

BAM 2023 CONFERENCE

US
UNIVERSITY
OF SUSSEX

**BUSINESS
SCHOOL**

The Blue Economy and the UN SDGs: Themes and Opportunities for Global Strategy
Research

Carolyn Decker-Lange

Brunel University London

Katharina Bothe

German Maritime Museum - Leibniz Institute for Maritime History

Knut Lange

Royal Holloway, University of London

Paul Caussat

Royal Holloway, University of London

**The Blue Economy and the UN SDGs:
Themes and Opportunities for Global Strategy Research**

Carolin Decker-Lange
Brunel University London
Brunel Business School
Kingston Lane, Eastern Gateway
Uxbridge, UB8 3PH, United Kingdom
Phone: +44 (0) 1895 267667
Email: Carolin.Decker-Lange@brunel.ac.uk

Katharina Bothe
German Maritime Museum
Leibniz Institute for Maritime History
Hans-Scharoun-Platz 1
27568 Bremerhaven, Germany
Phone: +4915141987577
Email: bothe@dsm.museum

Knut Lange
Royal Holloway, University of London
School of Business and Management
Egham, Surrey, TW20 0EX, United Kingdom
Phone +44 1784 414018
Email: Knut.Lange@rhul.ac.uk

Paul Caussat
Royal Holloway, University of London
School of Business and Management
Egham, Surrey, TW20 0EX, United Kingdom
Phone +44 1784 414018
Email: Paul.Caussat@rhul.ac.uk

**Full paper submission accepted for the BAM2023 Conference (Virtual Day)
Sustainable and Responsible Business Track**

The Blue Economy and the UN SDGs: Themes and Opportunities for Global Strategy Research

Abstract

The Blue Economy concept combines the views of oceans and seas as areas of growth, industrialisation, and development, on the one hand, and as vulnerable spaces that need to be protected and safeguarded, on the other hand. It goes beyond the traditional notion of the marine (or ocean) economy because it is interpenetrated by sustainability. This study explores how actors in the Blue Economy embrace sustainability and apply the UN SDGs to develop locally grounded, globally impactful responses to changes in the environment. Based on data from two interdisciplinary online workshops, narrations provided by experts in the field are extracted and linked to three dominant discourses in the Blue Economy: placelessness, development and sustainability. Different thought styles and approaches to address sustainability are discernible. Drawing on the findings from the narrative inquiry, avenues for future strategy research on the Blue Economy are outlined.

Word count: 7,205 (excl. references)

Introduction

The Blue Economy, which “is currently valued at \$1.5 trillion and, prior to the COVID-19 pandemic, was projected to double to \$3 trillion and support 40 million jobs by 2030” (World Economic Forum, 2022: 18), denotes a sustainable version of the marine (or ocean) economy (Mulazzani & Malorgio, 2017; *The Economist*, 2015). It comprises traditional industries, e.g., fishing, shipping, and offshore oil and gas, and novel activities, e.g., seabed mining, blue biotechnology, and renewable marine energy (e.g., Cisneros-Montemayor et al., 2019; Spalding, 2016; World Bank, 2017), briefly, international and domestic activities affecting stakeholders in a globally spanning, exploitable space (Germond-Duret, 2022; Peng & Pleggenkuhle-Miles, 2009). Originating from the United Nations Conference on Sustainable Development in Rio de Janeiro in 2012, the Blue Economy concept combines the views of oceans and seas as areas of entrepreneurial opportunity, growth, industrialisation, and development, on the one hand, and as vulnerable spaces that need to be protected and safeguarded, on the other hand (Lee et al., 2020; Smith-Godfrey, 2016; Voyer et al., 2018).

These characteristics make the Blue Economy attractive for global strategy research, which studies how economic actors compete in an international context and how their cross-border activities are governed (Benito et al., 2022; Tallman & Pedersen, 2015). Although the Blue Economy mainly highlights economic motives for the exploitation of marine resources (Hadjimichael, 2018; Kleingärtner, 2018), the concept indicates a shift towards sustainability, affecting society, economy, technology, and education worldwide (Germond-Duret, 2022; Wasieleski et al., 2021), chiefly, the business-society-nature nexus (Edwards et al., 2021; Voyer et al., 2018). The Blue Economy is mainly associated with SDG 14 Life Below Water, one of the 17 Sustainable Development Goals (SDGs) included in the United Nations’ (UN) 2030 Agenda for Sustainable Development. However, extant research addressing the business-society-nature nexus illustrates that little is known about organisations’ and their strategies’ roles in achieving the SDGs (Mio et al., 2020). Management studies focusing on SDG 14 do not exist (Berrone et al., 2023). There is an urgent need for closing this gap as the current practices of using the oceans pose an existential risk to the planet (von Schuckmann et al., 2020). Therefore, we explore *how diverse stakeholders embrace sustainability and apply the SDGs to improve work practices in the Blue Economy*.

We adopt a narrative approach to explore a topical area, which is not well understood in the management literature. A narrative approach lends itself well to bringing actors’ experiences in their own words to the fore and comprehending how they themselves make sense of them (Byrne et al., 2022; Pepper & Wildy, 2009). We analyse narratives collected during two online workshops with scholars, economists, policymakers, educators, and representatives from maritime museums in 2020 and 2022. We view the participants’ communication during the events as “modes of reality construction” (Geiger & Antonacopoulou, 2009: 413), reflecting the polyphony, equivocality, tensions and politics shaping the Blue Economy (Brown & Thompson, 2013; Hadjimichael, 2018; Mallin & Barbesgaard, 2020). In so doing, we intend to make two contributions: First, focusing on the Blue Economy, we follow recent calls to investigate the relationship between organisations and aspects of biodiversity as addressed by, for example, SDG 14 (Berrone et al., 2023). As SDG 14 is related to other goals addressing several societal ills, such as poverty and pollution, our study adds to the knowledge about organisations’ and strategies’ roles in achieving the SDGs in a global context (Mio et al., 2020). Second, including actors with diverse backgrounds, this study illustrates the relevance of contextualising the SDGs on local, national and transnational levels and considering economic, social and environmental issues and different industries in the Blue Economy. We identify salient issues and connect them with themes in global strategy research to inspire the development of a future research agenda.

Literature Review

Definition and Dominant Discourses

The Blue Economy has gained currency in policy discourses and academic research in multiple disciplines, such as geography (Mallin & Barbesgaard, 2020), production (Ferreira et al., 2018; Oliveira Neto et al., 2021), tourism (Phelan et al., 2020), economics (Spalding, 2016), marine policy and ocean governance (Hadjimichael, 2018; Voyer et al., 2018), political ecology (Childs & Hicks, 2019), and circular economy and eco-innovation practices (Bassi & Dias, 2020; Pauli, 2010). Despite its popularity, the Blue Economy has remained an ill-defined concept (e.g., Germond-Duret, 2022; Lee et al., 2020; Phelan et al., 2020; Smith-Godfrey, 2016). Its similarities with the Green Economy concept underlining the efficient use of scarce resources, the reduction of environmental risks, social equity, and improved well-being (e.g., Loiseau et al., 2016; Silver et al., 2015), are obvious. The Blue Economy can be understood as the ocean-based counterpart of the Green Economy (Cisneros-Montemayor et al., 2019; Waheed et al., 2023). However, its outreach is more global because “a better understanding of our ocean or ‘blue’ resources allows us to go beyond the green economy to reach very sustainable worldwide development” (Bassi & Dias, 2020: 2529).

Germond-Duret (2022) outlines three discourses that corroborate this point. First, oceans and seas have traditionally been seen as *placeless* – empty spaces bare of human interaction and social relations. This view originates from land-centric thinking. Decisions regarding the exploitation of scarce marine resources for economic purposes are made on land (Campbell et al., 2016; Germond-Duret, 2022; Gruby & Campbell, 2013; Kleingärtner, 2018). Place, boundaries, and distance, which emphasize the importance of location for global strategy (Benito et al., 2022; Tallman & Pedersen, 2011), are vital for actors seeking a competitive advantage and managing the flow of goods and services across national borders. Oceans and seas, which cover about 70% of the Earth’s surface and represent about 95% of its biosphere (Silver et al., 2015; Steinberg, 2001), do not have tangible borders. The Blue Economy constitutes a non-traditional global business environment for land-based actors and activities within and across industries, jurisdictions, and geographies (Spalding, 2016; Smith-Godfrey, 2016). Placelessness blurs the lines between what is domestic and what is international, as studies in, for instance, marine aquaculture (Suryanata & Umemoto, 2003), shipping (Sibilia, 2019), and shipbuilding (Tenold et al., 2021) illustrate. Questions of whether the Blue Economy comprises coastal or deep-sea environments or both and how it relates to land-based actors have remained unanswered so far (Voyer et al., 2018).

Second, national governments and renowned transnational institutions, among them the World Bank, the European Union, the African Union, the United Nations, and the OECD, have promoted the concept and supported the exploration of entrepreneurial opportunities to nurture economic growth, improved livelihoods, and the sustainable use of marine resources within and beyond coastal states’ jurisdictions (Lee et al., 2020; Voyer & Van Leeuwen, 2019). “If the sea were a country, it would be the sixth biggest economy. Ocean-based activities, including offshore energy, shipping, tourism and fishing, account for more than 5% of global GDP, while the World Bank claims that future economic growth will be led by ‘blue growth’” (Standing, 2022). Economic activities that aim to foster *development*, are embedded in social and environmental domains (Bennett et al., 2021). In that vein, Lee et al. (2020) highlight the World Bank’s (2017) definition of the Blue Economy as “the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem” (World Bank, 2017: 6) because it alludes to the interconnectedness of multiple developmental activities across economic, political, social, and environmental spheres. The Blue Economy bears the chance to create economic growth and entrepreneurial opportunities in emerging industries. For example, the shift towards sustainable energy may compensate for

the loss of income from industries which need to be abandoned in some countries, such as fossil fuels in Saudi Arabia (Waheed et al., 2023).

However, the interpretation and implications of the Blue Economy concept for the use and governance of oceans are still unclear (Germond-Duret, 2022; Voyer & Van Leeuwen, 2019). Development is hampered by fragmented governance in terms of UN-led sector-specific agreements and a lack of international frameworks (Silver et al., 2015). International agreements, such as the United Nations Convention of the Law and the Sea (UNCLOS) cannot resolve economic and political conflicts over the use of and access to the oceans and the contest between sovereignty and heritage (Mallin & Barbesgaard, 2020). In the last decades, tensions between new enclosures and common heritage have developed. The emergence of new privatization regimes in industries, such as fisheries, oil extraction, and deep-sea mining, has led to an inequitable distribution of economic benefits (Bennett et al, 2021; Steinberg, 2001).

Third, the Blue Economy concept is often mingled with the traditional notions of ocean economy or marine economy. However, it goes beyond them because it is interpenetrated by *sustainability* (Cisneros-Montemayor et al., 2019; Germond-Duret, 2022; Mulazzani & Malorgio, 2017; Spalding, 2016; Voyer & Van Leeuwen, 2019). Acknowledging the finiteness of marine resources (Kleingärtner, 2018), the Blue Economy concept aims to ensure that “economic activity is in balance with the long-term capacity of ocean ecosystems to support this activity and remain resilient and healthy” (*The Economist*, 2015: 7). It hence requires strategies that embrace the UN SDGs.

Sustainability Strategies in a Global Context

Sustainability and the multitude of stakeholders affected by economic actions aiming to exploit marine resources across the globe can be explained based on four lenses. First, according to the *oceans as natural capital*-lens, conservation and the protection of the oceans lead to entrepreneurial opportunities and quantifiable benefits in sectors, such as eco-tourism and blue carbon. Second, the *oceans as livelihoods*-lens focuses on resolving pertinent economic and social issues in developing economies, including small island developing states (SIDS; e.g., Gruby & Campbell, 2013; Mallin & Barbesgaard, 2020), and least developed countries (LDCs; e.g., Spalding, 2016). It highlights the importance of, for example, community-managed small-scale fisheries or tourism, and marine protected areas (MPAs; Halik et al., 2018). Third, the *oceans as good business*-lens brings MNEs in globally operating sectors, such as shipping, industrial fishing, oil and gas, and mining, to the fore. It highlights opportunities for economic growth and the scale of the contributions of these sectors to global markets. Finally, in line with the *oceans as a driver of innovation*-lens, oceans enable wealth-creating, technological innovations in existing sectors and the emergence of new activities, such as renewable energy, seabed mining, and blue biotechnology (Silver et al., 2015; Voyer et al., 2018; Voyer & Van Leeuwen, 2019).

These four lenses illustrate the tension between economic growth and the sustainable use of marine resources. They also shed light on the unresolved issue of which actors are or are not part of the Blue Economy (Lee et al., 2020; Voyer et al., 2018). Looking at the diverse industries in the Blue Economy, actors include, for example, multinational enterprises (MNEs), small and medium-sized enterprises (SMEs), political and environmental activists, non-profit and community actors, scientists, governmental bodies on local, regional and national levels, non-governmental organizations (NGOs), and transnational institutions (Campbell et al., 2016; Lee et al., 2020). This issue and the emergence of new industries labelled as “blue” (Spalding, 2016) turn the Blue Economy into a dynamically evolving context for global strategies considering the UN SDGs (Berrone et al., 2023; Tallman & Pedersen, 2011).

The Blue Economy is linked to the UN SDGs, but both serve different purposes. While the Blue Economy concept describes a sustainable version of the marine or ocean economy

(Mulazzani & Malorgio, 2017; *The Economist*, 2015), the SDGs are guiding principles for all individuals and organisations in business and society in relation to how to implement sustainability (Germond-Duret, 2022; Mio et al., 2020). Albeit mainly associated with SDG 14 Life Below Water, emphasizing the conservation and exploitation of the oceans, seas, and marine resources for sustainable development (Spalding, 2016), the four lenses show that the Blue Economy addresses many aspects beyond SDG 14. A literature review by Lee et al. (2020) supports this point. In addition to SDG 14, extant research predominantly focuses on SDG 12 Responsible Consumption & Production, SDG 15 Life On Land, SDG 16 Peace, Justice, and Strong Institutions, and SDG 17 Partnerships for the Goals. It is surprising that, according to Lee et al.'s (2020) analysis, extant studies barely link the Blue Economy to SDG 6 Clean Water & Sanitation. Likewise, these authors' result that SDG 13 Climate Action is not among the top five SDGs addressed by research on the Blue Economy despite the pivotal role of oceans and seas for global environmental change and climate regulation (Campbell et al., 2016; von Schuckmann et al., 2020), is startling.

Across disciplines, most studies examined by Lee and colleagues (2020) concentrate on distinct SDGs and tend to ignore linkages between them. Spalding (2016) asserts that SDG 14 backs at least nine of the other 17 SDGs – SDG1 No Poverty, SDG2 Zero Hunger, SDG3 Good Health and Well-Being, SDG5 Gender Equality, SDG8 Decent Work & Economic Growth, SDG9 Industry, Innovation, & Infrastructure, SDG10 Reduced Inequalities, SDG11 Sustainable Cities & Communities, and SDG13 Climate Action – and would thus help achieve a broad range of sustainability goals. Business leaders and investors still need to understand the relevance of SDG 14: “Despite the impact multipliers of investing in the ocean, SDG 14 has the lowest level of financial investment of any development goal” (World Economic Forum, 2022: 3).

Social and environmental discourses and political issues, such as marine policies and ocean governance, are often studied without considering economic aspects (Mallin & Barbesgaard, 2020) despite the potential of the Blue Economy for much-needed research at the business-society-nature nexus (Benito et al., 2022; Mio et al., 2020). Strategy research considering resource scarcity and changes in the natural environment as constraining factors for organisations' pursuit of competitive advantage is still in its infancy (Tashman, 2021). The SDGs are a global response to changes in the environment (Wasioleski et al., 2021), but studies tend to draw on distinct national contexts (Mallin & Barbesgaard, 2020). The exploration of strategies in the Blue Economy addressing the SDGs could help “develop locally grounded but globally scaled directions” (Lee et al., 2020: 5).

Methodology

Narrative Approach

To explore the research question of how actors in the Blue Economy embrace sustainability and use the SDGs to develop strategies that improve work practices, we opted for a narrative approach including multiple stakeholders at the business-society-nature nexus. A narrative approach offers the opportunity to value individual and authentic, first-hand experiences and categorise thought styles (Byrne et al., 2022; Pepper & Wildy, 2009). We organised interactive online workshops that allowed participants from diverse professional, institutional and geographical contexts to engage in conversations, share their stories, and scope different perspectives on an evolving topical area (Fenton & Langley, 2011; Ørngreen & Levinson, 2017). With a diversity of participants, we aimed to reflect the multiplicity of stakeholders and the unresolved issue of who is (not) part of the Blue Economy (Lee et al., 2020; Voyer et al., 2018).

First, like interviews, workshops are a form of human communication, which enables conversation and the exchange of stories. They encourage participants to reflect on, talk about

and reconstruct their experiences and make sense of issues that are important to them (Brown & Thompson, 2013). Both interviews and workshops give stakeholders a voice and allow them to tell their stories in line with John Dewey's principles of *continuity* – experiences build on past experiences and affect future experiences – and *interaction* – individuals are embedded in a social context that shapes their experiences (Pepper & Wildy, 2009).

Second, in contrast to interviews, workshops allow for meaningful knowledge exchange among people who would possibly not meet otherwise. Their interaction in a safe environment, such as an online room that can be joined by invitation only, may inspire participants to develop and suggest alternative views in a knowledge co-creation process guided by prompts, such as keynotes, questions for discussion, collaboration or brainstorming activities, or presentations (Shamsuddin et al., 2021).

Finally, workshops create an environment that gives stakeholders a voice instead of telling the story of an observer of the Blue Economy and where the interaction of stories is nurtured (Fenton & Langley, 2011). This interaction is suitable for a complex topic where a plurality of views, tensions and power struggles may exist and unequivocal approval might not be achievable (Brown & Thompson, 2013; Douglas et al., 2003) or where suggestions of future plans and forward-orientated changes are encouraged (Ørngreen & Levinson, 2017; Shamsuddin et al., 2021).

Data Collection

The workshops differed in terms of general themes, hosting institutions, approaches to facilitating conversations, and participants. These differences helped us capture a range of experiences and viewpoints from various contexts. The co-researchers acted as participant observers who had different roles in the workshops, such as organiser, host or co-host, co-facilitator, or delegate. Each co-researcher attended at least one of the workshops in either of these roles. One of the co-authors was involved in all workshops because of their position as a researcher in a non-university interdisciplinary research institute with a special focus on ocean-related topics and good connections with diverse stakeholders in the Blue Economy.

The first online workshop was co-organised by this non-university research institute in Germany and a research and innovation centre in New Delhi (India) in October 2020. Its general theme was “From Ship to Coast: Blue Economy and Sustainable Livelihoods”. Delegates comprised 24 doctoral, postdoctoral, and senior scholars and experts from research institutes in Germany and India, representing different areas of expertise. The workshop started with a keynote held by a renowned scientist in sustainability research, which was followed by three interactive breakout sessions on social inclusion in the maritime economy, climate change and its impact on coastal communities, and gender dimensions in the Blue Economy. The delegates presented the outcomes of each breakout discussion in a concluding plenary session.

Under the headline “Sustainability and the Blue Economy: Communication and Knowledge Transfer across Disciplines and Stakeholders”, the second online workshop was co-hosted and co-sponsored by the German non-university research institute and a centre for scholarship in business education at one of the other co-researchers' universities in the UK. It took place in March 2022 and attracted 19 participants from universities, non-university research institutes, museums, and foundations in the UK, Germany, India, Seychelles, Norway, and the Netherlands. The delegates had expertise in the natural sciences, social sciences and humanities, or worked as curators in museums. They shared an interest in sustainability education and communication. A keynote address introduced the workshop. Then, two series of brief presentations followed, which led to a plenary discussion and a brief wrap-up by the two co-facilitators.

Both workshops were recorded. The video files were transcribed and complemented with additional data, such as workshop reports, the co-researchers' field notes, and the slide

decks used by the keynote speakers and the delegates presenting their ideas. Both workshops generated stories told by and about actors in the Blue Economy. The stories comprised narrations focusing on first-hand experience, for instance, highlighting natural scientists' perspectives on topics, such as pollution or sustainability. They also included narrations about, for example, seafarers' labour conditions that were not told by those affected but by museum curators or social scientists.

Data Analysis

Narrative approaches allow for a variety of theme analyses to identify patterns and commonalities (Byrne et al., 2022). Opting for a computer-aided thematic content analysis, we, first, engaged in open coding to identify themes and narrative lines in each workshop. We used word frequency analysis in NVivo to find recurring terms.

Second, we specified search terms referring to the three discourses suggested by Germond-Duret (2022). We combined the results of the word frequency analysis from the previous step of analysis with the findings from our literature review. Regarding *placelessness*, we specified 'place', 'boundaries', 'borders', 'distance', 'location', 'environment', 'region', 'nation', 'country', 'community', 'jurisdiction', and 'geographies' as search terms. *Development* comprised 'growth', 'economy', 'industry', 'business', 'livelihood', 'jobs', 'ecosystem', 'entrepreneurship', 'income', 'governance', 'ownership', 'policies', 'finance', and 'investment'. *Sustainability* included 'SDG', 'balance', 'resilience', 'resources', 'innovation', 'renewable', 'blue', 'social', 'environmental', and 'climate'. Using these search terms in NVivo, we looked for issues, patterns, and themes across the workshops. As the general themes of the workshops and the composition of delegates in each event differed, we expected differences in the narrations.

Third, we went beyond the three dominant discourses and engaged in a grid-group analysis to disentangle thought styles based on two dimensions of social context, namely types of actors ("group") and actors' beliefs and values ("grid") (Douglas, 1999). How actors in the Blue Economy address sustainability and the SDGs depends on the context that they are part of. Context shapes individual perceptions of a situation, including assumptions about reality, values and belief systems, and the choice of behavioural strategies, such as the desire or refusal to take action (Douglas et al., 2003). Grid-group analysis helps situate the views held by actors concerned about the exploitation of marine resources (McNeeley & Lazrus, 2014).

Finally, we located the specified themes and thought styles within the literature streams on global strategy and the Blue Economy and documented our findings.

Findings

Placelessness

Some search terms referring to placelessness produced overlapping results. For instance, 'place', 'country', 'borders', and 'boundaries' led to a cluster of narrations focusing on issues pertaining to the access to and ownership of marine resources and the distribution of rights and benefits from the use of the oceans. An example from the Cuban tourism industry illustrates the impact of the demarcation of ocean-related territories on local communities. Beaches that are used for tourism are no longer available for local people. They must cross physical barriers with strict border controls if they want to go to the beach at the Paradero peninsula. Another narration, regarding the distribution of rights and benefits, focuses on blue technologies. Delegates familiar with legal issues and patenting rights questioned the ownership of patents and the distribution of revenues resulting from the development and use of blue technologies as, for example, patents for marine genetic resources are mainly held by actors in Western countries but not in the countries where the resources needed for these technologies are sourced.

These examples show that land-centric thinking (Germond-Duret, 2022; Smith-Godfrey, 2016) is difficult to overcome. The creation of territories for economic purposes makes ocean spaces more similar to land-based environments. The economic use of the ocean space bears the promise of economic growth and new sources of revenue but actually excludes some stakeholders in urgent need of income. It may thus lead to conflicts over the use of marine resources between local communities, national governments, and international stakeholders.

The search terms ‘nation’ and ‘jurisdiction’ produced findings related to these narrations, but they were more likely to highlight legal issues, legally non-binding international agreements, and questions of social justice and equality. The United Nations Convention of the Law and the Sea (UNCLOS), which was revised in 1973, 1982 and 1994, is a case in point. According to a keynote speaker in one of the workshops, UNCLOS includes two major problems, which cannot easily be resolved. First, over the last decades, territorialisation and privatisation have increased in several blue industries, such as fishing, oil extraction, and deep-sea mining. This development jeopardises freedom of movement and navigation across the oceans. Second, new globally operating stakeholders have emerged. They aim to control ocean spaces and the resources available there. Their activities create new geopolitical dynamics and tensions that go beyond the traditional divide between the global North and the global South.

The SDGs rely on UN member states’ voluntary commitments. States and other stakeholders can make commitments to implement SDG 14. However, in contrast to other transnational agreements, such as the Paris Agreement for Climate Policy, an effective and binding process for pledging and reviewing does not exist. So, progress regarding SDG 14 cannot be monitored or legally enforced.

Other narrations underlining the placelessness of oceans refer to seafaring. Seafarers constitute a diverse and mobile professional community. They originate from many countries and move across geographies and sometimes intangible national borders. On a single ship, people with different nationalities work under considerably different terms and conditions depending on their country of origin because the maritime sector does not have a unified legal framework for seafarers’ working conditions across countries. This circumstance has implications for seafarers’ access to healthcare services, trade union membership, wages, and length of touring. It also affects hierarchies in the workplace because the distinction between officers and other positions on a ship is subject to national regulations of professions. Seafarers’ working conditions depend on the flag under which a ship is sailing. The flag determines the jurisdiction shaping a seafarer’s rights and duties on a ship. However, flags can change because ships can easily be signed up elsewhere (“flag hopping”), often driven by shipowners’ cost considerations and preference for limited regulation. Therefore, the placelessness of oceans and seas turns seafarers into a vulnerable community. The seafarers’ example also reveals that communities cannot only be defined geographically but also in professional terms. Local communities addressed in the workshops mainly focussed on the impact of the Blue Economy on coastal regions. In that vein, gender equality was discussed because most blue industries in coastal regions are male-dominated, often preventing women in their local communities to seize emerging entrepreneurial opportunities in the Blue Economy.

Fishermen coping with placelessness constitute another professional community that the delegates in both workshops addressed. In countries that relatively recently decided to promote the demarcation of boundaries, such as in the Bay of Bengal, fishermen are often not aware of newly created boundaries. Hence, they continue fishing in areas now governed by another country or even in recently established conservation zones. In so doing, they unknowingly engage in illegal fishing or unintentionally promote overfishing, undermining initiatives in the Blue Economy that aim to promote sustainable development.

Development

The search terms used to capture stories regarding development led to the identification of three main storylines pertaining to growth stimulated by top-down initiatives, multi-stakeholder approaches and bottom-up initiatives, and alternative conceptions of growth and development.

First, ‘growth’, which is often used as a synonym for development, in combination with other search terms, most notably ‘economy’, ‘livelihood’, and ‘ecosystem’, pointed to ongoing debates about definitional terms and underlying assumptions. The origin of the Blue Economy concept cannot be separated from the idea of an ocean-based economic development relying on the exploitation of hitherto underused marine resources. The European Union began to discuss Blue Growth policies in 2012, promising the creation of new jobs and entrepreneurial opportunities in line with the notion of the oceans as good business. The COVID-19 pandemic nurtured this thinking. Revenues from blue industries are expected to help the world economy recover from the pandemic downturn, albeit with an emphasis on sustainability. The intensity of efforts to use oceans for economic purposes has substantially increased since the 1990s, a phenomenon that the Stockholm Resilience Centre coined as “Blue Acceleration”. A growing world population is increasingly dependent on the exploitation of ocean-based sources of food or energy because of the threat of depletion of many terrestrial resources.

This policy-driven mindset inspired top-down initiatives in many countries. Seychelles’ Blue Economy entrepreneurship ecosystem is a case in point. Before the pandemic, the country engaged in training and upskilling entrepreneurs in blue industries and in connecting actors that had operated in silos so far. Most entrepreneurs participating in this initiative were operating in industries, such as tourism, fisheries and aquaculture, which were more likely to build on imitation than innovation. They mainly served domestic markets. The goal of the national government, however, was to stimulate innovation and diversification into overseas markets. The initiative disclosed local entrepreneurs’ cultural mindset as an obstacle preventing them from internationalising their ventures. They preferred staying local because of their fear of failure and the stigma of being a failed entrepreneur in society.

Second, the first-hand experience with entrepreneurship ecosystems in Seychelles underlines the need for multi-stakeholder, actor-centred approaches and bottom-up initiatives. Economic development bears the risk of an unsustainable use of marine resources. So, governance should take sustainability into account. Small and seemingly small stakeholder groups can effectively push large organisations into this direction from below. An example is the case of shareholder climate activism in traditional oil and gas companies, which are supposed to transition from fossil fuels to blue energy sources, such as offshore wind energy, but tend to be hesitant. Investors can divest their shares if they want to disengage from fossil fuels. A more effective way to voice dissatisfaction and create awareness among a wider audience is activism. Activist hedge funds, which usually have a significant minority stake in a publicly traded company and use their influence to change the company’s strategic direction by, for example, persuading other investors to support their cause, can effectively force corporate leaders to appoint energy transition directors with a background in industry transformation and renewable energy to the board who then act as change agents and promoters of blue growth.

This example highlights the need for novel governance and ocean management frameworks that involve multiple stakeholders, go beyond formal regulatory frameworks and governmental bodies, and also consider informal processes, such as cultural mindsets. Currently, ocean governance relies on regulatory, institutional and legal pillars that rarely communicate with each other. Separate systems exist for, for example, fisheries management, shipping, or deep-sea mining. This fragmentation on national and transnational levels may impede the implementation of a holistic agenda, such as the 17 UN SDGs which include numerous interconnected goals and actions.

In that vein, a third storyline emerged from the data based on the combination of ‘growth’, ‘livelihood’, and ‘ecosystem’, pointing to alternative conceptions of development and approaches to achieving and measuring growth. Based on the example of fisheries in the Bay of Bengal, specifically in India, Bangladesh and Myanmar, the concept of ecosystems-based management was discussed. Traditional management approaches focused on the amount of fish caught in this region and on measures to keep the harvest constant over time. In other words, they specified where, when, and how much to extract one particular resource. However, over time, the effort needed to catch the desired amount of fish increased constantly, posing a risk to the livelihood of people in this coastal region. An ecosystems-based approach to fisheries management would go beyond the resource to be extracted from the oceans and instead look at how the ecosystem that produces the fish can be maintained and kept in good shape. For instance, it would consider potential threats to the health of the ecosystem and how they could be mitigated, such as the use of fertilisers in agriculture and changes in sea level and sea surface temperature. Briefly, ecosystems-based management would balance various “users” of the ocean and intervening environmental factors.

Holistic approaches in the Blue Economy can also relate to new financial instruments, similar to green bonds or climate mitigation financing, which provide investors with guidelines for where and how to invest their money in line with sustainable development principles. They may include alternative conceptions of value creation, such as blue “degrowth” or “post-growth” paradigms, and conceptions of solidarity economy and social enterprise emerging from the global South that put communities’ well-being at centre-stage, such as “buen vivir” from Latin America or “ecological swaraj” (radical ecological democracy) from India (Kothari et al., 2014). Business ethics can add new insights to this discussion because they may help to give marginalised groups a voice. For instance, a social justice perspective could stimulate new thinking about the treatment that seafarers deserve for their efforts in collaborating with other professionals over a given period of time and whose well-being affects their professional community and a ship’s functioning.

Sustainability

The sustainability discourse took centre-stage during both online workshops, reflecting the view and indicating delegates’ agreement that the oceans are under considerable pressure. The search terms ‘SDG’ and ‘climate’ yielded narrations focusing on the need to create awareness of the state of the oceans and their importance for mankind. For instance, some NGOs provide educational initiatives that foster children’s curiosity, encourage them to inquire and explore the oceans, and share their experiences via social media with a wider audience. Those initiatives are in line with and help promote the pursuit of SDG 14. They are examples of voluntary commitments that diverse stakeholders can make.

Delegates in both workshops were critical regarding the non-binding character of SDG 14. They also highlighted its linkages with other SDGs, which have largely been overlooked by academic research so far, such as the improvement of decent work (SDG 8), gender equality (SDG 5), poverty reduction (SDG 1), and sustainable consumption (SDG 12). The sustainability discourse often emphasises the environmental dimension, although social and economic aspects must also be considered, further underlining the need to take interconnections between the SDGs into account, involve local, national and transnational actors, and do collaborative, interdisciplinary research, which would be in line with SDG 17 Global Partnership for Sustainable Development.

The dominant view was that sustainability is inseparable from the Blue Economy concept. However, for some delegates, the current communication was not fit for purpose. A suggestion was that science and public communication should deal with the consequences of the use of the oceans for economic purposes like a political crisis. This might help a wider

audience understand that sustainability is closely related to the Blue Economy, human rights, social equity, and a core political agenda. It would highlight the need for innovation, such as technologies like environmentally friendly ships and novel entrepreneurial processes building on digital technologies that may support local communities in seizing opportunities globally.

Thought Styles

The analysis based on dominant discourses reveals various viewpoints and multiple actors involved in the Blue Economy. It also shows that different initiatives, frameworks and approaches on local, national and transnational levels exist. The SDGs are addressed in many ways, but there is no single best strategy to achieve the goals associated with the 2030 Agenda for Sustainable Development. Neither are there best practices regarding the question of how to deal with the linkages between SDG 14 and other goals. To clarify the prevailing thought styles and stakeholders' impact on ongoing debates about how to embrace sustainability in geographic, industrial, social and professional contexts in the Blue Economy, we applied grid-group analysis (Douglas, 1999).

Thought styles depend on two dimensions of sociality: first, the type of actor (depending on social position or membership in a particular "group") and second, an actor's beliefs and set of values ("grid"). The combination of these dimensions leads to the specification of four thought styles – individualism, fatalism, hierarchy, and egalitarianism – which are antagonists to each other (Douglas, 1999). Figure 1 situates the narrations from the online workshops in these thought styles.

--- Insert Figure 1 about here ---

The thought style shown in box A, described as *individualism* (Douglas, 1999), is discernible in the narrations. According to this thought style, oceans and seas are resilient and can recover from exploitation (Douglas et al., 2003). Entrepreneurship and technological innovation are promoted (McNeeley & Lazrus, 2014). Typical examples are actors pursuing a market logic in the Blue Economy, such as globally operating businesses or local commercial enterprises. They compete for superior positions in their industries based on blue growth. Opposite to that thought style, actors adhering to formal governance and rules for problem-solving and coordination, are classified as *hierarchy* (box C) (Douglas, 1999). In the Blue Economy, we find bureaucratic frameworks, such as UNCLOS, or national legal systems that allow countries to demarcate ocean spaces and exploit them. They reflect the belief that a fair distribution of resources depends on effective regulation and trustworthy institutions (Douglas et al., 2003). Both individualism and hierarchy are supportive of the Blue Economy and promote either market mechanisms or control and coordination for its development.

The thought style in box D is denoted as *egalitarianism*. Typically, egalitarians form closed communities with strong ideals and a sense of fairness and equity (Douglas, 1999). They are "as distrustful of hierarchies as they are of unfettered markets" (Douglas et al., 2003: 103). Scientists working on issues pertaining to the Blue Economy, NGOs, or activists would fit into this category. Egalitarianism points to problems and alternative, community-centred solutions. Likewise, *fatalism* (box B) reveals problematic issues. However, fatalists are typically not in a position that would allow them to promote change (Douglas et al., 2003). Instead, they tend to be isolated and ignored by other, possibly more dominant actors (Douglas, 1999). Seafarers, working under precarious conditions and maintaining the global shipping industry whilst being widely overlooked – a phenomenon that a delegate described as "sea-blindness" – would be an example for this thought style.

Concluding Discussion

The starting point of this study was the question of how stakeholders embrace sustainability in the Blue Economy. Based on two interactive online workshops, we gained insights into how diverse actors, inspired by the UN SDGs, aim to improve work practices in their contexts. Despite the limitation that some narrations do not draw on first-hand experiences but are told by “observers”, and although global strategy research emphasises MNEs (e.g., Peng & Pleggenkuhle-Miles, 2009; Tallman & Pedersen, 2015), our findings drawing on multiple actors in the Blue Economy can be linked to ongoing debates in global strategy and inspire an agenda for future research. Benito and colleagues (2022) suggest five interconnected themes in global strategy –coordination, cooperation, governance, politics and innovation – which resonate with the challenges facing the Blue Economy.

First, regarding *coordination*, the narrations reveal that the Blue Economy is a multi-contextual, non-traditional, and dynamically evolving business environment in terms of economic, political, and legal institutions across levels, geographies, industries, and communities. Coordination will require agreements and communication across multiple contexts and actors to achieve consensus about how to achieve SDG 14. Our findings point to the need for a broader discussion about alternative paradigms of economic development and competitive advantage. They also show ways in which responsible value creation can be enacted in a transnational field encompassing a variety of actors and geographies. Global strategy scholars can make a significant contribution by reinterpreting the integration-differentiation framework (Bartlett and Ghoshal, 2002) in the context of the Blue Economy, characterised by both transnational processes and a plurality of actors with local agendas. Future research could also study the issue of how blue industries, such as shipping, can be reconfigured to make global value chains more sustainable. Integrating a social justice perspective, future studies could also consider innovative strategies to manage an increasingly mobile and international workforce and ensure fair labour conditions across countries.

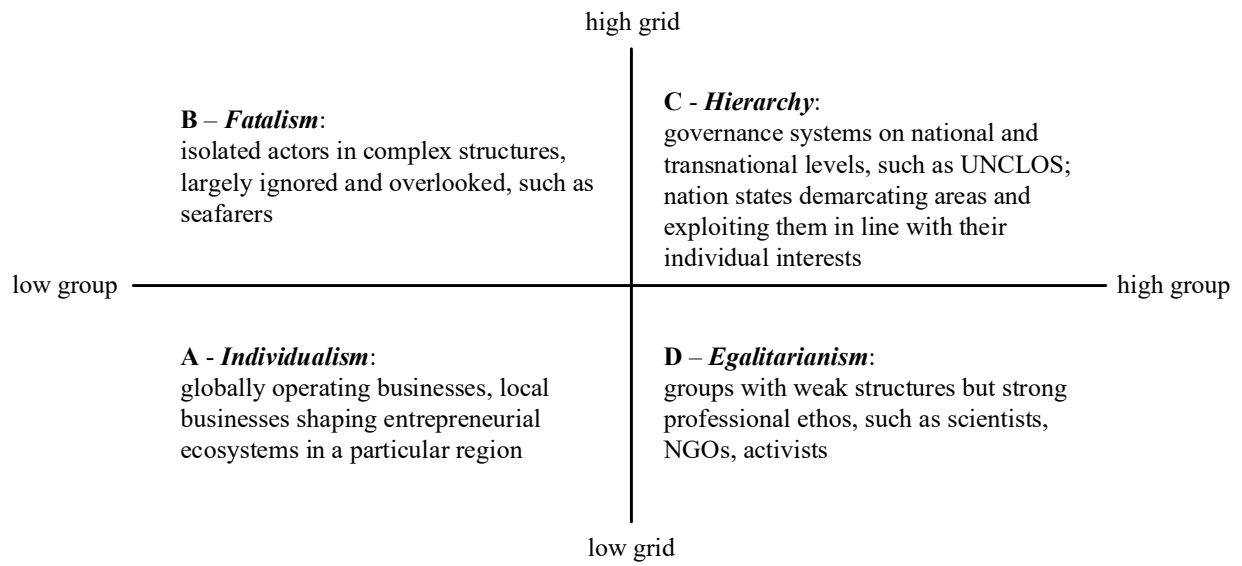
Second, regarding *cooperation*, global strategy research has traditionally focused on interorganisational collaboration in terms of alliances and networks (Benito et al., 2022). Local communities could learn from MNEs’ cooperative strategies to strengthen their own entrepreneurship ecosystems. Future global strategy research could draw on the Blue Economy to explore alternative, non-equity-based forms of cooperation within and across local communities (e.g., Kothari et al., 2014) that foster bottom-up decision-making processes and knowledge circulation. For example, the question of how the global strategy field can provide solutions for business actors that promote cooperation with non-business stakeholders while retaining their competitive advantages could be explored.

Third, *governance* is vital in both global strategy and the Blue Economy (e.g., Campbell et al., 2016; Silver et al., 2015; Voyer et al., 2018). It is interwoven with *politics*, the fourth theme suggested by Benito et al. (2022). Our findings show that the Blue Economy is not a consensual field but one in which diverging supranational, land-based private interests compete with each other, relying on various thought styles, often leaving local and professional communities dispossessed of their assets or left in a vulnerable position. The thought styles imply that stakeholder groups may disagree on how to address sustainability (Halik et al., 2018). In line with individualism, market mechanisms emphasizing economic development determine what a successful approach to implementing the SDGs in the Blue Economy might mean. Conversely, a hierarchical thought style is linked to sophisticated governance systems and top-down approaches, including, for example, legal enforcement, formal monitoring and control mechanisms, and pledging and review systems. Egalitarian thinking involves bottom-up initiatives, bringing communities to the fore and allowing for informal processes and alternative conceptions of value creation. Finally, fatalism would imply no intervention at all. Amid an increasing territorialisation of oceans, workshop participants reiterated the central role

played by “individualistic thought style”-actors to address the issues the Blue Economy is facing (box A; cf. Figure 1). Such actors will need to depart from a land-centric thinking to engage more with egalitarian (box D) and fatalist actors (box B). Law-makers and multilateral agencies may also attempt to depart from a top-down, hierarchical thought style logic and develop incentives that promote bottom-up cooperative behaviour across the various Blue Economy actors. The findings also suggest that the Blue Economy requires a universally acceptable framing that recognizes both regional and local economies as claimants of ocean resources and bridges geopolitical divides beyond those between the global North and the global South (Steinberg, 2001). Future research should address the intersection of economic and political spheres affecting global strategy. To further the conversation on how business actors can address sustainability issues, global strategy scholars may consider Descola’s (2013) work on bridging the duality between nature and culture to ensure the political representation of voiceless natural actors.

Finally, as the Blue Economy constitutes a global business context, it may offer promising avenues for future research on *innovation*. Benito et al. (2022: 439) describe global innovation as organised within “global value chains that are composed of large cooperative groups of firms and whose architecture is determined by an orchestrating multinational”. The workshop participants agreed on the need for innovation in the Blue Economy. Some narrations illustrate that innovative approaches to sustainability originate from practices developed in local entrepreneurial communities, which are not well integrated into global value chains. Future research could focus on how globally operating businesses could tap into these local reservoirs of knowledge and include them in their global innovation networks, thereby nurturing mutual learning and helping local communities to sustain their livelihood. The Blue Economy encompasses many isolated territories and actors. Businesses and governments alike should continue to work together towards developing technological innovation that delivers connectivity around the world. Improving connectivity will also enable further knowledge sharing with local communities around the Blue Economy. The field of global strategy should explore the role of technology to solve grand challenges amidst increasing geopolitical tensions around the origin, ownership and use of marine resources.

Figure 1. Thought Styles in the Blue Economy



References

- Bartlett, C.A. & Ghoshal, S. 2002. *Managing Across Borders: The Transnational Solution*. Boston, MA: Harvard Business School Press.
- Bassi, F., & Dias, J.G. 2020. Sustainable development of small- and medium-sized enterprises in the European Union: A taxonomy of circular economy practices. *Business Strategy and the Environment*, 29(6): 2528-2541.
- Benito, G.R.G., Cuervo-Cazurra, A., Mudambi, R., Pedersen, T., & Tallman, S. 2022. The future of global strategy. *Global Strategy Journal*, 12(3): 421-450.
- Bennett, N.J., Blythe, J., White, C.S., & Campero, C. 2021. Blue growth and blue justice: Ten risks and solutions for the ocean economy. *Marine Policy*, 125: 104387.
- Berrone, P., Rousseau, H.E., Ricart, J.E., Brito, E., & Giuliadori, A. 2023. How can research contribute to the implementation of sustainable development goals? An interpretive review of SDG literature in management. *International Journal of Management Reviews*, 25: 318-339.
- Brown, A.D., & Thompson, E.R. 2013. A narrative approach to strategy-as-practice. *Business History*, 55(7): 1143-1167.
- Byrne, J., Shantz, A., & Bullough, A. 2023. What about us? Fostering authenticity in entrepreneurship education. *Academy of Management Learning and Education*, 22(1): 4-31.
- Campbell, L.M., Gray, N.J., Fairbanks, L., Silver, J.J., Gruby, R.L., Dubik, B.A., & Basruto, X. 2016. Global oceans governance: New and emerging issues. *Annual Review of Environmental Resources*, 41: 517-543.
- Childs, J., & Hicks, C. 2019. Political ecologies of the blue economy in Africa. *Journal of Political Ecology*, 26(Special Section): 323-465
- Cisneros-Montemayor, A.M., Moreno-Báez, M., Voyer, M., Allison, E.H., Cheung, W.W.L., Hessing-Lewis, M., Oyinlola, M.A., Singh, G.G., Swartz, W., & Ota, Y. 2019. Social equity and benefits as the nexus of a transformative Blue Economy: A sectoral review of implications. *Marine Policy*, 109: 103702.
- Descola, P. 2013. *Beyond Nature and Culture*. Chicago: University of Chicago Press.
- Douglas, M. 1999. Four cultures: The evolution of a parsimonious model. *GeoJournal*, 47: 411-415.
- Douglas, M., Thompson, M., & Verweij, M. 2003. Is time running out? The case of global warming. *Daedalus*, 132(2): 98-107.
- Edwards, M.G., Alcaraz, J.M., & Cornell, S.E. 2021. Management education and earth system science: Transformation as if planetary boundaries mattered. *Business & Society*, 60(1): 26-56.
- Fenton, C., & Langley, A. 2011. Strategy as practice and the narrative turn. *Organization Studies*, 32(9): 1171-1196.
- Ferreira, M.S., Johnson, D., Pereira da Silva, C., & Ramos, T.B. 2018. Developing a performance evaluation mechanism for Portuguese marine spatial planning using a participatory approach. *Journal of Cleaner Production*, 180: 913-923.
- Geiger, D., & Antonacopoulou, E. 2009. Narratives and organizational dynamics. Exploring blind spots and organizational inertia. *Journal of Applied Behavioral Science*, 45(3): 411-436.
- Germond-Duret, C. 2022. Framing the Blue Economy: Placelessness, development and sustainability. *Development and Change*, 53(2): 308-334.
- Gruby, R.L., & Campbell, L.M. 2013. Scalar politics and the region: Strategies for transcending Pacific Island smallness on a global environmental governance stage. *Environment and Planning A*, 45(9): 2046-2063.
- Hadjimichael, M. 2018. A call for a blue degrowth: Unravelling the European Union's fisheries and maritime policies. *Marine Policy*, 94: 158-164.

- Halik, A., Verweij, M. & Schlüter, A. (2018). How marine protected areas are governed: A cultural theory perspective. *Sustainability*, 10(1): 252.
- Kleingärtner, S. 2018. A short history of the use of seas and oceans. In M. Salomon, and T. Markus (eds.), *Handbook on Marine Environment Protection: Science, Impact and Sustainable Management* (pp. 519-531). Cham: Springer.
- Kothari, A., Demaria, F., & Acosta, A. 2014. Buen vivir, degrowth and ecological swaraj: Alternatives to sustainable development and the Green Economy. *Development*, 57(3-4): 362-375.
- Lee, K.-H., Noh, J., & Khim, J.S. 2020. The Blue Economy and the United Nations' sustainable development goals: Challenges and opportunities. *Environment International*, 137: 105528.
- Loiseau, E., Saikku, L., Antikainen, R., Droste, N., Hansjürgens, B., Pitkänen, K., Leskinen, P., Kuikman, P., & Thomsen, M. 2016. Green economy and related concepts: An overview. *Journal of Cleaner Production*, 139: 361-371.
- Mallin, F., & Barbesgaard, M. 2020. Awash with contradiction: Capital, ocean space and the logics of the Blue Economy paradigm. *Geoforum*, 113: 121-132.
- McNeeley, S.M., & Lazrus, H. 2014. The cultural theory of risk for climate change adaptation. *Weather, Climate, and Society*, 6(4): 506-519.
- Mio, C., Panfilo, S., & Blundo, B. 2020. Sustainable development goals and the strategic role of business: A systematic literature review. *Business Strategy and the Environment*, 29(8): 3220-3245.
- Mulazzani, L., & Malorgio, G. 2017. Blue growth and ecosystem services. *Marine Policy*, 85: 17-24.
- Oliveira Neto, G.C. de, Cesar da Silva, P., Tucci, H. N. P., & Amorim, M. 2021. Reuse of water and materials as a cleaner production practice in the textile industry contributing to blue economy. *Journal of Cleaner Production*, 305: 127075.
- Ørngreen, R., & Levinsen, K. 2017. Workshops as a research methodology. *The Electronic Journal of e-Learning*, 15(1): 70-81.
- Pauli, G. 2010. *The Blue Economy*. Boulder, CO: Paradigm Publication.
- Peng, M.W., & Pleggenkuhle-Miles, E.G. 2009. Current debates in global strategy. *International Journal of Management Reviews*, 11(1): 51-68.
- Pepper, C., & Wildy, H. 2009. Using narratives as a research strategy. *Qualitative Research Journal*, 9(2): 18-26.
- Phelan, A.(A.), Ruhanen, L., & Mair, J. 2020. Ecosystem services approach for community-based ecotourism: Towards an equitable and sustainable blue economy. *Journal of Sustainable Tourism*, 28(10): 1665-1685.
- Shamsuddin, A., Sheikh, A., & Keers, R.N. 2021. Conducting research using online workshops during COVID-19: Lessons for and beyond the pandemic. *International Journal of Qualitative Methods*, 20: 1-7.
- Sibilia, E.A. 2019. Oceanic accumulation: Geographies of speculation, overproduction, and crisis in the global shipping economy. *Environment and Planning A*, 51(2): 467-486.
- Silver, J.J., Gray, N.J., Campbell, L.M., Fairbanks, L.W., & Gruby, R.L. 2015. Blue Economy and competing discourses in international oceans governance. *Journal of Environment & Development*, 24(2): 135-160.
- Smith-Godfrey, S. 2016. Defining the Blue Economy. *Maritime Affairs: Journal of the National Maritime Foundation of India*, 12(1): 58-64.
- Spalding, M.J. 2016. The new Blue Economy: The future of sustainability. *Journal of Ocean and Coastal Economics*, 2(2): Article 8.
- Standing, G., 2022. Can COP15 protect ocean biodiversity from the big fish of the 'blue economy'? *The Guardian*, December 12, 2022,

- <https://www.theguardian.com/commentisfree/2022/dec/12/cop15-ocean-biodiversity-blue-economy-corporate-montreal>.
- Steinberg, P.E. 2001. *The Social Construction of the Ocean*. Cambridge: Cambridge University Press.
- Suryanata, K., & Umemoto, K.N. 2003. Tension at the nexus of the global and local: Culture, property, and marine aquaculture in Hawai'i. *Environment and Planning A*, 35(2): 199-213.
- Tallman, S., & Pedersen, T. 2011. The launch of *Global Strategy Journal*: Comments from the co-editors. *Global Strategy Journal*, 1(1-2): 1-5.
- Tallman, S., & Pedersen, T. 2015. What is international strategy research and what is not? *Global Strategy Journal*, 5(4): 273-277.
- Tashman, P. 2021. A natural resource dependence perspective of the firm: How and why firms manage natural resource scarcity. *Business & Society*, 60(6): 1279-1311.
- Tenold, S., Kang, J.Y., Kim, S., & Murphy, H. 2021. International transfer of tacit knowledge: The transmission of shipbuilding skills from Scotland to South Korea in the early 1970s. *Enterprise & Society*, 22(2): 335-367.
- The Economist*. 2015. *The Blue Economy: Growth, Opportunity and a Sustainable Ocean Economy*. An Economist Intelligence Unit Briefing Paper for the World Ocean Summit 2015. London. https://www.oceanprosperityroadmap.org/wp-content/uploads/2015/05/2.-State-of-the-Blue-Economy_briefing-paper_WOS2015.pdf.
- von Schuckmann, K., Holland, E., Haugan, P., & Thomson, P. 2020. Ocean science, data, and services for the UN 2030 Sustainable Development Goals. *Marine Policy*, 121: 104154.
- Voyer, M., Quirk, G., McIlgorm, A., & Azmi, K. 2018. Shades of blue: What do competing interpretations of the Blue Economy mean for oceans governance? *Journal of Environmental Policy & Planning*, 20(5): 595-616.
- Voyer, M., & van Leeuwen, D. J. 2019. 'Social license to operate' in the Blue Economy. *Resources Policy*, 62: 102-113.
- Waheed, R., Sarwar, S., & Alsaggaf, M.I. 2023. Relevance of energy, green and blue factors to achieve sustainable economic growth: Empirical study of Saudi Arabia. *Technological Forecasting & Social Change*, 187: 122184.
- Wasieleski, D., Waddock, S., Fort, T., & Guimarães-Costa, N. 2020. Natural sciences, management theory, and system transformation for sustainability. *Business & Society*, 60(1): 7-25.
- World Bank and United Nations Department of Economic and Social Affairs. 2017. *The Potential of the Blue Economy: Increasing Long-term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries*. World Bank, Washington DC.
- World Economic Forum. 2022. *SDG14 Financing Landscape Scan: Tracking Funds to Realize Sustainable Outcomes for the Ocean*. White Paper, June 2022. https://www3.weforum.org/docs/WEF_Tracking_Investment_in_and_Progress_Toward_SDG14.pdf.