

DEMOCRATIC PARTICIPATION IN GOVERNING THE OCEAN

A study of how to plan within the framework of Wicked Environmental Problems

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ABSTRACT:

The Master's Thesis examines how democratic participation in governing the ocean can increase sustainability. Thus, the Thesis is based on the EU's Directive of Maritime Spatial Planning and Denmark's first Maritime Spatial Plan. Critical Theory is applied as the overall theoretical perspective. In addition, Governing the Commons is used to explain cooperation among stakeholders when governing common natural resources. Furthermore, Deliberative Democracy and Marine Citizenship are applied to explain how increased democratic participation in governing the ocean can increase ocean sustainability. The analysis is based on semistructured interviews with actors from the UNESCO IOC, the Danish Maritime Authority, and WWF, respectively. In addition, secondary empirical data is used, including the Consensus Conference Our Ocean, a citizen participation process, which was held in Oct. 2020. The analysis indicates that the mediums of money, hierarchy, and power, including avoidance, are present in the process of developing Denmark's Maritime Spatial Plan and because indication shows insufficient democratic participation among relevant actors, which might have led to a lower support among politicians, business and interest organizations, NGOs, and researchers. Furthermore, the analysis indicates that because the consequences are so enormous, the general population must understand why it is essential to ensure a healthy ocean. The Consensus Conference demonstrated that when citizens become involved in complex problems, they can, through increased literacy, form and develop their opinions and that increased literacy can foster a change in values and behavior. Moreover, the analysis indicates a lack of understanding of how the planning and execution of citizen participation processes affect the results. Thus, the analysis shows that planning needs to work within a wicked planning framework.

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Resumé

Nærværende speciale behandler, hvordan vi i et komplekst samfund står overfor nogle nye problemstillinger i planlægningen af samfundet. Et stigende antal aktører med forskellige og komplekse forståelser af problemerne og løsningerne samt videnskabelig usikkerhed gør, at der er mange forskellige holdninger til, hvordan vi planlægger for fremtiden.

Derfor undersøges det med dette speciale, hvordan demokratisk deltagelse i planlægning af havet kan øge den miljømæssige bæredygtighed. I specialet anvendes Kritisk Teori som det overordnede videnskabsteoretiske perspektiv til at forstå og forklare vanskelighederne ved at sikre demokratisk deltagelse i fysiske planlægning. Specialet tager udgangspunkt i hvordan vi forvalter vores fælles hav. Her anvendes den Europæiske Unions Direktiv *om Maritime Spatial Planning* og i forlængelse heraf i Danmarks første Havplan, som kom i høring 31. Marts 2021. Her anvendes Elinor Ostroms teori om *Governing the Commons* for at kunne forklare, hvordan man kan se på samarbejdet blandt aktørerne, når det drejer sig om fælles naturressourcer. Sammen med Kritisk Teori og *Governing the Commons* anvendes deliberativt demokrati og teorien *Marine Citizenship* til at forklare, hvordan øget demokratisk deltagelse i forvaltning af havet kan medføre øget bæredygtighed i havmiljøet.

Analysen baserer sig på primær empiri, som er udført som semistrukturerede interviews med hhv. Head, IOC Science and Communication Centre on Harmful Algae, KU, UNESCO IOC, Fuldmægtig i Søfartsstyrelsen og Sektionsleder for Oceans & Wildlife WWF. Derudover anvendes sekundær empiri, herunder optagelser fra møder om den danske Havplan og optagelser fra Konsensuskonferencen *Vores hav*. Konsensuskonferencen blev afholdt i oktober 2020, og giver et indblik i en borgerinddragelsesmetode, hvor de deltagende borgere skulle forholde sig til et teknokratisk og komplekst emne og de forhold, der er gældende i relationen mellem benyttelse og beskyttelse af havet.

Analysen indikerer, at styringsmedierne: penge, hierarki og magt, herunder undvigelse af miljøspørgsmål (*avoidance*) er til stede i planlægningen af Danmarks første Havplan. Derudover indikerer analysen, at der har været en utilstrækkelig demokratisk deltagelse blandt relevante aktører, hvilket muligvis har medført en lavere tilslutning til Havplanen blandt politikere, erhvervs- og interesseorganisationer, ngo'er og forskere. Desuden indikerer analysen, at fordi konsekvenserne er så alvorlige, er det nødvendigt, at den brede befolkning forstår vigtigheden og hvorfor, det er nødvendigt at sikre et sundt hav. Konsensuskonferencen demonstrerer, at når borgere bliver involveret i komplekse problemstillinger, kan de gennem øget indsigt og viden (*literacy*) danne og udvikle deres meninger. Derudover påvirkede øget literacy hos borgernes deres værdier og adfærd. Analysen indikerer ligeledes, at der er en manglende samlet forståelse for, hvordan planlægningen og udførelsen af borgerinddragelsesprocesser påvirker udfaldet af resultaterne. Analysen viser, at der er behov for, at planlægning i højere grad forstår at arbejde inden for rammerne af de stigende kompleksiteter, hvis det skal lykkedes at lave helhedsorienteret fysisk planlægning, som sikrer en bæredygtig fremtid af vores fælles naturressourcer.

Foreword

The following thesis is inspired by my third semester internship at the Danish Board of Technology Foundation (DBT), which took place from the 17th of August 2020 to the 15th of January 2021. During my internship, I was involved in organizing the Consensus Conference *Our Ocean* which was held from the 23rd of October to the 26th of October 2020. The complexity and impact of this process inspired my interest in understanding how citizen participation can impact society towards a more sustainable course of action.

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List of Abbreviations

UN	United Nations
UNESCO	The United Nations Educational, Scientific and Cultural Organization
IOC	Intergovernmental Oceanographic Commission
The SDG's	The Sustainable Development Goals
EU	European Union
WWF	World Wildlife Fund
EIA	Environmental Impact Assessment
PD Game	Prisoner's Dilemma Game
MSP	Marine Spatial Planning
EBM	Ecosystem-Based Management
DN	Danmarks Naturfredningsforening
DBT	The Danish Board of Technology Foundation

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Clarification of Terminology

Sustainability

The understanding of sustainability is based on the three dimensions – social, economic, and environmental sustainability, referred to as people, prosperity, and planet in the United Nations 2030 Agenda for Sustainable Development (United Nations, 2015). The perception is that by addressing the challenges related to environmental sustainability it will ensure better conditions for the social and economic challenges of sustainability. Thus, the concept of sustainability in this thesis must be understood as environmental sustainability. As part of the social dimension of sustainability, the 17 SDGs do not address a democratic perspective. This is in contrast to the thesis theoretical framework that the democratic form of social sustainability could function as a policy tool to support the pursuit of environmental sustainability.

1. Introduction

1.1 Planning for a Sustainable Future

Planning is a large and complex field that occurs on many different levels and often includes conflicting interests and perceptions of the desirable future (Jensen et al., 2009). Because of scientific uncertainty, conflicting social, cultural, and political interest, incompatible values, increasing levels of conflict between the involved stakeholders, and different views on the preferable outcome, Balint et al. (2011) identifies that the multiplicities of the problems we are facing in modern society are turning the problems more and more complex. This applies to problems in all areas, but especially to environmental problems. *"The clashing interest of environmentalists, developers, and others have elevated many environmental problems that require decisions at the federal and state level from simple to complex, to wicked"* (Balint et al. 2011 p. 2).

With the increase of problems related to global climate change, planners need to be able to handle local, regional, national, and global tensions, oversee interdisciplinary and crosssectoral contexts, enter into processes with many different actors, and understand the complexities. The goals and means for change in planning are rarely a matter of consensus but reflect the different interests, rationalities, goals, and visions of various social actors (Jensen et al., 2009). In the most complex cases, the process of defining the shared values, common goals and outcomes, and acceptable risk becomes political, in which social values and deliberation are rarely integrated. Furthermore, Balint et al. (2011) argue that there is a lack of adequate framework for decision-making to address what they define as Wicked Environmental Problems. Because implementation of decisions in Wicked Environmental Problems is difficult to reverse and has long-term consequences, there must be a general consensus regarding the course of action. Therefore, to successfully manage Wicked Environmental Problems, decision-makers must have a broad understanding of public values and priorities or which consequences the public is willing to live with. Thus, public participation is identified as a critical component in achieving any process with Wicked Environmental Problems (Balint et al., 2011).

To this extent, Hansen et al. (2016) identify the challenges of democracy as directly connected to the challenges from the global sustainability crisis. They refer *the crisis* to society's ability to regenerate and renew living conditions or society's ability to govern the

commons, which must be rooted in a shared and practical responsibility of the citizens. They argue that: *"It is as citizens we can address our common affairs, and it is as citizens that we can address the social and ecological implication (or behavior) of our collective culture and individual lifestyle"* (Hansen et al., 2016 p. 1). Thus, planning aimed at changing the future conditions must function across traditional sectors and make use of both plans and regulations as well as participation and communities to make this change possible (Jensen et al., 2009).

1.2 Democratic Participation in Governing the Commons

Since the early 1990s, there has been an increasing awareness of the potential that the involvement and mobilization of citizens constitute a resource of qualification in the planning process and a possibility to democratize planning processes. The communicative planning approach has its theoretical roots in Habermas' Theory of Communicative Action. Citizens' participation is expected to form new understandings and mutual respect between the actors involved, thus a more open-minded understanding between the actors involved, increase consensus on decisions, produce new knowledge, which have a potential to change dominant structures and practices, educate citizens to be democratic citizens, and build competencies for action in civil society. Communicative planning is about creating space for communication to steer development and governance towards a common good according to common interests, thus emphasizing the positive profit of increasing the dialogue between citizens, politicians and administrators (Agger, 2009).

The high levels of stakeholders and clashing interest of Wicked Environmental Problems are seen as obstacles when Governing the Common. The commons refer to natural resources with open access to individual users. Uncoordinated actions can cause depletion or collapse of the resource. The expression 'the tragedy of the commons' became more widely known when American Ecologist Garrett Hardin in 1968 addressed the issue and has since then been used to explain the degradation of the environment whenever many individuals use a common and shared resource and act according to their self-interest instead of the common good for all users (Ostrom, 1990). Participatory, inclusive planning, through dialogue, seeks to achieve a common good and is therefore contrary to short-term economic interests (Agger, 2009).

1.3 One Common Ocean

The ocean is the largest ecosystem on the planet. Water covers 71% of the Earth's surface, of which 97.5% constitutes the ocean (Withgott & Laposata, 2015). Because of its volume, the ocean accounts for 99% of the habitable space on our planet, thus nurturing incredible biodiversity (United Nation, 2020). Scientists have identified that since the 1980s, the ocean has absorbed 90% of the planet's surplus heat and approximately 20-30% of man-made CO2 emissions (Fonden Teknologirådet, 2020a). In addition, scientists estimate that the ocean produces between 50-80% of the world's oxygen (NOAA, n.d.a). The ocean shapes the land of the Earth. The change of sea levels has resulted in the expansion and subtraction of land. Waves and tides erode and redistribute sediments, thus, defining the coast (NOAA, n.d.b). In addition, the ocean current affects our planet's climate by circulating warm and cold currents (Withgott & Laposata, 2015).

On top of that, humans make use of marine resources in many ways. The ocean directly supports human well-being as it is a giant food source and energy resource. We are dependent on the ocean for sand, gravel, oil, wind, transport routes, and fishery, all of which provide many industrial occupations. In addition, we use the ocean for several recreational purposes when swimming, surfing, diving, fishing, etc. (Fonden Teknologirådet, 2020b). Therefore, many marine occupations depend on the health and good conditions in the ocean. As the ocean is globally interconnected, the future conditions of the marine environment present a significant global challenge. Therefore, ensuring sustainable conditions for the ocean and marine environment can potentially have a great impact on the condition for our future use of the ocean. The ocean thus constitutes one of our planet's largest commons with an enormous effect and importance for all human life and human settlement as we know it today.

In 2006 the millennium ecosystems assessment brought to attention that human civilization had never before faced such extreme and global threats to our marine ecosystems (United Nations, 2006). In 2015, The United Nations First World Ocean Assessment found that the ocean was now so seriously degraded that the carrying capacity is nearly at its limit, and that impacts on the ocean are predicted to increase as the world population will reach an estimated 9 billion people by 2050 (United Nations, 2020).

Urban decisions have an impact far beyond the city boundaries. With approximately 50% of the industrialized world's population living within 50 km of the coast, the ocean and marine environment are under exceptional pressure (McKinley & Fletcher, 2010). Thus,

unsustainable urban development has an extensive impact on the ocean and marine environment. Human activities affect the ocean, especially coastal marine conditions (Miljøog Fødevareministeriet, 2019). As more and more activities are moving from land to sea, the increasing level of activity at sea requires better planning (Søfartsstyrelsen, 2021a).

Because of the urgent need for sustainable change in the ocean and its marine resources, the complexities related to governance, and the urge to ensure self-interest above the common, finding and activating new policy channels to support the efforts to improve marine environmental health is essential (McKinley & Fletcher, 2012). McKinley & Fletcher (2012) suggest the engagement of citizens in ocean governance to ensure sustainability. *"At a national level, marine policy is generally focussed on a variety of organisations. Mostly state agencies, non-governmental organisations, and multi-sector partnerships. Very few marine policies focus on the individual citizens as the vehicle through which policy is implemented"* (McKinley & Fletcher, 2012 p. 839). They argue that increased understanding of the effects of personal behavior will ultimately change values and behavior to become more pro-environmental, thereby identifying marine citizenship as an unexploited policy channel to support a healthy ocean (McKinley & Fletcher, 2012).

1.4 The Danish Marine Waters and Ocean Governance

As shown in Figure 1, the Danish marine waters comprise the North Sea, Skagerrak, Kattegat, the Baltic Sea, Great Belt, Little Belt, Fehmarn belt, and the Sound. The Danish ocean covers 104.632 km2 and is therefore approximately 2.5 times larger than Denmark's land area (Hegland et al., 2020; Søfartsstyrelsen 2021a). As a result, there are no places in Denmark where the citizens have more than 52 km. to the coast (WWF, 2012).



Figure 1, the Danish marine waters (edited from source), (Hegland et al., 2020 p. 13).

Denmark has approximately 7300 km. of coastline, holding a 17th place over countries with the longest coastline in the world. On top of that 78 out of the 98 Danish municipalities have a coastline (Miljø- og Fødevareministeriet, 2016; DN, n.d). Furthermore, maritime companies account for approximately one-quarter of the total export and 3.8% of employment in Denmark (Søfartsstyrelsen, 2021a). Thus, Denmark is culturally, historically, and economically closely linked to the ocean (Søfartsstyrelsen 2021a; Fonden Teknologirådet, 2020b). In Denmark, governance of the ocean and marine environment is divided between eight ministries and nine authorities. On top of that, parts of the responsibility concerning coastal administration are placed with the municipalities (Hegland et al., 2020). An overview of the different Ministries and related authorities and administration is shown in figure 2.

The Ministries	The related authorities	
The Ministry of Environment	The Environmental Protection Agency	
	The Danish Coastal Authority	
The Ministry of Food, Agriculture and Fisheries	The Danish Fisheries Agency	
The Ministry of Climate, Energy and Utilities (Extraction of oil and gas, wind farms, and cables)	Danish Energy Agency	
The Ministry of Foreign Affairs of Denmark		
The Ministry of Industry, Business and Financial Affairs	The Danish Maritime Authority	
The Ministry of Transport and Housing (Marine traffic, bridges, and ports)	The Danish Transport, Building and Housing Authority	
The Ministry of Defense (Military facilities at sea)	Royal Danish Navy	
The Ministry of Culture	The Palaces and Culture Agency	

Figure 2, Ministries and authorities responsible for the governance of the ocean and marine environment in Denmark (Hegland et al., 2020; Fonden Teknologirådet 2020b).

In their report, Hegland et al. (2002) identified the large number of regulatory and governmental actors as a potential challenge for Danish ocean governance (Hegland et al., 2020). The same is determined by Balint et al. (2011), who identify that managing environmental issues often contain high levels of conflict between the involved stakeholders. There are often many conflicting values that lead to a clash in interest between the stakeholders involved and thus a lack of a single problem statement. The understanding of the problem is changeable according to the different stakeholders involved and therefore rooted in different interests (Balint et al., 2011). Based on Balint et al.'s theory on Wicked Environmental Problems (2011), figure 2 thus illustrates the complexity of ocean governance in Denmark. Based on the theory behind Wicked Environmental Problems, the high number of authorities and their cross-disciplinary collaborations make it incredibly complex to create coherent ocean governance and ensure sustainable use of marine resources. The clash of

interest and the different understandings of the problem can complicate negotiations in relation to finding a common solution to ensure good conditions of our ocean.

1.5 The Ocean Decade 2021-2030 and Ocean Literacy

In the 2030 agenda for sustainable development, an unanimous UN agreed that the Earth is facing a time of immense challenges, that the depletion of natural resources is causing adverse impacts of degradation to the environment, that the adverse impacts of the climate crisis are one of the most significant challenges, and that: *"the biological support systems of the planet, is at risk"* (United Nations, 2015 p. 7-8). Thus, recognizing that everybody will be affected by these challenges if action is not taken. In the agenda, it reads:

"We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations" (United Nations, 2015, p. 5).

Thus, it is recognized that current consumption and production cannot support the present generation, let alone future generations. Therefore, UNESCO initiated the Decade of Ocean Science for Sustainable Development from 2021 to 2030. The aim is that through the engagement of ocean stakeholders worldwide, we are able to foster new ideas and solutions and strengthen the cooperation between scientists and academics, governments and policymakers, industry and business, and public and civil society to ensure a more coordinated effort to protect the ocean and its resources. Thus, the ocean decade supports the achievement of the 2030 Agenda for Sustainable Development (United Nations, 2020a). The Intergovernmental Oceanographic Commission under UNESCO (IOC-UNESCO) is the responsible body. Their primary focus for the IOC is to build the capacity needed to achieve the Sustainable Development Goal 14. Goal 14 - Life below water is specifically dedicated to the sustainable development of the ocean and its resources and states that we need to: *"Conserve and sustainably use the oceans, seas and marine resources for sustainable development"* (United Nations, 2015, p. 18).

The Ocean Decade objectives are:

- 1. "A clean ocean where sources of pollution are identified and removed
- 2. A healthy and resilient ocean where marine ecosystems are mapped and protected

- 3. A predicted ocean where society has the capacity to understand current and future ocean conditions
- 4. A safe ocean where people are protected from ocean hazards
- 5. A sustainable harvested and productive ocean ensuring the provision of food supply
- 6. A transparent ocean with open access to data, information and technologies
- 7. An inspiring and engaging ocean where society understands and values the ocean" (United Nations, 2020b p. 8-9).

In addition, under objectives 7, it is elaborated, that: "In order to incite behavior change and ensure the effectiveness of solutions developed under the Decade there needs to be a step change in society's relationship with the ocean. This can be achieved through ocean literacy approaches" (United Nations, 2020b p. 9). Ocean literacy increases the focus on the importance of knowing and understating the oceans' influence on us as well as our influences on the ocean and identifies that this is essential to living and acting sustainably (UNESCO, 2017). The essential principles of Ocean Literacy are presented in the following figure 3.



Figure 3, The seven essential principles of Ocean Literacy (UNESCO, 2017 p. 19).

Therefore, the Ocean Decade will set focus on four priority areas to disseminate Ocean Literacy. These are effective policy formulation, increasing formal education related to the ocean, increasing cooperate action, and engaging communities (United Nations, 2020b).

Fostering citizens' experiences, knowledge, and perspectives concerning ocean science and sustainable development of the ocean and marine resources are identified as crucial to ensure more robust, effective, and trusted regulatory policies. Besides educating and informing the public about the importance of the ocean, there is a need to engage with society (UNESCO, 2017).

"It is imperative that the global citizenry understands the societal impacts of ocean research and pressing ocean issues. Ocean literacy aims at facilitating the creation of an ocean-literate society able to make informed and responsible decisions on ocean resources and ocean Sustainability" (UNESCO, 2017 p. 16).

Thus, to achieve ocean sustainability, it is imperative to attain new skills, values, and attitudes alongside informing and educating the public.

1.6 Summary

Jensen et al. (2009) identify planning to take place in relation to various policy areas, sectors, and planning fields such as urban and regional development, construction, sustainable work procedure, environment, pollution, business promotion, nature management, mobility and transport, settlement, health promotion, etc. (Jensen et al., 2009) These activities are not only found on land, but increasingly also on the ocean.

Since the ocean is already seriously degraded and there is an increasing pressure on the ocean as the global population both increases in number and increases their consumption. As more and more activities move from land to the ocean, it becomes critical that governing our common ocean aims at ensuring good conditions in the sea now and in the future. But the many actors with different values and goals for activities on the ocean pose a Wicked Environmental Problem.

The Ocean Decade focuses on the ocean and how we, through the cooperation of all stakeholders, must find new ideas and solutions to ensure a healthy ocean. Furthermore, they have an increased focus on citizens and their role in marine management, and how

their participation can function as a tool in creating change towards a more sustainable ocean.

Thus, the research focuses on why it is important to increase democratic participation in Wicked Environmental Problems. What some of the pitfalls for democratic participation in Governing the Commons are. And how increased citizens participation in ocean governance can, through a change in values and behavior, function as a governance tool in ensuring sustainable conditions for our common natural resources.

2. Problem formulation

How can democratic participation in governing the ocean increase sustainability?

2.1 Research Questions

- How are the Danish marine waters managed today, and how is democratic participation ensured in the process of the Danish Maritime Spatial Plan?
- Why is it important to increase democratic participation in governing the ocean?
- What are the pitfalls for democratic participation in governing the ocean?
- How can increased ocean literacy amongst citizens enhance sustainability in the ocean?

3. Theory of Science

This section presents the understanding of reality and how knowledge is created, which is applied in the thesis. This approach is understood from the German philosopher and sociologist Jürgen Habermas' theory of Critical Theory

3.1 Critical Theory

Habermas' understanding of social sciences is that it must have an emancipatory aim, i.e., social criticism must expose societal development that stands in the way of human advancement and criticizes moral failures in society. Thus, Habermas' critical theory is based on how the structures of modern society suppress the general population, and what can be done to empower citizens in modern society (Juul, 2012a).

Habermas is critical of the technocratic form of government that is prevalent in modern society (Juul, 2012a). The problem of modernization is that knowledge alone is a matter of experts, with no connection and interference to the general population. Thus, a greater distance is created between the experts and civil society, which contributes to the incapacitation of civil society (Elling, 2009).

To describe this relationship, Habermas uses the terms: the System and the Lifeworld. The System constitutes the state, the market, and the bureaucratic institutions where communication and actions are driven by the mediums: power and money. The System is based on a requirement for functionality and efficiency and is characterized by the strategic rationality of the actors, where the individual actors act egocentric rationally to maximize their own goals of advantage and/or economic profit. In addition, the authority hierarchies of positions play an important role. The mediums power and money operate independently of any rational, well-founded consensus on intentions, goals, and norms. Therefore, they have a communication-saving effect, which is a prerequisite for their efficiency. The Lifeworld constitutes civil society, the family, and the political public. Here communication and action are driven by the medium: interaction, communication, and a desire to understand each other. In the thesis, the Lifeworld will be referred to as civil society. Thus, communication in civil society can lead to rational reflection and critical dialogue (Juul, 2012a; Andersen, 2013).

The mediums of the civil society are crucial to what Habermas describes as the reproduction of society, i.e. *"The formation of 1) a system for meaningful cultural interpretation, 2) social*

communities with a sense of solidarity, and 3) identity" [Own translation] (Juul, 2012a p. 327).

The development of modernity, market forces, and bureaucratization pose a constant threat to the democratic discourse of the civil society, e.g., civil society, and thus, the ideal of emancipation in modern society cannot be realized due to interests and power relations which characterize the political debate (Juul, 2012a; Elling, 2009). The state and the administrative systems grow in relation to the increasing complexity of society. As the expansion and crises of capitalism increase, an expansion of the System will likewise occur. The consequences of the growing complexity, differentiation, and decentralization of modern society are that the state no longer constitutes the center of societal functions (Elling, 2009). Thus, regulation in modern society (the System) is characterized by a democratic deficit, undermining human communities, weakens citizens' civil engagement, and leads to passive civic roles, thus detaching civil society from the system (Juul, 2012a).

For that reason, Habermas calls for a democratization of the relationship between state and citizen. This implies that decision-making and conflict resolution should be based, to a much greater extent, on public discussion and exchanges of views, i.e., communicative rationality (Juul, 2012a).

The ideal of free communication serves as the normative foundation for social critique in Habermas' critical theory. Thus, the communicative paradigm must be interested in what stands in the way of the communicative processes, i.e., how political planning often eludes public discussion (Juul, 2012a).

Based on Habermas' theory of the medium's money and power, it is therefore the understanding in this research that regulatory and governmental stakeholders, as well as other stakeholders with economic interests in the ocean and marine resources, are bound by strategic and egocentric rationality and therefore have a greater focus on self-optimization instead of a common good.

4. Theory

This section presents the theoretical framework used in the thesis. First, Governing the Commons is presented based on the American political economist Elinor Ostrom. Then Deliberative Democracy, developed by Jürgen Habermas, is presented, and finally, Marine Citizenship based on Dr. Emma McKinley and Professor of Ocean Policy and Economy Steve Fletcher are presented.

4.1 Governing the Commons

The issue on how to govern the common natural resources has repeatedly been addressed throughout history, dating back to Aristoteles who wrote: *"What is common to the greatest number has the least care bestowed upon it. Everyone thinks chiefly of his own, hardly at all of the common interest"* (Ostrom, 1990 p. 2). Thus, emphasizing that the issue of ensuring the resilience of common natural resources is not a new problem. In 1954 H. Scott Gordon addressed the issue by stressing that:

"Wealth that is free for all is valued by no one because he who is foolhardy enough to wait for its proper time of use will only find that it has been taken by another.... The fish in the sea are valueless to the fisherman, because there is no assurance that they will be there for him tomorrow if they are left behind today" (Ostrom, 1990 p. 3).

The issue arises on how best to govern these natural resources, which many individuals use to ensure the resilience of the resource from exploitation (Ostrom, 1990). Many propositions on how to solve the tragedy of the commons have been offered through the years. Different suggestions are presented as to whether the state must control the common to prevent its destruction; others suggest that privatization of the common and that the market hold the solution. In her book *Governing the Commons* from 1990, Elinor Ostrom states that by observing the world, it must be clear that neither the state nor the market has successfully ensured a long-term and sustainable use of natural resource systems (Ostrom, 1990). Dating back from Aristoteles, governing the commons still represents an enormous problem today. Thus, emphasizing a gap in governing tools on how to solve the common-pool resource problem (Ostrom, 1990).

To illustrate why we as a society have not been able to solve the governing of the commons, Elinor Ostrom (1990) presents the model developed by Garrett Hardin The Prisoner's Dilemma Game (PD). The PD is a non-cooperative game, during which communication is forbidden, impossible, or simply irrelevant. If communication is possible, verbal bindings amongst players are presumed to be non-binding. Because each player thinks that the other player will cooperate, each player has a dominant strategy because the player is always better off choosing the strategy - to defect. The result from each player selecting the strategy of defect is not the optimal outcome for either of them (Ostrom, 1990).

The PD challenges the paradox that: *"individually rational strategies lead to collectively irrational outcomes seems to challenge a fundamental faith that rational human beings can achieve rational results"* (Ostrom, 1990 p. 5). Thus, illustrating the difficulty of getting individuals to pursue joint welfare. Following the principle of The PD, this suggests a lack of cooperation between the actors involved in governing the ocean, not achieving the optimal outcome and ensuring a resilient ocean, leaving the ocean today on the verge of a breakdown.

Governing the Commons and The PD game constitute a theoretical model of which the real world is much more complex with variation from problem to problem. The theory can be used to explain why governing the commons becomes so difficult, but it is important to analyze why the different stakeholders are reluctant to cooperate. This might be a lack of predictability, lack of information and trust. When engaging with the theory the players in The PD game guickly become evil, incompetent actors, but in the real world it becomes imperative to understand institutional and cultural behavior of the players, thus overcoming the conditions of The PD game (Ostrom, 1990). Ostrom (2000) recognizes that there is a substantial gap between the theoretical predictions and the reality, although she argues that the non-cooperative behavior is inevitable (Ostrom, 2000). In her paper Collective Action and the Evolution of Social Norms, Ostrom find, through staged laboratory test, those who believe others will cooperate are more willing to cooperate themselves, that face-to face communication substantially increases the cooperation, that repetitive engaging in PD game scenarios the players learn to cooperate and the cooperation last for longer periods, and that the rate of cooperation towards a common good is affected by the framing of the situation. Based on the experiment Ostrom concludes that cooperative behavior is partly based on social norms (Ostrom, 2000). Because stakeholders are not likely to have the same understanding of the problem and the solution it becomes essential to increase: "the authority of individuals to devise their own rules may well result in processes that allow social norms to evolve and thereby increase the probability of individuals better governing the commons" (Ostrom, 2000 p. 154). Through common social norms, a common obligation that commits the members and keeps them bound by the agreement of these common norms.

4.2 Deliberative Democracy

As a theoretical field, Deliberative Democracy has been under development since 1980, and is now regarded both as a political ideal, theoretical model, and epistemological evaluative paradigm (Hansen & Rostbøll, 2015). Deliberative Democracy advocates for the strengthening of democracy through an increase in communicative processes, with a higher focus on open discussion and accountability. Deliberative Democracy is developed by Habermas as the basic normative idea of communicative rationality (Andersen, 2013).

It is the belief that under better institutional and social conditions and by engaging the public in the debate, citizens would, through the free and equal exchange of opinions, be able to learn from each other, attain a more informed and reflective understanding of their own and others political preferences and thus, form their opinions more rationally and consistently (Hansen & Rostbøll, 2015). Deliberation is thus defined as debate and discussion with the aim of producing reasonable and well-informed opinions to an extent where participants are willing to revise their preferences based on the deliberation and new information (Chambers, 2003).

In Deliberative Democracy, it is not the number of speakers, their status, or economic resources, which add legitimacy to the democracy, but the unconstrained exchange of arguments, and thus the quality of the deliberation (Hansen & Rostbøll, 2015).

Deliberation in public processes is usually experienced when different stakeholders reason and defend their opinion. This process can often result in bargaining. The bargaining process is aimed at furthering one's own interest, in which the results of bargaining are determined by power. The notion of Deliberative Democracy is that the results of political decisions should be based upon good arguments. Besides, it is important that you, through deliberation, justify the effects of policymaking on everyone affected by the policies. Thus, it is the premise that deliberative democracy will lead to good, wiser, rational, and morally better outcomes (Hansen & Rostbøll, 2015).

Furthermore, the participation and discussion are argued to have an educational effect on the participants:

"The practical part of the political education of free people, taking them out of the narrow circle [...] and accustoming them to the comprehension of joint interest, the management of joint concerning - habituating them to act from public or semi-public motives and guide their conduct by aims which unite instead of isolating them from one another" (Hansen & Rostbøll, 2015 p. 505).

Thus, the deliberative process can be seen as a learning process for the involved and help strengthen the broader interest in public affairs (Hansen & Rostbøll, 2015).

Because that argumentation requires a special type of communication skills, Hansen & Rostbøll (2015) argue that this gives priority to the most educated, who they argue, will more often than not possess the better argumentation skills (Hansen & Rostbøll, 2015). Because communication can be a tool for manipulation, communication can thus also become a medium of power. And because a central tenet in the theory of deliberative democracy is that communication can revise and transform preferences amongst the participants, Chambers (2003) points out that there must be attention to in which direction the minds are changed (Chambers, 2003). Thus, as a planner, you must be aware that communication takes place through free and equal exchange of opinions.

4.3 Marine Citizenship

Marine Citizenship derives from the assertion of citizenship in which all members of society must contribute to the achievement of common social, political, and environmental goals. To cope with the changing world, it was argued that a new description of citizenship was needed, i.e., environmental citizenship. Environmental citizenship is based on the personal commitment to learning more about the environment and, in light of that, acting more responsible, thus increasing the focus on the responsibilities we all have as residents of our shared Earth (Fletcher & Potts, 2007).

Fletcher & Potts (2007) argue that specific environmental issues require more targeted behavior and, therefore more specific citizenship e.g., carbon emission citizenship, rural citizen, urban citizenship, and argue that because the ocean requires targeted behavior, ocean (or marine) citizenship is important. Fletcher & Potts (2007) demonstrate the need for Marine Citizenship based on three arguments:

"(1) that the health of the ocean is a common good that should be a shared aspiration of society; (2) that individual behavior has an impact on the health of the ocean and that through modified lifestyle choice and behavioral changes, individuals can collectively improve ocean health; and (3) that individuals can associate in personal geographic term to the ocean" (Fletcher & Potts, 2007 p. 513). Thus, McKinley & Fletcher (2012) describe Marine Citizenship:

"as the right and responsibilities of an individual towards the marine environment, with individual marine citizens exhibiting an awareness of, and concern for, the marine environment, an understanding of the impacts of personal and collective behavior on the marine environment, and is motivated to change personal behavior to lessen impact on the marine environment" (McKinley & Fletcher, 2012 p. 840).

McKinley & Fletcher (2012) argue that as citizens are taking greater personal responsibility for the environment and the ocean, Marine Citizenship is recognized by governments and other policymakers as a policy channel where environmental problems can be addressed to enhance the support of marine governing, and promote values and alter everyday behavioral choices to support and benefit a healthy marine environment, e.g., lifestyle preferences, travel patterns, food choices, and consumer behavior (McKinley & Fletcher, 2012).

The development of environmental citizenship and marine citizenship is not understood exclusively from each other but more as an extension. The contribution of citizenship and environmental citizenship is as much applicable to marine citizenship as the definition given by McKinley & Fletcher (2012).

The model of environmental citizenship by Hawthorn and Alabaster (1999) illustrates the diverse and intertwined factors of social, cultural, and economic character with the ability to influence and motivate the sense of environmental citizenship in an individual (McKinley & Fletcher, 2012; Hawthorne & Alabaster, 1999).



Figure 4, Model of environmental citizenship (Hawthorne & Alabaster, 1999 p. 30)

McKinley & Fletcher (2012) identify awareness and knowledge as critical factors to achieve marine citizenship, as these factors are essential to making informed choices concerning personal behavior. To overcome this lack of public awareness, it is necessary to improve public marine education (McKinley & Fletcher, 2012).

As the world becomes more and more complex, different types of citizenship are being developed to cope with various environmental issues. For example, Hawthorn and Alabaster's (1999) model over environmental citizenship illustrates the diverse and intertwined factors of social, cultural, and economic character with the ability to influence and motivate the sense of environmental citizenship in an individual, and where McKinley & Fletcher (2012) identify awareness and knowledge as critical factors to achieve marine citizenship. However, there is some uncertainty concerning how and where this increased awareness and knowledge should come. Thus, the theory is missing to address whether the responsibility of improving one's own knowledge is placed with the individual citizen or

whether the system has a broader obligation to increase knowledge among the population if they want to use it as a policy channel.

5. Methodology

First, the research strategy is presented. Followed by a presentation of the primary empirical data and how it is treated. Finally, the secondary empirical data are briefly introduced.

5.1 Research Design

Because of the increasing complexity and wickedness of the problems we are facing, it becomes important to understand how we solve these problems. Therefore, we need to understand how we ensure a world and a society we want to live in now and in the future, and how we get there. The problems we face have potentially such serious consequences that it is crucial to agree on what the problems are, but because of scientific uncertainty, conflicting social, cultural, and political interest, incompatible values, increasing levels of conflict between the involved stakeholders, and different views on the preferable outcome (Balint et al., 2011) it is difficult to find a solution to these Wicked Environmental Problems. Thus, with the thesis, I examine: How can democratic participation in governing the ocean increase sustainability?

To understand how democratic participation in governing the ocean can increase sustainability, Critical Theory is used as a lens to understand the structures of society.

The thesis is based on how we manage our common ocean. The starting point is the European Union's Directive on Maritime Spatial Planning and Denmark's first Maritime Spatial Plan. In order to understand the democratic participation in this plan, is based on the empirical data. In addition, the Maritime Authority has arranged seven regional meetings in June 2021. Because these meetings are held after this research is completed, any changes must be taken into account in the analysis and conclusion. The examples of the process of citizens participation in the Danish Maritime Spatial Planning is therefore only based on the interviewees' thoughts prior to the meeting and information obtained about how these meetings will be conducted

Furthermore, the theories of; Governing the Commons, Deliberative Democracy are used to support the understanding of Critical Theory, and to explain why it is difficult to ensure democratic participation in ocean management. In addition, the theory of Marine Citizenship is applied to explain how citizens can act as a governing tool in order to reach our goal. Critical theory, Governing the Commons, Deliberative Democracy and Marine Citizenship collaborate to explain different parts of the problem, and achieve a greater degree of

explanatory power in relation to the problem. Critical Theory, Governing the Commons, provides an opportunity to explain why it is so difficult to solve complex problems and why it is difficult to ensure a collaboration that solves the problems we face. Especially Deliberative Democracy and Marine citizenship but also Critical Theory, Governing the Commons, provide an opportunity to explain how we can overcome the lack of cooperation and the lack of communication that is necessary for us to solve the complex problems

In this connection, some key concepts are used to identify what qualities are needed to ensure democratic participation in ocean management.

The most widespread organization of democracy in western societies, including Denmark, is a representative democracy, which is characterized by regular elections, where representatives are elected to make the political decisions on behalf of the majority, and where the will of the majority defines the common will (Hansen & Qvist, 2009). Because the power of the parliament has been redacted due to the decentralization, the role of the parliament in societal decision-making has weakened, which is viewed as a crisis of representative democracy (Jæger & Andersen, 1999). Thus, Participatory democracy is seen as a solution because the ideals are based on integrative political processes where the people's will is discovered through deliberation, which includes the citizens. Participatory democratic processes in Denmark are identified to be primarily linked to a local perspective (Jæger & Andersen, 1999).

The two traditions of representative and deliberative democracy are not understood as contradictory; rather, deliberative democracy is understood as a needed improvement and expansion of representative democracy (Hansen & Rostbøll, 2015).

Based on Critical Theory, Deliberative Democracy cannot occur in the system because communication and actions in the system is driven by the medium's money and power. Because the mediums power and money operate independently of any rational, well-founded consensus on intentions, goals, and norms they have a communication-saving effect. In contrast, the communication and action in civil society is driven by interaction and the desire to understand each other. In addition, the desire for self-optimization and the desire to fulfill one's own goals are also limited by the willingness to cooperate in connection with governing the commons. On the basis of this and in continuation of the understanding of deliberative democracy, democratic participation must thus take place in civil society. Thus, the understanding of democratic participation is that it must take place through increased participation of citizens in governing our commons.

Because democratic participation in governing the ocean is a relatively new topic, at least in a Danish context, the purpose of this thesis has been to contribute to new understandings in the field. To examine how democratic participation in governing the ocean can increase sustainability, it has been necessary to understand the field of research. Therefore, the first Research Question is asked:

How are the Danish marine waters managed today, and how is democratic participation ensured in the process of the Danish Maritime Spatial Plan?

Afterwards, the analysis is more exploratory in an attempt to explain how the theory understands the phenomenon of democratic participation, and how the different variables, based on the theories, affect each other.

Why is it important to increase democratic participation in governing the ocean?

What are the pitfalls for democratic participation in governing the ocean?

How can increased ocean literacy amongst citizens enhance sustainability in the ocean?

The thesis is conducted with a hypothetico-deductive research strategy, as the research attempts to test existing theories on how the structures of power and influence apply to society. This is done through observations of the real world (Pedersen, 2015). With this thesis, I therefore seek to explain the structures that exist within the planning of natural resources, in order to then be able to explain how we can overcome the democratic deficit that exists within Wicked Environmental Problems. Figure 5 provides an overview of theories and the primary and secondary data that is applied in order to examine the Research Questions.

Research Question	Theories applied	Primary and secondary data applied	
How are the Danish marine waters managed today, and how is democratic participation ensured in the process of	Governing the Commons	Interview with the Maritime Authority	
the Danish Maritime Spatial Plan?		Interview with WWF	
		Video material from the briefing meeting on Denmark's Marine Spatial plan	
Why is it important to increase democratic participation in governing the ocean?	Critical Theory	Interview with UNESCO	
	Deliberative Democracy	Interview with the Maritime Authority	
	Deliberative Democracy	Video material from The Consensus Conference process	
What are the pitfalls for democratic participation in governing the ocean?	Critical Theory	Interview with UNESCO	
	Governing the Commons	Interview with WWF	
		Video material from The Consensus Conference process	
How can increased ocean literacy amongst citizens enhance sustainability	Critical Theory	Interview with UNESCO	
in the ocean?	Governing the Commons	Interview with WWF	
	Deliberative Democracy	Video material from	
	Marine Citizenship	The Consensus Conference process	
		Podcast on the Consensus Conference	

Figure 5, Overview of theories and the primary and secondary data applied to examine the Research Questions.

In order to contribute to new understandings in the field, the method of semi-structured interviews has been used. This has allowed the interviewees to come up with their attitudes and views in relation to the chosen research field.

To increase the understanding of the problem, an interpretive hermeneutic approach is used to interpret the interviews. By changing between a holistic understanding and understanding part of the problem, the attempt with this thesis is to understand what the cause of actions is and to explain what motivates behavior in humans. By conducting semi-structured interviews, an insight is gained into the actors' experiences and understanding of the world they are dealing with (Juul, 2012b).

Based on the chosen research design, conclusions from the analysis cannot be generalized but help to substantiate the circumstances concerning the problem. As the analysis is primarily based upon the knowledge obtained through semi-structured interviews, it has provided an opportunity to examine the chosen issue, and at the same time, making it possible for the interviewees to express from their understanding relevant angles to the problem. Additional interviews could have strengthened the conclusions or have elicited more perspective. However, the people who were interviewed are incredibly central to the planning of the marine environment in Denmark and central to the topic of democratic participation in governing the marine environment. The secondary empirical data is used to support the findings from the primary empirical and the theoretical framework. As the Consensus Conference was very well documented, through video material from the conference itself, podcast and mini documentary it has given the opportunity to incorporate knowledge and results from a citizen participation process which dealt with how to govern the commons - namely our ocean and how to ensure a balance between the use and protection of the sea and its resources. The reliability of the thesis is accepted because the results are consistent with the theoretical framework and related secondary data.

5.2 Primary Data

5.2.1 Explorative Semi-structured Interview

Because of the fairly uncovered concept of citizens involvement in ocean management, at least in a Danish context, explorative semi-structured interviews are used to uncover factual knowledge through specific situations and actions and the professional assessments of the people inquired. The interviews are conducted in Danish. The interviews are structured, so the focus is on the research topic by asking open-ended questions. Then it is up to the interviewee to bring out the dimensions that he or she believes are important within the research topic (Kvale & Brinkmann, 2015). The interviews focus on aspects of democratic participation in marine management, including how planning can foster change, and if so, what effects will come of this change. In addition, the focus has been placed on what marine education and increased ocean literacy can do to raise awareness of the state of the ocean. In the following, the interviewees are presented.

UNESCO's Intergovernmental Oceanographic Commission (IOC) has since 1960 been the responsible body of UNESCO specialized in ocean science and services. They work towards empowering the 150 member states to cooperate to protect the health of our shared ocean and to increase the understanding of the management of our oceans, coasts, and marine ecosystem (Hegland et al., 2020; United Nations, 2020a). Thus, the IOC has profound knowledge of ocean science and, with the initiated ocean decade, has increased focus on the citizen's role in governing the ocean and how to increase ocean literacy. Henrik Enevoldsen is Head of IOC Science and Communication Centre on Harmful Algae at the University of Copenhagen, Denmark, IOC UNESCO Programme Coordinator, and a member of the secretariat working on the UN Ocean Decade.

WWF is the world's largest nature conservation organization and works to create more space for nature and preserve wildlife habitats. They work, among other things, by focusing on sustainable management of natural resources, protection of natural areas by inspiring the world to get involved in nature (WWF, n.d.). Thomas Sørensen is Head of Section, Ocean & Wildlife in WWF Denmark.

The Maritime Authority is the responsible body to prepare Denmark's first Marine Spatial plan. The work began in 2017, and they have since then coordinated the work. The plan is currently (Spring 2021) in public consultation. Trine Kirkfeldt is employed in the Marine Spatial plan team in the Maritime Authority. Her work with the Danish Maritime Spatial Plan is related to geospatial information and the visualization of the Maritime Spatial plan on havplan.dk

Both Henrik Enevoldsen from UNESCO and Thomas Sørensen from WWF, participated as experts at the Consensus Conference *Our Ocean*. In addition to the issue of democratic participation in maritime governance, the interviews reflect on the Consensus Conference process and refer to it as a positive example of democratic participation of citizens.
5.2.2 Processing of Data

All interviews are transcribed and enclosed as appendices. The translation of used quotes, from Danish to English, has been approved by the interviewee, and is also enclosed in the appendices. For the sake of comprehensibility, used quotations are edited from spoken language to written language (Kvale & Brinkmann, 2015). The interviews are processed through the method of cataloging. This cataloging is based on the theories and opinions and experiences from the interviewees which explain the theories (Poulsen, 2016). In figure 6, key concepts are presented which have been the basis for the coding.

Theories	Concepts and notions for cataloging
Critical Theory	 The 'system' (i.e., money, power, hierarchy) Civil society/the (general) population (i.e., Communication, interaction, mutual understanding)
Governing the Commons	 Multiple actors/stakeholders Lack and difficulty in cooperation Understand behavior of the multiple actors
Deliberative Democracy	 Deliberation/communication Democracy Legitimacy
Marine Citizenship	 Ocean Literacy Knowledge Behaviour and values

Figure 6, Concepts and notions from the applied theories which have been used for cataloging the primary empirical data.

In addition, other relevant examples from the interviews are included to understand the complexity of the topic. Through coding and systematization of the empirical material, it has been possible to reduce the complexity to enable an analysis.

Using primary empirical data, it has been taken into account that the interviewees, as a result of their work and position, can have an agenda in relation to their understandings and statements, of which they can use the interview situation to bring forth.

5.3 Secondary Data

The Consensus Conference video material

The Consensus Conference was live streamed and subsequently uploaded to YouTube. Relevant video material have been used to understand the consequences of the current management of the ocean in Denmark, and to shed light on why it is relevant to get the citizens' opinions in governing the ocean and marine environment.

In addition, a short film was subsequently made about the process, where director of the DBT Lars Klüver and (former) senior project manager Ditte Degnbol talk about the process behind and the Consensus Conference *Our Ocean*. In addition, several of the citizens from the citizens' panel talk about their experiences of participating in the process.

Podcast on the Consensus Conference

In addition, DBT made a podcast on the method behind the Consensus Conference. In the podcast senior project manager Ditte Degnbol elaborate on the Consensus Conference *Our Ocean*, and why the method is relevant in complex issues.

Briefing meeting on Denmark's Marine Spatial plan

The 29th of April 2021 the Maritime Authority organized an online briefing/meeting on the Danish Marine Spatial Plan. The meeting was recorded and posted on their website.

Virtual arrangement on the first Danish Maritime Spatial Plan

On the 19th of May 2021 the Trade Union IDA, a Danish Society of Engineers, held a virtual arrangement concerning the first Danish Maritime Spatial Plan. During the arrangement the following actors, amongst others, gave a presentation, Office manager at the Maritime Authority Sine O. Heltberg, Danish Outdoor Council Deputy Director Torbjørn Eriksen, and Danish Fishermen PO Deputy Director of Fisheries and Sustainability Ole L. Larsen.

6. Analysis

The analysis is initiated with a review of the European and Danish legislation in relation to Maritime Spatial planning, including the participation of citizens and stakeholders in Maritime Spatial planning in Denmark to be able to answer the first research question: How are the Danish marine waters managed today, and how is democratic participation ensured in the process of the Danish Maritime Spatial Plan? Then, on the basis of the theory, supported by the empirical data analyzed: Why is it important to increase democratic participation in governing the ocean? Afterwards it is analyzed: What are the pitfalls for democratic participation in governing the ocean? And lastly it is analyzed: How can increased ocean literacy amongst citizens enhance sustainability in the ocean?

Date	Event
23rd of July 2014	The European Parliament es the Framework for Maritime Spatial Planning
24th of February 2016	The Maritime Spatial Planning act is implemented in Danish legislation
January 2017	Preparation of The Danish Maritime Spatial Plan is initiated
23-26 of October 2020	Consensus Conference
1st of February 2021	Thesis start-up
31st of March 2021	Publication of the Danish Maritime Spatial Plan
29th of April 2021	Briefing meeting on the Danish Maritime Spatial Plan
19th of May 2021	Virtual arrangement concerning the first Danish Maritime Spatial Plan.
4th of June 2021	Thesis deadline
8-24th of June 2021	Regional meetings on the Danish Maritime Spatial Plan
30th of September 2021	The public consultation period ends

To make the time perspective more understandable for the reader a time frame of important and relevant events is included. The time frame is presented in the following figure 7.

Figure 7, The time frame includes all relevant dates in relation to the research

6.1 How is the Danish Marine Waters Governed?

6.1.1 EU Legislation

As a member of the European Union (EU), Denmark is subject to an additional layer of legislation concerning marine management. Because of increasing activity in the European maritime areas, the EU enlarged the Integrated Maritime Policy (IMP) in 2007 to ensure a more coherent and holistic management, a more sustainable development for the maritime sector, and increased protection of the marine ecosystems in the EU. The IMP is established as two pillars. The first pillar was adopted in 2008 in the Marine Strategy Framework Directive and is focused on creating good environmental status in the EU's maritime area through national maritime strategies. The second pillar was adopted in 2014 in the Maritime Spatial Planning Directive to strengthen the integrated planning of activities at ocean (Hegland et al., 2020).

The MSP Directive recognizes that human activity causes significant pressure on the ocean and marine ecosystems, causing loss of biodiversity and degradation of ecosystem services. And that with the increasing demand for maritime space and resources, an integrated planning and management approach is needed (Marine Spatial Planning Directive 2014/89/EU (2014)). Therefore, the Directive identifies that MSP: "should cover the full cycle of the problem and opportunity identification, information collection, planning, decisionmaking, implementation, revision or updating, and the monitoring of implementation" (Marine Spatial Planning Directive 2014/89/EU (2014) p. 138). Thus, the MSP Directive recognizes that uncoordinated actions cause depletion or possibly the collapse of the ocean. The MSP Directive can, therefore, be understood as an extensive effort to establish a European framework for governing one of our biggest commons - the ocean. As uncontrolled natural resources will be overexploited because everybody is motivated to take as much for themselves as possible because they are anxious to avoid losing their share of the resource to others. Therefore, short-term self-interest is more dominant than the common good (Ostrom, 1990). The holistic thinking and integrated management behind Ecosystem-Based Management and MPS aim at creating a clear and overall structured governing of our common ocean. Therefore, in the following analysis focus is placed on the MSP process in Denmark¹.

¹ For a thorough review of the international framework to which the Danish ocean governance is subject, as well as a review of the Danish authorities involved and the regulations they administer in relation to, I refer to Hegland et al. (2020) report *Havforvaltningen i Danmark* (only in Danish)

According to the MSP Directive, national marine spatial plans must include the four objectives: environment, fisheries, maritime transport, and energy. On top of that, the member states can choose to include additional sectors (European Commission, n.d.). In addition, the member states must consider economic, social, and environmental aspects, and are required to use Ecosystem-Based Management to ensure that the collective pressure of marine activities is compatible with the achievement of good environmental status (Marine Spatial Planning Directive 2014/89/EU (2014)). The concept of Ecosystem-Based Management has its origins in the UN Convention on Biological Diversity, where The European Environment Agency defines Ecosystem-Based Management as follows:

"Ecosystem-based management is an integrated approach to management that considers the entire ecosystem, including humans. The goal is to maintain ecosystems in a healthy, clean, productive, and resilient condition so that they can continue to provide humans with the services and benefits upon which we depend (EEA, 2015 p. 20).

Ecosystem-Based Management recognizes that human well-being depends on a healthy marine ecosystem and its resources, and that human activity affects the marine environment in complex ways. Thus, acknowledging that humans are an integrated part of the marine environment - both its challenges and solutions (EEA, 2015). The MSP directive is based on integrated management of human activities and impact on the ocean to ensure sustainable use of marine space. Furthermore, as marine and coastal activities often are closely related, MSP must include land-sea interaction (Marine Spatial Planning Directive 2014/89/EU (2014)). Maritime Spatial Planning is said to reduce conflicts between sectors, create synergies and coexistence between different activities, increase multiple uses of space, increase cross border cooperation, increase investments (as marine spatial planning ensures transparency and clearer rules), and improve environmental protection (European Commission, n.d.).

Even though Maritime Spatial Planning is viewed as a process on how to address fragmented governance, and as a democratic mechanism to incorporate all the values from marine stakeholders in the decision-making process, MSP are also criticized for overlooking the power relations that exist within the political system and the fact that rationality is context dependent (Flannery et al., 2018). Flannery et al. (2018) argue that if MSP planning is to gain its full potential must recognize the socio-political complexities which are present in spatial governance issues, address the insufficient management of power and issues related to exclusion, and enable meaningful participation, thus levelling the playing field for all

stakeholders. Thus, emphasizing the need to evaluate the democratic legitimacy of MSP in practice (Flannery et al., 2018).

6.1.2 The Danish Maritime Spatial Plan

The MSP Directive requires all member states to have prepared and implemented a Maritime Spatial Plan by 31st of March 2021, and the plans shall be reviewed by the member states at least every ten years (Marine Spatial Planning Directive 2014/89/EU (2014)). In Denmark, the MSP Directive was implemented in Danish law under the Maritime Spatial Planning Act in June 2016 (Retsinformation, 2020). In Denmark, it is the Maritime Authority, under The Ministry of Industry, Business and Financial Affairs, who is in charge of preparing and implementing the Maritime Spatial Plan. Preparation of the plan was initiated in January 2017, and the plan came into public consultation on the 31st of March 2021, and will last six months (until 30th Sept. 2021). During the briefing meeting it was presented that the Danish Maritime Spatial Plan would have legal effect from the day it was published for public consultation (Søfartsstyrelsen, 2021b). This is in contrast to, as presented in an article published in the newspaper Politiken, that the deadline of 31 March 2021 cannot be met. Even though the Danish Maritime Authority states that the temporary legal effect is completely normal according to the Planning Act (Andersen, 2020), it appears contradictory from a democratic, participatory point of view as the public consultation period is used to give the public insight into legislation and where it is possible to submit contributions, to ensure a more open the legislative process.

In the *Explanatory Notes* it is presented that the preparation of the plan was a cooperation between the Ministry of Finance, the Ministry of Defense, the Ministry of the Interior and Housing, the Ministry of Climate, the Energy and Utilities, the Ministry of Environment, the Ministry of Food, the Agriculture and Fisheries, the Ministry of Transport, the National Board of Housing and Planning, the Energy Agency, the Business Authority, the Fisheries Agency, the Geodata Agency, the Coastal Authority, the Environmental Protection Agency, the Palaces and Culture Agency, the Transport Agency, and the Building and Housing Authority. In addition, it is presented that KL - Local Government Denmark, and the coastal municipalities have been involved, along with the involvement of the universities and relevant business and interest organizations (Søfartsstyrelsen, 2021a).

The Maritime Spatial Plan determines the overall planning framework of the Danish marine waters, and aims to promote economic growth, and cross-sector development of marine activities to ensure sustainable utilization of marine resources. Today there is a growing

desire to utilize the ocean's resources, and therefore, more and more activities are moving from land to the ocean. The Maritime Spatial Plan must form the basis for the coordination of the many uses of Denmark's marine waters in a way that can support the conditions for sustainable protection and utilization of the ocean. The aim of allocating the Danish marine water to specific activities is that it will contribute to better framework conditions for the maritime industries towards 2030 (Søfartsstyrelsen, 2021a).

The Danish Maritime Spatial Plan allocates areas for renewable energy, nature conservation and environmental protection, oil and gas activities, CO2 storage, fisheries and aquaculture, extraction of mineral resources, transportation infrastructure, land reclamation project, maritime transport, and for tourism and leisure activities (Søfartsstyrelsen, 2021a). As the entire Danish marine waters are laid out for a number of different purposes and specific projects, the Danish Maritime Spatial Plan changes the administration of the ocean from a first-come-first-serve principle to overall spatial planning (COWI, 2020).

Trine Kirkfeldt addressed the notion of an EBM approach in the Danish Maritime Spatial Plan stating that:

"The practice of an ecosystem-based approach is there to ensure that an uncontrolled increase of marine activities is not possible and that the environment and nature are not forgotten. I think it has been challenging to make a plan for the entire Danish marine water, and especially to make this (strategic) Environmental Impact Assessment (EIA) of the Danish Maritime Spatial plan. How does one assess environmental impact on some potential future activities that we do not yet know will even take place, or how big they will be [...] It is a balance between fully utilizing all areas and that nothing is utilized" (App. 2).

But even though MSP and EBM are interesting attempts to set legally binding guidelines for the exploitation of the ocean, there are still many uncertainties associated with this process as described by Flannery et al. (2018). A few days after the Danish Maritime Spatial Plan was published, the Marine Stewardship Council expressed how, in their opinion, human activities are prioritized over the marine environment in the Danish Maritime Spatial Plan. They argue that the prioritization of human activity in the plan puts further pressure on the marine environment. If the goal is to ensure sustainable use of marine resources, they argue that this must be reflected in the priorities (Christensen & Engström, 2021).

6.2 How is Democratic Participation Ensured in the Process of the Danish Maritime Spatial plan?

6.2.1 Citizen Participation in the Danish Maritime Spatial Plan

To meet the requirements of the MSP and ecosystem-based management, the MSP Directive states that:

"Member States shall establish means of public participation by informing all interested parties and by consulting the relevant stakeholders and authorities, and the public concerned, at an early stage in the development of maritime spatial plans, in accordance with relevant provisions established in Union legislation" (Marine Spatial Planning Directive 2014/89/EU (2014) p. 142).

Elsewhere in the MSP Directive, it is stated that stakeholders and the public must be consulted at an appropriate stage (p. 138). Throughout June 2021 the Maritime Authority has arranged seven regional meetings throughout Denmark. Everybody is invited to these meetings where it is possible to hear about and ask questions concerning the Danish Maritime Spatial Plan (Søfartsstyrelsen, 2021d). During the interview with Trine Kirkfeldt, she elaborated on the Maritime Authority's plans for the meetings:

"It is probably primarily aimed at the municipalities. They also have many interests in the management of the sea, so it is an opportunity for us (the Danish Maritime Authority) to get the municipalities involved and give them an opportunity, in a smaller setting, to ask some questions about the allocated areas that are near them. [...] The meeting is open to anyone who may be interested in it, so of course, we also hope that there are some citizens who show up. We are also looking at whether we should place the meetings close to some summerhouse areas because there may be someone who has interests who have holiday homes in coastal areas" (App. 2).

Although consultation at an early stage does not leave much room for interpretation, the wording of the appropriate stage remains open to interpretation, leaving the question of what the appropriate time is? But based on the set timeframe for the regional meetings it indicates that the Maritime Authority has not been successful in establishing early public participation. Furthermore, Trine Kirkfeldt expresses the expectations as to what types of inquiries would come from the citizens, if any are to participate:

"We have some expectations, based on experiences from our neighbouring countries, that it will primarily be about coastal offshore wind if there are any inquiries (from the citizens), but it can be about anything that they could be interested in as a citizen, but the expectation is that it's going to be mostly coastal related" (App. 2).

Based on what Trine Kirkfeldt expresses, the seven meetings are not organized with the primary aim of engaging the citizens. In addition, the expectations of what inquiries will come from the citizens may be influenced by the fact that the primary aim of the meeting is not to engage the citizens. I shall elaborate more on this in *cf. 6.3.1.* It can therefore be questioned whether enough has been done earlier in the MSP process or whether enough is being done during this final phase of the MSP process to ensure that the general public understands what the meaning of a plan for the entire Danish marine waters is. Furthermore, during the interview Trine Kirkfeldt expresses that she considers the interest organizations to represent the citizens:

"The interest organizations, for example, take up the larger themes. Which I also think represents the citizens. At least that is what they are meant to do - represent the citizens [...]. So, I also think that the citizens are in a way represented by that because I expect the interest organizations to get involved now and give some detailed answers during the period of public consultation. At least that is what we expect" (App. 2).

This can be seen in different perspectives. The purpose of interest organizations is to take care of their members' common interests to policy-makers. Still, there is a big difference in the many interest organizations ability to influence decision-making. This depends on the power resources, i.e., the economic power, the qualifications of the staff, the formal and informal relations with politicians and officials, as well as the representation of the organization in public committees. Interest organizations with many resources have many members, a large and well-functioning secretariat, good political relations, lobbyists, and great expertise in their field. These organizations are often ensured participation in politics. While the interest organizations that have scarce resources, most often take care of the non-profit and public interests, are primarily based on the members' commitment and alternative channels for creating political action and are therefore denoted as ideological (Hansen & Qvist, 2009). Illustrating that power and hierarchy also applies in this part of the system. Thus, a disparity arises if the interest organizations become the single view of what the general population think about the maritime administration.

6.2.2 Stakeholder Participation

The *Maritime Spatial Plan - Explanatory Notes* presents how a number of different stakeholders have been involved in the planning process (Søfartsstyrelsen, 2021a). In addition, it was presented at the briefing meeting how:

"All Ministries and Agencies who have an interest in the ocean have contributed to the work. Just as we have received many useful inputs and good advice from interest organizations, business organizations, and scientists, who have contributed to delivering the Maritime Spatial plan that we see today" [Own translation] (Søfartsstyrelsen, 2021c).

However, Thomas Sørensen, describes a slightly different experience of the situation:

"From my experience, it is not only citizens and environmental organizations who have been kept out of the process. I think the Maritime Authority has held lots of meetings with the trade association for fisheries, raw materials, energy, etc., but they have done it entirely out of the radar and not made it possible for people to know what was going on" (App. 3).

In addition, four researchers from the Center for Blue Governance at Aalborg University describe how the authorities have coordinated the plan between relevant policies, but only to a limited extent have they involved stakeholders (i.e., sectoral organizations and environmental organizations), which are not part of the government or the administrations. Eliasen et al. (2021) point out how technocratic processes often tend to become closed and not live up to openness criteria, and how the closed process has limited the stakeholders' ability to understand and learn from each other's challenges and experiences, which could have contributed to the development of more innovative solutions for governing our common ocean (Eliasen et al., 2021). Because the mediums of money and power undermine the communication, the system thus has a communication-saving effect. Thus, the consequences of the growing complexity of the system are a democratic deficit. Strategic rational actors of the system will always try to maximize their own goals, and as the PD Game suggests stakeholders, are reluctant to cooperate. However, findings indicate that face-to-face communication substantially increases the willingness to cooperate amongst the stakeholders and by repetitively engaging in PD game scenarios, the stakeholders learn to cooperate, and the cooperation lasts for longer periods. This indicates that increasing faceto-face communication are likely to dominate the mediums of the system (Juul, 2012a;

Andersen, 2013; Ostrom, 2000). Furthermore, Eliasen et al. (2021) also address how, based on experiences, a lack of stakeholder involvement undermines both the legitimacy and the support for the plans and how it creates skepticism amongst the affected, emphasizing how it is easier to implement a plan that has support among stakeholders and in the civil society (Eliasen et al., 2021). In Deliberative Democracy, it is not the number or the status of the speakers but the exchange of arguments that adds legitimacy to the democracy (Hansen & Rostbøll, 2015), but if the discussions are only limited to specific stakeholders, there can occur a disparity in the legitimacy of the plan. Thus, Eliasen et al. (2021) point out that it is crucial that: *"The consultation period is used to initiate a number of processes which democratically involve all relevant stakeholders, and that this is a prerequisite for the adoption of a sea plan that enjoys high legitimacy in the Danish population" [Own translation]* (Eliasen et al. 2021).

In March 2021, The Danish Society for Nature Conservation (DN) & The Danish Fishermen PO agreed on a proposal to ensure 10% of strictly protected ocean in the North Sea, Skagerrak, and Baltic Sea. With this proposal, Denmark will be the first country in the EU to live up to the objective in the EU's biodiversity directive to ensure 10% strictly protected ocean (DN & Danmarks Fiskeriforening, 2021). This collaboration is a good example of how it is possible to reach an agreement even between two organizations that have different interests. Trine Kirkfeldt elaborates on how the Maritime Authority participated in coordinating this proposal from DN and the Danish Fishermen PO across the ministries.

"This was part of the reason for the delay in the process, causing time pressure in the end with the Danish Maritime Spatial Plan. We were back and forth between the various ministries that were to oversee this debate as to how much the various ministries can agree to be allocated to (strictly) protected areas. It was a slightly difficult negotiation back and forth. Especially with the Ministry of Finance, who thought it was a bit expensive to allocate some of the oil areas out in the North Sea to strictly protected areas. [...] then we simply landed on a compromise" (App. 2).

With the current Maritime Spatial Plan, 4,1% is allocated to strictly protected areas. Thus, less than half, as was proposed from DN and the Danish Fishermen PO. This situation illustrates how the cooperation between the two actors outside the official MSP process would have led to a higher percentage of strictly protected marine areas and thereby most likely increase the sustainability in the ocean. But after the negotiation with the Ministry of Finance, as mentioned by Trine Kirkfeldt above, the negotiation ended in a less sustainable

compromise. These circumstances make it possible to argue that governance in modern society is driven by power, money, and hierarchy (Juul, 2012a; Andersen, 2013).

In addition, Martin Lidegaard from the Danish Social Liberal Party and Morten Messerschmidt from the Danish People's Party has expressed that the Danish Maritime Spatial plan is too unambitious about the protection of the marine environment and urge the government to reject the current plan and start over (Lidegaard & Messerschmidt, 2021). Furthermore, during at a virtual event held by the trade union IDA, concerning the first Danish Maritime Spatial plan how The Danish Fishermen PO and Danish Outdoor Council, although they expressed joy that there is now a holistic planning at the ocean, they also express disappointed that their interests at the ocean are not integrated in the Maritime Planning and that is does not seem like their organizations interests have been leveled equally, as for example how offshore wind which have been given high priority (IDA Miljø, 2021).

There is thus an indication that there is not a unison experience on how the process of preparing the Maritime Spatial plan has proceeded. Which could indicate that the criticisms made by Flannery et al. (2018) concerning that MSP can be insufficient in addressing the power relations if the complexities are not recognized, thus not leveling the field of all stakeholders, in order to ensure that all stakeholders, also those who are not political, are represented in the Danish Maritime Spatial Planning process. Because the process is not more thoroughly described in the *Explanatory Notes* or on the website, it is difficult for outsiders to know how the process has proceeded and to what extent the various stakeholders have been involved. All of which emphasizes the importance of a transparent planning process.

6.2.3 Partial Conclusion

Today there is an increasing demand and desire to utilize the ocean resource, which entails increasing activity on the ocean. Maritime Spatial Planning recognizes that uncoordinated actions cause depletion or possibly the collapse of the ocean and through and Ecosystem-Based Management aim to cover the entire cycle of the problem, and recognizes that human activity causes significant pressure on the ocean and marine ecosystem, the MSP has the potential to establish a European framework for governing the commons. But based on the empirical data, there is an indication that the MSP planning has not fully succeeded in establishing an early consultation of all interested and relevant stakeholders or succeeded in

establishing early public participation, as the directive prescribes, which has the potential to delegitimize the Danish Maritime Spatial Plan.

Because the seven regional meetings are not organized with the primary aim of engaging the citizens, it can therefore be questioned whether enough has been done earlier in the MSP process and whether enough is being done during this final phase to ensure an understanding in the general public concerning the meaning of this Maritime Spatial plan which changes the administration of the ocean from the first-come-first-serve principle to overall spatial planning of the entire Danish marine waters.

In addition to the indication of a lack of citizen participation in the MSP process, there is also an indication, based on statements from Thomas Sørensen, business organizations and interest organizations, and scientist, that there has been a lack of stakeholder involvement in the Maritime spatial planning process. Thus, the prospect of the system recognizing the potential of and ensuring democratic participation in complex planning processes remains questionable.

6.3 Why is Democratic Participation in Governing the Ocean Important?

Because the problems we are facing are enormous, it becomes imperative to understand how we can overcome these problems to ensure that the changes we create are successful. Henrik Enevoldsen elaborates on why he believes it is essential to ensure more democratic participation in governing of the ocean:

"The challenges we face to have a sustainable ocean in the future are enormous. So, if you do not have a population that is involved and that understands why it is important, then it will never succeed [...]. Even the most well-meaning politicians cannot get through with these changes if there is not a higher level of literacy in the population and a deep understanding that we need this. Then they can quarrel afterwards about how it should be done, whether they belong to one or the other wing in parliament. It's less important to me. What is important is that there is agreement on the agenda and the challenges. [...] Because citizen involvement is representative of all sorts of different political positions, it will help politicians make the right decisions, which of course will always be a balance between consensus and compromise" (App. 1). As stakeholders in the system are defined by Habermas as strategic rational actors who act to maximize their own goals and whose communication is driven by money, power, and hierarchy, it suppresses any rational, well-founded consensus on intentions, goals, and norms. Thus, any attempt to ensure reflection and critical dialogue must come through the involvement of civil society, which is driven by a desire to understand one another (Juul, 2012a; Andersen, 2013). Thus, emphasizing the importance of ensuring democratic legitimacy through the involvement of citizens to overcome the challenges we are facing successfully. Ensuring the participation of the civil society, free deliberation, and discussion will provide more reasonable and well-informed opinions, which will steer the development in a better, wiser, more rational direction, with morally better outcomes adding legitimacy to the democracy (Hansen & Rostbøll, 2015). Therefore, Henrik Enevoldsen emphasizes the impartiality of citizens and how they understand the challenges and what is valuable and important to us as a society (App. 1). Democratic participation needs to be ensured well beyond citizen involvement. As citizens have no financial interest in the ocean, it could be argued that it makes them more objective in the discussions on the governing of our common ocean. When Trine Kirkfeldt was asked why citizens should be involved in the process with the Marine Spatial Plan, she answered:

"Well, they have to because it's as much their ocean as it is our ocean. We are planning the Danish marine waters on their behalf, so they must have the opportunity to have an influence. If they have any interest at all in the ocean that surrounds our country, then they must have the opportunity to speak and have an influence on this plan, because it is their plan" (App. 2).

Last year (2020) the DBT was commissioned to arrange a Consensus Conference² with the headline *Our Ocean* to address the relationship between the utilization and protection of the Danish marine waters³. The Consensus Conference process allows a panel of 12-16 citizens to present their recommendations on managing technocratic and democratic controversial and complex issues. In addition, the process includes an expert panel to ensure that opposing views and professional conflicts can be discussed at the conference and an advisory planning committee whose task it is to ensure a democratic, fair and transparent process. The process takes place over three weekends. The first two preparation weekends allow citizens to familiarize themselves with and discuss the topic among themselves. On the

² Consensus Conferences is a method on public engagement in decision-making processes with the aim of furthering the public debate. The method was developed in the 1980s in Denmark by the DBT (Jæger & Andersen, 1999).

³ The Consensus Conference was funded by the Velux Foundation.

third weekend, during the conference itself, the citizens will have the opportunity to question the expert panel about their positions or clarify misunderstandings. The citizens then formulate their recommendations to the politicians, which will be presented on the last day of the conference (Jæger & Andersen, 1999). Thus: *"Citizens are not only looked on as receivers of information and expert knowledge, but are expected to make useful and necessary contributions to technology assessment"* (Jæger & Andersen, 1999 p. 332). The concept is that if a group of citizens with a broad demography can reach consensus on a set of political recommendations, the majority of the population will also be able to agree with them. Thus, the Consensus Conference provides an insight into the general public's opinions on complex issues (Langkjær, 2020; Langkjær & Enevoldsen, 2021). On the first day of the conference, Ditte Degnbol senior project manager at the DBT addressed why it is interesting what ordinary citizens think of the ocean management:

"Usually, in these types of problems, we ask the stakeholders and experts in the processes. And ordinary citizens do not necessarily know much about the ocean. It is very far from the experienced world of most people. Nor is it the case that the marine environment is on the agenda in election campaigns and fills in the public debate, so why ask citizens about the ocean? This is because the ocean is a common resource - it belongs to us all. [...] It is something that concerns us all, and this process has testified that it is a topic that concerns ordinary people" [Own translation] (Fonden Teknologirådet, 2020d).

The above statement from Ditte Degnbol indicates how knowledge in modern society exclusively is a matter of stakeholders and experts with no connection to the civil society and the general population, which contributes to the incapacitation of civil society (Elling, 2009). It thus indicates that the system weakens citizens' civil engagement and leads to passive civic roles, thus detaching civil society from the system (Juul, 2012a). In addition, the lack of focus on managing the ocean in political debates of election campaigns, despite how important it is for the globe and society, might explain why this issue lies far from the experienced world of most people. The consequence of this may be that due to the lack of public information and public debate, citizens do not increase their understanding of their own and others' political preferences (Hansen & Rostbøll, 2015). In addition, Ditte Degnbol points out how in connection with the Consensus Conference and the involvement of citizens, it has become clear to citizens how significant it is. This indicates that being involved in this participation process, meant that the citizens learned from each other, attained a more informed and reflective understanding of their own and others political

preferences, and thus because of increased discussion, were able to form their opinions resulting in a set of recommendations for how to manage our common ocean.

In addition, Jens Petersen, Professor at the Department of Aquatic Resources, DTU Aqua, presented how planning that deals with environmental problems often becomes incredibly complex. Because decisions will always have some consequences, either at the expense of the environment or at the expense of the industrial sector and the economic interests, it must be a democratic decision in which citizens must be involved in influencing the political decisions concerning what we want to achieve and on which terms we want to achieve it (Fonden Teknologirådet, 2020g).

6.3.1 A Need for Greater Understanding of the Participation Processes in Planning

Based on the primary empirical evidence, it has become clear that there might be an inadequate understanding of how the process and execution of citizen participation affects the result.

If the desire is to get a broad understanding of the general population's attitude and positions towards the management of the ocean and marine environment, the process needs to be more thoroughly planned. The Consensus Conference is an excellent example. The theory behind the Consensus Conference is that the citizen panel needs to be composed of a broad demographic with no prior in-depth knowledge on the topic. In addition, the planning and process of conferences itself should be executed as objectively as possible. Thus, the process only sets up a framework for the process, leaving the citizen panel to make all the decisions concerning direction. If the process is planned corresponding with the theory behind the outcome of the process (i.e., recommendation on managing the topic at hand). The results of a Consensus Conference can therefore provide an insight into the general population's attitudes on different complex and technocratic issues. Thus, the planning and execution of the process are crucial in relation to the outcome (Jæger & Andersen, 1999; Fonden Teknologirådet, 2021; Langkjær, 2020).

If the process behind the citizen participation is not well organized, then the citizens who show up to participate are likely to be the people who usually participate. These are generally people with some prior knowledge and interest in the topic, and therefore they might have an agenda with their participation. This is elaborated by Henrik Enevoldsen: "There are a lot of challenges in terms of what is the actual outcome. The more organized, the more it will affect what kind of feedback you get from a citizen panel or the process. But it is a strange expression (i.e., 'organized'). It requires resources, and it requires commitment [...] It is not self-organizing. Because then you get hold of the citizens who usually participate. That is what I think was so interesting about this (i.e., the Consensus Conference). It was that immediate amazement where many of the participants said, 'I never thought about it, and I never knew. Had I just known, then I would have thought differently about this and that. Or had I understood this earlier, then I might have looked at it differently '. So it was that aha experience and that first-time inquiry to the topic. I think that's where the great value lies. Because it shows whether it really matters to the general population" (App. 1).

When Enevoldsen refers to 'organized' as a strange expression, it is because it requires a neutral and objective planning process, in the sense, that the citizens are not forced in a specific direction. The Consensus Conference process enables the citizens, based on a comprehensive but objective and balanced background material, to choose what they find interesting, which topics they want to engage more in, what questions they want to ask, and which experts they wish to invite to the conference. Based on their opinions, the actual conference is then organized with experts, etc. In the end, it is entirely up to the citizens what they want to make recommendations about (Fonden Teknologirådet, 2020f). But this process requires an incredible amount of preparation so that everyone involved understands their role and the process succeeds. The premise of the process is that it is very planned and organized so that the citizens can be spontaneous and driven by desire and interest. If the process was not thoroughly planned, it would appear chaotic and thus be chaotic for the citizen to participate in.

As addressed earlier, Trine Kirkfeldt explained that they (i.e., the Maritime Authority) have some expectations about what types of inquiries will come from citizens during the regional meetings (App. 2). Based on what Henrik Enevoldsen expresses that citizen participation is not self-organizing because this will involve the citizens who usually participate, the expectations and experiences from neighbouring countries are likely a realistic image. But based on the experiences from the Consensus Conference, the citizen's recommendations spanned from inquiries on nutrients, including limiting environmentally hazardous materials, comprising plastic, including consequences of port operations and tank flushes, Climate, Fisheries, including quotient, Fishing technique, identification of fishing equipment, animal welfare, Ocean Management, and mindset and attention (Fonden Teknologirådet, 2020e). The expectations and experiences mentioned by Trine Kirkfeldt thus support a notion of a more general inadequate understanding of how citizen participation processes affect the result, possibly also from our neighbouring countries.

In addition, Henrik Enevoldsen elaborates on how increased literacy means that citizens can no longer function as neutral citizens because they have increased their knowledge by participating:

"The process wears itself. How many times can the same citizen stay engaged, and how long can you be engaged before you no longer represent the public or an average citizen but have become a kind of semi-educated person. Because they suddenly know the process, they have been to many events, they have read many documents and listened to different experts. [...] Then they are no longer completely impartial. They will start to take their standpoints in a completely different way"(App. 1).

Therefore, planners must be aware that the organization and execution of participation processes affect the outcome.

6.3.2 Partial Conclusion

Due to the seriousness of the challenges, we face with ensuring a sustainable ocean in the future, there is a need for a broad agreement on the problems, which requires increased cooperation, not only between the political stakeholders. Thus, it is necessary that the general population is involved and understands why it is important and why change is needed. However, the empirical data indicates that there is usually a lack of participation of citizens in governing of the ocean. In addition, the empirical data suggests that because there is a lack of focus on spatial governance in political debates and election campaigns, and therefore, the general population knows very little about governing our common ocean. The Consensus Conference process indicates that when citizens participate in political discussions and debates, they learn from each other, attaining a more informed and reflective understanding of their own and other's political preferences. Moreover, the empirical data indicates an inadequate understanding of how the organization and execution of the citizen participation process affect the result.

6.4 What are the Pitfalls for Democratic Participation Governing the Ocean?

As reviewed in the introduction, human life is enormously dependent on the ocean and marine resources. Hegland et al. describe it as: *"The ocean meets a patchwork of different and not infrequently conflicting societal and industrial interests which make use of the ocean as a resource in various ways"* [Own translation] (Hegland et al., 2020 p. 19). In the introduction, the high number of actors involved in managing the Danish marine waters are presented. Henrik Enevoldsen addresses the consequences of complex management structure:

"It is really difficult - especially in Denmark. The more complex the country is in the management structure, the more difficult it is to measure what the effect of citizen participation is" (App. 1).

In addition, the problems of having a large number of regulatory and governmental actors involved in management of the ocean in Denmark was elaborated by WWF Oceans & Wildlife, Head of section Thomas Sørensen during the Consensus Conference:

"The ocean and ocean management (in Denmark) are incredibly divided by sectors. [...] There are many different administrations who decide on fishing, extraction of raw material, e.g., sand, extraction of oil and gas, agriculture, the expansion of ports and bridges, offshore wind, and climate change, which all affect the ocean. And in each of these Agencies and sector Administrations, where there work some experts who know a great deal about one thing and a number of employees who only work to promote the sector for which they now work. We need to avoid this silo mentality we have in Denmark, i.e., where the climate only wants to build offshore wind turbines, aquaculture just wants to farm fish, and fishermen just want to catch fish, etc. There is a need for coordinating the general overview of everything that affects our ecosystems" [Own translation] (Fonden Teknologirådet, 2020c).

This silo mentality of the sectors indicates a tendency that the stakeholders in Denmark are what in Critical theory is referred to as strategic rational actors who only act to maximize their own goals (Andersen, 2013). In addition, the aim to optimize one's own goals are addressed in the theory of governing the commons, where self-optimization causes a lack of cooperation amongst the stakeholders. Because no one has the overall overview of

everything that affects our ecosystems, as Thomas Sørensen describes, this could indicate that current ocean governance will result in collectively irrational outcomes (Ostrom, 1990). Henrik Enevoldsen expresses a similar understanding:

"For the marine environment, as you have seen, there are an awful lot of agencies involved, and it is divided and ruled. None of them has the overall responsibility, so, therefore, it becomes essential to have a citizen involvement process that they agree on and that they agree to listen to, or at least agree to integrate into their way of working. It is an important element" (App. 1).

Furthermore, Henrik Enevoldsen points out that if citizens' participation is to gain a foothold in planning, it is essential to establish a political interest, that relevant political representatives embrace the process, and that they understand the benefits of citizens participation as it enhances justification and support for political issues among the general population (App. 1). Furthermore, he elaborates:

"It is, of course, a rather complicated process because it is another element in the planning process they are going to have to take into account, and I think that will only happen if the political system recognizes it as important. [...] I don't think that one should expect much willingness to change from the officials. Unfortunately, it can be perceived as if a culture has emerged in Denmark where politicians have become incredibly withholding" (App. 1).

This indicates that the medium of power is present in the political debate, which is a threat to the democratic discourse as it suppresses civil society (Juul, 2012a; Elling, 2009). In continuation, Henrik Enevoldsen elaborates on how avoidance is increasing amongst the regulatory stakeholders:

"It appears to me as if there has been a culture in Denmark where the agencies and the ministries are incredibly avoidant - one answers as little as possible, behaves passively, and the arm's length principle (ALP) is prevalent. They don't want too much trouble, but opening up debates concerning citizen involvement is like opening a platform for trouble. Because you might get some answers you do not like or some reactions that support something that goes against the political agenda set by the current government. Therefore, it requires some courage and that the political administration and agencies get involved" (App. 1). Besides the mediums of power controlling the political debate, as indicated in the previous guote, and the medium of money driving the political debate, as shown in the situation with the allocation of marine areas to strictly protected areas cf. 6.2.2, this could indicate that avoidance is an emerging medium in the system. Avoidance can also be seen as an extension of power, as it can be a factor in strengthening the medium of power. But if the use of avoidance as a medium is prevalent, it can potentially reduce the communication even further, and thus, it will be even harder to achieve collectively good outcomes (Juul, 2012a; Andersen, 2013; Ostrom, 1990). In addition, it emphasizes that until it is recognized that participation methods and the involvement of citizens in planning processes are an essential resource for ensuring interaction, communication, mutual understanding, and legitimacy in policy-making, then the lack of knowledge of the positive outcome from participation processes must be seen as a pitfall. Henrik Enevoldsen points out that when there is influence, power, and money at stake, involving citizens must be a transparent process. Otherwise, it may be possible to manipulate the results, which he points out, in the worst case, can contribute to undermining the credibility of processes involving citizens, thus, undermining democratic processes (App. 1).

In addition, there is a lack of commitment from the political side to include results and knowledge from various participation processes in governing. Thomas Sørensen addresses this. He appeals for commitment mechanisms so that politicians are compelled to include the participation processes actively in planning. His experience is that when time and money are spent on providing citizen input to the politicians, they are well received, but apart from that, nothing more is done about it (App. 3). Thus, emphasizing the need for increased and clear democratic structures in the current system. This can be seen in relation to what Henrik Enevoldsen says, that:

"Because the public system does not really take that kind of initiative, it is great that we have some funds (e.g., the Velux Foundation) who can see the need [...]. In the ideal world, it would have been amazing if such a task would have been requested on behalf of an agency or a ministry. [...] Especially because you really want the result to be that the recipient, who will always be the political system, will be more receptive if they requested such (citizen participation) themselves" (App. 1).

Even though it is addressed that it is great that the funds see a need to increase citizen participation, it constitutes an obstacle if the system does not understand or recognize the value of citizens participation because it is indicated that the political system will possibly be less receptive when they are not the commissioner of the citizen participation.

In addition to Flannery et al. (2018) criticizing MSP for not recognizing the socio-political complexities, addressing the insufficient management of power and issues related to exclusion, they argue that public participation has become a process of legitimization rather than an actual involvement in decision making. Therefore, they argue that if the MSP process manages to actively involve stakeholders in decision making it must develop beyond only using the participation process to legitimize the top-down planning process (Flannery et al., 2018). Thus, there is a contrasting understanding, because it is important that policy stakeholders understand the benefits of participation processes, namely that it can legitimize the process and the result. But it is important that the participation is not just held for the sake of legitimacy, but that inputs from participation processes indeed influence the final result.

6.4.1 Partial Conclusion

There are many possible pitfalls when dealing with democratic participation in governing the commons. Because of the many activities which affect the ocean, there are many conflicting societal and industrial interests, and it is difficult to ensure that the opinions of citizens are also included in the political processes.

Therefore, if citizen participation is to gain a foothold in planning, it is addressed in the empirical data that it is essential to establish a political interest, ensure that relevant political representatives embrace the process, and ensure that the stakeholders in the system understand and acknowledge the benefits of citizen participation.

However, the empirical data indicates that the mediums of money and power are dominant in the political debate, and as a consequence ensuring democratic participation constitutes a complicated process because the mediums do not inspire a willingness to change from the officials. Besides the mediums of power and money controlling the political debate, it is indicated that avoidance is an emerging medium in the system. Furthermore, it is addressed that there is a need to increase the understanding and recognition of the political system of the value of citizen participation and ensure a commitment mechanism so that politicians are compelled to include the participation processes actively in planning. In addition, the inadequate understanding that the organization and execution of the citizen participation process affect the result, as accounted for in *cf. 6.3.1*, can also be seen as a pitfall.

6.5 How can Increased Ocean Literacy Amongst Citizens Enhance Sustainability in the Ocean?

Neither the state nor the market (i.e., the system) has successfully ensured a long-term and sustainable utilization of natural resource systems, therefore Ostrom (1990) emphasizes that a gap in governing tools on how to solve the "common-pool resource problem" is missing (Ostrom, 1990). Because increasing knowledge and awareness of the effects and impacts of personal and collective behavior on the marine environment can motivate a change in personal values and behavior, McKinley & Fletcher (2012) identify citizens as an unexploited policy channel to support marine governance (McKinley & Fletcher, 2012). As cited earlier, Henrik Enevoldsen expresses how we will never succeed in creating a fundamental and necessary change in the governing of our ocean if the general population does not understand why it is important. Therefore, Henrik Enevoldsen emphasizes the importance of increasing ocean literacy in the general population: "In recognition that it is fundamental in creating change" (App. 1). Ocean Literacy is established as one of seven main objectives in the framework for the Ocean Decade (United Nations, 2020b). By establishing ocean literacy as an objective for the Ocean decade, the question also arises as to who is responsible for ensuring this objective or elements in extension of the purpose will be established in society. Thomas Sørensen expresses that he thinks that the task of increasing the population's Ocean Literacy falls on the authorities. "I think it's their task to ensure the basic level of knowledge in the population concerning nature in Denmark, and knowledge about the Danish marine environment should be communicated to a much greater extent" (App. 3).

The notion of Ocean Literacy is that by increasing people's awareness and knowledge of the ocean, people will be more likely to respect the marine ecosystem's limits and resources (UNESCO, 2017). Henrik Enevoldsen elaborates on the Ocean Decade view on Ocean Literacy:

"Ocean literacy is what we call it in our context, but it is the same as citizen involvement. That's what it's all about. We call it Ocean Literacy because, in order to involve citizens, you need to raise their level of knowledge. So, it's just a choice of words and the semantics. It's all about the same thing" (App. 1).

This supports the necessity and importance of raising the awareness and knowledge amongst the general population in order to involve them, as is identified as the most critical factors to achieve Marine Citizenship (McKinley & Fletcher, 2012). In addition, other factors have an impact on achieving Marine Citizenship including identity variables and personal variables (Hawthorne & Alabaster, 1999). By engaging the public in the debates, they will be able to learn from each other, attain a more informed and reflective understanding of their own and others' political preferences and thus, form their opinions more rationally and based on the deliberation and new information be able and willing to revise their preferences (Hansen & Rostbøll, 2015; Chambers, 2003). Therefore, to ensure the reproduction of civil society which affects identity variables and personal variables it is crucial to ensure meaningful cultural interpretation, social communities with a sense of solidarity, and identity (Juul, 2012a).

Because of the importance of the Danish Maritime Spatial Plan Thomas Sørensen addresses why it is important to ensure that the population understands what the plan is and what it will mean for the future:

"The citizens need help to understand what this Maritime Spatial plan is. It is based on some directives, some long words, and the Maritime Authority. Citizens need to understand what this plan really is, and they need to understand that this plan is the future of Danish marine waters" (App. 3).

If their literacy was increased, it could be argued that it would mean greater participation in the public consultation process and perhaps also in increasing citizens' participation in other topics than what is expected.

The effects of increasing knowledge and awareness can be seen amongst the citizens who participated in the Consensus Conference. During the process, one of the citizens expressed how almost everything they had learned had surprised him and how many consequences it can have if we do not act. The citizens' concerns were further elaborated by Ditte Degnbol, who said that already after the first preparation weekend, the citizens were astonished about all they had already learned (Fonden Teknologirådet, 2020f).

" 'How can it be that we did not know all this?' They are very worried, and they think it is an incredibly important topic. And 'why does the rest of Denmark's population not know this? It should be something we were all informed about so we could take a stand on it and get involved' " [Own translation] (Fonden Teknologirådet, 2021).

Due to their early but great surprise as to how much they did not know, how important the topic is, and how much the ocean could potentially affect, the citizens themselves chose that

one out of seven topics at the Consensus Conference was to be related to increasing awareness, and public education (Fonden Teknologirådet, 2021). Based on this, they recommend involving the cultural sector, public services, and educational institutions to ensure an increased ocean literacy, enhance the understanding of the general population and their role, and change the mindset so that everyone takes responsibility (Fonden Teknologirådet, 2020e). They were so affected by the process that several of them subsequently had to reconsider their jobs and education:

"It is also something that has really affected them after this process. Some of them said that they had their own career paths up for reconsideration - what they should do with jobs and education because it has made such an impression on them" [Own translation] (Fonden Teknologirådet 2020f).

Thus, the deliberative process of the Consensus Conference showed how citizen participation did not only increase ocean literacy but also strengthened the broader interest in public affairs (Hansen & Rostbøll, 2015). In addition, Henrik Enevoldsen addresses why it is essential to involve citizens to overcome this problem.

"Politicians come and go. They are highly sensitive because they need to get voter support. This makes them volatile, while the population is more stable. Citizen participation processes, that raises the level of ocean literacy, do not disappear again. Once you have understood it, I think it will remain for many years" (App. 1).

In addition, Henrik Enevoldsen expresses how the Consensus Conference can be seen as an exceptional model for citizen participation but points out that the alternative does not necessarily have to be a completely simplified model. In his view, it should be possible to make a more standardized process with some introductory webinars to raise the level of knowledge and where it is possible to ask questions. Planners do not have to wait until they have the finished product before informing and involving citizens (App. 1).

"If people feel that engaging pays off because it is actually being used for something. And this is, for example, where the actor who orders the citizen participation becomes critical" (App. 1).

It is uncertain if or how much effect citizen recommendations have had or will have on the management of the Danish marine environment. As addressed earlier it could be connected to the fact that it has not been ordered from a political side. In addition, it clarifies the need

that Thomas Sørensen calls for, namely a commitment mechanism to ensure that the results from participation processes are used in political governance (App. 3). Furthermore, Thomas Sørensen expresses what he thinks could have created even greater impact:

"I think a lot more work needs to go into the final phase of the project concerning the communication about the results of the process. For example, on social media with a campaign that says: this is what you mean out there. We have made this process, where we have involved a representative sampling of the population, so whether you like it or not, this reflects the general populations' attitudes, and you mean this and that and that" (App. 3).

In addition, Henrik Enevoldsen addresses why it is important to involve citizens at an early stage in the planning process. Even though they may be passive and not feel that they have much to contribute with, the fact that they are involved early means that they know what is going on in their society, they know who the actors are, and they know what kind of considerations planning is trying to take. This is done to ensure that there is a reasonable understanding of the facts. If citizens are involved at an early stage, it will become easier for them when they later have to review and comment on the plans (App. 1). An early involvement might also begin to foster a change in some of the factors that constitute Marine Citizenship.

UNESCO recognizes that a challenge of ocean literacy is finding ways to encourage a change in behavior and values, and how to integrate it as a necessity in policy-making. They argue that it will require strategies beyond conventional policy-making and require the empowerment of all possible actors to ensure a shared understanding and responsibility towards the ocean (UNESCO, 2017).

"What controls humans the most is our daily needs and comfort and staying in our comfort zone. So, we have to be highly motivated to step out of this zone. So, when you have to accept that there will be some changes, then you must be informed" (App. 1).

As the Consensus Conference process showed, increased participation and deliberation can be highly motivating. Furthermore, Thomas Sørensen elaborates on how WWF tried to get funding's to analyze the Danes' willingness to pay for a healthy ocean in Denmark. They wanted to analyze how much more yearly tax will the average Danes pay to know that we have a healthy and vibrant sea that lives up to all our environmental goals and that they ensure a healthy biodiversity for future generations. Unfortunately, WWF was not granted the funds as it was too controversial, even though a similar analysis had been conducted in Norway in relation to newly discovered cold-water corals, showing that even though the Norwegians would never be able to see them because of their deep location, they were willing to pay more tax for the corals to be protected for posterity⁴ (App. 3). It was considered too controversial to analyze whether the Danish population is willing to pay for a healthy marine environment which stands in contrast to what the citizens' panel from the Consensus Conference presented in their final document of recommendations for managing the marine environment. In the introduction, they write: *"We are fully aware that there will be great costs associated with the implementation of our proposals, but believe that these costs, in the long run, will prove to be sensible investments" [Own translation]* (Fonden Teknologirådet, 2020e).

6.5.1 Partial Conclusion

Since reversing the negative development in the ocean (cf. the introduction), has not been successful, it may indicate a lack of governing tools on how to solve the common-pool resource problem. Citizens have been identified as an unexploited policy channel to support marine governance, and the Ocean Decade has recognized that increasing citizens' literacy is fundamental in creating change. The Consensus Conference process clearly indicates that increasing literacy motivates a personal behavior change amongst citizens. Thus, participation in spatial governance increased knowledge and awareness, which fostered a change in personal behavior, values, and actions amongst the participating citizens. This shows that citizens can participate in discussions about how to deal with Wicked Environmental Problems. However, it requires an organized participation process with a primary aim to enlighten the citizens and understand the citizens' concerns and opinions. Despite this, it is uncertain if or how much effect the citizens' recommendations will have on governing the Danish marine environment, which support the need for a commitment mechanism to ensure that the results from participation processes are used in political governance. Furthermore, to ensure that participation amongst citizens is possible, it is addressed how it is essential to involve citizens at an early stage, so they have an understanding of what is going on in their society, they know who the actors are, and they know what kind of considerations planning is trying to take. In addition, it is addressed how communication of the results of the process in the final phase is necessary to reach a wider audience.

⁴ The analysis of the respondent's willingness to pay was conducted by Aanesen et al. (Aanesen et al., 2015).

7. Discussion

In the following section, the importance of democratic participation based on Wicked Environmental Problems will be discussed initially. Secondly, the consequences of avoidance as a medium in the system will be discussed. Third, it will be discussed how it will be possible to investigate democratic participation in the system further. Finally, ocean spatial governance will be discussed in comparison to other spatial governance issues.

7.1 Wicked Environmental Problems

As the multiplicities of modern society are turning the problems more and more complex, there is a lack of adequate framework for decision-making to address these Wicked Environmental Problems (Balint et al., 2011). The consequences we face are enormous. Since the implementation of decisions in Wicked Environmental Problems is challenging to reverse and has long-term consequences, the decisions that are made must positively affect the environment. Even though we have a reasonably good idea of the possible consequences, it is still difficult to predict all the different effects of depletion of natural resources and the consequences of policy decisions. Therefore, a general consensus regarding the course of action is needed.

The conditions to identify Wicked Environmental Problems are simultaneously recognized to slow down decision-making processes. These are, amongst others identified to be a lack of a single problem statement, conflicting values and objectives, multiple actors with the powers to assert their values and thus also various tactics to address the problem, and political and administrative complexity and uncertainty (Balint et al., 2011). Therefore, it is essential to examine how to overcome these conditions because the consequences of not finding a solution are enormous. Moreover, because the situation has evolved to wickedness, it requires a suitable policy framework to address these Wicked Environmental Problems successfully.

7.2 The Consequences of Avoidance

In the analysis, Henrik Enevoldsen pointed out how the Danish agencies and the ministries are incredibly avoidant (App. 1). Furthermore, it was mentioned how avoidance could be seen as an extension of the system's communication medium power. However, avoidance could also be seen in the light of the fact that modern society is becoming increasingly complex, and thus the consequences are equally complex. Therefore, it is possible to

understand avoidance in light of the notion that modern society has become so complex that it requires an extremely high level of literacy to understand the contexts, to see through the consequences and how we can create sustainable solutions for the future.

But if avoidance is increasing as a communication medium, it could be indicated that it is used as a communicative strategy in the system. Furthermore, avoidance from agencies and ministries could have consequences in relation to solving these complex problems, as it oppresses the free and unconstrained communicative and democratic processes in civil society. If the free exchange of opinion is avoided, it might weaken citizens' civil engagement and lead to passive civic roles, thus detaching civil society from the system. Avoidance could have the consequence that it will limit the literacy of civil society. Thereby not activating citizenship as a policy channel to contribute to the achievement of common social, political, and environmental goals and promote values that alter everyday behaviour (Fletcher & Potts, 2007; McKinley & Fletcher, 2012). If avoidance limits the general population's knowledge of, for example, the different views of the political parties, it can threaten representative democracy because it becomes too difficult to understand the position of the various parties. There is also a possibility that the debate will turn to focus on the avoidance itself, which could help put the democratic deficit on the agenda.

Regardless of whether avoidance is used as a deliberate strategy or is related to the increasing complexity in modern society, it poses a problem that needs further examination and discussion. In that perspective, it could be examined how avoidance takes place in different ways so that the strategies of the individual actors become more visible. Here one could include Professor Emeritus of Organization Studies Christine Oliver's (1991) description of how 'institutions' can respond to institutional pressures by either concealing, through creating a facade, creating buffer systems, by decoupling internal work activities from formal structures and external assessment, or escaping from the pressure, by changing of goal and activities (Oliver, 1991).

7.3 Positions of the Stakeholders

The primary empirical data indicate different positions amongst the interviewees concerning how important citizen participation is in planning processes. The interviewee from UNESCO expresses that it is not possible to overcome the challenges we face in relation to the ocean without citizen involvement, and thus places himself as a great supporter of citizen involvement. The interviewee from WWF expresses that policy should be based on science and research and because his experience is that citizens largely support research and science, it is, therefore, important to involve citizens, and thus he places himself as a supporter of citizen participation when there is a greater purpose for the participation. Finally, the interviewee from the Maritime Authority expresses that the ocean is a common resource but does not seem entirely convinced that citizens have any interest in the ocean and, in addition, expresses the expectation of what interests citizens concerning ocean management. Thus, the three different actors place themselves differently concerning how important and meaningful the participation of citizens in planning is.

Because the system functions reasonably undisturbed in its hierarchical form, citizen involvement becomes an inconvenient element, interfering inappropriately and disruptively with system planning. Therefore, to clarify where in the system there is a greater need for strengthening the understanding of the importance of citizen involvement, it could be interesting to examine further how similar actors, i.e., the authorities, non-governmental organizations, and international organizations, respectively, position themselves in the matter of citizen participation, or how different actors in the system, i.e., politicians, ministries, interest organizations, business organizations, and municipalities, position themselves in the matter of citizen participation, to examine if there are any similarities to the opinions from three interviewees from the thesis, or to examine which initiatives the different actors take in organizing citizen participation, and how these initiatives are organized and executed.

7.4 Spatial Governance

Because MSP constitutes an overall strategic management of the ocean with many underlying sectors that deal with different interests at sea, it is an incredibly complex subject with many varying and divergent interests. And as expressed by Thomas Sørensen, all sectors want to optimize their own goals (Cf. what are the pitfalls of democratic participation). Based on Governing the Commons, all participants will try to optimize their own goals. Therefore, it is plausible that the challenges of Governing the Commons will apply in other sectors than only those involved in ocean management. It is plausible to identify the same structures and complexity in the overall coordination and distribution between different interests on land, i.e., agriculture, forestry, biodiversity, coastal areas, wetlands, wind energy, solar energy, raw material extraction, leisure activities, business development, urban development, and infrastructure. Although spatial planning on land has taken place for many years and as Deputy Director of the Maritime Authority Rikke Wetter Olufsen, points out, becomes more detailed as time goes on (Søfartsstyrelsen, 2021c), the high number of actors are likely to have different views of the challenges and solutions. Furthermore, in 2017, DBT presented a report which showed that there are plans and desires for 140% of the land area in Denmark (Fonden Teknologirådet, 2017). Thus, it can be assumed that there are some of the same complexities and coordination tasks as in marine planning. Therefore, it can be assumed that there is a need not only to coordinate the utilization of the ocean and marine resources but also to coordinate the utilization of the land and the land-based resources, to ensure increased cooperation and debate about the future we want. Furthermore, it is crucial that this future is based not only on economic communication and thus reflects economic interests but also reflects the wishes of a broader society. Thus, it is highly possible to assume that other issues concerning similar areas (i.e., governing the commons) can be analyzed with the same theoretical framework.

8. Conclusion

As the world becomes more global, more populated, and more urbanized, there is an increasing need for natural resources. This entails that there has been increasing pressure and desire to utilize the ocean and marine resources, which has led to growing activity in the ocean. Because management has not managed to reverse the negative impact on our natural resources, including the ocean, we need to solve the gap in governance tools and rethink some of the current systems through knowledge exchange, discussion and cooperation. Moreover, we need to think multifunctionality, multidisciplinary, and across sectors. However, for this to succeed, we need to ensure equal and more cooperative communication. Due to the natural framework set for this thesis, the above research only touches on the surface of the problem concerning the challenges and consequences of limited democratic participation in ocean management. Based on the analysis, there are some indications that the empirical data support the theoretical framework. Even though MSP and EBM processes have the potential to establish sustainable spatial governing of our ocean, the Danish MSP processes have not successfully managed to involve all relevant stakeholders or to establish early public participation in the process. The theory behind Governing the Commons should complicate cooperation between stakeholders. Still, the analysis illustrates that cooperation between two stakeholders with very different values is possible. However, the cooperation was undermined by the mediums of power, money, and hierarchy in the system. Nonetheless, the situation indicating that increased cooperation among stakeholders can increase sustainability in the ocean. Therefore, it is crucial that we ensure coordination between all relevant stakeholders. But when several stakeholders express their lack of involvement in the MSP process, it is possible that they are not likely or willing to learn to cooperate and develop social norms that commit them to solve the problems we face jointly. Moreover, the lack of participation seems to have resulted in a low support to both the plan and the process amongst politicians, business organizations, interest organizations, and scientists. When the MSP process has not even succeeded in ensuring successful participation and the involvement of stakeholders, the prospects for ensuring participation among citizens in Wicked Environmental Problems are long and uncertain. Because the problems we face have such enormous consequences, it is crucial that the general population is involved in planning and understanding why it is essential and why change is needed. Secondary empirical data demonstrate that it is possible to involve citizens in complex environmental problems when the process is organized and well executed. The Consensus Conference process indicates that when citizens participate in complex spatial planning processes, they attain a more informed and reflective

understanding of their own and other's political preferences and thereby increase their literacy. This motivated a personal behavior change, thus indicating that citizens can function as an unexploited governance tool to support marine management, and thereby increase sustainability, when their literacy is likewise increased. However, the primary empirical data indicates that communication mediums in the system, i.e., money, power, including avoidance, and hierarchy are dominant in planning processes and thus overshadow the participation of citizens in the political debate. Therefore, there is a need to establish an interest, an understanding, and an acknowledgment in the system concerning the benefits of citizen participation. Furthermore, there is a need to establish an understanding that the planning and execution of the citizen participation process affect the result and establish a commitment mechanism to ensure that citizen participation is considered in political governance. Thus, to a greater extent than before, planning needs to understand and look at the planning framework as wicked (i.e., Wicked Environmental Problems). Being aware of the complexities present in planning could make it more manageable to work within the framework and overcome the problems we face.

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Appendices

Appendix 1. Transcription of interview with Henrik Enevoldsen, UNESCO IOC Appendix 2. Transcription of interview with Trine Kirkfeldt, the Danish Maritime Authority Appendix 3. Transcription of interview with Thomas Sørensen, WWF