Ocean and Society
2026 • Volume 3 • Article 11355
https://doi.org/10.17645/oas.11355

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Open Access Journal

The UN Ocean Decade and Its Performative Impact on North Sea Governance: An Extended Event Ethnography

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Submitted: 29 September 2025 **Accepted:** 16 December 2025 **Published:** 25 February 2026

Issue: This article is part of the issue "Ocean Climate Governance: Eclectic Viewpoints of a Multi-dimensional Nexus" edited by George Dikaios (Leiden University), fully open access at https://doi.org/10.17645/oas.i488

Abstract

The UN Ocean Decade aimed to promote knowledge, understanding, and access to oceans that are variably envisioned and imagined by state and non-state actors. The UN Ocean Decade vision, "The science we need for the ocean we want," set the path for global oceanic water bodies from 2021 to 2030 and beyond. However, multiscalar ocean governance often presents as a confusing and unclear vortex. Fortunately, ocean governance events provide a spatial and temporal entry point for empirical analysis. This article draws on an extended event ethnography, designed at the intersection of geographies of knowledge and ethics of care, to argue that ocean governance events extend concentrically along spatial, temporal, and normative dimensions. The data was gathered from five extended field research stays as well as multiple ocean governance events. From a diachronic perspective, this contribution uses the European Maritime Day 2021 as a reference event and entry point. As such, it is possible to uncover how the UN's metaphorical vision is (a) *shifted* into scenarios, which are (b) *interlinked* to precise projects that (c) spatially and temporally *impact* governance itself, the physical materiality of the North Sea, and the senses of place of people living with the sea.

Keywords

climate imaginaries; ethics of care; extended event ethnography; geographies of knowledge; North Sea; ocean literacy; sense of place; UN Ocean Decade

1. Introduction

The UN Ocean Decade (OD) vision sets the path for the world's oceanic water bodies from 2021 through 2030 (Intergovernmental Oceanographic Commission, n.d.-a). Its mantra, "The science we need for the ocean we want" (Intergovernmental Oceanographic Commission, n.d.-a), has reached the world's oceans, delivering a profound impact on the world's blue 70%. Different scholars have pointed out that the oceans

are often conceptualised as a type of the world's "last" (Constantinou & Hadjimichael, 2020, p. 2; Fawcett et al., 2023, p. 70), "new" (Constantinou & Hadjimichael, 2020, p. 16; Johnson & Braverman, 2020, p. 2), or "final" (Spalding & de Ycaza, 2020, p. 20) frontier. They are said to be: "riddled with 'knowledge gaps' and…under-researched relative to terrestrial space….Only 0.04 to 4 per cent of total research dollars worldwide goes to ocean science, a pattern that has led humanity to know more about Mars than about Earth's oceans" (Fawcett et al., 2023, p. 70).

This contribution is interested in how global imaginaries, such as the UN OD vision travels, materialises, interacts with national, regional, and local governance spaces, and as such ultimately has an impact on a sea like the North Sea—one of the most used seas of the world (Couling & Hein, 2020; Jongman, 2022). The question arises as to how the UN OD vision would influence ocean governance. How do ocean governance events (OGEs) at different scales refer to this vision? Would this vision lead to an actual impact? Answering these questions necessitated doing event ethnography: "The sheer diversity of events is not a problem that researchers need to 'solve' with precise schemas and categories; rather it is a methodological opportunity for researchers who are open to thinking in and through events" (Koch, 2023, p. 5).

The following section outlines the research design, which is conceptualised at the intersection of geographies of knowledge and ethics of care. A threefold analytical lens is proposed, focusing on the temporal, spatial, and normative dimensions of performing OGEs. The methods used mark an extended event ethnography (EEE), which makes it possible to diachronically trace the concentric and ongoing spatial, temporal, and normative lives of OGEs.

Section 3 unpacks the extended normativities in three steps: (1) how the UN's metaphorical vision is *shifted* into scenarios; (2) how these are *interlinked* to precise projects; and (3) how these projects spatially and temporally *impact* governance itself, the physical materiality of the North Sea, and the senses of place of people who live with the sea.

Before concluding, the discussion part ties back to the conceptual framework and the approach of EEE to highlight (a) how multiple OGEs weave a polycentric web of North Sea governance and (b) how the way OGEs perform ocean knowledge-production might lead into a knowledge fix.

2. Research Design

The aim of this contribution is to understand how OGEs perform North Sea governance and how normativities—values, visions, scenarios, strategies, care-relations, etc.—are negotiated within an OGE and extend beyond spatial and temporal settings of an OGE itself.

2.1. Conceptual Framework

The notion of governance is "both a contested concept and an increasingly empirical concern" (Glückler et al., 2020, p. 1). The governing of oceans, seas, and waters (hereinafter referred to as "ocean governance" as this is the term normally used in this field) is a contextual (Partelow et al., 2023, p. 2), relational (Glückler et al., 2020, p. 5), and material-nonmaterial (Partelow et al., 2023, p. 2) phenomenon. It presents a "wicked problem…in the face of the growing ecological crises in the Anthropocene" (Johnson & Braverman, 2020,

p. 19). Therefore, governing the oceans is governing the climate (Partelow et al., 2023, p. 15). The "fluidity of land and sea requires a reconsideration of the existing institutions, temporal frameworks, and categories with which we engage the oceans, illuminating our responsibilities toward these spaces and to what lies and lives within them" (Johnson & Braverman, 2020, p. 19). Such responsibilities entail ethical qualities of caring, such as attentiveness, responsibility, competence, and responsiveness (Tronto, 2013, pp. 34–35).

Competence itself cannot be measured or experienced; it is merely the result of competent action, known as *performance* (North et al., 2013, p. 43). These actions can be experienced, described, and unpacked with an emphasis on the temporal, spatial, and normative dimensions, as shown by the following conceptual structure.

2.1.1. Temporal Dimension

The temporal dimension unfolds in two major strands: The chronological order of events indicates when events are taking place and allows a diachronic perspective on past, present, and future events. It is particularly interesting to analyse so-called "futuring practices" (Hulme, 2022, p. 229) in ocean governance, which influence both present and future events and politics. Hulme (2022, p. 195) argues that "climate governance has become much more than governing 'the climate', narrowly defined. Rather than denoting a specific new set of political institutions or processes, governing climate has become a synecdoche for governing the future." Hulme (2022, p. 229) goes on to identify "four *futuring practices* as applied to the climatic future, four creative ways in which groups of people apply their imaginative faculties and cultural resources to engage the future." Two are considered "realist techniques [which are] scenario planning and scientific modelling"; the other two techniques are "metaphors and creative fiction…speculative practices" (Hulme, 2022, p. 229). The present analysis takes up *metaphors* which are "powerful linguistic and visual devices for guiding human cognition, emotion, and behaviour [that] help us to grasp something new or unfamiliar by associating it with something more familiar and everyday" (Hulme, 2022, p. 235), and *scenario planning*, which "seeks to develop plausible and rational accounts of what the climatic future might look like" (Hulme, 2022, p. 229).

Furthermore, analysing the repetitive character of these OGEs allows to elucidate the relational character of these performances: Applying Tronto's (2013) four phases of care offers thoughtful tools to unravel complex care relations, their respective ethical qualities, and their expressions as practices of care. These four phases are attentiveness (i.e., caring about), responsibility (i.e., caring for), competence (i.e., care giving), and responsiveness (i.e., care receiving; Tronto, 2013, pp. 34–35). The first phase of care, attentiveness, forces us to dwell on the notion of caring about, a "suspension of one's self-interest, and a capacity genuinely to look from the perspective of the one in need" (Tronto, 2013, p. 34). As soon as these needs are "identified, someone or some group has to take the burden of meeting those needs. This is responsibility" (Tronto, 2013, p. 34). However, "the actual work of care…requires the moral quality of competence" (Tronto, 2013, p. 35). Caring requires an ability to listen to those being cared for: "Observing that response, and making judgements about it (for example, whether the care given was sufficient, successful, or complete?) requires the moral quality of responsiveness" (Tronto, 2013, p. 35).

2.1.2. Spatial Dimension

Governing the seas and oceans requires multi-sited and tremendously powerful practice across all political *scales*. At the global level, the UN OD acknowledges—cares about—that the world's seas and oceans are under

threat (e.g., see SDG 14 "life below water"; The Global Goals, n.d.). The OD's vision, mission, seven goals, and 10 challenges (German Committee of the UN Ocean Decade, n.d.) aim to "take on the burden of meeting those needs" (Tronto, 2013, p. 34). In other words, the global directive calls for responsibly governing the oceans to enhance knowledge-production practices and achieve e.g., "healthy and resilient ocean" (German Committee of the UN Ocean Decade, n.d.). However, such knowledge is not produced at the global level or by the global institutions. Rather, responsibility is transferred to other institutional levels (especially political institutions and scientific communities) at different scales (i.e., supra, [inter-]national, [inter-]regional, and local). For a "geographer of knowledge…[it is therefore of interest to] explain the spatially differentiated ways in which knowledge claims emerge in places, how they become institutionalised, and how they travel through social and cultural worlds." (Hulme, 2022, p. XXIX)

Hulme (2022, p. 223) makes a valid point by suggesting that "a more plausible metaphor for climate governance is that of a clumsy multi-layered mashwork of overlapping and competing competences and interests." Therefore, it is of uttermost importance to scrutinise how these competences and interests perform responsiveness. In this light, OGEs are key to investigating as they are both organised *spaces* that shape polycentric governance (Hulme, 2022, p. 210) and *places* of (re)producing knowledge.

2.1.3. Normative Dimension

OGEs perform ocean governance and knowledge-building; they make it tangible and haptic in an "orchestrated" (Collaborative Event Ethnography, n.d.-a) way. Hulme's (2022) notion of climate imaginaries helps to unpack how the global UN OD imaginary influences OGEs and, in this case, how it interacts with national, regional, and local spaces of North Sea governance:

> *Climate imaginaries* can be understood as collectively shared sets of beliefs, narratives, technologies, discourses, and practices that condition what climate futures are thought of as possible, likely, or (un)desirable. Climate imaginaries envision not only possible climate futures, brought to life through different futuring practices. They are also suggestive of ways to deliver such futures. For this reason, all imaginaries are politically charged. (Hulme, 2022, p. 230)

Together with Tronto's approach to ethics of care, three normative modes of performance can be identified: At these events, the organisers performatively shifted the UN OD vision from "speculative" to "plausible" (Hulme, 2022, pp. 229–237). Concrete projects and practices were then performatively interlinked with a plausible scenario by other state and non-state actors. Finally, these specific projects led to concrete impacts on governance (e.g., policy strategies), polycentric knowledge production (Digital Twins, Ocean Literacy, etc.), the physical materiality of the North Sea (e.g., technological interventions), and the senses of place of people living with the sea:

> When considering *senses*, we mean the myriad ways in which people understand, interpret and interface with the world, which involve multiple sensibilities, physical senses and embodied identities. Changing *places* refers to the new patterns of socio-spatial relations and experiences of "placeness" that surface or are resignified, rescaled or revalued. (Raymond et al., 2021, p. 5)

Raymond et al. (2021, p. 9) argue that "innovations in technology and governance (law, policy, coalition-building) can also radically change the way in which we understand and negotiate senses of place." Knowledge as imagined and negotiated ultimately has a performative impact on senses of place. Indeed, "legal transformations, such as the proclamation of new nature protection directives across the European Union, challenge us to rethink the relationships between people and place" (Raymond et al., 2021, p. 9). Here, the idea of value must be viewed through the lens of geographies of knowledge and ethics of care. How is the North Sea valued by state and non-state actors? How do these perspectives shape the countless senses of place around and across the North Sea? Which perspectives are valued by OGEs? Answering these questions requires attending to how ocean governance is *performed* by different actors at OGEs.

2.2. Doing Research

Event ethnography is a well-established empirical method in human geography and has been widely used to experience, describe, and understand the complexity of environmental governance (Brosius & Campbell, 2010; Campbell et al., 2014; Corson et al., 2019; Gray et al., 2019; Koch, 2023). Gray et al. (2019) pioneered the method in their research on the 2008 World Conservation Congress in Barcelona. They "approached the large international event as a field site—a place where ideas about environmental conservation are circulated" (Gray et al., 2019, p. 1) and subsequently founded the collaborative event ethnography project (Collaborative Event Ethnography, n.d.-b), which calls on ethnographers to attend to:

> The meanings people attribute to their social and political realities….International meetings have mostly been studied by political scientists, often with a focus on outcomes. We are equally interested in the *processes* through which outcomes are achieved and the insights these provide into how global environmental governance is accomplished. (Collaborative Event Ethnography, n.d.-a, emphasis added)

2.2.1. Methods: Towards an EEE

Doing event ethnography over a four-year period (2021–2024) helped to understand how events do not necessarily stop at their supposed temporal and spatial end. The UN OD offers an illustrative example. It is a 10-year event whose influence will likely extend far into the future to shape the seas and oceans worldwide. Careful examination of the events' extended temporalities, spatialities, and normativities requires a unique methodical approach: In accordance with the threefold conceptual framework of the temporal, spatial, and normative dimensions of OGEs, this contribution presents the methodical approach of an EEE.

What makes this approach stand out is that, in addition to attending OGEs and doing classical event ethnography, gatekeepers and interviewees were also visited afterwards in their home region. This provided insights into how these state and non-state stakeholders are embedded in their national, regional, and local governance spaces, as well as how diverse knowledge about the North Sea is produced in different places:

> The essence of multi-sited research is to follow people, connections, associations, and relationships across space….Research design proceeds by a series of juxtapositions in which the global is collapsed into and made an integral part of parallel, related local situations, rather than something monolithic or external to them. In terms of method, multi-sited ethnography involves a spatially dispersed field

> through which the ethnographer moves—actually, via sojourns in two or more places, or conceptually, by means of techniques of juxtaposition of data. (Falzon, 2009, pp. 1–2)

In so doing, the aim was both to describe in an event ethnographic manner (Creswell, 2016, p. 6) how OGEs are being performed and how these perform ocean governance over time and space; and to explain the process (Creswell, 2016, p. 5) of how the global UN OD narratives materialise within OGEs, and interact with (supra-)national, (inter-)regional and local governance spaces within the North Sea region. Therefore, the data gathered from event ethnography and related field research have been coded in a grounded theory way (Section 2.2.2).

Below is an overview of how I implemented EEE and, consequently, how the approach applied leads to uncovering three spheres of how OGEs are performed towards their extended temporalities, spatialities, and normativities (Figure 1).

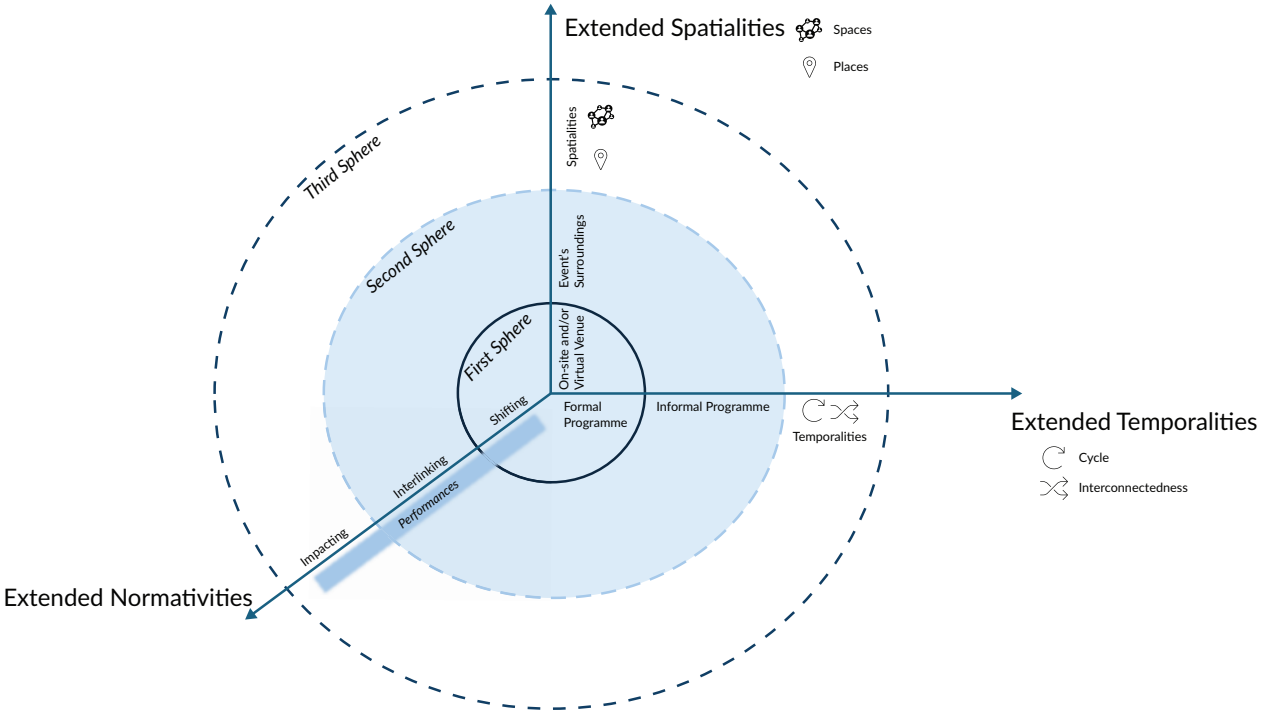

Figure 1. Towards an EEE.

In order to experience, describe, and understand how OGEs are performed and how global imaginaries materialise and ultimately impact governance spaces from different scales, I applied different sets of methods according to the different spheres of OGEs.

2.2.1.1. The Core of an OGE—The 1st Sphere

The first sphere allows an event ethnography which combines "participant observation…and many other forms of observation [such as photo documentation] to understand the world through social relations" (Koch, 2023, p. 2). As Koch (2023, p. 8) explains, "textual materials play an important role in linking events across time, and indeed, the repetitive approach…[is] useful for understanding how the field [is] changing."

All the attended conferences emphasised the UN OD vision, missions, and goals, as well as the myriad technological imaginaries of how the North Sea mattered to countless actors at all levels of politics, economics, science, and arts. Therefore, collecting and afterwards analysing all kinds of flyers, information brochures, stickers, or event merchandise was another pillar in the methodical spectrum.

OGEs occur at a specific time and are fixed by a formal programme. This schedule—shared with all participants, the media, and online—provides information about when and where discussions, keynotes, and workshops will take place and who will be involved. Specific topics are focused on in moderated discussions, workshops, and keynote speeches. Their results are of interest not only to the participants, but also to the organisers.

The spatial core of every OGE is its *venue*, whether on-site, virtual, or hybrid. On-site events are usually hosted in large event complexes, such as exhibition centres, universities, or cultural facilities (e.g., the concert hall in Bruges for the North Sea Conference 2022). Sessions may be more hybrid, and speakers and participants can often join via links. Apropos, the question of access is crucial. I attended OGEs free of charge; however, on the registration forms, I had to enter an organisational affiliation (in my case, the university). Most university attendees seemed to fall into two groups: project-based scientific partners (e.g., Horizon Europe projects) and scientific experts (e.g., as keynote speakers). All OGE participants fulfil a (state or non-state) function, indicating how access is planned.

On a normative level, I observed how the OD vision became a common mantra, recited by moderators at the beginning and end of each session or discussion (research notes, 2021, 2022, 2023). Experts in politics and science referred to the vision as a confirmation, while other participants (e.g., representatives from NGOs and artists) saw it more as a pledge. The organisers are the key actors guiding the programme, but not the only actors within this first sphere. Two other groups include the starring actors (mostly experts in politics, economy, science, and arts) who are invited to present their perspectives, and the listening actors. The starring actors play an important role in shifting "futuring practices" (Hulme, 2022, p. 229), and the quality of their performance is determined by using their expertise to confirm the shift (Section 3.1).

2.2.1.2. The Surroundings of OGEs—The 2nd Sphere

An event's second sphere includes everything that takes place beyond the official programme, where the variables of time and space soften. All people participating in an event—whether it be organisers, starring actors, or listening actors—fulfil the role of participants. And as such, all participants are key actors (research notes, 2021, 2022). Or in other words, this event's second sphere enables all different participants to speak, express their ideas and values, and to interlink their ideas and values in broader ways with plausible scenarios, here with the EU's "sustainable blue economy" scenario (European Commission, 2021a).

Regarding the temporal dimension, there are also informal parts of an event—spontaneous moments that are not listed on the official programme (e.g., when participants spontaneously have coffee, lunch, or dinner together). Post-events (see also European Commission, 2021b, p. 4) can be informal as well. Thematic sub-events organised by participating institutions and actors often occur around the formal event to enable networking and information exchange. This informal setting allows qualitative interviews to be conducted in addition to participant observations, photo documentations, and the collection of event materials.

The event's spatial surroundings include everything that can be accessed spontaneously. At the event, people take the same travel routes, creating opportunities to exchange and work on ideas. Participants will often walk together as they move between buildings or continue their discussions informally at a nearby restaurant or café. Driven by the phenomenological interest as a human geographer, I came across a sentence that other event participants (state and non-state actors) mentioned to me several times in different event settings: "You should go there" (research notes, 2021, 2022, 2023). The gist of what they were saying was that I should visit several places that they considered to be of high relevance to the topic at stake: the North Sea governance and respective local projects that are interlinked to OGEs' scenarios and strategies (Section 3.2).

2.2.1.3. Related Spaces and Places to OGEs—The 3rd Sphere

Taking the sentence "you should go there" to heart, I indeed travelled to certain cities, ports, beaches, and numerous locations and other events (e.g., World Port Days 2021, etc.) by train, by ship, by car, hiking, and cycling to meet other people. As such, it was possible to encounter different perspectives and practices of how the North Sea was governed in these places. Doing "go-alongs" (Sommer & Töppel, 2021, p. 206) and conducting additional follow-up interviews provided insights into how these state and non-state stakeholders are embedded in their national, regional, and local governance spaces as well as how diverse knowledge about the North Sea is produced in different places.

Furthermore, this methodical approach allows us to read temporalities beyond formal and informal settings. Events demonstrate a *cyclical* character and temporal *interconnectedness* to other events on different scales. Their nuances change as narratives, visions, and strategies intensify over the years, across events, and scales (Section 3.3).

2.2.2. Data and Mode of Analysis

The data were gathered from five extended field research stays (between 2021 and 2024) as well as multiple OGEs that I attended between 2021 and 2023 to meet participants, who were initially perceived as gatekeepers at these OGEs, and visit relevant places, people, projects, and other events (Table 1).

Due to the Covid-19 pandemic, I followed some OGEs virtually (i.e., European Maritime Day [EMD] 2021 in Den Helder, the Netherlands, and NTNU Ocean Week 2021 at the Norwegian University of Science and Technology in Trondheim) and The North Sea Conference 2022 in Bruges, Belgium, in person (Figure 2).

Doing field research was a logical consequence of the desire to learn more about how ocean governance is performed around the North Sea by the actors involved in these events, and how the global vision of the UN is likely to shape and interact with local governance spaces.

The data has been categorised into three sections as data from (1) the event's core, (2) the event's surroundings, and (3) its related fields. The event's core included the official information from organisers (e.g., the programme), the merchandise (the "classy" jute bags, pens, flyers, information brochures, stickers, notebooks, and name badges with logos and slogans), notes from the sessions, photos, and the event's website. Virtual events lacked material content but did produce a flood of emails to be analysed. The event's

Table 1. Overview of research.

Ocean governance event/field research	When	Where	Why
EMD 2021	2021	Online, Den Helder, the Netherlands	Annual, supranational EU level of OGE, focusing on the EU basins, located at the North Sea
NTNU Ocean Week	2021	Online, Trondheim, Norway	Annual, non-EU and national level of OGE, focusing on national waters, including the North Sea
Field research 2021a	2021 (7 weeks)	The Netherlands, Germany, Norway	Follow-up meetings after events, regional and local ocean governance
Field research 2021b	2021 (1 week)	The Netherlands	Follow-up meetings after events and field research 2021a, regional and local governance
The North Sea Conference 2022	2022	Bruges, Belgium	(Bi-)annual, interregional EU level of OGE, focusing on the North Sea
Field research 2022	2022 (3 weeks)	The Netherlands, Germany, Denmark	Follow-up meetings after events and field research 2021a, 2021b, regional and local ocean governance
EMD 2023	2023	Online, Brest, France	Comparing with EMD 2021 regarding intensifications and shifts of imaginaries
NTNU Ocean Week	2023	Online, Trondheim, Norway	Comparing with NTNU Ocean Week 2021 regarding intensifications and shifts of imaginaries
Field research 2023	2023 (2 weeks)	Norway	Regional and local ocean governance
Field research 2024	2024 (2 days)	Amsterdam	Regional and local ocean governance

Figure 2. The main stage at The North Sea Conference 2022 in Bruges, Belgium. Note: Own photo.

surroundings included research notes, memory minutes of informal conversations or notes taken during events, and photo-documentation. The event website was also checked for both on-site and virtual cases. Related fields contained data from follow-up meetings, interviews, and "go-alongs" (Sommer & Töppel, 2021, p. 206) with people I met at events. The fact that we stayed in contact over the years made it possible to text, chat, or meet whenever it was necessary (e.g., Fire of Freemantle Highway, 2023, the test drilling off Borkum, Germany, etc.).

The data was analysed based on the reflexive grounded theory (Breuer et al., 2019) according to the three-dimensional approach of the conceptual framework and the methodical approach of an EEE. This made it possible to show how OGEs unfold three concentric spheres of performing North Sea governance alongside extended temporalities, spatialities, and normativities. The following section elucidates how the UN OD vision normatively extends throughout these three OGE's spheres.

From a diachronic perspective, the very first OGE I attended—the EMD 2021—is used as the main case study and as a reference event for analysing the inherent normativity of the UN OD imaginary and how it resonates within the North Sea governance. For context: the EMD has taken place annually since 2008, six times in riparian states along the North Sea (European Commission, n.d.-c):

> The European Maritime Day (EMD) is the annual EU conference meeting point on maritime affairs and sustainable blue growth, and the place where "Ocean Leaders Meet" as the slogan goes. The European Commission, together with the EMD city and ministry/region, organise the conference. It is also a public event reaching out to young people and citizens across Europe through local events under the "EMD in my Country" label, organised by local stakeholders. (European Commission, n.d.-c)

The other events will be considered in chronological (e.g., EMD 2021, The North Sea Conference 2022, etc.), cyclical (EMD 2021 and EMD 2023), and interconnected (EMD 2021 and the Fifth One Ocean Summit 2022) terms.

3. Extended Normativities: Performances From Imaginaries to Impact

In the following, it will be shown how normativities extend through OGEs: Organisers performatively *shifted* the UN OD vision from "speculative" to "plausible" (Hulme, 2022, pp. 229–237). Concrete projects and practices were then performatively *interlinked with* the plausible scenario by other state and non-state actors. Finally, these concrete projects led to specific *impacts* on governance spaces across scale (e.g., policy strategies), polycentric knowledge production (digital twins, ocean literacy, etc.), the physical materiality of the North Sea (e.g., technological interventions), and the senses of place of people living with the sea (Figure 3).

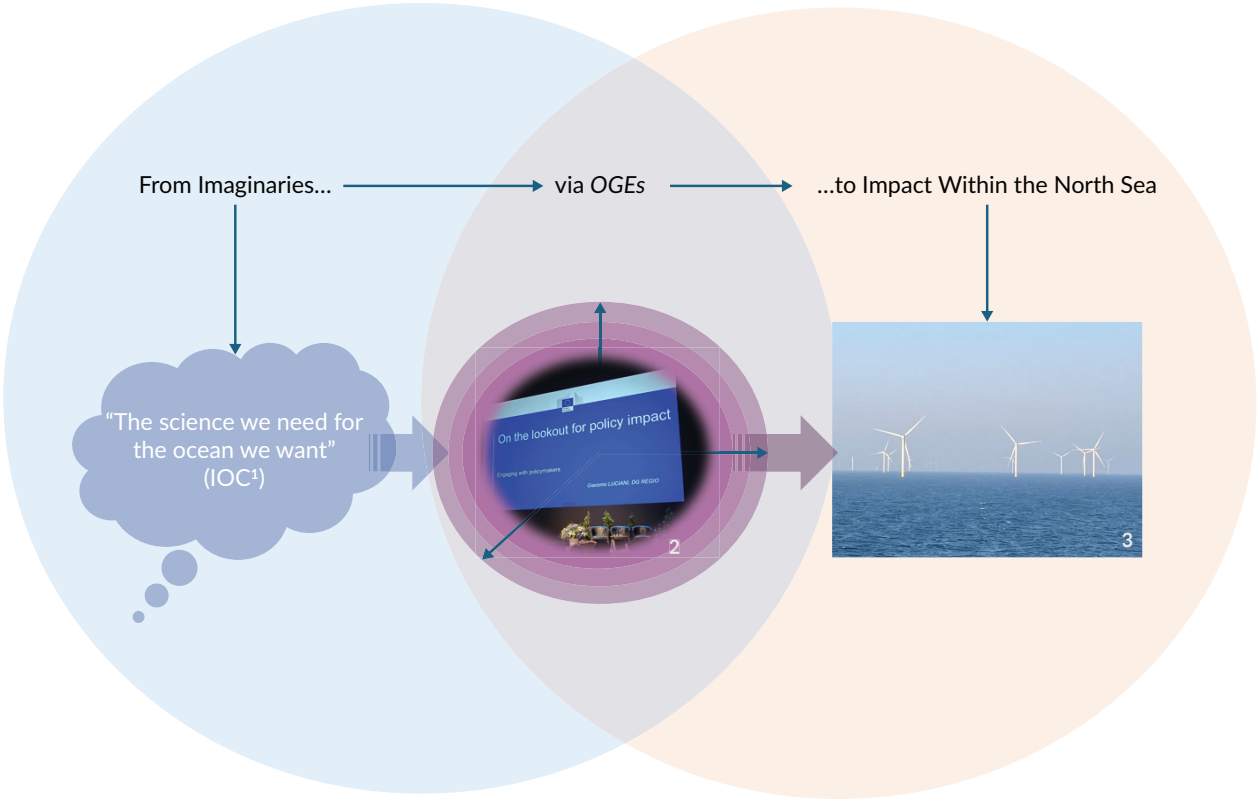

Figure 3. From imaginary to impact. Notes: (1) Intergovernmental Oceanographic Commission, n.d.-a; (2) own photo: The main stage at The North Sea Conference 2022 in Bruges, Belgium; and (3) own photo: The North Sea pictured from a ferry heading to Ijmuiden, the Netherlands, 2024.

3.1. Shifting

The UN OD vision "The science we need for the ocean we want" (Intergovernmental Oceanographic Commission, n.d.-a) entered the event's first sphere through the formal programme and was often repeated by the formal moderators. Their work created a common narrative around the UN OD mission of "transformative ocean science solutions for sustainable development, connecting people and our ocean" (Intergovernmental Oceanographic Commission, n.d.-b). The UN formulated seven goals for the ocean "we" want. As this contribution focuses on investigating complex care relations in ocean governance, the following focuses on the second goal: how a "healthy and resilient ocean" (German Committee of the UN Ocean Decade, n.d.) is being performed at OGEs:

> Many of our activities on land and in the sea affect biodiversity and marine habitats. Added to this are the effects of climate change. We need to better understand what this means for the ecosystems as a whole through targeted research in order to use coastal and marine habitats sustainably and protect or restore them effectively. (German Committee of the UN Ocean Decade, n.d.).

At the EMD 2021, formal sessions aimed to connect to the UN's vision-mission, as seen in the description of an EU policy session on "*Marine and Freshwater Research & Innovation*" (The EMD 2021 programme; European Commission, 2021b, p. 2):

> *This session will shed light on the expected marine and aquatic research and innovation in the Horizon Europe work programme. The discussion will explore what kind of research we need in the next years and how the proposed mission on healthy ocean, seas and waters will complement this research towards impactful policy-making. The session will also touch upon how EU research fits in the global spectrum through the UN Decade of ocean science.* (European Commission, 2021b, p.2)

This session blurb represents the performative, discursive work of connecting an EU policy session to the UN OD and its goal of "*healthy ocean, seas and waters*" (European Commission, 2021b, p. 2). This figurative expression can be read as a metaphor of "futuring practices" (Hulme, 2022, pp. 229–238). It "provoke[s] more imaginative ways of thinking about" (Hulme, 2022, p. 235) how a healthy North Sea can be achieved. For the UN OD, healthy oceans are "where marine ecosystems are understood, protected, restored and managed appropriately" (German Committee of the UN Ocean Decade, n.d.). Restoration is another metaphor in the context of climate imaginary: it "implies the possibility of reverting an ecosystem to some prior, 'natural' condition" (Hulme, 2022, p. 236) without specifying how the ecosystem would be restored and to which preexisting state. Would a restoration of the North Sea even be possible, whose knowledge would be considered, and what governance structures would be negotiated and performed? As such, this metaphor can be categorised as speculative:

> The desire to master and materially redesign the world according to human *need or want*—and the belief that it is possible to do so—is longstanding….This technoclimate imaginary can embrace a variety of geoengineering technologies that seek either to cool the planet or to protect human societies from extreme future climate scenarios. All of them, however, should be considered speculative. In this sense these imagined geo-technologies are another speculative futuring practice. (Hulme, 2022, p. 242, emphasis added)

The EMD 2021 was one of the first events to take place during the UN Ocean Decade. Its tagline was "towards a sustainable blue economy and ocean literacy for all" (European Commission, 2021c). And so, the discursive shift took place within the core sphere, as reflected in policy sessions and the keynote title of "*A NEW APPROACH FOR A SUSTAINABLE BLUE ECONOMY*" (European Commission, 2021b, p. 1) by Virginijus Sinkevičius, the EU Commissioner for Environment, Oceans and Fisheries. Every speech, discussion, or workshop was guided by this EMD's motto, which shifts speculative metaphors of healthy oceans into a plausible scenario—sustainable blue economy (research notes, 2021; Figure 4).

The scenario planning of a "*SUSTAINABLE BLUE ECONOMY*" (European Commission, 2021b, p. 1) was also part of the supranational EU's Green Deal (legislation period 2019–2024; European Commission, n.d.-d). This highlighted how "Europe's seas, oceans, and environment are a source of natural and economic wealth for Europe. We must preserve and protect them to ensure that they continue sustaining us in the future" (European Commission, n.d.-d). The EU's Green Deal was also a planned scenario, a "scenario resulted from concerted multi-lateral policy initiatives" (Hulme, 2022, p. 233; see also Bazilian et al., 2020).

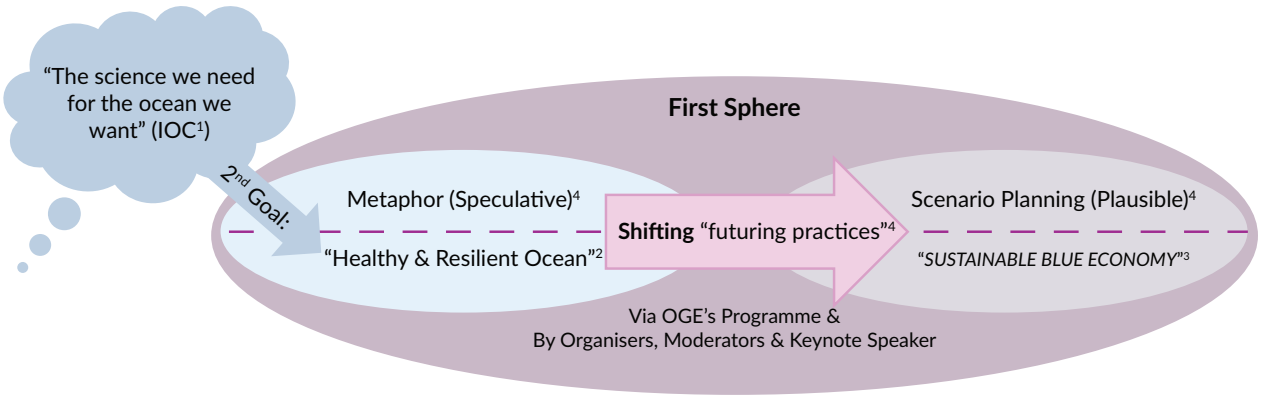

Figure 4. Performing the shift. Notes: (1) Intergovernmental Oceanographic Commission, n.d.-a; (2) Intergovernmental Oceanographic Commission, n.d.-b; (3) European Commission, 2021b; and (4) Hulme, 2022, pp. 229–238.

3.2. Interlinking

In 2021, a few days before the EMD 2021, the European Commission (2021a, p. 1) published "a new approach for a sustainable blue economy in the EU. Transforming the EU's Blue Economy for a Sustainable Future." This document addressed the "need to shift the focus from *'blue growth'* to a *sustainable* blue economy" (European Commission, 2021a, p. 2). This "*SUSTAINABLE BLUE ECONOMY*" (European Commission, 2021b) was imagined and discussed during interviews with different EMD 2021 participants, including as an "energy transition" (entrepreneur for tidal energy; research notes, 2021), a need to "mak[e] European food systems fair, healthy, and environmental friendly" (programme manager of animal welfare organisation; research notes, 2021), to create a "marine spatial plan to ensure the functioning of the many different activities in our borders" (representative of the Belgian Department of Marine Environment, research notes; 2021), and as "clean shipping" (project manager in a Dutch NGO, research notes; 2021). These statements were often followed by the admission that more information about ocean systems and social behaviour was needed to put these ideas into practice.

In view of the twofold motto of the EMD 2021, the first part emphasised the shift towards a concrete scenario planning, and the second part introduced the strategy "ocean literacy" to fulfil this shift. The term ocean literacy has washed up globally as part of the UN OD. Literacy denotes the "ability to 'read' a specified subject or medium; competence or knowledge in a particular area" (Literacy, n.d.). The term was introduced "in 2004 by a group of ocean scientists and education professionals in the USA, who recognised a lack of ocean-related subjects in formal education" (McKinley et al., 2023, p. 1). Approximately 100 participants at an online conference in October 2004 explicitly drew attention to "the need for ocean literacy, the definition of ocean literacy, identification of key ocean concepts…and alignment of these concepts to the National Science Education Standards" (Cava et al., 2005, p. 4). These scholars formulated the following definition in their workshop summaries (Cava et al., 2005):

> Ocean literacy is an understanding of the ocean's influence on you and your influence on the ocean. An ocean-literate person:
>
> - understands the fundamental concepts about the functioning of the ocean;

- can communicate about the ocean in a meaningful way; and
- is able to make informed and responsible decisions regarding the ocean and its resources. (Cava et al., 2005, p. 5)

Subsequently, the concept transcended both national and institutional boundaries. Ocean literacy is now understood as a global concept that can be "a mechanism for change" (McKinley et al., 2023, p. 1). The EMD 2021 went one step further and put this into practice in an event announced as a post-event to the official programme:

> Ocean Literacy Festival–Celebrating the Atlantic Ocean and the North Sea
>
> A *post EMD* special event, organised by the EU4Ocean coalition (EU4Ocean Platform, Youth4Ocean Forum and EU Network of Blue Schools) addressed to families, young people, pupils, teachers, marine science educators, researchers, policy makers, entrepreneurs and other professionals.
>
> The festival will showcase diverse virtual events, activities and digital educational content from the European countries bordering the Atlantic Ocean and the North Sea.
>
> Main themes:
>
> - Food from the Ocean
> - Ocean and Climate
> - Healthy Oceans" (European Commission, 2021b, p. 4, emphasis added)

Therefore, the scenario planning for a "*sustainable blue economy*" (European Commission, 2021b, p. 1) was interlinked with ocean literacy as the main strategy and its various projects, so that meaning and values were eventually ascribed (Figure 5).

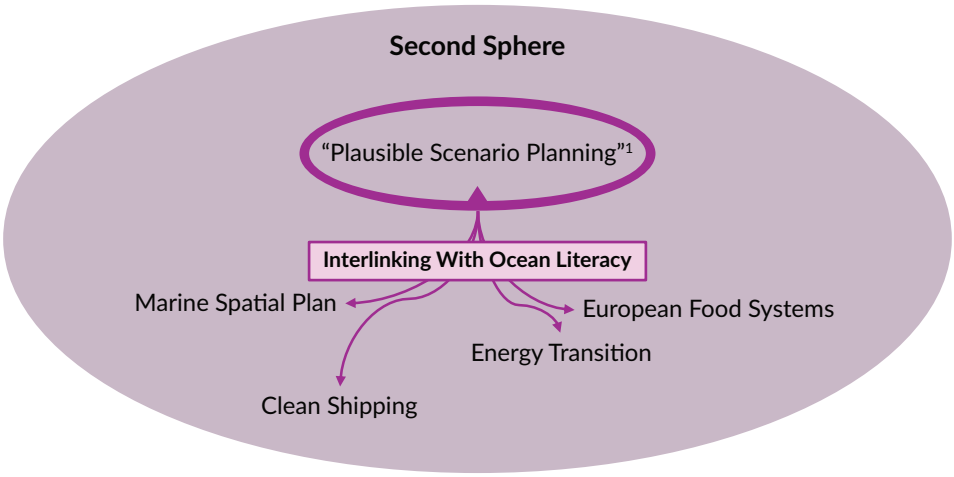

Figure 5. Interlinking scenarios and strategies. Note: (1) Hulme, 2022, p.229.

Ocean literacy is no longer a "knowledge-centric model [but] one which draws on and fosters active participation, connection, and engagement" (McKinley et al., 2023, p. 2). The EMD 2021 Ocean Literacy Festival emphasised that participation was encouraged:

> The aim of the Festival is to raise awareness of the importance of the ocean, marine resources and ocean science for the blue economy in the region. The festival activities are aimed at families, young people, pupils, teachers, marine science educators, researchers, entrepreneurs, policy makers, and other professionals. (European Commission, 2021d)

However, interviews conducted at the EMD 2021 revealed that some participants understood participation to mean *taking part in* decision-making processes to protect marine ecosystems, rather than simply *being aware* that oceans harbour resources on which economies are based. This raises a broader ethical question about who is permitted to participate in decision-making processes and at what age. Whose competence counts? A representative of Youth Environment Europe, section Arctic and Ocean, recalled during an interview that young people are often excluded from political decision-making processes with long-reaching consequences, in temporal, spatial, and normative terms (research notes, 2021).

3.3. Impacting

The new normativity in ocean governance involves fostering ocean knowledge, and OGEs serve as places to (re)produce such knowledge. Their normative impact extends outward to change other senses of place and (re)produce organised spaces, thereby shaping polycentric governance (Figure 6).

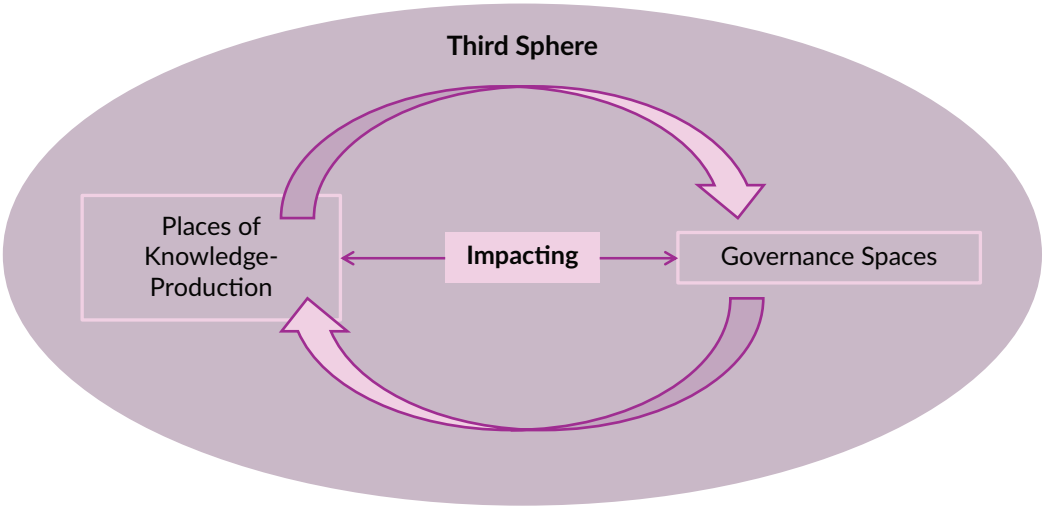

Figure 6. Impacting governance spaces and places of knowledge-production (vice versa).

3.3.1. Places

The host cities of the EMD, "the place where 'Ocean Leaders Meet'" (European Commission, n.d.-c), in 2021 and 2023 were Den Helder, the Netherlands and Brest, France. The EMD takes place every year at or near a European coast, drawing attention to the host city, its region, and the adjacent sea. However, it is not just about governing the North Sea or the English Channel, but also about ocean-related technology and innovation.

The water bodies are a projection surface for the UN OD imaginary, which merges with other imaginaries, principally with the national imaginary of the event's host. A global imaginary, such as the UN OD, aims to make the EMDs (even more) specific and grounded:

> Climate imaginaries are created through social processes that *meld* together stories, ideologies, values, institutions, and technologies. They shape the practices, lived experiences, and identities of different social groups and provide a collective orientation towards the climatic future. Some imaginaries instinctively default to the global; others may be grounded in specific places. Geography matters. (Hulme, 2022, p. 244, emphasis added)

A cyclical perspective allows us to compare the EMD 2021 with the EMD 2023 to understand how and which imaginaries have merged and which nuances have changed or intensified. The organisers of the EMD 2021 in Den Helder came from the supranational level (European Commission), the national level (Ministry of Infrastructure and Water Management of the Netherlands), the regional level (Provincie Noord-Holland), and the local level (Gemeente Den Helder). Many participants registered for the event also came from the Netherlands. Numerous port companies were represented, as were shipping agencies, energy companies, fishing companies, algae producers, stakeholders of the offshore wind farm sector, companies that extract and use sand, various universities, shipbuilders, software engineers, biologists, and artists (research notes, 2021).

The EMD 2021 focused on Dutch technological know-how and how Dutch actors imagine ocean knowledge. Multiple references were made to Dutch strategy and policy papers as well as legal frameworks throughout the EMD's programme. One pitch session was even titled "*Ocean Literacy and Soft Power: Stories from The Netherlands*" (European Commission, 2021b, p. 3). This focus on the Netherlands was also confirmed by the interviews (with representatives of shipping agencies, NGOs, energy companies, etc.) and field research (especially in Germany, 2021 and 2022, and the Netherlands, 2021 and 2022). The EMD 2023 was located in Brest, France, and "organised by the European Commission, the City of Brest, the Secretariat General for the Sea and the Region of Bretagne" (Mercator Ocean International, n.d.). Again, most registered participants were French, and many scientific institutions from Brittany (e.g., European Institute for Marine Studies, UBO Brest, Ifremer, Campus mondial de la mer, etc.) presented innovations from their region (research notes, 2023).

The temporal lens of the interconnectedness of the events reveals an intensification of "The science we need" (Intergovernmental Oceanographic Commission, n.d.-a) that can be traced back to the Fifth One Ocean Summit 2022—which took place between EMD 2021 and EMD 2023—and was also held in Brest. The organisation of the Fifth One Ocean Summit 2022 was "in the context of the French Presidency of the Council of the European Union and with the support of the United Nations" (One Planet Summit, 2022a). The announcement of the European Digital Twin of the Ocean (DTO; von der Leyen, 2022) by the president of the European Commission, Ursula von der Leyen, marked a turning point in the management of European waters. The event concluded with the "Brest Commitments for the Oceans" (One Planet Summit, 2022a):

> Place the ocean at the top of the global political agenda….To decide, one must first understand. The digital revolution is an opportunity to build an integrated model of the oceans, covering physics, chemistry, marine life and human activities. This "Digital Twin" initiative will inform political decisions

> and track their effects, enable the marine economy to develop with respect for ecosystems and fuel dialogue with stakeholders and the public. The European Union has pledged to produce a "Digital Twin of the Ocean" to gather knowledge and test scenarios for action, supporting European blue growth and global governance. UNESCO has pledged to ensure at least 80% of the sea bed is mapped by 2030. (One Planet Summit, 2022b, p. 3)

The intensification of the "science we need" (Intergovernmental Oceanographic Commission, n.d.-a) came with the announcement of the European DTO. During the EMD 2023, certain event strands continued to focus on modelling and predicting the climate, ocean systems, and all aspects related to marine resources (research notes, 2023). Pledges made by different institutions set the tone for the future of European waters through the EU's calls for "making ocean sustainability a reality by 2030" (European Commission, n.d.-a) and a "European Ocean Pact at the third UN Ocean Conference" (European Commission, 2025), which will have an impact on how people coexist with the seas.

3.3.2. Spaces

The attendees of the EMDs and other OGEs (e.g., at the EU's interregional level: Interreg's North Sea Conference, 2022; and at the national, non-EU level: NTNU Ocean Weeks 2021 and 2023) were polycentrically interconnected. Often, the participants from previous events were met, including national EU advisors at supranational and interregional OGEs, and NGO representatives and scientists at supra and national OGEs (research notes, 2022, 2023). Polycentric thinking "recognises that multiple semi-autonomous authorities are active at many different scales. These nonstate authorities operate above, below, and beyond the state" (Hulme, 2022, pp. 210–211).

The different OGEs produce "organized spaces and knowledge [which] are both conditions as well as consequences of th[is] governance process" (Glückler et al., 2020, p. 1). The very first EMD "included a stakeholder conference in Brussels 19–20 May [2008], which focused on the regional approach to the implementation of Maritime Policy, and dialogue with stakeholders" (European Commission, n.d.-c). This set the conditions and, over the years, the EMDs "pay[ed] tribute to 'maritime Europe' and put all maritime sectors and activities in the spotlight" (European Commission, n.d.-b). The EMD's polycentristic character around the EU's sustainable blue economy will change the physicality of the North Sea and how people live with the sea. This resonates with Hulme's (2022) notion that:

> The idea of climate is performative, it has effects in the real world. How one comes to know climate—and the account one gives of its changes—is *never politically neutral nor without effect* on the social ordering of today's and tomorrow's worlds. One cannot separate the merely descriptive from the intentionally normative. Any description of what climate change is carries with it latent but preferential modes of acting *in* the world in ways that substantively *change* the world. (Hulme 2022, p. XXXI)

The North Sea OGEs were *cyclical* and *interconnected*, negotiating and restructuring their respective organised spaces to align them with the UN OD vision, EU goals, nation-building strategies, interregional and regional projects, and local needs. This created new governance structures that, for example, supported new technologies (such as the EU's DTO) and promoted citizen science (see also EMD in MyCountry, beach

clean-ups; research notes, 2021, 2022, 2023). The iterative character also reflected Tronto's fourth ethical quality of care, responsiveness:

> Once care work is done, there will be a response from the person, group…environment, or thing that has been cared for. Observing that response, and making judgments about it (for example, whether the care given was sufficient, successful, or complete?) requires…*responsiveness*….And the response will often involve noting that new needs emerge as the past ones are met, thus the process continues. (Tronto, 2013, p. 35)

The normative impact manifests itself iteratively through legal frameworks, documents, and agreements (e.g., European Ocean Pact, 2025, The North Sea Programme 2022–2027, the Netherlands, etc.).

4. Discussion

Climate policy in general suffers from a vague definition of responsibility, where a multitude of different actors operate at various levels to form a complex system of action (Tosun & Rosello, 2020, p. 18). Therefore, doing EEE helps to investigate and, thus, address care relations in the large-scale institutions governing the oceans and seas.

4.1. OGEs and North Sea Governance

This EEE has shown how ocean knowledge is imagined, negotiated, (re)produced, and finally diffused through OGEs. In this regard, "we must take knowledge to be performative" (Turnhout, 2018, p. 364). In any case, "ethics precedes [sic] knowledge-making" (Fawcett et al., 2023, p. 77), and, so too, "scientific knowledge is typically considered as preceding the law and as providing the foundation for legal inscription. But, of course, scientific and legal practices are deeply entangled" (Johnson & Braverman, 2020, pp. 5–6).

Tying the given analysis and findings back to the UN OD vision of "The science we need for the ocean we want" (Intergovernmental Oceanographic Commission, n.d.-a), this vision can be understood as the most powerful "technoclimate" (Hulme, 2022, pp. 242–244) imaginary that the world's oceans and seas have ever faced. It expresses an undisputable belief that everything is possible. And yet, the UN OD's key strategy of ocean literacy is negotiated at OGEs to comprehensively connect all people, especially young people, with the oceans so that they become "ocean literate person[s]" (Cava et al., 2005, p. 5). However, profound technological and ensuing (upcoming) legal transformations are taking place within the North Sea region. Against this backdrop, EEE not only reveals how a single OGE performs North Sea governance but also how multiple events from different scales are interconnected along temporal, spatial, and normative dimensions and how these OGEs together weave a polycentric web of North Sea governance. Doing EEE, then, allows to address precise responsibilities, agencies, actors, time frames, and the level or scale at which care practices are performed, but also to identify where care must be provided in order to be effective.

4.2. OGEs and North Sea Knowledge-Production

With regard to knowledge-production in the North Sea region, DTOs and the process of becoming an ocean literate person are subject to lively discussions at these North Sea OGEs. Currently, there are only a few

scientific publications on the topic of DTOs. A side glance at the DTO's twin—the Digital Twin of the Earth—is worth mentioning. For instance, one major criticism is that it "lacks a clear and shared definition and may be misleading. It conceals that all digital representations are models and, as such, will always be detached from reality" (Reinecke et al., 2024, p. 1). Our lives, in contrast, are attached *to* the seas and oceans: "the sea *touches* our everyday lives [and] alerts us to the material and tangible reality of water worlds" (Anderson & Peters, 2016, p. 16). And this also includes thinking about meaningful relationships between humans and non-humans. As Sammler (2020) vividly puts it:

> The geophysical, hydrological, and biological materiality and mobility of oceans partially influence the logic of UNCLOS [UN Convention on the Law of the Sea] and national enactments of the international treaty, even as attempts are made to legislate around these intrinsic ocean features. Regulators must contend with the agency of the living and nonliving natures as they enact static borders among mobile bodies. (Sammler, 2020, p.64)

Consequently, we must address "the changing relationships between knowledge-making, institutional practice and human culture in evolving places. We need kinds of knowledge which are 'liquid'—i.e., mobile and responsive" (Hulme, 2010, p. 563). Moreover, different imagined and negotiated time frames have to be considered and connected to questions such as "*whose* future is being envisioned and by whom" (Hulme, 2022, p. 141). If not, ocean governance might be heading towards a certain *knowledge fix*. Political, economic, scientific, and social stakeholders often and repeatedly point to knowledge gaps, which they ultimately translate into enormous investment opportunities by closing these gaps through ocean technology innovations (e.g., DTO's), and to the fact that "sustainable blue economy will create tangible opportunities for new jobs and businesses" (European Commission, 2021a, p. 2).

Ocean literacy, in turn, encompasses the ongoing pursuit of scientific and technical research and innovation. Due to "technological and legal transformations" (Manzo et al., 2021, p. 332), the aimed closure of these knowledge gaps will shape the North Sea's governance and its physical materiality, leading to profound "changing senses of places" (Raymond et al., 2021). This would lead us to the continuation of a *dilemmatic ocean* rather than to a "healthy and resilient ocean" (German Committee of the UN Ocean Decade, n.d.), as the economic use and the environmental protection of the oceans, seas, and other water bodies are too difficult to reconcile technologically without "ethical-based approaches" (Fawcett et al., 2023). Hulme's reference to Collingridge (1980) shows that the impact of a certain technology on the economy, environment, and society can only really be foreseen once that technology has been fully developed and implemented. At this point, it is complicated to make changes or to supervise this technology because of its complexity:

> At the heart of responsible innovation lies the question of which people and whose interests are to shape the processes and scrutiny of technology development and deployment. Collingridge's "technology control dilemma" applies equally, among many other technologies, to solar geoengineering…and carbon capture and storage. (Hulme, 2022, p. 205)

In order to not heading towards *dilemmatic oceans*, political, economic, scientific, and social actors need to "take the burden" (Tronto, 2013, p. 34) of discussing and informing in transparent and comprehensible ways (responsibility) how evaluations, measurements, and judgements are made and "whether the care given was

sufficient, successful, or complete" or not (Tronto, 2013, p. 35). This follows Sevenhuijsen's (1998, as cited in Tronto, 2013, p. 35) call for "tak[ing] collective responsibility."

5. Conclusion

This article demonstrated a multi-perspective approach to North Sea governance from the intersection of geographies of knowledge and ethics of care through extended normativities alongside temporalities (e.g., competences a priori and a posteriori, circular learning experience, and interconnected events) and spatialities (e.g., places of (re)producing knowledge and organised spaces shaping polycentric governance). An EEE approach was presented, a deeply relational, situational, contextual method that questions how normativity enters the worlds and changes, in this case, oceans, seas, and senses of place by combining classic event ethnography with field research. These methods were enhanced by important works on imaginaries (Hulme, 2022), ethics of care (Tronto, 2013), and senses of places (Raymond et al., 2021).

The EEE revealed the relational architecture of OGEs through three emerging spheres of performance. First, the UN OD metaphorical vision was performatively shifted into scenarios. Secondly, concrete projects and practices were then performatively interlinked with those scenarios. Thirdly, these concrete projects led to concrete impacts in governance (e.g., policy strategies), polycentric knowledge production (digital twins, ocean literacy, etc.), the physical materiality of the North Sea (e.g., technological interventions), and the senses of place of those who live with the sea.

However, EEE is a new approach and, of course, has to be proven in many more cases. The UN OD is still in full swing; the first half of the decade has passed. As such, it would be of interest for further studies to investigate both how the UN's global imaginaries are being negotiated and how these resonate in different ocean governance spaces and basins over the upcoming years.

Acknowledgments

I would like to thank the anonymous reviewers sincerely for their insightful comments and constructive feedback, which improved this manuscript. Furthermore, I would like to express my gratitude to everyone who shared their insights on how they value, care for, and manage the North Sea together.

Funding

Publication funded by Johannes Gutenberg-University, Mainz, Germany.

Conflict of Interests

The author declares no conflict of interests.

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