to the number of documents, not to their volume, which means we had to weigh all quantitative elements of our analysis accordingly, or to translate them into percentages.

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[3] Just to give an impression: While Google delivers around 3.75 million results for "renewable energies," "deep-sea mining" is found in 330.000 pages only (as of April 21st, 2019).

Quantitative features of our study comprise traditional word counts, which were carried out in the interest to get a hold on overall semantics, and distributions of certain sub-codes within "pentads," e.g., to the types of purposes (or the lack of any purpose) ascribed to positively connoted agents, by which we inferred the value structure of the text corpus. As we worked with MAXQDA only, we did not include LDA or any other more refined lexicometric method; it was however not in our interest to do so, either, as we did not want to register topics or style, but rather the structure of micro-narratives. The main work, therefore, was purely qualitative, namely the establishment and description of these micro-narratives, or pentads, themselves. Deciding upon how many pentads to establish and analyze in each text, ultimately came down to assessing our own working capacities, and to an intuitive sense of proportionality. Over the entire corpus consisting of 32 documents (and slightly more than 100.000 words), we cast a net of 160 pentads, i.e., five pentads per text (or one every 625 words), but we let that average vary slightly, for instance if certain texts (e.g., shorter but 'telling' opinion pieces) proved to be more varied and therefore richer in narrative term than others (e.g., lengthy but rhetorically repetitive technical reports). *Where* to position the pentads within a text, however, was mostly a matter of hermeneutic acumen, whose criteria we abstain from explicating in the present draft.

The more than 1.100 pentadic codings that resulted out of this operation,[4] and which reflect the constellations of action the discourse invokes and 'narrates,' were complemented by nearly 600 thematic codes by some of which we traced direct mentions of the common heritage principle and of sustainability, while others were meant to capture value references separately from the pentads (to increase the validity of our results).

4. Narrative Structures of Discourse on DSM

The very first glance at the corpus already reveals a maybe somewhat trivial, but nonetheless striking feature: There is no activity which could even remotely compete with "mining." The according word combinations (plus the related, and very telling, economicist notion of "primary international supply") amount to *the quintuple* of its competitors.[5] The latter are heterogeneous; environmentalist notions (e.g., "preserving deep sea") are paired with such of exploration ("marine scientific research"), and it is noteworthy that some of them, like

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[4] There are two reasons why the average pentad consists of more than the five categories/codes mentioned in Section 2 (*agent, act, purpose, agency, scene*): First, there is often more than one act (or purpose, or agency…) mentioned. Second, in order to control whether and how micro-narratives truly were conducive to the overall discourse's value structure we applied a distinction between "ought"-stories (which directly express the state of affairs deemed desirable by the author), "is"-stories, and "quoted"-stories (which only indirectly relate to the narratives of others without evaluating them). This distinction had to be coded as well.

[5] In this case, we counted three-word combinations which included a verb/activity, and who were mentioned more than 10 times throughout the corpus.

“environmental impact assessment," are conceptually dependent on the economic activity in question.

This does of course not imply that mining is affirmed throughout—as said before, the discourse is structured as a debate pro and contra mining—, but it indicates that there is hardly an alternative notion of what to do with (or in) the deep sea instead. The semantic centrality of exploitative activities pervades almost all groups of documents and speakers. Opponents of DSM are often just that: opponents; they spend a lot of time refuting DSM argumentatively instead of setting forth their own vision or story. One may say that they commit the most classic mistake of political communication by involuntarily reaffirming the adversary’s frame (Lakoff, 2008).

When leaving aside this preeminence of an exploitation-oriented, economicist vocabulary, we can see how aspects of environmental concern, social justice, and institutional pragmatism fare in the overall debate, and how they are accentuated differently by different groups of speakers. Beside the notion of mining itself, the debate about it is dominated by an ‘institutionalist noise,’ comprised by terms like “regulations,” “implementing,” “legal,” and the like. Overall, this confirms Ulrike Kronfeld-Goharani’s finding that ocean discourse—which she quantitatively analyzed over a thematically much broader, and much more copious, corpus of texts—is anchored to the central term “management” (Kronfeld-Goharani, 2015, p. 314) which is very prominent in our aforementioned group of terms as well. It is not very surprising that this noise is even more prevalent in documents issued by institutional political actors, and considerably less so in civil society documents and media articles (fig. 1).[6] What is not as trivial is the fact that this politico-managerial approach to the matters at hand is almost equaled by an *environmental* framing of the debate. Actually, right after the words “deep,” “sea,” and “mining,” it is the words with the root “environment” that by far lead any conventional word count, even beyond the selected dictionary presented in the figure.[7] This is true for any of the speaker groups, and for DSM opponents and proponents alike, which means that the former have at least succeeded in making the mitigation of environmental impacts of mining activities an issue that everybody in the debate has to address.[8]

What clearly takes the backseat, however, is any more immediately social, let alone justice-related semantics. Words like “conflict,” “poverty,” or “inequality” are mentioned so extremely seldom that they almost seem inexistent. More prominence is attributed to notions like “distribution” (e. g., of revenues from mining) and “income,” but even they pale in comparison with words like “nature” or “ecosystem.” This negligence is even more pronounced in the documents which detract DSM than in those which defend it, indicating that the economic core of the common heritage idea (sharing revenues) is, if at all, mobilized by those in favor of mining.

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[6] Interestingly, though, the group of institutionally authored documents is the only one in which “mining” does *not* prevail over other activities like environmental assessment, research, or negotiation.

[7] In the “environmental” group of our MAXQDA dictionary, besides the lexical “environment” (and “umwelt”) family, we included words such as “nature,” “protection,” “ecology,” etc.

[8] Consistently, only those who claim a certain impartiality, mostly legal scholars, prioritize talk about regulations (which are in fact often also *about* the environment) over environmental semantics.

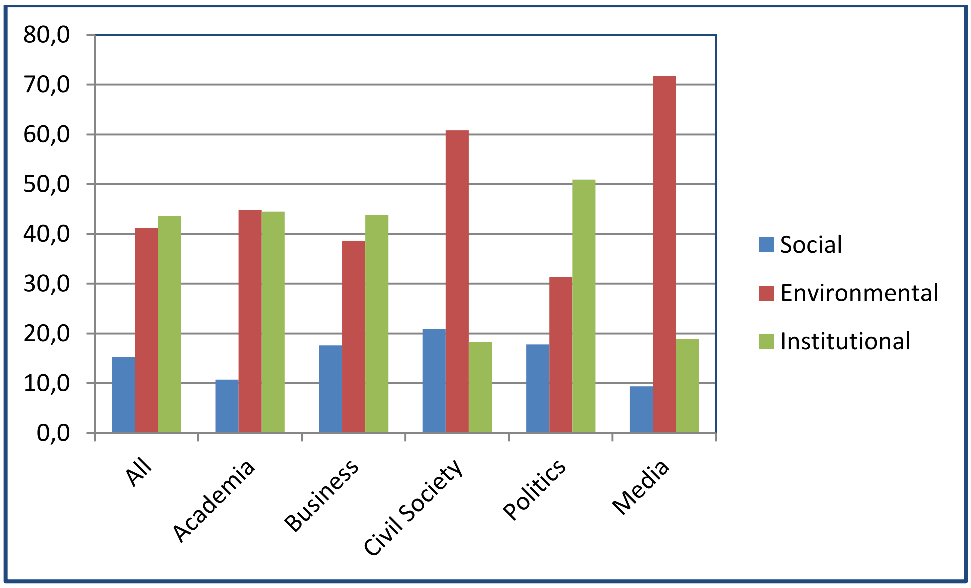

Figure 1: Proportions of selected vocabulary for different speaker groups (n = 4176 words; in %)

This relative lack of social semantics especially in the groups who are either the most inclined to criticizing DSM (Civil Society) or the most interested in making it a ‘good story’ (the media) is remarkable, because it seems to indicate that they cannot construct a strong relation between social matters and interest conflicts on the one hand, and mining prospects or the working of ISA, on the other. This impression is confirmed when diving deeper into the discourse and its narrative structures.

We start with the drivers of discourse again: DSM advocates. Notwithstanding that they mention revenues and their distribution from time to time, they either locate the agent (and/or beneficiary) of DSM in an entirely unspecified “humanity,” or as a nation that benefits from an improved location-related economic competitiveness. In the former case, while at least rhetorically linking up to the common heritage vision in the likes of Elisabeth Mann-Borgese or Arvid Pardo, they have however given up part of its promise, and redefined its necessity. Costs and benefits of deep seabed mining projects tend to be compared with those of traditional terrestrial mining and the availability of land-based resource stocks. Against this background, deep seabed mining is no longer primarily discussed as a source of novel wealth, but rather as a potential means to securing current standards of production. Its proponents argue that using deep-water resources for economic development is inevitable if humanity is to respond no longer to a global concern for peace and political cooperation, but rather to dwindling land-based resources and to urbanization, population growth, and modernization processes that increase the global demand for metals and rare earths (mainly digitalization and renewable energies). DSM is presented as a significant part—or even a mandatory prerequisite—for sustainable development and associated with a green and modern image that connects both to an audience of potential private and governmental investors, as well as to a concerned global public.

This globalist green modernization narrative, to be reconstructed out of many of the pentads especially in business documents,[9] is complemented by a second line of reasoning, which is even more remote from international justice concerns than the first. It centers on location-related economic competitiveness. Here, the development of a modern green industry is explicitly discussed in light of national and sectoral interests. Very contrary to the original common heritage spirit, the money to be made and the jobs to be created are presented as a domestic opportunity that should not be left to international competitors. This competitiveness narrative appeals to both the hope for economic bloom and to fears of losing touch and coming under political and economic pressure from the outside. For instance, warnings are repeatedly voiced against the German industry being left behind by international competitors, especially by an overly powerful China.[10]

When fleshing out these ideas, DSM proponents can rely on a gamut of economic and/or technological acts, from “changing mining industry for the better” to “developing resources,” and from “supplying generators” to “building modern devices.” Figure 2 shows the dominance of this type of acts in their discourse—as well as the fact that their opponents cannot elude these acts either. This occurs both when they describe what miners want to do matter-of-fact (e.g., “exploit”) or when they set out to criticize these activities as dangerous (mining as “wiping out pristine habitats,” for example). The latter often also resonates in what we call “negative acts” and what is an indirect way of affirming one’s own purposes. Narratively, it results in sentences that rather are non-stories, though, as for instance when the ISA is accused of “failing to represent the common interest,” or when DSM-friendly scientists are said to “not use the appropriate data.”

What fails to come through in these micro-narratives is, again, a bigger picture of how DSM opponents envision a desirable development of the high seas. Acts of research, while being mentioned by everybody from time to time, do not add up to a coherent whole. The only camp in this debate which manages to effect a certain narrative clarity at micro level and to pierce to the overall managerial, institutionalist noise of which we spoke in relation to discourse semantics, and which resonates again in dozens of rather abstract political acts like “administrating the oceans,” “governing trade,” or “incorporating environmental law into UNCLOS,” is, again, the Pro-DSM fraction.

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[9] Not exclusively pertaining to them, though. DSM advocates can also be found among journalists and

[10] Unintentionally, the location competitiveness narrative may be strengthened further by opponents of deep seabed mining when they refer to the ensuing trend of seabed exploration as a “gold rush” or a “scramble for resources”. Despite the obvious intention to paint deep seabed mining in a negative light, these metaphors contribute to the image of a rapidly evolving competition between a few pioneering actors who are trying to be first in securing a wealth of openly accessible economic opportunities, thus strengthening the proponents’ frame.

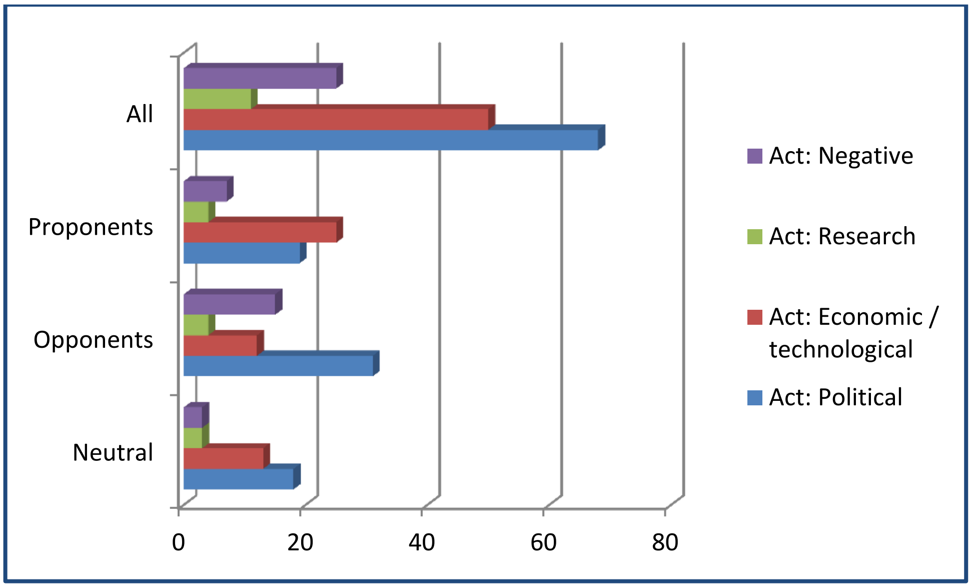

Figure 2: Absolute frequency of types of acts for the ‘camps’ of DSM debate (n = 145 pentads)

But what is all this regulation, governance, management and negotiation, explained in great detail in academic and policy documents, and referred to constantly in all others as well, ultimately for? Most often, at the level of micro-narratives, this question receives no answer at. We assigned the respective code “Purpose: missing” (see fig. 3) to paragraphs were the purpose of a described activity were not neither made explicit in the coded passage itself, nor inferable from its immediate context. What arises in these cases, especially for a distracted, disengaged reader (see Section 2) is an impression of pointlessness, which in turn renders engagement with the discourse unlikely.

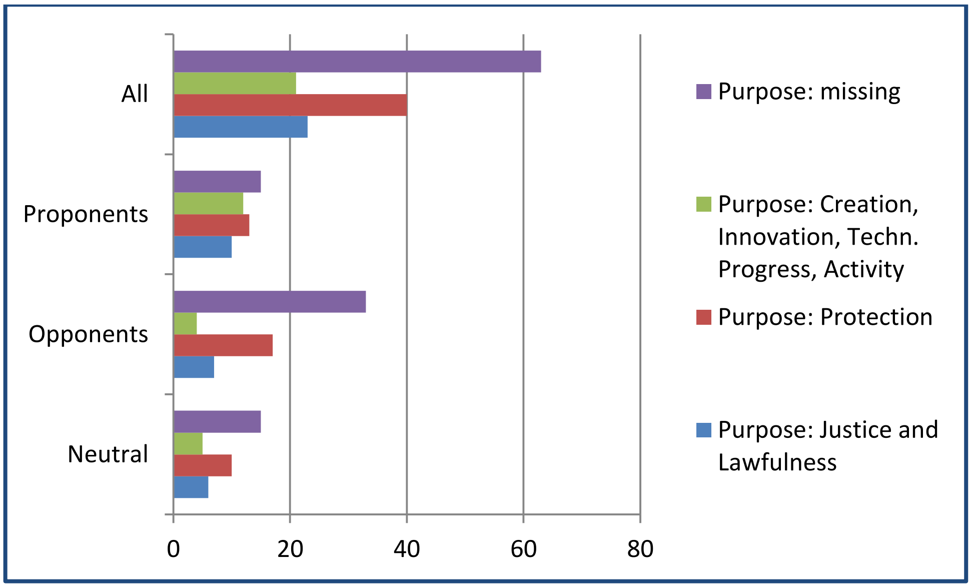

Figure 3: Absolute frequency of types of purpose (n = 139 pentads)

DSM proponents, with their overall narrative combinations of invoking technological innovation and economic activity as a purpose in itself and claiming that their plans will also preserve the environment and prevent any harm (be it from economic loss in the international competition or from damage to livelihoods), manage to outbalance that lack of orientation. Proponents, with their predominant reliance on protection and conservation motives, have a much harder time achieving the same.

Justice, on the other hand, does not come through particularly clearly in *any* of the discourse's segments. When a DSM license holder claims, for example, that their activities will mean "no depletion of Kiribati's natural resources, zero impact on Kiribati's environment and fish stocks, and no cause for land use conflicts," they smuggle a conflict avoidance motive into a negatively articulated set of purposes so indirectly that one will have to deliberately pause and think in order to notice that there is something implied about justice here; the sentence is far clearer about environmental and social stability than about justice strictu sensu. Examples like this, where you have to 'squint' in order to notice justice-related motives, are the rule rather than the exception; alongside them, we included references to procedural fairness, including transparency, in this group, which are often not very tangible either.

This applies to some explicit, generic references to lawfulness as well, such as when an NGO demands from the ISA that they "must prioritize conservation of the deep sea, the rights of coastal communities and the rights of humankind as a whole." Here again, justice is named alongside environmental protection, and the "rights of coastal communities," while forming the most concrete clause of the sentence, are not easy to picture: How exactly would they be affected by activities in the deep sea? Scientific considerations about the shape of potential conflicts with the coast, e.g., about sediment discharged in the course of seabed mining travelling to coastal state waters, are very marginal in the discourse and not mounting up to a palpable story yet. Neither do possible conflicts of DSM with navigation, the exploitation of genetic resources, or—most importantly—with fisheries. Although it is possible that the latter could occur, especially at shallower parts of mid-ocean ridges and seamounts, DSM critics do not tap fully into experiences associated with resource and other conflicts and ensuing injustice (a framing used successfully for instance by the "food or fuel" debate in the late 2000s).

5. Outlook

Deep seabed mining is primarily a scenario of the future. Most arguments put forward tend to appeal to hopes or fears, while resting on a rather weak foundation of lived experience. Different interpretations of future uses of the seafloor are therefore particularly dependent on the effects of narrative plausibility and imageability, even more than sustainability discourse in general is (see Section 2). For this very reason, cross-references to other environmental and economic policy discourses play a critical role, as they allow the narrator to fill the "black box" of the deep seabed with images and experiences from other contexts.

Our analysis showed that hope, nurtured by the idea of justly distributed wealth and peaceful cooperation in the run-up to UNCLOS a few decades ago, has in the meanwhile somewhat been toned down by mining advocates in favor either of a global sustainability "necessities" narrative or of references to location-related competitiveness frames. Apart from rejecting proponents' projections and arguments, i.e., casting doubts on the plausibility of their imagined futures, mining detractors have a hard time coming up with a proper narrative about the deep sea. Their most valued motive, environmental conservation, is difficult to translate into lively acts and micro-narratives, unless the miners themselves are vilified and the defense against them exalted, which would then result in what rhetoric scholars sometimes denominate as "melodrama" (Kinsella et al., 2008). But not even this classic environmentalist trope is truly blossoming in DSM discourse yet. Attempts to paint underwater robots and mining devices as cruel and life-threatening often fall flat in the face of a remote and somber deep sea which is not easy to portray as a sort of new rainforest.

Why, then, not talk about justice? This question is not easy to answer, and an idea of how to successfully bundle global justice and earth system protection—the central global sustainability formula—into narratives is especially hard to come up with in the case of the remote ocean floor. At this point, we will not open a systematic speculation about the reasons why marine justice seems to prove narratively infertile when it comes to the deep sea, but leave this up to discussion at the workshop. We think, though, that the case may be not as special as it seems, but rather exemplify general challenges experienced by sustainability (i.e., global and intergenerational justice) narratives with regard to (1) the per definition 'localist' character of successful story-telling, (2) their inherent value tension between innovation and conservation, and (3) the anthropocentric nature of any conventional narrative dynamics (Ghosh, 2016).

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