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DISCOURSE SHAPES MARINE SPACE: REPRESENTATIONS OF THE MACRO-REGIONAL GOVERNANCE OF THE BALTIC SEA SPACE AND THEIR ECOCULTURAL IMPLICATIONS

Dyskurs kształtuje przestrzeń morską:
Reprezentacje zarządzania makroregionalnego
przestrzenią Morza Bałtyckiego
i ich ekokulturowe implikacje

Rozprawa doktorska
w dyscyplinie nauki o kulturze i religii
napisana pod kierunkiem
dr. hab. Kazimierza Musiała, prof. UG

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To my heart treasures,

Who feel and understand that

"(t)he sea, once it casts its spell, holds one in its net of wonder forever."

(Jacques-Yves Cousteau (1978). "Life and death in a coral sea")

Abstract

Due to its multi-dimensionality the Baltic Sea space lends itself to diverse representations, with some of them revolving around the idea of regional seas governance – a process shaped by culture, its assumptions, values, and representations. The emergence of the macro-regionalization trend has sparked my research interest in the added value of the macro-regional strategy for the Baltic Sea Region (BSR), particularly in the context of the extremely dense network of institutions, legal instruments, and cooperation arrangements already in place in the BSR. This thesis is based on two assumptions: 1) both the global and ecological crisis is a product of culture in crisis, and 2) the philosophical aspects of culture shaping our (human) perception, identities, competences, and actions with regard to the macro-regional governance of the Baltic Sea, need to be identified, rethought, and, if necessary, replaced with new ways of thinking, being, and acting. Therefore, the thesis navigates the macro-regional approach to Baltic Sea governance in terms of human-ecosystem relations as represented in the EU's first macro-regional strategy, through the combination of the problem-questioning approach to problem representation (Bacchi (2009)'s 'What's the Problem Represented to Be') and Stibbe (2015)'s stories-we-live-by. It aims at identifying the following: 1) Implicit problem representations of the Baltic Sea macro-regional governance in the selected policy documents and their underlying cultural assumptions, including erasures or unproblematized aspects of integrated marine governance; 2) Social-ecological conditions produced by the identified problem representations in terms of constraints imposed on possible ways of conceptualizing the macro-regional governance of the Baltic Sea, as well as human roles in the multi-dimensional process.

All of these representations and their social-ecological conditions are critically interrogated and evaluated through the lens of my ecosophy based on the idea of human embeddedness in the biosphere, with all of its linguistic, cultural, and material implications. While the macro-regionalization trend does deserve recognition and support, the research results highlight the need to improve the internal consistency of the macro-regional approach dominated by the techno-scientific-economic discourse to the exclusion of other knowledges. Such

a tendency may testify to the lack or marginalization of cultural patterns supporting a truly sustainable relation between humans and the marine ecosystem.

To strengthen meaningful stakeholder engagement and the inclusion of other ways of knowing, I have recommended that a supportive space be created with enabling conditions for reimagining the macro-regional governance of the Baltic Sea along social-ecological lines, including the concepts of ocean (marine) literacy and ecocultural identity. Far from being a safe harbor in the storm, the space may facilitate the development of alternative scenarios, social-ecological awareness, and critical sustainability skills, thereby helping relevant stakeholders find common ground amid unavoidable conflicts and friction due to the culture-specific, system-bound, and context-dependent nature of the macro-regional governance of the Baltic Sea. Following the critical interrogation of my own problem representations, a practical recommendation for developing a macro-regional project is made with the view to fostering critical marine literacy in the context of the complex social-ecological challenges facing the Baltic Sea macro-region (BSmR) in the 21st century.

Keywords: Baltic Sea, macro-region, space, governance, discourse, representation, ecocultural perspective, social-ecological approach, sustainability, resilience

Streszczenie

Wielowymiarowość przestrzeni Morza Bałtyckiego sprawia, że można ją reprezentować na wiele sposobów, między innymi jako przykład zarządzania morzem na poziomie regionalnym, które stale kształtowane jest przez przejawy szeroko pojętej kultury, jej założenia, wartości i reprezentacje. Pojawienie się procesu makroregionalizacji wzbudziło moje zainteresowanie wartością dodaną generowaną przez Strategię Unii Europejskiej dla Regionu Morza Bałtyckiego, szczególnie w kontekście już istniejących, niezwykle rozbudowanych sieci instytucji, instrumentów prawnych oraz platform współpracy. Ponadto, praca ta opiera się na założeniu, że kryzys ekologiczny, zarówno ten globalny, jak i regionalny, wynika z kryzysu kultury, a filozoficzne i światopoglądowe aspekty kultury leżące u podstaw naszych (ludzkich) percepcji, tożsamości, kompetencji i działań związanych z zarządzaniem Morzem Bałtyckim na poziomie makroregionalnym należy rozpoznać, przemyśleć i w razie konieczności zaproponować nowe pojęcia i wzory postępowania. Zatem celem tej pracy jest analiza podejścia makroregionalnego UE do zarządzania przestrzenią Morza Bałtyckiego pod kątem relacji na linii ludzie-ekosystem, dzięki połączeniu krytycznego podejścia do problematyzacji (‘What’s the Problem Represented to Be’ (Bacchi 2009)) z analizą historii, którymi żyjemy, czyli ‘stories-we-live-by’ (Stibbe 2015). Takie połączenie metod ma na celu określić: 1) sposób, w jaki problematyzowane jest zagadnienie zarządzania Morzem Bałtyckim na poziomie makroregionalnym w wybranych dokumentach unijnych, jak również założenia kulturowe leżące u podstaw tych problematyzacji, w tym usunięte albo niepoddane problematyzacji aspekty zintegrowanego zarządzania przestrzenią morską; oraz 2) warunki społeczno-ekologiczne wytworzone przez zidentyfikowane problematyzacje w sposób ograniczający nie tylko możliwe rekonceptualizacje zarządzania Morzem Bałtyckim na poziomie makroregionalnym, lecz także role, które mogą przyjąć interesariusze w tym wielowymiarowym, ekokulturowym procesie.

Wszystkie zidentyfikowane problematyzacje wraz z wytworzonymi przez nie warunkami społeczno-ekologicznymi poddane zostały krytycznej analizie i ewaluacji przez pryzmat mojej ekozofii, opartej na osadzeniu w biosferze ludzi wraz ze wszelkimi przejawami ich działalności, co niesie ze sobą implikacje

językowe, kulturowe i materialne. Nie ulega wątpliwości, że proces makroregionalizacji zasługuje na wsparcie i uznanie. Jednakże wyniki badań uzyskane w trakcie pracy nad doktoratem wskazują na wyraźną potrzebę zapewnienia spójności wewnętrznej Strategii UG dla Regionu Morza Bałtyckiego, która zdominowana jest przez dyskurs naukowo-techniczno-ekonomiczny, z wyłączeniem innych paradygmatów i źródeł wiedzy, co może świadczyć o braku lub zmarginalizowaniu wzorów kulturowych wspierających prawdziwie zrównoważone relacje na linii człowiek-ekosystem morski. Celem wzmocnienia rzeczywistego zaangażowania interesariuszy oraz włączenia innych sposobów konstruowania wiedzy zaproponowane zostało stworzenie wspierającej przestrzeni wraz z warunkami umożliwiającymi zmianę wyobrażeń o zarządzaniu Morzem Bałtyckim na poziomie makroregionalnym zgodnie z podejściem społeczno-ekologicznym. Podejście to obejmuje takie pojęcia, jak kompetencje morskie (ocean (marine) literacy) oraz tożsamość ekokulturowa (ecocultural identity). Choć przestrzeń ta nie jest panaceum na wszelkie wyzwania stojące przed Regionem Morza Bałtyckiego, to zapewnia ona możliwość opracowania alternatywnych scenariuszy rozwoju, buduje świadomość społeczno-ekologiczną oraz wzmacnia krytyczne kompetencje w zakresie zrównoważonego rozwoju. Tym samym pomaga interesariuszom w znalezieniu płaszczyzny porozumienia w sytuacji nieuniknionych konfliktów i tarć ze względu na zdeterminowany kulturowo, systemowo oraz kontekstowo charakter zarządzania Morzem Bałtyckim na poziomie makroregionalnym. Na podstawie krytycznej analizy zaproponowanych przeze mnie problematyzacji sformułowana została rekomendacja dotycząca opracowania projektu makroregionalnego mającego na celu wspieranie krytycznych kompetencji morskich w kontekście złożonych wyzwań społeczno-ekologicznych stojących przed naszym makroregionem w XXI wieku.

Słowa kluczowe: Morze Bałtyckie, makroregion, przestrzeń, zarządzanie, dyskurs, reprezentacja, perspektywa ekokulturowa, podejście społeczno-ekologiczne, zrównoważony rozwój, rezyliencja

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Embarking on a PhD project is by no means a lone sailor's race, and – I do believe I can speak on behalf of all PhD students – we, as researchers, also need a supportive space to navigate our research topics, particularly when faced with various challenges and tough choices. It goes without saying that the whole research endeavor would not have been possible without all the inspiring people I have met along the way, and the valuable suggestions and recommendations they have been willing to share with me.

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It needs to be underscored that I am solely responsible for any errors and omissions to be found in this thesis.

The list of the renowned scholars I had the privilege of meeting is by no means exhaustive. Inspiring and at times challenging, my PhD journey took me to numerous meetings, conferences, and research schools in Amsterdam, Bergen,

[1] David Attenborough. Source: https://wwf.org.au/blogs/10-best-nature-quotes-from-sir-david-attenborough/ (accessed January 8, 2023).

Berlin, Boston, Gdańsk, Gdynia, Greifswald, Jönköping, Kraków, Łódź, Odense, Oslo, Stockholm, Turku, Warsaw, and Århus. I am immensely grateful for all these wonderful opportunities. They allowed me to gain new knowledge not only in the course of plenary sessions, discussion panels, and joint projects but also during coffee breaks and outdoor activities. At this point I'd like to express my sincere appreciation to the University of Gdańsk, the University of Bergen, the University of Amsterdam, the Stockholm Resilience Centre, Södertörn University (Sweden), and the Baltic University Programme, for providing me with a variety of opportunities to enhance my research skills, ranging from PhD research schools, through sustainability-related conferences, to projects related to the practical implementation of my knowledge.

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As one of the winners of the 2021 Baltic Sea Science Award, I am very grateful to the competition organizers for providing us with an excellent opportunity to submit our research projects evaluated in terms of their relevance to sustainability, transnational cooperation in the context of the Baltic Sea macro-region, as well as their contribution to research and innovation strategies at the macro-regional level.

This part of my PhD thesis would be far from complete without thanking the Baltic Sea for never ceasing to nourish, connect, and inspire us with its unique beauty and life-supporting qualities. May it be protected for both present and future generations, and appreciated both by academics and non-academics, both in theory and practice, across disciplinary divides … Never taken-for-granted! Always taken-care-of!

Many thanks should also go to ALL my friends from near and far, both academics and non-academics, whose unwavering support, helpful advice, and gales of

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1
Introduction

The aim of this chapter is to explore the nature of the Baltic Sea space and to highlight the need to introduce its drainage basin definition, particularly in the context of regional seas governance in the BSmR. What is more, this chapter presents the transformation of the Baltic Sea space from an area, through a region, into a macro-region, as well as explains my ecosophy and contribution to the research work done on the governance of the BSmR. What is more, it outlines the purpose of the thesis and my research questions.

1.1. The Baltic Sea space[2]

There is one Baltic Sea, usually defined as an "arm of the North Atlantic Ocean, extending northward from the latitude of southern Denmark almost to the Arctic Circle and separating the Scandinavian Peninsula from the rest of continental Europe. The largest expanse of brackish water in the world, (…) semi-enclosed and relatively shallow (…)".[3] Both the sea and the coastal areas constitute one complex ecosystem characterized by numerous ecological interactions between aquatic and terrestrial ecosystems.

Fig. 1. Baltic Sea outline map. Source: d-maps.com

As the notion of space is neither neutral nor naturally given (the spatial turn (Bachmann-Medick 2016)), the Baltic Sea and the coastal areas form one

[2] I have selected the term 'Baltic Sea space' to refer to the sea and its surrounding areas as an umbrella term encompassing the following ones: 'Baltic Sea Area,' 'Baltic Sea Region,' and 'Baltic Sea Macro-region'.

[3] The Baltic Sea. Source: https://www.britannica.com/place/Baltic-Sea (accessed: April 26, 2020).

biophysical space which is discursively represented in multiple ways by various stakeholders using their respective discipline- or sector-specific concepts and categorizations. Due to its multi-dimensionality the Baltic Sea space lends itself to diverse representations and has given rise to multiple and, to a large extent, overlapping research themes, including: the history of the BSR (Grzechnik 2012, North 2015, Fröjmark et al. (eds.) 2019); the socio-cultural development of the BSR (Maciejewski (ed.) 2002); the environment in the BSR (Rydén et al (eds.) 2003) or environmental governance of the Baltic Sea (Gilek et al. (eds.) 2016); regional identity in the BSR (Henningsen 2011); civil society in the BSR (Reuter 2007; Götz and Hackmann (eds.) 2003); the use of global and regional approaches in the context of the protection of the Baltic Sea environment (Boczek 1984); regional cooperation in the Baltic Sea area in terms of regional security interdependence from the end of the Cold War to 2004 (Tassinari 2004); Europeanization of regional seas and regionalization of EU politics (Gilek and Kern 2015); and the macro-regionalization trend, including the EU Strategy for the Baltic Sea (Gänzle and Kern (eds.) 2016); Szulc 2019). This list of possible spatiotemporal renderings of the Baltic Sea space is by no means exhaustive due to a wealth of publications exploring the Baltic Sea space not only in a myriad of possible theme combinations and from different research angles but also in other foreign languages.

Such a rich repertoire of cross-cutting, multi-issue perspectives is hardly surprising in light of the fact that the Baltic Sea space has been malleable enough to accommodate all of them within the framework of Baltic regional studies carried out at the Centre for Baltic and East European Studies (CBEES)[4] and centered, for example, on the research strand of politics, identity and space. Often referred to as an 'unusual' or 'non-standard' region (Paasi 2011: 10), the BSR may come in various guises, from the resident definition (the coastal states) through the political one (the member states of the Council of the Baltic Sea States) to the drainage basin definition (Henningsen 2011: 11; see also Szulc 2019: 10, 15 for various definitions of the BSR). To illustrate the functional plasticity of the Baltic Sea space, Figure 2 shows its spatial evolution in the context of EU Interreg programs for the BSR (Götz 2016: 57).

[4] For more information on the Centre for Baltic and East European Studies (CBEES), please visit: https://www.sh.se/english/sodertorn-university/research/centres--researchnetworks/cbees/our-research

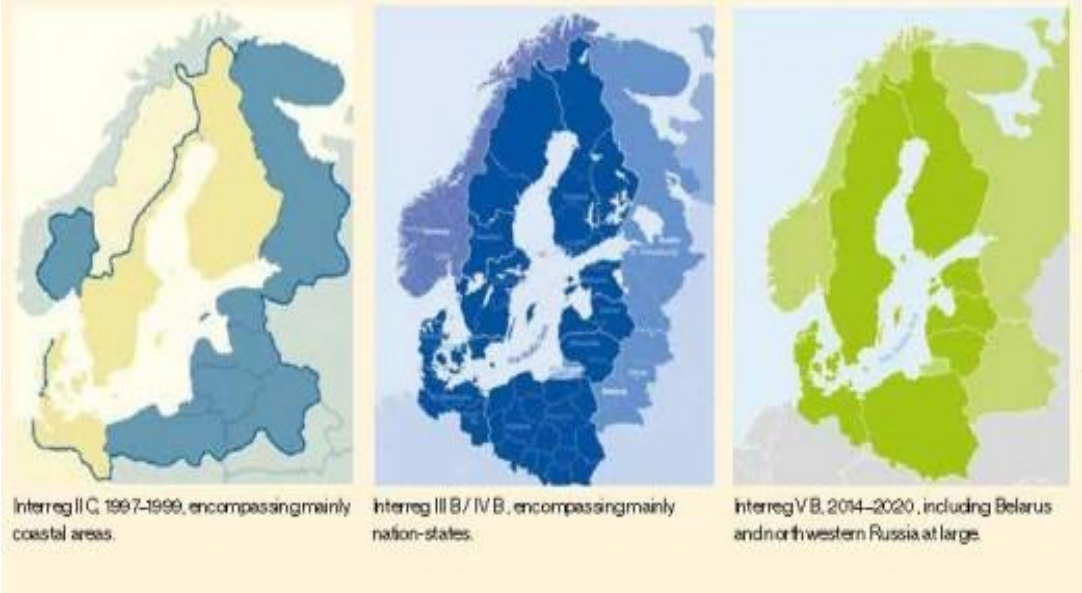

Fig. 2. The spatial evolution of EU Interreg programs for the Baltic Sea region. Source: Götz (2016: 57).

It needs to be underscored that the drainage basin[5] definition constitutes a point of departure for my thinking about the Baltic Sea space for the following reasons:

- The perspective puts the Baltic Sea at the very center of the region by including "all countries (places) through which water flows into the Baltic Sea (…)" (Henningsen 2011: 11), i.e. "wholly or partly the territory of 14 countries altogether with some 85 million inhabitants. In addition to the nine coastal states – Sweden, Finland, Russia, Estonia, Latvia, Lithuania, Poland, Germany and Denmark – (…) [parts of] Belarus, Ukraine, Czech Republic and Slovak republics draining through Poland in the south, and very small parts of Norway draining through Sweden in the west" (Rydén 2002: 10);
- It corresponds to the very nature of the marine space by connecting the inland to the sea through rivers and waterways (Rydén 2002: 9, 25), thereby highlighting the interdependence between the ecological state of the Baltic Sea and the quality of water flowing into the Baltic Sea from land sources (Rydén 2002: 9, 25; Hammer 2015: 81, 83);
- It is in line with the Water Framework Directive (WFD 2000), which introduced the idea of a river basin district as an area designated according

[5] The drainage basin of the sea is also called the catchment or watershed (Rydén 2002: 9)

to the biogeographical conditions of a given river basin rather than the political or administrative ones; and

- It is particularly relevant to projects carried out in the context of sustainable development and marine spatial planning (Rydén 2002: 8).

Furthermore, the drainage basin perspective corresponds to the functioning of the land-sea interface, i.e. the space where the sea meets the land not as two separate entities entering into accidental interaction but – quite the contrary – as two spaces involved in constantly unfolding social-ecological processes which have been broken down into the following categories:

- Land-sea processes: natural material and physical flows occurring within land-sea ecological processes (e.g. rivers carrying sediments and nutrients to the sea);
- Cross-system threats: a biophysical or environmental change (human-induced or otherwise) in one system (i.e. the land or the sea) that has implications for another (e.g. agrichemicals, if used improperly or irresponsibly, can make their way into the sea); and
- Management and policy decisions: having an overarching influence on both land-sea processes and cross-system threats (e.g. designation of conservation areas) (Pittman and Armitage 2016).

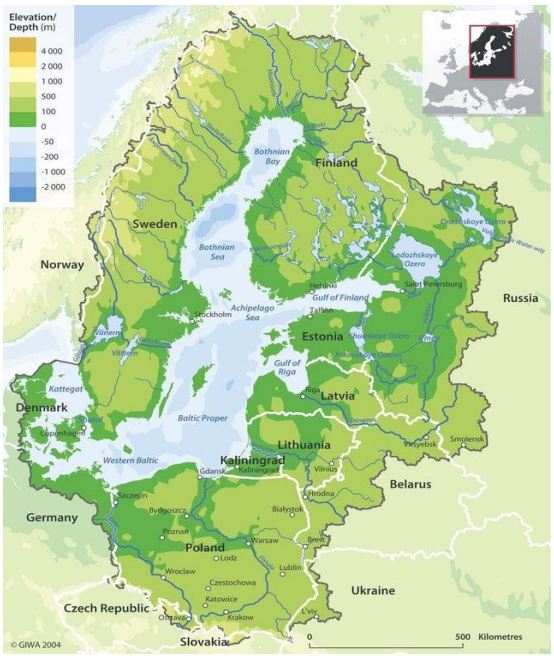

Fig. 3. Map of the Baltic Sea and its upstream catchment area /1/. © GIWA. Source: HELCOM (2006: 5).

Taking all of the above into account, it is reasonable to approach the BSR in terms of "a truly post-modern creation in the sense of a possible, negotiable construction (…) a region without strict boundaries or with varying boundaries" (Musiał 2002: 191). In other words, the process of region-building in the Baltic Sea space shaped by various geographical, environmental, social, cultural, economic or political factors as well as comprising numerous forms of interaction, networks, platforms, practices, and relationships testifies to the existence of a very dynamic regional setting whose boundaries resemble "practical necessities not (…) holy walls (…)" (Lundén 2004: 212).

1.1.1. Baltic Sea governance: From an area to a macro-region

In addition to its historical, political, social and cultural dimensions, the BSR is also an example of regional seas governance (marine governance), with the Baltic Sea as a common marine ecosystem at its heart. Its complex nature requires that a combination of polycentric and multi-level modes of governance be put in place: national and subnational governance as well as governance beyond the nation state, i.e. international environmental governance, regional governance, new forms of European governance, and various forms of transnationalization (Kern et al. 2008: 217-221; Reusch 2018: 5). The idea of the Baltic Sea space as a regional environmental challenge has been shaped by the following, to a large extent parallel, trends: regionalization (the Helsinki Convention 1974), Europeanization (EU legislation), and macro-regionalization (the EU Strategy for the Baltic Sea Region 2009) (Söderström et al. 2015; also Kern et al. 2008: 219-220), which testifies to the need to "push marine governance in the region far beyond the boundaries of the nation-state" (Söderström et al. 2015: 164). Since the 1970s there have been three stages of developing governance arrangements in the area of regional seas governance in the Baltic Sea space (Söderström et al 2015: 168):

1. regionalization through the Helsinki Convention (signed in 1974, entered into force in 1980, and amended in 1992, entered into force in 2000), making the Baltic Sea area the 1st region worldwide with a regional sea convention for the protection of its marine environment (including regional environmental degradation of trans-boundary and cross-sectoral nature as well as land-based sources of pollution and the inner waters of all member states) (Söderström et al. 2015: 169). In this way the regionalization trend has underscored

the ecological state of the sea and its importance for the whole region, thereby tying human activities and initiatives in the region, either directly or indirectly, to the condition of the Baltic Sea (Tomala 2020);

2. Europeanization since the 1990s through EU legislation such as: the Water Framework Directive (2000) with its river-basin management and the Marine Strategy Framework Directive (2008), and the Maritime Spatial Planning Directive (2014)) (Bohman and Langlet 2015: 64-69; Smolarz et al. 2016: 89). With the Baltic Sea becoming an almost internal sea of the EU following its enlargement in 2004, and with HELCOM becoming 'Europeanized' with the EU acting as a party to the Helsinki Convention after its revision in 1994 (Söderström et al. 2015: 168, 170, 171), the synergy between HELCOM's Baltic Sea-specific recommendations and binding EU environmental legislation may significantly facilitate ecosystem-based marine management to be realized at the Baltic Sea level. The implementation of ecosystem-based marine management supported through integrated management (as opposed to a sector-driven or geo-political-boundary approach) based on sustainability, cooperation between existing structures, various stakeholders, and integration across sectors, interests and policies in the context of newly developed governance arrangements (Hammer 2015; Soma et al. 2015 as cited in: Hegland et al. 2015: 1) may turn the Baltic into "a pioneer and frontrunner region" (Hegland et al. 2015: 8) in this respect. Such a vision is further justified on the grounds that due to its biophysical properties the Baltic Sea is on a faster trajectory of anthropogenic changes and thereby a perfect testing ground for making predictions for the social-ecological development of other sea basins (Reusch et al 2018). Despite signing the Helsinki Convention, ensuring deep collaboration in the BSR and an acceptable ecosystem health status of the sea remained problematic. Therefore, a new form of regional environmental governance extending beyond particular regional organizations, i.e. the EU's macro-regional approach, needed to be developed to "(…) mov[e] away from a particular organization rather narrowly focused on environment[6] to a more comprehensive and complex governance mechanism" (Söderbaum 2016: 129; also Antola 2009); and

[6] The inaptness of the expression "narrowly focused on environment" or similar ones virtually turning environment into a sector will be explained in relevant chapters of the thesis.

3. macro-regionalization through the EU Strategy for the Baltic Sea Region (EUSBSR) as the EU's first macro-regional strategy (Figures 4 and 5 below). In short, the aim of the macro-regionalization trend is to introduce a layer of governance between the EU on the one hand, and the EU member states and partner countries on the other, to ensure territorial, social and economic cohesion in macro-regions constructed around common biophysical features, e.g. regional seas, river systems or mountain areas (Söderström et al. 2015: 167, 168, 172, 173). Initiated by the European Commission in 2009, and currently based on three objectives to save the sea, to connect the region, and to increase prosperity, the EUSBSR:
    - Utilizes HELCOM and its Baltic Sea Action Plan as an institutional basis for the implementation of EU legislation (horizontal interplay), and entails the participation of the EU Commission, states, subnational authorities and civil society actors (vertical interplay) (Söderström et al. 2015: 172-175);
    - Gathers existing cooperative schemes and institutions under a unifying umbrella, and requires multi-level governance arrangements, inter-governmental and transnational cooperation, as well as flexibility and adaptability to changing circumstances (Söderström 2017: 38, 42); and
    - Constitutes an important initiative for improving the Baltic Sea environment (a prominent issue of the strategy) (Söderström et al. 2015: 173) as stated in Presidency Conclusions of 29/30.10.2009: "[t]his Strategy constitutes an integrated framework to address common challenges, i.e.. the urgent environmental challenges related to the Baltic Sea, and to contribute to the economic success of the region and to its social and territorial cohesion, as well as to the competitiveness of the EU" (Presidency Conclusions of 29/30.10.2009: 11).

Fig. 4. The EU Strategy for the Baltic Sea Region. In: facts and figures. Source: www.balticsea-region-strategy.eu

Fig. 5. The revised EUSBSR Action Plan. Source: www.balticsea-region-strategy.eu

All things considered, one may wonder what the added value of the EUSBSR may be in the context of the extremely dense framework of institutions, legal instruments, cooperation networks, and multi-level governance arrangements already in place in the BSR (Söderström et al. 2015: 164, 167; Zaucha et al. 2020), which may result in thematic, institutional, coordinating or instrumental tensions (Dubois et al. 2009: 9-10). The situation is further complicated by the fact that the member states may have different expectations vis-à-vis the EUSBSR with regard to the placement of environmental and economic issues on the agenda (Söderström et al. 2015: 174). The diversity of the macro-region notwithstanding, the bottom line is to transform the BSR into a sustainable area (Tomala 2020: 9) by dealing with complex transboundary challenges occurring at large spatial scales (Gilek et al. 2016: 7).

> "The EUSBSR could be particularly important in this respect as it provides the only context within which all policies relevant to the health of the sea – and associated areas and population – are addressed." (WWF 2012: 10)

Such a vision can hardly materialize without improving the ecological state of the Baltic Sea to ensure the provision of ecosystem services, thereby contributing to the wellbeing and prosperity of residents in the BSR (Szulc 2019: 105, 190; Tomala 2020: 176). In light of the foregoing, it is reasonable to investigate the relations between humans and the Baltic Sea as represented in selected EU policy documents, as well as to determine their potential impact on its macro-regional governance.

1.2. My intended contribution in light of previous research on the EU Strategy for the Baltic Sea Region

No single literature review can do justice to the multidimensionality of the BSmR explored from multiple research perspectives, written with various goals and interests in mind. There are undeniably many publications on the BSR and its macro-regional governance written in different languages spoken in the region and beyond, which is clearly outside the scope of this thesis. Due to the cross-cutting and interrelated nature of challenges faced in the BSmR, it may be extremely challenging to neatly categorize them in terms of themes, disciplines or perspectives (see Pollock 2016: 16-17 for nested natural systems, and Raakjær et al. 2014 as cited in: Hegland et al. 2015: 2 for nested governance systems). Therefore, I have decided to present an overview of relevant publications that have shaped my thinking about the macro-regional space, thereby appreciating the unity in their diversity. Either directly or indirectly referring to the Baltic Sea as a marine ecosystem, the publications on the EU's 1st macro-regional strategy presented below either explore its various complex dimensions or touch upon its certain aspects in the context of sustainable development, the macro-regionalization trend, and marine environmental governance.

The multi-faceted nature of the BSmR has also been approached through the lens of trans-boundary environmental governance (Gilek et al. (eds.) 2016; Gilek and Kern 2015; Joas et al. (eds.) 2008) as a regional sea threatened by multiple environmental stressors (eutrophication, chemical pollution, overfishing, climate change, to name but a few) and conflicts arising over the use of its marine space and natural resources. To meet these challenges, there is a widespread agreement that multi-level, multi-sector and multi-stakeholder settings need to be put in place to correspond to the intertwined nature of the macro-regional governance of

the Baltic Sea. However, according to Kapaciauskaite (2011), such an endeavor requires the transformation of multi-level governance into common governance involving "[the combination of] the traditional governance through states and all governmental co-operations and at the same time (…) [the acceptance of] a great number of different non-governmental actors (…)" (Kapaciauskaite 2011: 98-99). Common governance, in turn, may hardly be realized without collective identity defined "as a significant precondition for successful regional governance" to protect the regional commons (Kapaciauskaite 2011: 91). The issue of building a common identity of the Baltic Sea Region as a European macro-region has also been raised by Henningsen (2011), who gives a more nuanced picture of Baltic Sea identity in terms of a 'we-feeling' or a sense of togetherness.

The macro-regionalization trend in the BSR has also been tracked through various stages of its development from the perspective of political science and political geography, including such interrelated issues as: multi-level and macro-regional governance approaches, with both horizontal and vertical interplay among its various state and non-state stakeholders; macro-regionalization as a shift from territorial toward functional regions; rescaling (new scales of intervention) or synergies between the EUSBSR and multilateral cooperation structures and networks (Gänzle and Kern (eds.) 2016; Szulc 2019). These publications also embed the EUSBSR in the context of the EU's macro-regional policy extended to cover other European spaces built around a common geographical feature.

As an example of soft space, the BSmR is governed through non-binding instruments (guidelines and recommendations, flexible rules to be also set by various stakeholders (Heupel 2008 as cited in: Hegland et al. 2015: 2). The soft space dimension of the macro-regional strategy is in line with Söderström (2017)'s comment on the EUSBSR as "a shift from the traditional top-down Europeanization process to including a more bottom-up regionalization approach through the inclusion of actors and stakeholders" (Söderström 2017: 42). The fuzziness, flexibility and functionality as inherent features of the EUSBSR have also been highlighted by Götz (2016). He also points to the tension between regionalization and Europeanization, and its implications for cooperation and communication between both EU and non-EU Baltic Sea States. The tension may take the form of multiple contradictions in the EUSBSR, with one of them being the tense,

somewhat ambiguous, relation between the EU and Russia[7] with its "hybrid role as a participant in regional cooperation and a country neighboring the EU" (Kosov and Gribanova 2016: 34). Another source of tension identified in the context of the Baltic soft space may be linked to the increasing solidification of the region (its institutional formalization) through the positioning of the European Commission as a regional spokesperson, which does not necessarily result in a higher degree of institutional durability (Metzger and Schmitt 2012). While a certain amount of tension seems to be unavoidable in the complex marine governance process, it has been underscored that both the Europeanization of regional seas and the regionalization of EU policies also offer synergies worthy of exploration (see Gilek and Kern (eds.) (2015) for the analysis of these trends).

The repertoire of possible perspectives and research angles to be applied in the context of the Baltic Sea macro-region resembles a bottomless pit, and never ceases to inspire, amaze, surprise or even disappoint researchers. The macro-regionalization trend in the Baltic Sea space has also been approached in terms of the role played by universities in creating a regional identity in the macro-region by supporting a regional sense of community and higher education networks (Musiał 2006; Ewert 2011; Lindroos and Musiał 2014) or through the lens of transnational science strategies in the BSR to strengthen a macro-regional dimension through higher education, science and research cooperation (Musiał and Schumacher 2018.) Furthermore, research publications on epistemic communities and their role in legitimizing the integration in the BSR on rational foundations (Musiał and Šime 2021) or the development of science diplomacy in the context of the EUSBSR in general, and its flagship "Baltic Science Network" in particular (Šime 2020) have clearly injected a fresh perspective into the multi-faceted macro-regionalization process in the Baltic Sea space.

In 2019, the EUSBSR celebrated its 10th anniversary – a perfect occasion both to honor the day and to critically reflect on the accomplishments and shortcomings of the macro-regional approach in order to create space for improvement (see Zaucha et al. (2020) for their approach to the BSmR through the lens of economics). At the very core of such critical reflections should lie the role of the EUSBSR in

[7] Russia's invasion of Ukraine putting additional strain on the already tense and unstable geopolitical situation in the BSmR.

fostering development through solving common problems and tapping into the potential of the BSR, particularly in the context of the climate crisis and resilience, as well as a net zero economy, which has been approached by Tomala (2020) from a social constructionist perspective on sustainable development in the Baltic Sea Region.

It needs to be underscored that the contribution made by the above-mentioned authors to the understanding of the constantly renegotiated Baltic Sea space cannot be overestimated. They have attempted to theoretically and conceptually anchor this lively and relational marine space in the making (Jay 2018; also Gänzle and Kern (eds.) (2016)) in their observations, insights, and empirical findings. However, to the best of my knowledge, there are no research publications that delve into the manner in which the EU's macro-regional policy toward the BSR problematizes the very issue of its macro-regional governance by critically examining the problem representations lodged within the policy and their wide-ranging implications (see Bacchi (2009) for her 'What's the problem represented to be' approach to policy analysis).

Contribution

My initial research into policy documents shaping the BSmR has shown that there is a certain discrepancy between the representation of human-marine ecosystem relations and the complex challenges faced by the macro-region in the 21st century, which may have serious ecocultural implications, for instance in the area of research and education or economic development. Therefore, in my view the BSmR and its governance deserves a deeper scrutiny in terms of social-ecological sustainability (Folke et al. 2016; Larson 2011 as cited in Stibbe 2015: 11), as well ecosystem approach to management (ecosystem-based management) (Gilek et al. 2016 (eds.). It is noteworthy that while ecosystems are "the fundamental building blocks" for designing effective governance arrangements, one needs to include economic and social systems in the delimitation of regional spaces as well (Söderström 2017: 43).

Since the main assumptions of the EUSBSR are to form a complete whole (Tomala 2020: 173), I have approached it in its entirety, without focusing exclusively on one aspect of the macro-regional dimension or an instance of cross-sectoral cooperation.

The rationale behind this approach has also been to highlight the fluid, interconnected and trans-boundary nature of the BSmR as a social-ecological system affecting, and affected by, human lives and actions through adopting a metalevel and pan-Baltic perspective. In light of the foregoing, my thesis has attempted to make the following contribution to the existing literature on the EUSBSR:

- To reconceptualize the BSmR as a complex social-ecological system with multiple interactions and interdependencies across the sea-land-atmosphere interface in accordance with its drainage basin definition;
- To highlight the implications of the reconceptualization of the space for its macro-regional governance with regards to possible development trajectories and stakeholder non-financial resources;
- To increase the added value of the macro-regional strategy for the Baltic Sea and its internal coherence in light of available literature on integrated marine governance and social-ecological sustainability, as well as in accordance with my ecosophy and research perspective to be explained in the relevant parts of my thesis; and
- To offer a practical recommendation with regard to stakeholder capacity building.

This thesis has partly attempted to fill the research gap described by Gilek et al. (2016) in the following manner:

> "there is a need for more in-depth critical analyses of framings, processes and outcomes linked to stakeholder participation in Baltic Sea environmental governance [as] knowledge on environmental communication and framing is rather underdeveloped in the Baltic Sea region, [bearing in mind that] stakeholders' perceptions, engagement and participation can all be influenced by how the Baltic Sea environment and its problems are communicated and framed in the public discourse" (Gilek et al. 2016: 10).

To do so, it critically interrogates unexamined ways of thinking (Bacchi 2009) that lie at the core of thinking about, and acting toward, the Baltic Sea in the macro-regional context. In other words, my research work uses Bacchi (2009)'s problem-questioning (problem-challenging) approach to policy analysis by looking into problem representations in selected policy documents, their underlying assumptions

and social-ecological conditions created by them, as well as by recommending alternative ways of thinking about the macro-regional governance of the Baltic Sea. Rather than trying to provide 'evidence' to solve 'pre-set problems' (Bacchi 2009: 144), I have decided to explore the what why and how of the problematizations identified in the documents shaping the macro-regional strategy for the Baltic Sea. Additionally, my call for the creation of a supportive, non-dichotomous space for reimagining the Baltic Sea space along social-ecological lines has materialized in the deconstruction of numerous binaries, ranging from nature/society, through expert/non-expert, all the way to language/discourse, and their subsequent reconstruction along social-ecological lines.

Hopefully, the research results obtained in the course of my PhD project will facilitate the reconceptualization of the Baltic Sea as a social-ecological system and inform policy proposals, as well as educational and outreach programs dedicated to the macro-regional governance of the Baltic Sea. Owing to their both universal and region-specific nature, they may also prove to be relevant to other social-ecological challenges typical of our Anthropocene Epoch (Bińczyk 2018), such as the climate crisis, deforestation or desertification.

1.3. The purpose of the thesis and research questions

The purpose of the thesis is to find out how the problem of macro-regional governance of the Baltic Sea is represented in EU documents on macro-regional strategies, as well as in the EU Strategy for the Baltic Sea Region. It aims at understanding the assumptions and key concepts underlying this relatively new and innovative approach to governing the regional sea, as well as the processes and practices in which the macro-regional governance of the Baltic Sea is embedded. Following on from this, the overarching aim is to investigate the relationship among the construction of the following categories: the marine space; the issues and challenges identified in the process of governing the marine space; stakeholder representation as well as the rules of engagement and resources needed to engage in the macro-regional governance.

Moreover, the research project explores the likely lived effects of the identified problem representations, and offers practical recommendations with regard to alternative ways of thinking about the Baltic Sea governance inspired by social-

ecological sustainability and resilience. Through critically interrogating the interrelated concepts of development, growth, and human-ecosystem relations, as well as education, science, research and innovation, the project attempts to create a supportive space with enabling conditions for reimagining the macro-regional governance of the Baltic Sea along social-ecological lines (e.g. developing social-ecological awareness and critical sustainability skills), thereby helping diverse stakeholders establish a common platform for joint actions and capacity building. While the macro-regionalization approach does deserve recognition and support, the project highlights the need to improve its internal consistency in order to: match the complexity of the social-ecological challenges facing the region in the 21st century in general, and facilitate the implementation of the Baltic 2030 Action Plan (Baltic 2030) in particular.

In order to do so, the thesis attempts to answer the following research questions inspired by Bacchi (2009)'s approach to policy analysis called "What's the Problem Represented to Be?"

1. How is the issue of macro-regional governance of the Baltic Sea represented through problematizations to be found in policy documents shaping the EU macro-regional dimension?
2. What social-ecological conditions are constituted through such problematizations?
3. How may the 'problems' of macro-regional governance of the Baltic Sea be represented differently in order to correspond to the multi-dimensional nature of the marine space?

Not only do the above-formulated research questions aim at critically interrogating the macro-regional governance of the Baltic Sea in terms of my biosphere-based ecosophy (to be explained in the relevant subchapter) but also set the boundaries of my research project in the following manner:

- Taking the Baltic Sea and its ecological condition as both the main point of reference and the main driver for cooperation in the BSmR;
- Choosing the regional (above-the-state) level of marine governance as perfectly corresponding to the trans-boundary nature of the marine ecosystem (Ciechanowicz-McLean and Nyka 2016: 166), thereby

approaching the multi-level issue predominantly in terms of regional seas governance characterized by fluidity, dynamism and interconnectedness of multiple human-ecosystem interactions;

- Focusing on the macro-regional dimension of Baltic Sea governance for the following reasons:
    - The BSR as the EU's first macro-region established within the framework of the EU Strategy for the Baltic Sea Region, which celebrated its 10th anniversary in 2019. According to Söderström (2017), the EUSBSR "can be considered a new and complementary mode of governance merging Europeanization with a regional approach through the creation of a macro-region (…) [and] is a shift from the traditional top-down Europeanization process to including a more bottom-up regionalization approach through the inclusion of actors and stakeholders" (Söderström 2017: 42);
    - As the strategy is based on the principle of the 3 NOs (no new institutions, no new funding, no new legislation) (Gänzle and Kern 2016), it is worth taking a closer look at the added value of the macro-regionalization in the context of the extremely dense network of institutions, legal instruments. and cooperation networks already in place in the BSR;
    - The macro-regional strategy is to serve as a source of inspiration and a pattern for other macro-regions to follow as it is expected to perform better than previous regional development policies (Bafoil 2013: 202-203); and
- Selecting the time span of 10 years, delimited to cover the period from 2009 to 2019.

Other delimitations shaping the selection of the research corpus, relevant research publications and institutional reports, as well as the remaining analytical and conceptual choices have been reflected upon in the relevant chapters and subchapters of the thesis. Additionally, the scope of the project has been delimited by personal and academic motivation to be explored below.

1.4. My research motivation

One can hardly imagine a more awe-inspiring ecosystem than the Global Ocean. I have been captivated by the concept ever since I heard it for the first time in the context of the research work done by Professor Dorota Pyć at the Faculty of Law and Administration, the University of Gdańsk, Poland. However, in order to reduce my PhD thesis to manageable proportions, during my research stay at the Center for Governance and Sustainability, at the University of Massachusetts-Boston in 2015, I decided to focus on the BSR and multiple challenges related to its environmental governance. It seems that sometimes we need to travel to remote destinations to appreciate what we have at our doorstep. The selection of the BSR as my research interest has been determined by a number of reasons. First, spending my vacation time on the Baltic Sea coast, as well as being at the sea and observing its flora and fauna will always remain among my most treasured childhood memories. What is more, my passion for the sea has turned out to be more than just ephemeral fascination – I have always felt at home on the Baltic Sea coast. My sense of belonging to that place was aptly described by Jason Scorse, professor of Environmental Policy Studies at the Middlebury Institute of International Studies at Monterey, who during his TEDxMonterey talk[8] on the ocean's true market value said that his connection to the marine environment was so strong that being away from the ocean for a while made him feel landlocked. Surely I can relate to that. Therefore, over 10 years ago I moved from Warsaw to Gdynia, a port city on the Baltic Sea coast and part of the Gdańsk-Sopot-Gdynia metropolitan area, which gives me a chance to experience firsthand the complexity of the marine ecosystem, as well as enables me to appreciate the opportunities and challenges related to its multi-level and multi-actor governance.

What has always bothered me is our (human) claiming attitude toward the environment in general, and the Baltic Sea in particular, i.e. the habit of setting high expectations for the ecosystem without bearing proportionate responsibility for its (and thereby our) health and well-being, which results in a relatively poor environmental condition of the Baltic Sea, including but not limited to pollution, eutrophication and overfishing (Gilek et al. 2016).

[8] TEDxMonterey - Jason Scorse - The Ocean's True Market Value. Available at: https://www.youtube.com/watch?v=EBJekWCHxVU (accessed: June 16, 2018)

Since environmental governance issues are both social and environmental in nature, the social sciences have a significant part to play in marine (environmental) governance (ISSC/UNESCO (2013). Nevertheless, the expertise generated by social scientists has not been used to its full potential in the governance process, which "is likely thus to reproduce [its] reductionist view and treatment" (Jönsson et al. 2016: 223). The call for a more holistic and integrated scientific approach recognizes the nature of ecosystems as open, changing and complex systems. Such an approach explores the dynamic interactions of their social, political, economic, biological, and physical features, as well as considers humans and their values and preferences (social justice, economy, human health, and national security) to be integral parts of ecosystems (Cortner 2000: 26). The aim of integrated science engaging experts working across disciplinary boundaries is to "drop the artificial distinction between the biophysical and social sciences and the hard and soft sciences, and speak just of science" (Cortner 2000: 27). What is more, the discourse on environmental governance of the Baltic Sea is pervaded by such concepts as: public participation, stakeholder engagement or multi-stakeholder dialogue, which calls for critically-oriented research projects in this area.

If I were to choose two books best summarizing my personal values and attitudes as well as informing my ontological perspective and epistemological position, I would recommend the following ones as those holding the key to understanding me both as a researcher and an ocean enthusiast:

- "The World is Blue" by Sylvia Earle (2009), with its succinct subtitle: How Our Fate and the Ocean's are One. The author reorients our land-dominated perception toward the vast blue space that sustains us, as well as introduces us to the world's largest life-supporting ecosystem, largely unexplored and seriously threatened by human activities, with multifarious (or even mind-blowing) interconnections along the land-sea-atmosphere interface. What is more, Sylvia Earle urges us to embrace a common responsibility for its condition and wellbeing as "(…) without the "blue" there could be no green, no life on Earth and therefore none of the other things that humans value. Water – the blue – is the key to life" (Earle 2009: 15). The relevance and timeless appeal of the book has been highlighted by the fact that the period of 2021-2030 has been proclaimed by the UN as the Decade of Ocean

Science for Sustainable Development with the aim of "(…) provid[ing] a 'once in a lifetime' opportunity to create a new foundation, across the science-policy interface, to strengthen the management of our oceans and coasts for the benefit of humanity"[9]; and

- "The Routledge Handbook of Ecocultural Identity" (Milstein and Castro-Sotomayor (eds.) 2020), in which ecocultural identity has been introduced as an underlying and gathering concept with the potential to bridge the nature-culture divide pervading numerous discourses, from academia, through business and government to civil society, as well as to underscore the social, cultural, economic, political and ecological aspects of identity. Both universal and culture-specific, individual and collective in nature, the concept of ecocultural identity may not only help expose one of the most detrimental myths our unsustainable civilization is based on but also open a space for alternative ways of thinking about human-nature relations thanks to its cognitive, educational and practical potential.

Due to their universal and culture-specific appeal, both of these books merit worldwide recognition and, hopefully, engaged reading as their authorship and titles are clearly worth sharing across cultures, geographies and time zones, which reminds me of the metaphor of a message in a bottle described by Bauman (2005) as follows:

"The 'message in a bottle' allegory implies two presumptions: that there was a message fit to be written down and worthy of the trouble needed to set the bottle afloat; and that once it is found and read (…) the message will be still worthy of the finder's effort to unpack it and study, absorb and adopt it. (…) entrusting the message to an unknown reader in an undefined future may be preferred to consorting with contemporaries who are deemed unready or unwilling to listen, let alone to grasp and retain what they hear. In such cases, sending the message into unmapped space and time rests on the hope that its potency will outlive its present-day neglect and survive the (transient) conditions that have caused the negligence (…)" (Bauman 2005: 142).

[9] What is the United Nations Decade of Ocean Science for Sustainable Development? Available at: https://www.oceandecade.org/about?tab=our-story (accessed: January 20, 2021).

By the same token, the ideas of living on the Blue Planet and of discovering one's ecocultural identity appear to be universal and always true messages defying spatial or temporal constraints, as well as worth preserving for both the present and future generations.

1.5. My ecosophy: Navigating toward the natureculture paradigm

The ecocultural perspective (Milstein and Castro-Sotomayor (eds.) 2020) runs as a common thread through my research work by approaching the Baltic Sea as a discursively constructed marine space, both cultural and ecological in nature; and by exploring the cultural dimensions of its macro-regional governance by focusing on its culturally mediated representations, with the central role being played by language as an integral part of all sciences (Finke 2017, Fløttum 2017, Stibbe 2014, 2015), shaping and reflecting our cultural assumptions. As ecocultural identity is not a normative concept (Milstein and Castro-Sotomayor 2020a: 18), I have operationalized it in terms of my ecosophy (ecological philosophy; also referred to as ecological framework), i.e. a clear statement of my values, philosophical background assumptions and the conditions which allow valued outcomes to occur (Alexander et al. 2014; Stibbe 2015: 10-12). In other words, it is my ethical vision of the interrelationships of humans with other organisms and the physical environment that is normatively orientated toward the preservation of life-sustaining ecosystems (Alexander et al. 2014: 105). As the macro-regional discourse of the Baltic Sea is pervaded by various stories-we-live-by, i.e. cognitive structures in the minds of multiple individuals shared across a culture and shaping their perception of the world (Stibbe 2015: 6), they need to be subject to critical scrutiny using my own ecosophy to determine whether they are working in the current conditions of the world or there is a need to expose destructive discourses and to search for new, inspiring stories (Stibbe 2015: 10-11). It is noteworthy that any ecosophy needs to be scientifically possible, plausible, and aligned with the available evidence and the researcher's own experience of both the natural and social world, as well as subject to revision as new evidence emerges (Stibbe 2015: 13, 15). The idea of formulating and applying one's ecosophy in the pursuit of a research project appears to be in line not only with Stibbe (2015, 2021)'s approach to ecological analysis of discourse but also with the highly political nature of ocean (marine) governance (Bennett 2019). What is more,

the fact that any ecosophy should be based on explicitly stated criteria resonates well with the post-normal approach to science which stresses the need to ensure transparency in the face of complexity and uncertainty, as well as value-laden knowledge production (Funtowicz and Strand 2007; Cortner 2000). As there is no objective algorithm for determining whether certain ideologies are destructive or beneficial, it is only possible to assess whether a given ideology is compatible with my ecosophy or working against it (Stibbe 2015: 24), which appears to follow Funtowicz and Ravetz's recommendation to embrace as the goal of science "a more relevant and robust guiding principle [of] quality, understood as a contextual property of scientific information" rather than truth, the invocation of which may be seen as "a distraction, or even a diversion from real tasks" (Funtowicz and Ravetz 2003: 2). Such an approach to the idea of truth in scientific knowledge production is clearly in line with Barnett's concept of truth as "a value rather than as an end-point" (Barnett 2018: 111).

Furthermore, it needs to be underscored that while there is no correct ecosophy that ecological analysis of discourse should be based on, the assumptions of any ecosophy may be evaluated in terms of available evidence and their internal consistency (Stibbe 2015: 12). The fact that there is no correct ecosophy resonates well with Bacchi's approach to the research process: "this is not to suggest that my analysis is in any sense comprehensive or correct. You may produce a very different analysis of the same or related material" (Bacchi 2009: 21). In light of the fact that problem representations tend to nest (or are embedded one) within one another, it may well be possible to identify and classify other implicit problem representations (Bacchi 2009; Bacchi and Goodwin 2016). Although my ecosophy may contain simplifications and omissions, I have made the criteria on which it is based explicit and transparent, thereby underscoring the fact that I have embarked on this research project with specific prior knowledge, experience, and assumptions.

Human embeddedness in the biosphere

My ecosophy takes as its point of departure a relatively simple diagram that consists of three concentric circles representing the relationship among nature, society and economy.

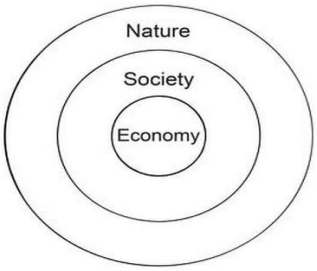

Fig. 6. The diagram showing the relationship between economy, society, and nature. Based on C. Folke's lecture notes of the early 1990s. Source: Folke et al. (2016).

Through embedding people with their cultures (and economies) in nature, the diagram challenges the nature-culture divide with its tendency to prioritize culture (the human-produced) over nature (the not-human produced), which may hamper "the internalization of relations with the non-human environment into everyday life, political discourse and policy formulation," as well as underplay both the impact of anthropogenic pressures and drivers on the natural environment and its power to shape human affairs (Heyd and Brooks 2009: 273, 279). Moreover, the human-in-nature diagram brings to the surface the notions of the unknown, the uncertain and the unpredictable – the sphere beyond human comprehension and control, which is in line with the post-normal approach to science (Funtowicz and Strand 2007).

At the core of my ecosophy lies the root metaphor[10] of nature as the web of life, which has a number of implications: first, it makes humans an integral part of the web of life (the biosphere); second, it makes it clear that harm done to any part of the web may ripple back to damage its remaining parts; then, it highlights the interconnectedness of all things; and finally, through the metaphorical entailment it makes humans responsible for their actions with respect to the whole web (Stibbe 2015: 72-73, Harper 2016: 95, Pollock 2016: 21). My ecosophy has primarily been based on two research perspectives on human-ecosystem relations: reconnection to the biosphere (Folke et al. 2016) and the dwelling perspective (Cooke et al. 2016), which generates multiple social-ecological implications for

[10] Root metaphor: a metaphor 'structur[ing]and maintain[ing] a "that's just the way it is" perception of the world ... a deeply ingrained set of ideas that structures how one sees, relates to and behaves in the world' (Martusewicz et al. 2011: 66)

the research process. If I were to express my ecosophy using one word, I would choose 'the biosphere' to summarize it as the concept of the biosphere explicitly refers to a space where all life exists: "a relatively thin life-supporting stratum of Earth's surface, extending from a few kilometers into the atmosphere to the deep-sea vents of the ocean. The biosphere is a global ecosystem composed of living organisms (biota) and the abiotic (nonliving) factors from which they derive energy and nutrients (…) The biosphere is a system characterized by the continuous cycling of matter and an accompanying flow of solar energy in which certain large molecules and cells are self-reproducing. Water is a major predisposing factor, for all life depends on it (…)"[11] In other words, in addition to making people an integral part of all life-supporting ecosystems, the definition of the biosphere is based on the concepts of flow and continuous cycling, thereby highlighting the dynamic and non-linear nature of environmental governance in general, and marine governance in particular. Therefore, the original nature-society-economy diagram may be modified accordingly to embed all social, cultural and economic activities in the biosphere in the form of three concentric circles (with the largest one symbolizing the biosphere) or a three-tiered wedding-cake structure as shown below.

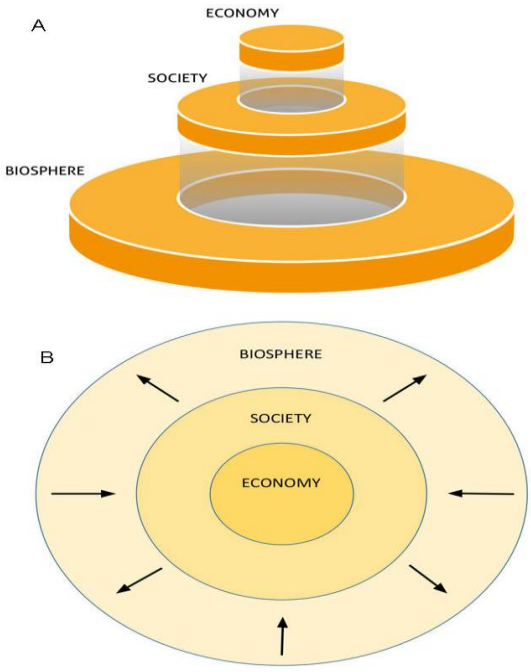

Fig. 7. The economy and society as embedded within the biosphere. (A) based on C. Folke's lecture notes of early 1990s, (B) inspired by, e.g., Boulding (1966), Odum (1989), and Daly (1991), see also Folke (1991), Perrings et al. (1992). Source: Folke et al. (2016). Reproduced with the consent granted by professor Carl Folke.

[11] Biosphere. Written by David M. Gates. Available at: https://www.britannica.com/science/biosphere (accessed: March 29, 2021).

The human embeddedness in the biosphere and the resultant critical dependence of people on life-sustaining ecosystems have creatively been captured by Tone Bjordam in her Biosphere Sculpture Installation (2016-2017). Inspired by the nature-society-economy diagram shown above, the three-layered installation consists of the largest part symbolizing the biosphere, the middle circular plate standing for society, and the lowest layer, i.e. a sphere-shaped ball representing economy, all of which have been suspended by the wires reflecting the mutual relationship among the parts, as well as underscoring the critical, life-supporting function of the biosphere. The installation representing the ecological embedding of humans and human societies perfectly corresponds to my worldview that there is no human existence independent of the biosphere, which makes virtually every object of study (whether the mind, the human, society, culture or religion) "an inextricable and integral part of a larger physical and living world" (Stibbe 2015: 7).

Fig. 8. The biosphere sculpture installation, reproduced with the consent granted by Tone Bjordam. Source: www.tonebjordam.com

Inextricably linked to the concept of human embeddedness in the biosphere, the other tenet of my ecosophy is the dwelling perspective based on the interactions

between mind, body and the environment, with the (re)connection occurring not only through a mind-shift or a change of perception but also constituting a more embodied form of the human-biosphere connection as people are not just mentally but also physically and materially immersed in their immediate environments (Cooke et al. 2016). The importance of the dwelling perspective may be underscored with the following observation: "We can be ethical only in relation to something we can see, feel, understand, love or otherwise have faith in" (Leopold 1979 as cited in Stibbe 2015: 161).

While 'nature', 'environment' and 'biosphere' are often used interchangeably, in my ecososphy I have replaced the concepts of 'nature' and 'environment' with the one of the 'biosphere' for the following reasons:

- The prevalent separation between nature (the Umwelt, the environment, everything that is outside of the realm of the human; the non-human) and culture (the Innenwelt, the 'I' and the 'us'; the human power of cognition, speech and action) (Harper 2016: 95), which reinforces the human disconnection from nature;
- Nature as an empty or floating signifier as well as an abstract term with "[its] elusive, ever-shifting, and multi-value signification" (Conesa-Sevilla 2018);
- Nature colonized by human beings to a point where social and natural systems have become "coupled" and there is no pure nature (Arias-Maldonado 2016);
- ➢ The etymology of the word 'environment'[12] ("state of being environed," i.e. surrounded, encircled, encompassed) conveying the idea of being 'surrounded' rather than embedded and embodied, which is evident in the following expressions: natural environment, human environment or built environment;
- The word 'environment' perceived as an abstract category with no one clear image coming to mind when heard (Stibbe 2015: 164); and

[12] Online Etymology Dictionary. Available at: https://www.etymonline.com/word/environment (Accessed: March 16, 2021)

- The environment seen as externality as opposed to the biosphere regarded as a precondition for social justice, economic development, and sustainability (Folke et al. 2016).

Through listing the above-stated reservations regarding the concepts of 'nature' and 'environment' I have no intention of imposing any linguistic or conceptual choices on any research approaches or frameworks. Conversely, the aim of the critical interrogation of the notions has been to highlight any potential pitfalls to be encountered in their unreflective use, which does not mean that they have been erased from my linguistic and conceptual repertoire, as is evident in my dissertation. All the concepts need to be used with caution and subject to critical scrutiny as they may be framed in multiple, culture-specific ways.

Apart from its function in the context of ecological analysis of discourse as stated above, my ecosophy also shapes my research perspective, as will be shown in subchapter 2.4: Relationality: At the nexus of the material and the representational. In other words, my biosphere-based ecosophy has informed every single step in my research work, determined my linguistic and conceptual choices, as well as navigated toward the natureculture paradigm, i.e. a holistic, systemic, integrated natureculture perspective with multiple cross-feeding issues, reaching beyond regional interests to include global problems (Harper 2016: 102), which will be developed in the context of trans- and undisciplinarity in chapter 4 of this thesis.

1.6. Thesis outline

The thesis consists of five chapters. Chapter 1 explores the nature of the Baltic Sea space and highlights the need to introduce its drainage basin definition, particularly in the context of regional seas governance in the BSmR. It also presents the transformation of the Baltic Sea space from an area, through a region, into a macro-region, as well as explains my ecosophy and contribution to the research work done on the governance of the BSmR. What is more, the chapter outlines the purpose of the thesis and my research questions.

Chapter 2 navigates the nodal discourse of sustainable development with its related theoretical frameworks of sustainability and resilience. Apart from underscoring the discursive dimension of marine (environmental) governance and introducing such key concepts as space, time, discourse, it includes subchapters on my

analytical framework and research design. Additionally, it shows insights to be gained from relational thinking in the context of linking the material to the representational.

Based on empirical evidence, Chapter 3 presents problem representations of the macro-regional governance of the Baltic Sea identified in the selected policy documents, their underlying assumptions, and an unproblematized ocean perspective. It also explores social-ecological conditions constituted by the identified problem representations in the form of constraints imposed on thinking, being, and living (discursive, subjectification, and lived effects, respectively). Moreover, this chapter contains a transitional chapter introducing the social-ecological approach and extrapolating likely lived effects from relevant publications.

Chapter 4 starts with my quest for creating a supportive space with enabling conditions for reimagining the macro-regional governance of the Baltic Sea along social-ecological lines. Then, it attempts to reconceptualize stakeholder non-financial resources to match the complexity of the Baltic social-ecological system. Finally, this chapter offers a practical recommendation in the form of critical marine literacy.

In Chapter 5, I reflect upon my main research results and the contribution I have made to the understanding of macro-regional governance of the Baltic Sea. To satisfy the need for self-reflection, I subject my own problem representations to critical scrutiny. What is more, by referring to the Ocean Decade, I strengthen the conceptual link between the Baltic Sea and the Global Ocean, as well as offer my final reflections regarding the research topic.

2

Theoretical considerations and methods

This chapter of the thesis explores the nodal discourse of sustainable development with its related theoretical frameworks of sustainability and resilience. Apart from underscoring the discursive dimension of marine (environmental) governance and introducing such key concepts as space, time, discourse, it includes subchapters on my analytical framework and research design, as well as explains insights to be gained from relational thinking in the context of linking the material to the representational.

2.1. Sustainable development v. sustainability and resilience

The macro-regional policy framework for the Baltic Sea epitomizes the nodal discourse of sustainable development which subsumes many other discourses and sub-discourses (see Fairclough 2012). Therefore, it appears to be reasonable to provide a brief overview of the very concept of sustainable development, as well as to offer a critical perspective on its modified use and to introduce two interrelated and mutually enforcing concepts of sustainability and resilience. The widely accepted definition of sustainable development reads as follows: "the development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987). The intergenerational justice objective of sustainable development is to be served by: "promoting sustained, inclusive and equitable economic growth, creating greater opportunities for all, reducing inequalities, raising basic standards of living; fostering equitable social development and inclusion; and promoting integrated and sustainable management of natural resources and ecosystems that supports *inter alia* economic, social and human development while facilitating ecosystem conservation, regeneration and restoration and resilience in the face of new and emerging challenges" with the aim of "(…) further mainstream[ing] sustainable development at all levels integrating economic, social and environmental aspects and recognizing their interlinkages, so as to achieve sustainable development in all its dimensions" (The Future We Want 2012: 1). Although the roots of the principle of sustainable development (or sustainability) may be traced back as far as the 18th century (Ciechanowicz-McLean and Nyka 2016), its conceptual underpinnings were consolidated in the early 1970s,

with the growing awareness of environmental concerns linked to economic growth trajectories, as well as scientific and technological progress (Du Pisani 2006: 89, 91).

Not only has sustainable development been viewed as a solution to growth problems (Du Pisani 2006: 91) but also as a norm performing an interstitial function to adjust overlapping or conflicting norms in the judicial process, i.e. a judicial factor when interpreting rules governing the management of marine natural resources (Tanaka 2018: 114-115). Widely used in the policy and business communities, the model of sustainable development has been based on economic, social, and environmental pillars either of equal importance or with sustainability being attributed to one of them (Folke et al. 2016). What is more, it has become "the new mantra for a coherent multilateral approach to addressing globalization" (Haas 2015: 371). Despite its being "a new morally defensible paradigm" (Du Pisani 2006: 94), the concept of sustainable development is far from being a panacea for complex environmental challenges facing the entire planet for the following reasons:

- The concept of sustainable development implying that economic growth is both ecologically and socially sustainable (see Du Pisani 2006; Bernstein 2001);
- "The designed ambiguity of the term" or "elusive quest for a definitional consensus" (Bernstein 2001: 5, 70);
- The concept of sustainable development as discourse and practice being prevalent, yet having reached a conceptual and political dead-end (Sneddon 2000: 524);
- A possible contradiction in terms, i.e. genuine sustainability and genuine development – from a puristic point of view – are irreconcilable (Du Pisani 2006: 94);
- 'Sustainable development' seen as an attempt to reconcile economic growth and ecological transformation in the development missions of international-level and national-level institutions toward developing countries in order to make the very concept more palatable to the people being 'developed' (Sneddon 2000: 522);
- Various conceptions of sustainable development as suggested by Baker et

al. (1997: 9) from the ‘treadmill approach’ through weak and strong sustainable development to the Ideal Model;

- The concept of sustainable development intended as a compromise between growth and conservation, with the following inconsistencies:
  - No ideological neutrality;
  - An alternative for the zero-growth option and the resultant positive inclination towards the growth and modernization viewpoints;
  - Anthropocentric views prevailing over ecocentric ones;
  - The major critique of sustainable development linked to its failure to question the ideology of economic growth or to adequately challenge the consumer culture, thereby serving neo-liberal interests (Du Pisani 2006);
- “[S]ustainable development rest[ing] on ‘shaky ground’, because specific criteria of sustainability have never been formulated, thus leaving the back door open to advocates of economic growth and progressive secular materialism to hijack the concept of sustainable development for their purposes” (Worster1993 as cited in Du Pisani 2016: 93);
- Doubts as to whether ecosystem protection or healthy environment is an integral part of the concept of sustainable development as evidenced in the following expressions: ”to achieve both an integrated sustainable development and a healthy environment,” “a sustainable development and ecosystem protection;” “a truly integrated approach to conservation and sustainable development” (WWF 2009);
- An exhausted paradigm of sustainable development, with the predominance of science-economic discourse and social and technological development subject to market logic (Bińczyk 2018: 173-180), with human imagination being stifled and hindered by thinking about their future only in terms of profitable technological innovation, individual consumer choices or emission trading system (Blühdorn cited in Bińczyk 2018: 174); and
- Challenges linked to the sustainable development triad with ‘environment’ as one of its components, thereby making it relatively easy to surrender to the temptation to drop this problematic component if hard to reconcile with economic objectives treated as the primary goal (Stibbe 2020).

Taking the above into consideration, it is becoming increasingly apparent that the closely related notions of resilience and sustainability have the potential to replace what Stibbe (2014a) calls "tired and compromised 'sustainable development' discourses" (2014a: 124).

By contrast, the term 'sustainability' appears to be more palatable through its avoidance of the problematic concept of 'development' and the use of insights gained from ecological economics, the natural sciences, and diverse theoretical perspectives, as well as its focus on the interaction among academics, citizens' groups, NGOs, and social action networks seeking to challenge socio-ecologically unsustainable initiatives (Sneddon 2000: 523-525). As a more unifying concept (Gee 2019: 36), sustainability may have the following advantages over the problematic concept of sustainable development:

- Its perception as a political initiative, a scientific study, an expression of respect for nature, a new dimension of participatory democracy, justice for future generations (inter-generational justice), justice towards fellow humans (intra-generational justice), and a vision of the good life (Sundström and Rydén 2003: 769);
- A general frame of reference to facilitate the process of breaking down traditional dualisms in the sciences (Jamieson 1998 in: Sneddon 2000: 522); insights from ecological economics, the natural sciences, alternative development practices, an eclectic collection of theoretical perspectives, as well as creative liaisons among both academic and non-academic knowledge holders (Sneddon 2000); and
- A discursive filter and a major trope in discussions on development, society, and livelihoods, and other social, economic and ecological activities, with the growing recognition of the multicausality and multidisciplinarity of social and environmental challenges (Sneddon 2000: 522).

In other words, de-linking the interrelated concepts of sustainable development and sustainability, and removing the problematic concept of development may result in the exploration of new modes of inquiry (Sneddon 2000).

Defined in a variety of ways, resilience is a system's ability to absorb, recover from and adapt to external pressures, i.e. to be adaptive and transformative within critical

thresholds in the context of a gradual and abrupt change (Folke 2006). Rather than assuming that ecosystems are in equilibrium or tend to return to equilibrium after being exposed to shocks or pressures, the perspective instead emphasizes "non-linear dynamics, thresholds and surprise, how periods of gradual change interplay with periods of rapid change and how such dynamics interact across temporal and spatial scales" (Folke 2006: 253). It is also noteworthy that according to Sjöstedt (2015) resilience thinking that has exerted its influence far beyond its original disciplinary borders may derive much benefit from examining institutional change trajectories, the dynamics of path dependence, the distributional character of institutions, the fundamental political drivers of institutional design and diversity as well as endogenous sources of institutional change. Normally, institutions are subject to change not only in response to external shocks or changes in the biophysical world but also through internal struggles regarding the interpretation and enforcement of adopted rules. The emphasis on non-linearity, power struggles and change typical of both institutional arrangements and complex adaptive systems within the resilience perspective has also been placed by Steinberg (2009), who raises the issue of political mobilization as a prerequisite for institutional resilience in the context of change.

In summary, it needs to be underscored that attempts have been made to differentiate between the concepts of sustainable development and sustainability (Du Pisani 2006) or to establish the mutual relationship between sustainability and resilience, with one concept seen as a component of the other one or both of the concepts treated as separate objectives or, to make things even more complicated, with the ambition to jointly integrate sustainability and resilience (Marchese et al. 2018; Redman 2014). However, consensus regarding their consistent use is nowhere in sight. Therefore, it is recommended that the above-discussed theoretical framework for the concept of sustainable development and its relation to sustainability and resilience be treated as an invitation to critically explore the interrelated concepts on a case-by-case basis rather than as an exhaustive study of the principle of sustainable development and its modifications. This thesis has greatly been inspired by the following approach to sustainability: "We seek not just ecological sustainability, but a more encompassing socioecological sustainability. We want a sustainable relationship between humans

and the natural world rather than a sustained ecological system without humans which, to many of us, would be a sign of failure…" (Larson 2011 as cited in Stibbe 2015: 11).

2.2. Marine (environmental) governance and its discursive dimension

It needs to be stressed that rather than being a blueprint for change, sustainable development is a context-dependent process the governance structures of which are characterized by both uncertainties and goal setting, as well as multi-actor and multi-level interactions, which may ultimately lead to formulating a smart mix of governance approaches (Baker 2009). They may include the following:

- Adaptive management, community-based natural resource management, network governance, collaborative governance, thereby marking a shift from state-centered, hierarchical top-down government towards less formalized bottom-up governance by networks of interdependent stakeholders (Fliervoet et al. 2016);
- Participatory processes and co-management (Hauck et al. 2016; Mathur et al. 2007); and
- Shared learning, institutional diversity, and multi-scale governance (Palomo et al. 2014).

The above recommended courses of action need to be based on the assumption that both ecosystems and societies epitomize complex systems, the governance of which occurs at multiple levels and in multi-stakeholder settings, as well as across spatial and temporal scales (Ivanova et al. 2019). Moreover, they combine not only environmental but also social, political, economic and cultural dimensions. The inseparability of social and environmental systems and challenges is directly linked to the very nature of the environment as a single, complex and interconnected system having a socio-ecological dimension (ISSC/UNESCO (2013). Environmental governance is defined as a system of multi-level interactions (local, national, international/global) among, but not limited to, the state, market, and civil society interacting with one another for the purpose of facilitating environmentally-sustainable development in the area of complex, interconnected and overlapping issues, such as: marine governance, climate change, deforestation, desertification or biodiversity loss. The process of environmental governance involves the following: wider community participation, policies implemented in

response to environment-related demands, and inputs from society (Ciechanowicz-McLean and Nyka 2016: 125-126; Allen and Kilvington 2010; Mathur et al. 2007). As an on-going and multi-level endeavor, the governance approach sees citizens and their communities as entities actively involved in public affairs, as well as results in increased social interaction, deeper interdependence, and greater complexity of social life (Mazur 2015: 297). In order to be seen as legitimate, it requires the following: the deliberative participation of state representatives, independent experts, businesspeople, activists, journalists, and citizens; the connection between the forms of cooperation and the participants' interests and values; the process design, the exchange of information, and the rules for participation (Haas 2015: 373, Van Tatenhove 2011: 101). In other words, governance denotes a cooperative and non-hierarchical form of political steering, very often engaging both public and private actors (Steffek 2009: 313). Owing to its de-centralized, non-hierarchical, inclusive and flexible nature, governance may contribute to successful policy-making (Steffek 2009: 314). However, such an aim can hardly be reached in an exclusively top-down manner (Hauck et al. 2016). What is needed is the incorporation of a bottom-up approach to governance into various policy arrangements (ISSC/UNESCO (2013)). The bottom-up approach to governance is in line with the call for a more civic science within the framework of which relevant stakeholders are to be involved at each stage of the research work, science involves participatory research designs and democratic deliberation, and grassroots knowledge is given more prominence. Although conflicts may arise because of divergent values and interests (Hauck et al. 2016), citizen participation has the potential of "bringing forth new knowledge and ideas capable of creating and legitimizing new interests, reshaping our understanding of existing interests, and (…) influencing the political pathways along which power and interest travel" (Fischer 2003: 220).

Although one can hardly imagine a more complex and overwhelming challenge than marine (ocean) governance (Bennett 2019), the above outlined conditions may facilitate reconciling the protection of marine environment and the management of ocean space and marine resources (Pyć 2011, 2016) in an effort to share policy making competencies in a system of negotiation between governmental institutions at several levels and state actors, market parties and civil society organizations of

different maritime activities (Van Tatenhove 2011: 95). The ongoing and dynamic process of governance (Ciechanowicz-McLean and Nyka 2016) clearly justifies the need for civic science to "supplement, not replace, the standard analysis of efficient means to given ends with qualitative discussions of the means themselves" (Fischer as cited in Cortner 2000: 27), as well as to ward off the risk of breeding technocracies which – owing to their overreliance on expertise – may change the status of citizens (local communities) from authors of political outcomes to mere stakeholders (Steffek 2009: 313).

The role of experts played in the area of marine (environmental) governance cannot be overestimated (Steffek 2009: 316). However, there is a gap between the scientific discourse and the language used by laypeople, which may pose a serious challenge to legitimating efforts. Scientists tend to use their own particular reference system and style of reasoning, which confers on them the authority to provide their expertise on environmental issues. Yet the discourse used by scientists may result in the exclusion of lay people from governance processes and their discourses (Steffek 2009: 316-317). It is noteworthy that science is often relied upon to provide arguments supporting specific policies (rational argumentative justification). According to Steffek, "[as] speakers in a discourse, individual scientists and institutions embodying expertise have particular standing" (Steffek 2009: 317). However, the authority of scientists and their claims may also be subject to contestation, and other sources of authority, including ethical values, are often invoked to challenge scientific knowledge. The attempt to assign to the public and scientists completely separate roles: determining goals, and deciding on the means to achieve them, respectively, may result in the marginalization of the public in the policy-making process and in the use of predominantly technical criteria for decision making (Cortner 2000: 25). However, due to the inherent uncertainties of knowledge, the process of generating scientific knowledge for public policy should be open to an intense, social examination of the evidence collected, and to the negotiation of the knowledge construction process, yet without the scientific truth to be determined by social choice (Wynne 1992: 126). Such an approach is in line with the model of extended participation based on the idea of an extended peer review community comprising both expert and non-expert stakeholders. As a result, citizens perceived as both critics and creators are given

a chance to evaluate scientific methodologies in the knowledge production process, which may result in quality assurance and the democratization of science (Funtowicz et al. 2007). In order to facilitate the interaction among analysts and participants, it is crucial "to improve policy argumentation by illuminating contentious questions, identifying the strengths and limitations of supporting evidence, and elucidating the political implications of contending positions," which is in line with the argumentative turn in policy analysis (Fischer 2003: 201). Moreover, the following developments have grown in importance: language, argumentation and deliberation in the process of policy-making (the argumentative turn); the rejection of the notion of policy analysis as a value-free, technical project; a combination of both descriptive and normative elements; focus on communicative competences, social learning and the dynamic interaction between public and private interests, as well as on the role of experts (Fischer and Gottweis (eds.) 2012; Fischer and Forester 1993). The issue of marine (environmental) governance revolves around questions regarding adequate stakeholder representation, legitimacy, participation, power (interests and influence), and knowledge. In other words, it comes down to the following dilemma: "who's in, and why?" (Reed et al. 2009: 1934). Furthermore, the discourse on participatory processes in marine environmental governance is pervaded by such concepts as: communication, consultation, and participation (Rowe and Frewer 2000), and dissemination (deficit), dialogue and conversation (participation) and their possible variations (Trench 2008), as well as informing, consulting, forming partnership (Allen and Kilvington 2010). In other words, the type of stakeholder engagement may range from passive, one-way consultation (stakeholders simply providing information for the analysis) to active engagement or multi-directional deliberation (a two-way exchange of information between stakeholders and analysts as equal partners, with stakeholders helping direct research aims and objectives) (Reed et al. 2009, Trench 2008), which highlights the rising complexity of interplay among diverse actors (Marks and Hooghe 2001) operating in various multi-level settings, including state and non-state, expert and non-expert ones, epistemic communities, social networks, civil society (Haas 2015; Kanie et al. (eds.) 2014; Reuter 2007; Bodin et al. 2006).

As the issue of public participation is strictly connected to communication, discourse and power, public participation in environmental decision making is both

shaped by and, in many cases, constrained by the ways in which marine (environmental) issues, problems, and solutions are defined or framed through the strategic communication practices of the participants (Depoe et al. (eds.) 2004). To account for that, the scientific research process should take into account any uncertainty and complexity involved in knowledge production as well as reflect relevant stakeholders' views on a particular issue. Furthermore, the scientific process needs to answer the question of how scientific knowledge is produced, interpreted and integrated into the policy-making process. Therefore, it may be concluded that not only does scientific expertise facilitate the legitimation of an integrated approach to environmental governance issues but it also needs to legitimize itself. It is clearly beyond the scope of this thesis to determine whether post-normal science is a new way of doing science or just a sensitizing concept meant to alert us to the existence of certain complex issues (Wesselink and Hoppe 2011). However, the post-normal approach to science is based on several concepts that correspond exceptionally well to the nature of integrated marine governance such as: uncertainty, complexity, urgency, extended peer community or precautionary principle (Ravetz 2011). Apart from their overwhelming complexity, human-nature systems are characterized by many sources of uncertainty: lack of knowledge leading to knowledge gaps, variability (inherent randomness of natural systems) or expert subjectivity (Maxim and van der Sluijs 2011). What is more, the involvement of various institutional designs and jurisdictions in the governance process adds additional levels of depth and complexity to the task at hand (Sjöstedt 2015; Valman 2013; Steinberg 2009). Matters are even more complicated due to the problematic nature of the science-policy interface (the degree of fit of scientific knowledge with nature; different time spans; urgency of decisions etc.) (Funtowicz and Strand 2007, Wynne 1992). As the governance of human-nature systems occurs at multiple levels and in multi-stakeholder settings, as well as across spatial and temporal scales (Ivanova et al. 2019), numerous attempts are made at the level of discourse and institutional practices to capture the multi-dimensionality of space.

2.3. Key concepts

Forming the backbone of my PhD thesis, the concepts of space, time and discourse epitomize travelling concepts, i.e. abstract representations of an object (objects) which move across spatial, temporal and disciplinary constraints, as well as

analytical domains, thereby acquiring various meanings and finding their way into diverse studies (Bal 2002). As it is clearly outside the scope of the thesis to track the routes travelled by the above-mentioned concepts, a brief overview of their unfixed and ambiguous nature (Bal 2002: 23) has been given below, with special emphasis on their use in the context of marine space and its governance.

Space

Owing to its multi-dimensional nature, the concept of space has been appropriated and defined by various academic disciplines such as geography, physics, sociology, history, architecture and political science, as well as analyzed in terms of its material objects, structures, actions, spatiotemporal dimensions, social capital and interpersonal relations (see Rau 2019, Löw 2018, Sztompka 2016, Schmitt-Egner 2002). However, it appears that none of these approaches has managed to capture the multi-dimensional and multi-disciplinary character of marine space and human relation to it, i.e. the totality of marine space. This void may partly be filled with the so-called Harvey-Lefebvre matrix interweaving Harvey's notion of spatiality as produced by practice (absolute, relative and relational space) and Lefebvre's socially produced spatiality (experienced, conceptualized, and lived space) (Nash 2016). In this way it adds the spatio-temporal dimension to Bourdieu's field theory by incorporating the concept of process as a binder connecting Bourdieu's material space and abstract social relations (Nash 2018). Apart from adding depth to Bourdieu's field theory, the Harvey-Lefebvre matrix captures the multi-dimensionality of the concept of space, which is clearly in line with the spatial turn in the humanities (Bachmann-Medick 2016), as well as with the need to formulate a unified theory of space (Lefebvre 1991). A scoping tool rather than a rigid checklist (Nash 2016), the matrix facilitates the understanding of processes by which abstract relations produce objective results, which reflects the totality of practice. Furthermore, the matrix appears to be highly relevant to marine ecosystems in the sense that it underscores the complexity of marine governance, with the concept of the marine space not only referring to the life-sustaining ecosystem, natural and social processes shaping the marine environment, relations among stakeholders (actors), their values and interests but also to the social production of this space through sensory and cognitive experience, as well as imaginative, emotional and cultural engagement.

Such a multidimensional approach to space resonates well with relational understandings of marine spatiality (Jay 2018: 455-456), as well as zonal and integrated management approaches to ocean governance to account for both the need to divide the marine space into multiple jurisdictions, and the fluid and dynamic ecological interactions and conditions typical of the marine ecosystems (Tanaka 2004, 2008).

In his article on field theory, space and time, Nash seems to oppose Bourdieu's somewhat ambiguous statement as to the detachment of trans-historical truths from space and time, as well as their independence from history on the grounds that all knowledge to be found in the world is produced in spatio-temporality, which means "inside never-ending time and unrestricted space" (Nash 2018: 219). Therefore, the term 'trans-historical' is not synonymous with 'ahistorical', which is clearly in line with the attempt to historicize oceans and other supposedly ahistorical spaces, as well as to introduce the fourth dimension of the ocean (marine) space: time (Bachmann-Medick 2016, Stel 2014). The unity of time and space shapes environmental governance in the sense that natural boundaries are always changing in space and time, with the diffuse nature of environmental issues making them virtually impossible to delimit and with environmental governance decisions impacting even future generations (Lundén 2004).

As the governance of any marine space is marked by overwhelming complexity, attempts have been made in the form of identifying various types of boundaries to cope with this mind-boggling task:

1. Natural borders (found to exist in nature): fluid, non-linear, overlapping, interacting, changing in time and space, e.g. land-sea interface; ocean-atmosphere interface; sea-land air interface (see Pyć 2011);
2. Man-made borders including lines drawn on a map: state borders (rarely coinciding with ecological boundaries); maritime zones (boundaries) as specified in the United Nations Convention on the Law of the Sea (1982), e.g. territorial sea, exclusive economic zone, extended continental shelf, the high seas; the Baltic Sea space conceptualized in terms of an area, a region or even a macro-region, as well as delimited in accordance with political, drainage definition or resident definitions, to name but a few (Henningsen 2011); boundaries set to protect marine and terrestrial

ecosystems through mapping ecosystems for conservation, as well as to create ecologically representative systems of protected areas: marine protected areas, marine sanctuaries, marine reserves; terrestrial ecoregions (Spalding et al. 2007);

3. Lines and limits shaping our perception and practices regarding human-environment interactions, e.g.: nature-culture, nature-society divide; planetary boundaries aimed at creating a safe operating space for humanity: biosphere integrity, climate change, novel entities, stratospheric ozone depletion, atmospheric aerosol loading, ocean acidification, biogeochemical flows, freshwater use, land-system change (Rockström et al. 2009); ecological thresholds (the point or level at which something begins or changes in ecological systems), tipping points (a point at which an (ecological) system experiences a qualitative change, mostly in an abrupt and discontinuous way) and regulatory limits (decision thresholds or management thresholds) (Jax 2016).

While by no means exhaustive, the above list of various boundaries reflects human attempts to conceptualize a fluid, changing and complex environmental setting characterized by trans-boundary and multi-level forms of interaction (Pyć 2011), thereby demonstrating that the space-time dichotomy is out of place in marine (environmental) governance. Rather than being "a static backdrop to time's activity" (Thrift 2006 as cited in Peters and Kessl 2000: 26), space along with time is actively constructed as [an] "aspect of human beings living in the world," as part of the spacing process (Peters and Kessl 2000: 27). The spatiotemporal dimensions of governing marine space(s) appear to be in line with the statement that human history has been closely interwoven with the sea (Gee 2019: 23) and the 4D[13] perspective of the ocean space introducing its fourth dimension of time to track ocean masses moving in space and time (Stel 2014). A different take on the spatiotemporal dimension of marine space was offered by Rachel Carson:

"Who has known the ocean? Neither you nor I, with our earth-bound senses, know the foam and surge of the tide that beats over the crab hiding under the seaweed of his tide pool home; or the lilt of the long, slow swells of mid-ocean, where shoals of

[13] A five-dimensional approach (including the air above the sea and the substrate) has been proposed by Gee (2019: 34).

wandering fish prey and are preyed upon, and the dolphin breaks the waves to breathe the upper atmosphere (…) To sense this world of waters known to the creatures of the sea *we must shed our human perceptions of length and breadth and time and place, and enter vicariously into a universe of all-pervading water*. For to the sea's children nothing is so important as *the fluidity of their world*." (Carson 1937; my emphasis).

Her call to reconceptualize human perception of space and time vis-à-vis the marine ecosystem appears to be more valid now than ever before in the context of the climate crisis threatening the whole BSmR with its multiple social-ecological consequences (Reusch et al. 2018).

Time

As the 4D perspective has introduced the concept of time and change into marine space and its governance, there are two concepts that may be evoked in this context, i.e. critical transitions and critical junctures. Although both of them convey the meaning of change and contingency, they differ in a number of ways. According to Scheffer et al. (2012), critical transitions refer to sudden and significant changes occurring in complex systems, leading to instability and resulting in a given system's shift into an alternative stable state once the tipping point has been reached. While it is extremely challenging to predict sharp shifts for large ecosystems (e.g. the Baltic Sea) or other complex social-ecological systems, there are some generic markers of the system's fragility that precede various abrupt changes (Scheffer et al. 2012; Scheffer et al. 2009). The stability of a given system and its response to both minor and major triggers is to a large extent contingent on the heterogeneity of the components and their connectivity, i.e. the nature of interactions within the network. In highly connected systems characterized by strong connectivity, small-scale perturbations can be repeatedly compensated by the broader system, which, according to Scheffer (2009), gives a false impression of resilience as under changing conditions a complex system may be surreptitiously approaching the tipping point (chemical munitions dumped in the Baltic Sea after WW2 may serve as a case in point). As the theory of critical transitions is applicable to both natural and social systems, the insights gained from it may well be used in designing resilient institutional solutions in the context of complex social-ecological system governance. Naturally, all these suggestions need

to be used with caution as "much is beyond our reach when it comes to 'design'" due to the non-linearity of responses to other unobserved drivers, the multimodality of the distribution of such drivers or the character of the perturbation regime (Scheffer et al. 2012: 346). Therefore, it should not be surprising that such a complexity and unpredictability calls for an integrative approach for anticipating critical transitions, i.e. a smart combination of approaches (Scheffer et al. 2012).

Although ecological and social change may be related through the concept of a critical transition (Scheffer 2009), the notion of a critical juncture (albeit connected with change and contingency) refers to situations of uncertainty and contingency, as well as of a substantial relaxation of constraints in which actors may take decisions regarding the selection of one path of institutional development over other options, thereby placing institutions on relatively stable trajectories (Capoccia et al. 2007). In the context of environmental challenges characterized by evolutionary, cumulative causes and longer time spans, it appears to be more reasonable to expect gradual institutional change (Valman 2013).

The sense of change, contingency and instability regarding both social and ecological systems may come in different conceptual guises:

- Liquid modernity as a period of interregnum, with humans trapped between exhausted old paradigms, structures and social orders on the one hand, and the undefined ones in the process of ongoing formation on the other (Bauman et al 2017: 35);
- Liminality as "a disorientating borderline state of "betwixt-and-between" entailing the suspension of stable meanings and the exploration of the unknown and the uncertain (Bachmann-Medick 2016: 82, 88);
- "VUCA world," i.e. a volatile, uncertain, complex and ambiguous world necessitating unprecedented levels of agility, creativity, adaptability and resilience, and calling forth new mindsets, models and ways of seeing and being (Pollock 2016: 10); and
- Being in-between stories: "We are in trouble just now because we don't have a good story. We *are between stories*. The old story, the account of how the world came to be and how we fit into it, is no longer effective. Yet we have not learned the new story." (Thomas Berry (1988) as cited in Stibbe 2015: 2; my emphasis). It has never been more evident than today: "We do

not have a new story yet. Each of us is aware of some of its threads, for example in most of the things we call alternative, holistic or ecological today. Here and there we see patterns, designs, emerging parts of the fabric. But the new mythos has not yet formed. We will abide for a time in the 'space between stories'. It is a very precious – some may say sacred – time." (Eisenstein 2013 in Stibbe 2015: 192).

Particularly in the context of marine (environmental) governance challenges, the category of time needs to be extended to include the concept of Anthropocene – an era where humanity has accelerated into a big world on a small planet (Rockström and Klum 2015 as cited in Folke et al. 2016) and a human-dominated epoch (see Bińczyk 2018 for the exploration of this concept as well as others used to in the context of human exploitation of the planet), all of which calls for rethinking sustainability in the postnatural age (Arias-Maldonado 2016). While undoubtedly the planet has been transformed by human actions at an unprecedented scale and speed (Bińczyk 2018; Folke et al 2016), it is imperative that:

- Human existence and actions be interwoven with the global ecological system (the biosphere) in a complex interplay of local, regional, and worldwide dependencies (Folke et al. 2016);
- The concept of biosphere-based sustainable development be embraced as the prerequisite for rapid transformations toward global sustainability (Folke et al 2016; Folke et al. 2021);
- Governance systems be both durable enough to guide actions and behavior, as well as agile enough to respond to rapidly changing conditions (Young 2017); and
- The cooperation at the science-policy interface be strengthened in the context of complex system governance (Young 2017).

Taking into account all of the above complex circumstances, could David Abram's concept of the Humilocene[14] referred to in *The Routledge Handbook of Ecocultural Identity* (Milstein and Castro-Sotomayor (eds.) (2020)) as a new epoch of humiliation and humility, "as a regenerative, ethical, and empathetic framework

[14] It is interesting to note that the words: *human, humiliation and humility* have a common etymological origin indicating their earthly connection. Online etymology dictionary. Available at: https://www.etymonline.com/word/*dhghem-?ref=etymonline_crossreference (accessed: May 6, 2021).

within which multiple ecologies of sensory experience interlock to engender ancient and renewed ways of being human – as a species, as animals, as sensory bodies – and to break from the prevalent contemporary narcissistic human posture threatening existence on our planet" (Milstein and Castro-Sotomayor 2020b: 24) hold the key to addressing our current social and ecological crises? Whether humanity embraces the new humility-pervaded epoch remains to be seen, particularly in the context of the Covid-19 pandemic, the liminal nature of which has been aptly summarized by Arundhati Roy in the following manner: "Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next" (Roy 2020).

The above list of names for the human-dominated era is by no means exhaustive as the spatio-temporal dimensions of our reality (realities) may be discursively constructed in a myriad of ways (see Fairclough 2003; Fairclough and Duszak (2008) for discourse analysis as both an analytical method and a research perspective, as well as Jørgensen and Phillips 2002 for discourse analysis as theory and method).

Discourse

Similarly to the concepts of space and time, the term 'discourse' has multiple meanings (discourse as text, communication, frame or practice), and can be analyzed from a variety of research perspectives (see Arts and Buizer 2009). As textually mediated social action, discourse (language use as a form of social practice (Fairclough 2003) performs an ideological work by 'representing and constructing society' and by '[reproducing] unequal relations of power' (Wodak 1996: 18). Stibbe (2015) has put it succinctly when affirming that "texts and discourses will always be partial, bringing certain elements together into a configuration while leaving out a whole universe of other elements" Stibbe (2015: 146). For example, stakeholder selection and engagement are defined by the framing of a given environmental challenge produced by a certain group of actors (see Reed et al. 2009). Fairclough (2003) defines a discourse as "a particular way of representing some part of the (physical, social, psychological) world" (Fairclough 2003: 17), as well as highlights its role in reflecting and shaping the world or possible worlds (Fairclough 2003). "Some part of the […] world" may

safely be referred to as a multi-dimensional conceptualization of space with all its inherent complexities, including physical space, processes and abstract relations subject to empirical observation, conceptual representation as well as imaginative, emotional and cultural engagement (see Nash 2016, 2018). While discourse (language use) defined as a form of "social practice" (Fairclough and Wodak, 1997: 258).

However, it needs to be remembered that there are radically different accounts of what discourse is (Richardson 2007 as cited in Stibbe 2015: 22), which may result in a 'bewildering range of overlapping and contrasting theorizations'" (Fairclough 2003: 124; see also Gee and Handford (eds.) (2012) for a myriad of approaches to discourse analysis, as well as Leopold and Winkel (2016) for an overview of interpretive discourse analysis approaches and their analytical heuristic referred to as the Discursive Agency Approach). In this thesis, however, an attempt has been made to reconcile Stibbe (2015)'s approach to the concept of linguistically accessed discourses with Bacchi (2009)'s Foucault-inspired concept of discourse as knowledge claims, which will be explained in detail in subchapter 2.5 (Analytical framework). Suffice it to say that as this thesis explores a research topic of inter- or even trans-disciplinary nature, the very definition of the concept of discourse needs to be malleable enough to accommodate apparently conflicting approaches and to identify synergies between them to reflect the nature of actively constructed marine (environmental) governance issues. They are textually mediated social practices shaped by "discourses also subject to challenge through deliberative debate in public about their foundations, and about alternatives" (Haas 2015: 115).

However, before I proceed to my analytical framework, I will explore the nexus of the material and the representational, which not only lays the foundation for the analytical framework but also provides insights into my ontological perspective and epistemological position.

2.4. Relationality: At the nexus of the material and the representational

The aim of this subchapter is not only to ensure a smooth transition from the theoretical-conceptual part to the analytical-methodological one but also to lay the foundation for the creation of a supportive space for reconceptualizing the macro-regional governance of the Baltic Sea along social-ecological lines. My

relentless quest for overlaps and synergies among the myriad of approaches, concepts, methods, and perspectives has, to a large extent, been driven by Sarah Cornell's review of the book *Ecophilosophy in a World of Crisis: Critical realism and the Nordic Contributions* (Bhaskar et al. (eds.) 2012), which – in my view – perfectly captures the nature of the world we are living in:

"A world of crisis – in other words, a rapidly changing world where social and environmental transformations, interactions and risks are real, not merely a matter of perspective, debate or belief – demands a philosophy capable of 'thinking' these many dimensions coherently and simultaneously. It must accommodate Earth's functioning (…) and also give an account of the workings of the human world. It must be able to address why society apparently seeks to accelerate the erosion of its own material underpinnings, even as an unprecedentedly rich and detailed intellectual understanding of this unhealthy dynamic is developed in academic institutions, and disseminated and debated by people all around the world. Such a philosophy must also allow for personal responsibility in the face of these changes. (…)" (Cornell 2014).

While this thesis makes no claim whatsoever with regard to satisfying all of its requirements, the above-cited diagnosis is undoubtedly an inspirational point of departure for multiple interdisciplinary endeavors, with the PhD thesis being just one voice among many legitimate ones in a position to assist in the evolution of such a philosophy. Guided by the paradigm-opening approach to be found in relational approaches (West et al. 2021, West et al. 2020), I have attempted to reconcile the numerous dimensions of the marine space and its governance by drawing some inspiration from relational thinking and post-structural geographies in the following manner:

1. Relational thinking, with its emphasis on "continually unfolding processes and relations" and the rejection of deeply ingrained dichotomies and bifurcations (West et al. 2020: 304, West et al. 2021), may be traced in my conceptualization of the Baltic Sea as a relational and dynamic space (Jay 2018), and the need to embed the Baltic Sea as a social-ecological system in the biosphere to account for countless ongoing processes and relations occurring at the land-sea-atmosphere interface. However, due to the fact that the macro-regional governance of the Baltic Sea is a large-scale

predominantly project/platform-based endeavor I have approached from a metalevel perspective in terms of complex coupled systems (West et al. 2020: 309), I have not been in a position to fully adopt process-relational philosophy (see West et al. 2021: 108). Instead, while retaining some of the modernist-substantialist assumptions to be found in my pre-determined coding categories (place, challenges, subjects, and objects), I have been inspired by relational thinking as follows:

- The process-relational philosophy of relational approaches (West et al. 2021; West et al. 2020) has been reflected in my decision to frame the macro-regional governance of the Baltic Sea in terms of complex adaptive systems owing to their relational worldview (Preiser et al. 2022a: 33-34), as well as to adopt Bacchi (2009)'s WPR approach to policy analysis with its emphasis on the ongoing process of becoming a problem or a subject in policy-making (see also Bacchi and Goodwin 2016). The relational view of the world in a state of becoming (West et al. 2020: 310) corresponds to the idea of the Baltic Sea space as a macro-region in the making (Gänzle and Kern 2016);
- The relational approach to the space-time interface may be detected in my conceptualization of the Baltic marine space (the BSmR) as a space functioning in a given temporal context (Schmitt-Egner 2002) and also having a history (Peters and Kessl 2000), i.e. a time-contingent and context-dependent spatial entity established by society with a particular purpose in mind (Gee 2019: 43). Such a representation of the marine space perfectly corresponds to Bacchi (2009)'s approach to the process of making and unmaking places, problems, subjects, and objects; to the unity (inseparability) of time and space as an inherent feature of any environmental governance challenge (Lundén 2004; see also Stel 2014 for the 4D perspective of the ocean space), which, in turn, testifies to the understanding of spatiality "as a dynamic pattern of relational spatial pieces" (Peters and Kessl 2000: 25-26);

- The relational view of both the material and the representational may be found in the concept of nested systems, i.e. systems nested within systems of which nature is made up. “Each individual system is an integrated whole and, at the same time forms part of a larger system. Changes within a system can affect the sustainability of the systems that are nested within it as well as the larger system in which it exists” (Pollock 2016: 16-17). To attempt to address such a complexity, one needs to embrace a nested governance system (structure) perspective based on the connection among institutions, policies, laws and sectors, and their embeddedness into “a tiered, internally consistent and mutually re-enforcing planning and decision-making system” (Raakjær et al. 2014 as cited in: Hegland et al. 2015: 2). The idea of nestedness has also been conveyed in Bacchi (2009)’s nested problematizations, i.e. problem representations that tend to nest (or are embedded) one within the other;
- The complex and relational nature of the Baltic marine space has been framed in terms of an indivisible social-ecological system to emphasize the intertwinedness or “the co-constitutive nature of social and ecological relationships” (Preiser et al. 2022a: 34; see also Reyers and Selig 2020 for their approach to the Sustainable Development Goals in the context of biodoversity and ecosystem services, and the need to consider the nature and functioning of the whole system first before delving into its constituent parts). Such an approach may hopefully be facilitated by embedding the Baltic Sea space in the biosphere, both at the level of representation as well as material practices;
- Typical of relational thinking, temporary stabilizations or patterns of relations “produced within dynamic intersecting processes” rather than fixed or static entities (DeLanda 2006 as cited in West et al. 2020: 310) correspond to my understanding of entities, such as ecosystem, society, and resources, as part of continually unfolding processes, as well as temporary anchoring performed for analytical

purposes (see West et al. 2020: 310, 317 for temporary nodes in sustainability research). To reflect the idea of temporariness in my analytical framework, I have been inspired by Van Tatenhove's approach to integrated marine governance in terms of policy arrangements defined as "the temporary stabilization of the content and the organization of a particular policy domain" (Van Tatenhove et al. 2000 as cited in Van Tatenhove 2011: 89). Moreover, I have combined the categories adapted from Van Tatenhove (2011)'s policy arrangement approach to integrated marine governance (discourses, actors, resources and rules of the game), as well as from the WPR approach to policy analysis (problems, subjects, objects and places) (Bacchi and Goodwin 2016: 109) on the understanding that they are inextricably interwoven, i.e. "any change in one of the dimensions induces change on the other dimensions" (Van Tatenhove 2011: 89);

- The relational view of language as "not simply reflect[ing] the world but actively interven[ing] in and shap[ing] it" (West et al. 2020: 314) may be traced in the form of my language-discourse-materiality interface as reflected by the selection of Bacchi (2009)'s WPR approach, with its emphasis on lived effects, i.e. material impacts on the bodies and lives of those affected by the conditions produced by the problem representations, as well as of Stibbe (2015)'s stories-we-live-by and their impact on life-supporting systems. It is true that my analysis gives a priority to the issues of representation, language, and culture when exploring the macro-regional governance of the Baltic Sea. Yet the fact remains that it also makes space for considering the material aspects of the EUSBSR, as well as for giving due recognition to the Baltic Sea as an agent and active force in its own right.

2. Poststructural geographies, with their focus on "unhing[ing] (…) concepts from their earlier-on securities, tossing them into a differential space of relational meanings buttressed by wide sociospatial-historical contexts and everyday social articulations" (Woodward et al. 2009: 407), may be seen in my combination of both Stibbe (2015)'s approach to ecolinguistics and

> Bacchi (2009)'s WPR approach to policy analysis with the aim of rigorously interrogating core and taken-for-granted concepts and categories. Additionally, the interacting, relational, contingent, emergent, and discursive nature of social processes (see Jay 2018 for these qualities in the context of marine spatial planning in the Baltic Sea) has been highlighted in my conceptualization of the Baltic Sea macro-regional governance in terms of the interface of space-discourse-governance. With spaces discursively constructed by various stakeholders through power struggles and conflicts of interest and capable of co-existing with other spaces within the same physical space (Flyvbjerg and Richardson 1998: 9-10), the concepts of fluidities, mobilities and networks (see Woodward et al. 2009: 407) appear to be particularly apt to capture "the sea's inherent graded-ness and multiplicity of possible interactions" (Jay 2018: 456).

While it may be extremely challenging to fully embrace any theoretical or philosophical position due to the nature of the marine space and its governance, navigating toward a realist social constructivism (Elder-Vass 2012) may offer a relational view of social constructivism and critical realism in order to account for the interdependence between ontology and epistemology (see Walach 2020 for contemplative science and the consciousness-matter nexus; also Woodward et al. 2009). Particularly in the context of marine governance, the social constructivist perspective allowing for the mediating role of discourses in representational processes (Woodward et al. 2009) needs to be supplemented with critical realist ontology. It is true that language constructs social reality (realities or aspects of reality). Yet the fact remains that "these constructions are theorized as being constrained by the possibilities and limitations inherent in the material world" (Sims-Schouten et al. 2007: 102), which embraces the idea of a material world extending beyond us and acting upon us, gives material practices an ontological status (independent of, but in relation with, discursive practices), and allows for investigating relationships between discursive practices and people's material conditions (Sims-Schouten et al. 2007). In other words, it makes one sensitive to a possible naturalization of concepts, which may result in "the concepts (…) use[d] to navigate the world (…) becom[ing] mistaken for the world itself" (West et al. 2020: 308).

In light of the foregoing, my analytical framework and research have been designed to accommodate the modernist (mechanistic) nature of the macro-regional strategy for the Baltic Sea, to reconcile the apparently irreconcilable perspectives of critical realism and social constructivism to avoid reducing the Baltic Sea space solely to human knowledge of it, as well as to pave the way for a more critical and non-dichotomous exploration of the complex marine space and its macro-regional governance inspired, to a certain extent, by relational thinking.

2.5. Analytical framework

As the chapter on previous research and intended contribution has shown, most of the research work on the Baltic Sea macro-region revolves around the analysis of challenges, multi-stakeholder projects, and strategies, as well as evidence-based policy. While the value of such contributions (taking a problem-solving approach toward the analysis of macro-regional governance of the Baltic Sea) cannot be overestimated, this study follows a different path. Greatly inspired by Carol Bacchi's "What's the Problem Represented to be?" (WPR) approach to policy analysis, it is primarily oriented toward problem-questioning (Bacchi 2009). Based on the assumption that 'problems'[15] are not fixed or pre-existing entities to be solved in policy-making processes, the Foucault-influenced WPR approach sheds light on the way in which policies and policy proposals contain implicit representations of what is deemed to be the 'problem' ('problem representations', 'problematizations') and how governance takes place through problematizations (Bacchi 2012; Bacchi and Goodwin 2016). In other words, the shifting of the research focus from the problem-solving paradigm to the problem-questioning one underscores the fact that it is policies or policy proposals that produce particular conceptualizations of 'problems,' as well as signals the need to reverse the order of policy analysis, i.e. the need to work backward from concrete policy solutions (policies or policy proposals) and critically examine their implicit problem representations (Bacchi 2009: 3). Instead of tracking policies through various stages of development, it recommends a critical analysis of the categories and knowledges that shape governing practices by promoting the study of problematizations, i.e. how "problems" are conceptualized within policies and policy proposals (Bacchi

[15] Following Bacchi's approach to 'problem' in the analysis of policy-making processes, I use the term 'problem' in scare quotes to "signal that [its] commonly assumed status as [a] fixed and readily identifiable entit[y]" has been questioned (Bacchi and Goodwin 2016: 111).

2016: 12). Such an approach to policy analysis facilitates the exploration of unexamined assumptions and deep-seated cultural presuppositions within implicit problem representations, which entails the study of various professional and other forms of knowledge(s) underpinning public policies (Bacchi 2009). However, central as they are to governing processes, problematizations constitute framing mechanisms, which necessarily entails simplification and reduced complexity, as well as results in only part of a story being told (Bacchi 2009: xii, 263). What is more, problem representations with their implicit nature, deep-seated (often unexamined) ways of thinking, and impact on governing may be perceived in terms of cultural-cognitive elements of institutions which may also contain "deeply entrenched assumptions and conceptions of the 'way the world is' (…) [as well as] provide the bedrock for normative prescriptions and regulative controls (…)" (Scott 2010: 7).

Nevertheless, I have selected Bacchi's WPR approach to study representations of macro-regional governance of the Baltic Sea for the following reasons: it has helped me clarify implicit problem representations within the macro-regional policy framework for the Baltic Sea; it has facilitated my understanding of the underlying premises in the representation of this form of governance, as well as of the contingent practices and processes through which this specific understanding of the 'problem' has emerged. Then, it has helped me identify possible gaps or limitations inherent in representations of the macro-regional governance of the Baltic Sea; and it has enabled me to study the implications of identified problem representations for possible constraints imposed by discourse**,** people's understanding of themselves and relevant issues, as well as the material impact of these representations, which highlights the fact that human (but also non-human) existence is shaped by policies and policy proposals creating particular understandings of 'problems'. What is more, the use of the WPR approach in the context of the macro-regional policy framework has allowed for the exploration of alternative representations, as well as has provided insights into the contestation surrounding identified representations of the 'problem'. Finally, my own problem representations to be identified in my ecosophy and proposals for change have also been subject to critical scrutiny, with self-problematization (reflexivity) being

a crucial part of the equation (Bacchi 2009: 19). These insights have been generated using the questions provided by the WPR approach to policy analysis:

1. What's the 'problem' represented to be in a specific policy (policies or policy proposals)?

2. What presuppositions or assumptions underlie this representation of the 'problem' (binaries, key concepts, categories)?

3. How has this representation of the 'problem' come about (examining their origins, history and mechanisms; tracing the history of a given problem representation)?

4. What is left unproblematic in this problem representation? Where are the silences in identified problem representations? Can the problem be thought about differently (specific policies constrained by problematizations)?

5. What effects are produced by this representation of the 'problem' (discursive effects, subjectification, lived effects)?

6. How (where) has this representation of the 'problem' been produced, disseminated and defended? How could it be questioned, disrupted and replaced? (Bacchi 2009: xii)

As the WPR approach has been conceived to be an open-ended mode of critical engagement rather than as a formula (Bacchi 2012: 23), the questions provided by Bacchi have been applied in a manner corresponding to my research topic as explained in subchapter 2.6. (research design). Furthermore, the WPR approach to policy analysis has been selected as relevant to my research work as it encompasses 3 cross-border movements corresponding to the nature of macro-regional governance of the Baltic Sea: 1) across national/international boundaries (problem representations across space and time); 2) across the boundaries of policy specialisms; and 3) across the government/non-government divide (Bacchi 2009: 269).

It is noteworthy that in my PhD thesis I apply these questions to the Baltic Sea macro-regional strategy, which is a policy framework rather than a specific policy. Furthermore, as one of the research aims of this thesis is to explore the relation between the representation of macro-regional governance of the Baltic Sea and

the very construction of the sea itself, I have adopted an ecolinguistic perspective in the form of ecological analysis of discourse defined as the study of the impact of language use on the life-sustaining relationships among humans, other organisms, and the physical environment (Stibbe 2015), with the concept of the stories-we-live-by as a semiotic point of entry into the WPR-based analysis of macro-regional governance of the Baltic Sea (see Fairclough 2007: 131). As mental models existing in the minds of multiple individuals across a culture (cultures) and impacting human perception and behavior, as well as lying at the core of today's ecological challenges, the stories-we-live-by exist behind and between the lines of various texts. Since they cannot be examined directly, the only way to gain access to them is through the use of language and other semiotic modes (Stibbe 2021, Stibbe 2015). It is noteworthy that the stories are not just transparent descriptions of reality, but instead shape how we perceive reality as they underlie various discourses shaping cultures (Stibbe 2015), and thereby modes of governance.

Apart from the concept of the stories-we-live-by, there are some significant overlaps between the WPR approach to policy analysis and the ecological analysis of discourse as defined by Stibbe (2015), with its focus on discourses having a significant impact on life-supporting ecosystems. First, the analysis of clusters of linguistic features contained in selected texts and used to convey particular worldviews or 'cultural codes' in order to uncover (hidden) stories may aid in tracking various presuppositions and assumptions underlying problem representations (Question 2). Second, some of the forms the stories-we-live-by (e.g. erasure or reframing), neatly correspond to silences and alternative ways of thinking explored in Question 4. Then, the impact of the stories-we-live-by on human perception and behavior may be regarded in terms of the effects produced by problematizations (Question 5). Finally, the introduction of my ecosophy (my ethical vision and statement of values and assumptions leading to positive outcomes) into the thesis satisfies the requirement of reflexivity (self-problematization) set by the WPR approach. In other words, in the context of macro-regional governance of the Baltic Sea the combination of the WPR approach to policy analysis and Stibbe-influenced ecological analysis of discourse may assist in both exposing discourses (defined both as representations and socially constructed forms of knowledge) that are ecologically destructive and promoting

those aiming at the protection and preservation of life-supporting systems (Stibbe 2021, Stibbe 2015). What is more, by raising awareness of the role of problem representations and their semiotic manifestations, my combined approach to policy analysis has the potential of informing policy and educational development, as well as providing ideas for redesigning existing texts or producing new texts in the future (Stibbe 2014a: 118-119). The incorporation of the ecolinguistic perspective (ecological analysis of discourse; the stories-we-live-by) into the WPR approach to policy analysis aids in the critical interrogation of the macro-regional policy framework in general, and the EU Strategy for the Baltic Sea in particular, as well as provides a deeper understanding of the dialectical relation among semiosis, practices and materiality (see Fairclough 2007).

As illustrated in Figure 9 below, the macro-regional dimension of Baltic Sea governance has been developing alongside the earlier regionalization trends in the BSR. To examine the representations of macro-regional governance of the Baltic Sea, I use the categories adapted from Van Tatenhove (2011)'s policy arrangement approach to integrated marine governance: discourses, actors, resources and rules of the game, as well as from the WPR approach to policy analysis, according to which various policy developments revolve around 4 themes: problems, subjects, objects and places (Bacchi and Goodwin 2016: 109). My key analytical categories include: marine area (place); challenges (issues); actors (subjects); rules, resources (objects). The selection of these components clearly testifies to the fact that the macro-regional policy framework for the Baltic Sea is an example of the nodal discourse of sustainable development, which subsumes many other discourses and sub-discourses, such as: participation, knowledge, economic development, social cohesion or environmental protection (Fairclough 2012). The examination of these components in accordance with the WPR approach combined with the ecolinguistic perspective as outlined above fosters a deeper understanding of problem representations underpinning the macro-regional governance of the Baltic Sea.

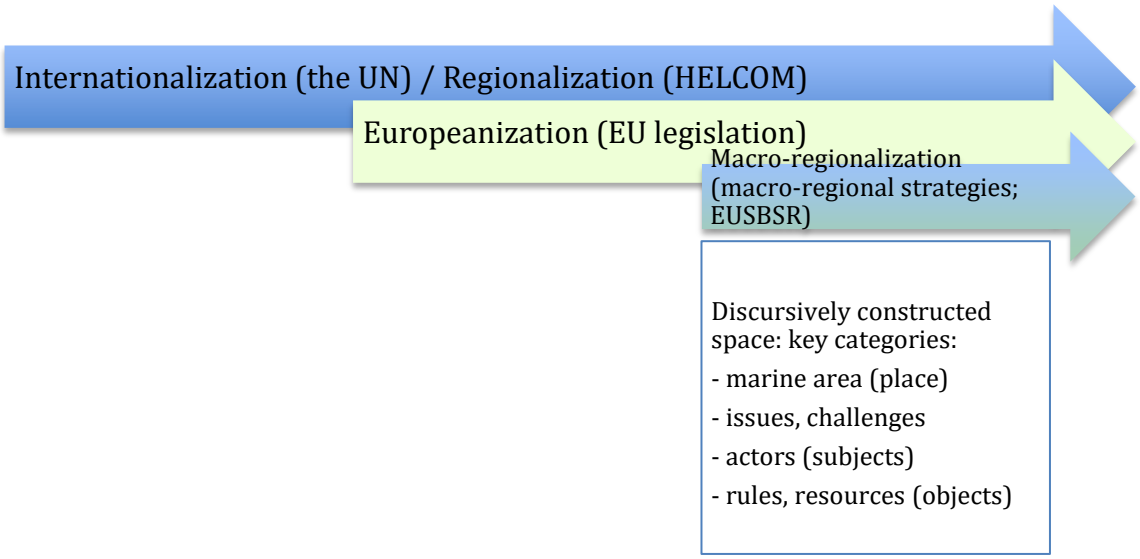

Fig. 9. Analytical framework: Macro-regional governance of the Baltic Sea.

However, the definition of discourse(s) as socially produced background knowledge(s) rather than forms of language use to be found in the WPR approach to policy analysis (Bacchi and Goodwin 2016: 111) may seem to be at odds with my ecolinguistic research perspective, which attaches a great importance to the role of language use (or semiosis) in shaping the interaction among humans, other living organisms, and their physical environment. Although Bacchi makes it clear that the WPR approach to policy does not refer merely to language nor to the tradition of discourse analysis that investigates language use (Bacchi 2009: 35) nor should the term 'discourse' (in the Foucauldian tradition: practices forming knowledge across different sites) mean language (Bacchi and Bonham 2014), this study attempts to deconstruct the language-discourse binary by:

- refusing to focus on the analysis of linguistic patterns only (Fairclough 2003);
- extending the concept of language to include other semiotic modes (Fairclough 2007, 1992);
- emphasizing fact that semiosis (language and other semiotic modes) is an irreducible element of all material social processes (Williams 1977); and

- introducing Fairclough (2003: 17)'s definition of a discourse [16] as a particular way of representing some part of the (physical, social, psychological) world.

What is more, this study is also compatible with Lemke (1995)'s definition of 'text' as the concrete realization of abstract forms of knowledge (Foucault's notion of 'discourse'). The fact that these forms of knowledge may be accessed through textually-oriented discourse analysis clearly testifies to the dialectical relationship among semiosis, other elements of social practices, and materiality, with "semiosis internalis[ing] and [being] internalised by other elements without the different elements being reducible to each other" (Fairclough 2012: 458). While the approach to policy analysis applied in this thesis does not exactly follow the analytical steps specified in Fairclough (2003)'s multi-level discourse analysis, it combines the WPR policy analysis with the ecological analysis of discourse (with its rich repertoire of linguistic and discursive categories provided by critical discourse analysis) to gain insights into larger forms of knowledge shaping the representations of macro-regional governance of the Baltic Sea. The next subchapter presents my research design process, including: research strategy, data selection and collection, as well as methods of data analysis and analytical process.

2.6. Research design

The aim of the previous subchapter has been to lay out the theoretical assumptions and analytical framework for my research project, which has facilitated the anchoring of my work in relevant conceptual frameworks, as well as the making of corresponding methodological choices. To ensure transparency of my data selection and analysis process, this subchapter presents the assumptions informing my research design (Nowell et a. 2017), as well as demonstrates how the selected version of thematic analysis and other analytic claims made in my project correspond to my research questions and methodological assumptions. My project is based on a qualitative research design to "draw attention to the multiplicity of meanings and interpretations, and their consequences for how governance and stewardship interventions are implemented and enacted" (Preiser et al. 2022b: 273). Therefore, it is crucial to provide clear criteria for conducting such

[16] Fairclough (2003: 3) also uses the term discourse as used in 'discourse analysis' to signal "the particular view of language in use".

an analysis in order to both satisfy the requirement of rigorously produced research, as well as counter the possible “anything goes” or ”airy fairy” critique of qualitative research (Braun and Clarke 2006: 26). In other words, this subchapter places an emphasis not so much on a positivism-inspired search for universal truths discovered in the process of objective knowledge production but rather on the assumption of subjective knowledge, multiple perspectives regarding a real social-ecological system ‘out there’ (both real and constructed). The overarching goal of this subchapter is to ensure transparency by explaining the process of data selection and analysis, and presenting my analytical steps, as well as by showing the links among my theoretical assumptions, research questions, and the methods selected for analysis (see Rapley 2010: 220-223). All of these categories need to reflect the logic of my scientific inquiry (see Mason 2018: 22-23).

Case selection

As I have already explained the research motivation part of my thesis, I have been captivated by the idea of the Global Ocean and its governance ever since I first heard this term at the Faculty of Law and Administration, the University of Gdańsk. The timeliness of the topic with a multitude of cross-cutting issues and challenges appeared to be a perfect research choice for me, as an ardent supporter of the belief of the Nordic ecophilosophers that everything is related to everything (see Bhaskar et al. 2012). Moreover, I feel truly privileged to have taken part in sustainability-related conferences held in Gdańsk, Stockholm, Amsterdam, Turku, Odense, as well as to have attended a summer research school in the city of Bergen, and to have conducted part of my research at the Center for Governance and Sustainability, at the University of Massachusetts-Boston. All of these interactions have exposed me to a truly mind-blowing selection of research topics and approaches in the area of environmental governance, stakeholder participation, and social-ecological sustainability. Taking into account the above-mentioned circumstances, many inspiring researchers I have met along the way, and my relentless zeal for navigating the topic of ocean (marine) governance, everything has seemed to fall into place. However, one may wonder whether from an academic perspective having such an ‘everything is connected to everything’ mindset is a blessing or a curse. It was not until I decided to focus on the macro-regional governance of the Baltic Sea that I managed to narrow down the scope of my

project to researchable proportions. Uneasy compromises notwithstanding, such a maneuver has involved making an incision into the highly complex marine space with a blade in the form of my ecosophy, research design, and theoretical assumptions, as well as methodological choices in order to gain insights into representations of the macro-regional governance of the Baltic Sea.

Furthermore, the analysis of macro-regional governance of the Baltic Sea space appears to be a natural choice for me, both as a Baltic Sea coast resident and a researcher interested in integrated marine governance. Since the 1970s the Baltic Sea space has not only been the scene of multifarious political, economic, and social developments but also witnessed a variety of supranational efforts aimed at establishing regional frameworks to facilitate its governance (Gilek et al. 2016, Gilek and Kern (eds.) 2015, Bafoil 2013, Joas et al. (eds.) 2008). With this in mind, I have decided to subject to critical scrutiny the macro-regional dimension of Baltic Sea governance for a number of interrelated reasons. Firstly, the macro-regionalization trend is the EU's latest approach to governing regions built around shared geographic features and common challenges (Gänzle and Kern 2016), with the Baltic Sea space created as the EU's first macro-region (Bafoil 2013: 202). Secondly, the idea of macro-regionalization of the Baltic Sea space follows the rule of "3 NOs" (no new institutions, no new legislation, no new funding (Gänzle and Kern 2016: 124)), which may raise a question mark over the whole project as it may be difficult to expect such a new approach to regional policy-making to be successful if nothing new is created (Bafoil 2013: 204). Therefore, it appears to be necessary to interrogate the macro-regional policy to determine its added value. Thirdly, the Baltic Sea macro-region epitomizes a regional entity in the making (Gänzle and Kern 2016), which perfectly corresponds to the research perspective adopted in this thesis, namely the poststructural policy analysis approach, according to which objects are in ongoing formation and subject to change (Bacchi and Goodwin 2016: 101). Then, the Baltic Sea macro-region may serve as a source of inspiration and a path to follow for other regions as the EU considers macro-regions to be "laboratories for future EU regional policies, by bringing innovative solutions to the complexity resulting from previous enlargements, new border uncertainties and key global issues like environment and security" (Bafoil 2013: 203). Last but not least, my interest in the EU macro-region with the Baltic

Sea at its heart has been generated not only because of the renewed multi-level system of governance in the form of macro-regionalization but also due to the fact that the Baltic Sea ecosystem faces numerous threats (including warming, acidification, deoxygenation, toxic and nutrient pollution) to be experienced by other coastal areas in the future, and, therefore, it may "serve as [a] time machine for other marine areas that are on a slower trajectory of anthropogenic perturbation" (Reusch et al. 2018). As there are reasonable questions asked about any clear benefits for engaging in the macro-regional governance efforts or about the incentives to comply (Bafoil 2013: 206), my decision to analyze the macro-regional dimension of the Baltic Sea space in terms of its problem representations appears to be fully justified.

Research object development

As the field of macro-regional governance of the Baltic Sea space covers numerous scientific areas and topics and may be analyzed from a variety of research perspectives, there is a need to develop my research object and its related analytical categories in such a way that it will aid in answering my research questions and correspond to my theoretical and methodological orientation adopted in this thesis. Therefore, the development of my research object departs from a simple, yet often overlooked, ecolinguistic premise that it is crucial to explore relations between people and the ecosystem to be governed in order to determine whether a given interaction (a policy approach or governance initiative) supports or undermines life-supporting conditions (Stibbe 2015, 2014a). Furthermore, the research object development has been informed by Van Tatenhove (2011)'s integrated marine governance framed in terms of policy arrangement approach and analyzed along 4 dimensions: current policy discourses (views, narratives of the actors involved; norms, values, definitions of problems and approaches to solutions); the actors and their coalitions involved; the division of resources between these actors (power, influence, determining policy outcomes); and the rules of the game (formal procedures, informal rules and "routines" of interaction).
The representation of macro-regional governance of the Baltic Sea space will not be analyzed in terms of Van Tatenhove (2011)'s policy arrangement approach but in line with Bacchi (2009)'s WPR analysis. Nevertheless, his approach to policy analysis in the context of integrated marine governance offers useful and relevant

categories to be applied in this thesis. As the aim of the thesis is to interrogate the representation of macro-regional governance of the Baltic Sea space, the research topic includes the analytical categories proposed by Bacchi and Goodwin (2016): "places", "problems", "subjects" and "objects". Figure 10 below demonstrates how my research object has been developed through the combination of research perspectives and categories provided by the fields of ecolinguistics, integrated marine governance, and the WPR approach. It is noteworthy that as the categories comprising my research topic are interrelated and mutually constitutive, as well as there are significant overlaps among them, they have only been separated for analytical purposes. In fact, they are both mutually internalizing and irreducible (dialectically related) components of governance of the Baltic Sea space, which reflects the multidimensionality of governing the marine space (see Bacchi and Goodwin 2016, Fairclough 2012, Van Tatenhove 2011, Bacchi 2009).

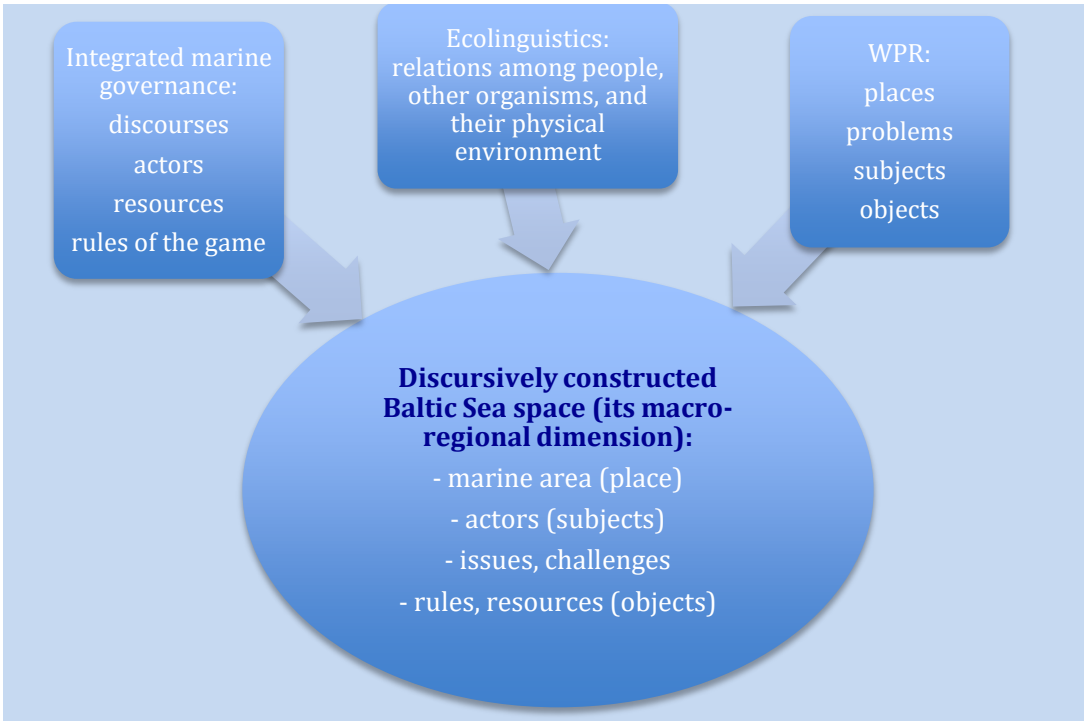

Fig. 10. Research object development.

Research strategy

The basic idea behind qualitative data analysis amounts to the selection, classification and interpretation of relevant materials "to make statements about

implicit and explicit dimensions and structures of meaning-making in the material and what is represented in it", with a view to formulating generalizable statements by comparing various materials or texts (Flick 2014: 5). In other words, the qualitative approach "seek[s] to find and examine patterns of sense-making and meaning creation in the communicative characteristics of language, by focusing on the content and underlying themes and meaning that emerge in a text (…)" (Preiser et al. 2022b: 270). The selection of qualitative research as a path of scientific inquiry requires that an adequate fit be established among my assumptions about the nature of reality (ontology) and the grounds of knowledge (epistemology) on the one hand, and my research design on the other, which has been termed as philosophical coherence by du Toit (2015: 63). To operationalize this commitment, I have used the following categories in my thesis: an ontological perspective, an epistemological position, a research area, research questions, research aims and intellectual puzzles (Mason 2018: 4-17). While the first five categories have already been explored in the previous subchapters, the final one deserves an explanation. Mason (2018) defines intellectual puzzles as those questions about the social world (in my case: the social-ecological world) that are important, fascinating and timely. What is more, they need to be connected to my ontological perspective and epistemological position evidenced in my research project and embedded in the specific context of my research problem. From the collection of intellectual puzzles listed by Mason (2018) I have selected ecological puzzles as they explore the interrelationships of phenomena, the ever-present interconnections to be found among human and non-human actors (agents) and life-sustaining ecosystems, which perfectly corresponds to my ontological and epistemological assumptions specified in subchapter 2.4. As regards the purpose of my research, it appears to be cutting across various purposes enumerated by du Toit (2015: 63): it is rigorously and accurately descriptive when describing the ecological state of the Baltic Sea and other challenges facing the region; explanatory when navigating interrelations between various categories and causal explanations; interpretative when exploring the impact of problematizations of the macro-regional governance of the Baltic Sea; formative when attempting to inform educational programs and policymaking processes; and, last but not least, emancipatory when aiming at raising people's awareness, dispelling false beliefs, and improving social-ecological conditions. Although my project primarily represents basic, theoretically-driven research, it

also attempts to offer some practical solutions to concrete problems identified in the BSmR, which is clearly in line with du Toit's approach to the division of research into basic and applied categories as being "two ends of a continuum with no clear distinction between them" (du Toit 2015: 62), as well as the ecolinguistic mission to inform educational programs and policy designs (Stibbe 2015).

As for my methodological paradigm defined by du Toit as "philosophies [permeating] various facets of a study, albeit in very indirect and subtle ways" (2015: 63), my research project epitomizes both pragmatism (using a combination of theoretical and analytical approaches by identifying overlaps and synergies among them to improve social-ecological conditions in the BSmR) and critical social science (dispelling myths; exposing destructive discourses; empowering people through raising awareness to generate positive social-ecological change) (du Toit 2015: 65). The critical-pragmatic paradigm has been reflected in my combination of Bacchi (2009)'s 'What's the 'Problem' Represented to Be?' and Stibbe (2015)'s ecological analysis of discourse focusing on the stories-we-live-by, as well as Fairclough (2012)'s approach to transdisciplinary research, which has enabled me to explore both discursive (represented) and non-discursive (material, lived) aspects of problem representations in the EU macro-regional policy toward the Baltic Sea, as well as to offer recommendations for change. Such theoretical and analytical modifications have been introduced to correspond to my research topic and to answer my research questions (Rapley 2010: 12).

Textual analysis

I have selected a textually-oriented analysis as a way of critically approaching the selected materials, as well as of working toward some practical suggestions. As the concept of text may be extended to include printed and digital documents, images, architectural plans or even buildings (see Mason 2018, Bacchi and Bonham 2014), it is important to note that I use the term 'texts' to refer to policy documents shaping the EU's macro-regional strategies and the EU Strategy for the Baltic Sea Region, as well as research publications (books and articles) and institutional reports on Baltic Sea governance, marine (ocean) governance, and the governance of social ecological systems. The policy documents are of prescriptive nature, which is in line with the WPR approach recommending the use of prescriptive texts as the departure point for my analysis and then working

backwards in order to identify the problem representations implicit in the prescription (Bacchi 2012, 2009). The materials selected for my analysis have been recorded without my intervention as a researcher as they are publicly available in an electronic format (computer-based and Internet-transmitted materials). In other words, I have compiled a broad collection of unsolicited documents existing prior to, and not because of my research convention (Coffey 2014: 369).

While the policy documents have enabled me to investigate problem representations of the macro-regional governance of the Baltic Sea, my secondary sources (research publications and institutional reports) have provided contextual background and highlighted the conditions shaping the phenomena under scrutiny (see Bowen 2009: 29-30). Although media texts may also form part of document analysis, they have not been included in my secondary sources as there is no common media or shared platforms for debating issues regarding the BSmR, including regional media stations in different regions (Jönsson et al. 2016: 223). It is noteworthy that my textual analysis focuses on problem representations (certain versions of reality) rather than real projects, day-to-day functioning of particular institutions or decision-making processes (see Silverman 2012: 203-204). Therefore, I do not treat documents as "surrogates for other kinds of data" capable of painting the whole picture of everyday operations of a given organization or as firm evidence of what is reported in them, irrespective of their official status (Coffey 2014: 369, Atkinson and Coffey 1997: 47) but as social facts produced, shared and used in socially organized ways. Their analysis has helped me develop my understanding of the problem representations implicit in the prescriptive texts, as well as fits the theoretical framework of my project, provides answers to my research questions, and enables me to offer some conceptual and practical recommendations (Coffey 2014: 369, Bowen 2009: 33-34). Therefore, I have used document analysis as the main method for my qualitative research design, with full awareness of both the opportunities and risks entailed in its application (Coffey 2014: 370). What I am particularly interested in is what is included in the texts and what is excluded (erased, silenced), as well as how the selected categories (my pre-determined coding categories) in the selected texts connect to each other, thereby reinforcing or undermining the assumptions underlying a given text (Rapley 2010: 196, 213). In addition to the adequate fit between document analysis and my research aims, I

have selected this type of analysis for the following reasons: public availability of the policy documents (the Internet); virtually no ethical or legal dilemmas arising from my research regarding confidentiality, anonymity or informed consent; lack of obtrusiveness and reactivity (the documents recorded without my intervention as a researcher), and their stability (documents suitable for repeated reviews), as well as their exactness (exact names, details and references) and coverage (a long time span) (Bowen 2009).

However, I am perfectly aware of my contribution as a researcher to the construction of meanings in the course of their analysis, as well as my influence on the research process, which has been underscored in the reflexive parts of my research project exploring my ecosophy, delimitations and limitations. The reason I use document analysis as a stand-alone method (not as a complement to other research methods, e.g. interviewing, observational and participatory methods of generating qualitative data (Mason 2018)) lies in the fact that I am interested in problem representations and their implications, as well as constraints imposed on what is possible to say, think and conceptualize (Bacchi 2012, 2009). In other words, my concern is not how different stakeholders (actors) problematize a given issue but on "how the policy itself problematizes it" (Bacchi and Goodwin 2016: 17). Although I do appreciate individual views, experience or comments that may be disclosed during an interview, I have decided not to conduct any for a number of interrelated reasons. Firstly, interviewing as a method appears to be not of much relevance in Bacchi's 'WPR' approach to policy analysis[17]. Secondly, it would be hard to determine the criteria for selecting my interviewees taking into account the fact that the BSmR is a perfect example of multiple-level governance and of a multi-sector setting, with various state and non-state actors whose number depends on the definition chosen for the BSR (see Henningsen 2011). Then, there have been failed attempts to combine data from interviews regarding the perceptions produced by certain individuals with discourse analysis of particular texts, the reason being that from a discourse-analytical perspective interviews are socially constructed and

[17] Although it is possible to use interview materials in Bacchi's 'WPR' in the form of Poststructural Interview Analysis, such a methodology does not explore why the interviewee says what s/he says but focuses on the kinds of "subject" it is possible for the interviewee to become (Bacchi and Goodwin 2016: 112, 114-115).

the information generated in interviews may not be treated as the final version of reality (Mason 1996 as cited in: Silverman 2012: 163). Such a perspective corresponds to my constructionist thematic analysis based on the assumption that people's talk about their views or experience is not to be treated as "a transparent window on their world" (Braun and Clarke 2006: 26). Finally, it needs to be underscored that triangulation in the sense of combining methods does not always give the full picture (Silverman 2012: 163-4). Any statement to the contrary may imply the existence of one objective and knowable social reality, which appears to be clearly at odds with a constructionist worldview (Mason 2018: 239).

Data selection (research corpus and methods of data selection)

As I have already mentioned, I have not collected my research corpus but rather selected it as my approach is based on the analysis of publicly available documents (Rapley 2010: 37-48). As any researcher may grapple with the issue of how many documents should be selected for analysis, I have decided to follow Bowen's recommendation by focusing on the quality of my documents and the evidence they contain while taking into account my research aims and design (Bowen 2009: 33). As my study relies solely on documents, I have chosen a wide range of documents, including policy documents, research publications, and institutional reports. These documents revolve around the same or related topics and circumstances regarding the governance of the Baltic Sea, marine (ocean) governance, as well as the governance of social-ecological systems. The materials have been divided into two groups: primary and secondary sources and kept in separate folders.

My primary sources and their selection

According to Bacchi (2012, 2009)'s WPR approach to policy analysis, the materials to be selected for analysis need to be of prescriptive nature, i.e. they need to constitute a form of proposal and a guide to conduct. My primary sources include policy documents on macro-regional strategies and the EU Strategy for the Baltic Sea Region (the EUSBSR), publically available at the relevant EU websites (see the attached list of primary sources in Appendix I). As the content of any website may be subject to change or no longer available, I have verified my search results against Marta Szulc (2019)'s book on macro-regional cooperation and multi-level governance in the BSR, which appears to be a comprehensive publication on

the issue at hand. Covering a time span of over 10 years, the policy documents constitute sui generis legal acts represented by the following text types: conclusions, reports, communication, declarations, and action plans (Szulc 2019). In other words, the policy documents represent a sui generis governance architecture affecting existing institutions at the macro-regional level (Gänzle and Kern 2016: 124). While these policy documents are defined as soft law instruments, with no binding force or sanctions provided for non-compliance with them, they are still important sources of EU law that are adhered to because of the authority and power conferred upon their issuing entities (the European Commission and the EU Parliament) (Szulc 2019: 80). Apart from the fact the EUSBSR contains all components of a strategy (its scope (range); resource distribution; outstanding competence; synergy), it is not a vague declaration of intent as its sui generis character might suggest. Quite the contrary, it serves as a practical tool the aim of which is to adjust relevant EU regulations regarding the BSR to its specificity, in particular its common sea and common challenges (Szulc 2019: 95, Gänzle and Kern 2016).

My secondary sources and their selection

In contrast to the policy documents, i.e. prescriptive texts expected to produce policy outcomes, research publications and the institutional reports may explore the realm beyond what can thought or conceptualized, and point to alternative ways of representing problems owing to their partly prescriptive but mainly descriptive, diagnostic, predictive, and evaluative nature (see du Toit 2015 for corresponding research purposes). Therefore, the secondary part of my data corpus includes both research publications (books, book chapters, articles) on Baltic Sea governance and marine (ocean) governance, as well as reports written by such institutions as: the UN, the EU, HELCOM, the Center for European Studies, Nordregio-the Nordic Center for Spatial Development, and the World Wildlife Fund. In the course of my research work, I have generated an extensive body of the materials thanks to the on-site access to their databases generously granted to me by the following research institutions: the John F. Kennedy Institute for North American Studies (Freie Universität in Berlin), Jönköping University, the University of Bergen, and the University of Massachusetts-Boston. The databases have predominantly included JSTOR, ScienceDirect, and Sage Knowledge. As might be expected, my

search using such keywords as: ocean governance, marine governance, and Baltic Sea governance, has yielded an overwhelming number of publications on marine (ocean) governance covering both integrated and sector-specific approaches to the issue. In order to turn my gathered materials (data corpus) into a data set for the purpose of my analysis, I have selected those publications focusing on the integrated approach to marine governance, characterized by its multi-level, multi-sector and multi-stakeholder settings. The choice of such a strategy has been determined by my research questions and theoretical perspective (Rapley 2010: 34, 36-37). It needs to be emphasized that I have not included any policy documents, research publications or reports regarding other EU macro-regional strategies covering the Danube Region, the Adriatic and Ionian Region, and the Alpine Region. Apart from the fact that my research project has been carried out with no comparative purposes in mind, it is the EU Strategy for the Baltic Sea Region that is intended to serve as a model for other macro-regions to follow (Szulc 2019, Gänzle and Kern 2016). Furthermore, in order to satisfy the requirements of the WPR approach to policy analysis in general, and Question 6 (questioning, disrupting and replacing the identified representation of the 'problem') in particular, I have selected research publications on social-ecological systems, as well as social-ecological sustainability and resilience. Inspired by my participation in the 2007 Conference on Resilience Frontiers for Global Sustainability, at the Stockholm Resilience Centre, such a choice of my secondary sources reflects my ecosophy, and has helped me answer my research questions. As the selection of data for analysis appears to be as much a supposedly neutral scholarly activity as a political endeavor, I have addressed the issue of research ethics through being explicit about my ecosophy, my research questions and methodology. What is more, I have described my doctoral research path shaping my thinking about complex social-ecological challenges. Part of my thesis is dedicated to formulating insights resonating with wider sets of interconnected governance issues (Mason 2018: 89, 104) and putting my own assumptions and recommendations under critical scrutiny (Question 7 of Bacchi's WPR approach).

As I have generated a large collection of secondary sources, I have used the principle of saturation to narrow down their number to researchable proportions. In my thesis, saturation is not a specific juncture to be reached but rather a matter of

degree established by the researcher when new data fail to contribute further insights or to lead to conceptual understanding (Saunders et al. 2018: 1900-1901). Therefore, rather than aiming for total knowledge, I have decided to gain insights into the relevant issues, to develop explanations through the use of 'telling' examples and to ensure that my sample range is adequate to answer my research questions (Mason 2018: 70-72). As my research approach is based on a largely deductive approach (applying my pre-identified coding categories rather than allowing such categories to emerge inductively), I have opted for the a priori thematic saturation model according to which my data have been selected to exemplify theory at the level of lower-order codes or themes rather than to develop or refine theory (Saunders et al. 2018: 1896). Furthermore, I have verified the extent to which the predetermined coding frame (my conceptual categories pre-established through existing theory) has been adequately represented in the data (recurrent themes, 'telling' examples), thereby linking saturation with the notion of content validity, as well as making it contingent upon the provision of generalizable results (Saunders et al. 2018: 1898-1899, 1904). The predetermined coding frame I have used to determine the relevance of the secondary materials retrieved from the databases consists of interrelated conceptual categories developed as my research object: place (area, region, ecosystem) – challenges (issues) – subject (stakeholders, actors) – objects (rules of the game and resources). To summarize, the choice of the a priori thematic saturation is fully consistent with both my theoretical position and analytical approach adopted to answer my research questions (Saunders et al. 2018: 1904).

Integrated analysis

As our world is incredibly complex, nuanced and multi-dimensional, I have combined relevant approaches to policy analysis to investigate its selected aspects (Mason 2018: 24). The aim of this part of the research design chapter is to highlight the overlaps and synergies identified among Bacchi (2009)'s "What's the Problem represented to be?" approach to policy analysis, Stibbe (2015)'s ecological analysis of discourse, and Fairclough (2012)'s CDA integration within frameworks for transdisciplinary research, as well as to demonstrate how the combination of the research approaches is used to answer my research questions. Of particular relevance are two points of entry into Bacchi 'WPR'

approach: a semiotic point of entry (see Fairclough 2012) which I have identified as Stibbe (2015)'s stories-we-live-by, i.e. cognitive structures in the minds of multiple individuals influencing their perception of the world, as well as shared across a culture (cultures) and accessed via their linguistic realizations (Stibbe 2015); and a practical point of entry in the form of my proposal for a flagship project to inform both educational programs and policy-making processes. The semiotic and practical points of entry have been introduced to Question 2 and Question 6 of Bacchi's WPR approach, respectively. I have also complemented my analysis with insights from the multimodal analysis to visually reconceptualize the relations among the objectives of the EUSBSR and, in turn, to support my recommendations made for Question 6 (Kress and van Leeuwen 1996). What is more, it has been shown how the concept of an abstract marine space becomes a place through operationalizing it in terms of Nash (2018, 2016)'s Harvey-Lefebvre matrix and Fairclough (2012)'s conceptualization of social reality. Finally, this part of the research design subchapter defines my research object using the categories to be found in Bacchi and Goodwin (2016)'s approach to problem representations, and in Van Tatenhove (2011)'s integrated marine governance, as well as demonstrates how the conceptualizations of marine space may be explored using the discourse-oriented approaches. The table included in Appendix II demonstrates multiple overlaps and synergies to be identified among various approaches to investigating the space-discourse-materiality interface, and to be perceived in terms of correlations rather than one-to-one correspondence.

Methods of data analysis

My overriding concern when designing my qualitative research has been to ensure a match between my theoretical and analytic claims, as well as between the research questions and the method selected for analyzing my dataset (Braun and Clarke 2006: 26). As Bacchi's WPR approach to policy analysis does not prescribe any particular method of analysis, I have selected reflexive thematic analysis for several reasons (Braun and Clarke 2006). Particularly useful for producing qualitative analyses aiming at informing policy development, such an analysis has enabled me to identify, analyze and report patterns (themes) within data, as well as interpret the selected aspects of my research topic. Moreover, it is not linked to any pre-existing theoretical framework, which results in a high degree of its compatibility

with both essentialist and constructionist paradigms (Braun and Clarke 2006). As any theoretical position of thematic analysis is based on various ontological and epistemological assumptions, with themes not emerging from the data but actively produced by the researcher, I have revealed my ontological, epistemological and methodological assumptions in the relevant parts of the thesis (Nowell et al. 2017:2, Braun and Clarke 2006). Any themes or patterns within my data have been identified in a theoretically-driven (deductive) way using an a priori coding scheme based on a careful review of research literature (Castleberry and Nolen 2018: 809). Reflecting my analytic preconceptions and ecosophy, the pre-existing coding frame foregrounds my subjectivity in the process of coding and theme development to highlight the selected aspects of my research topic across the entire data set (Braun and Clarke 2006: 12). As I have worked with the predetermined coding frame developed through reading the literature relevant to my research, my deductive thematic analysis has resulted in focusing on some aspects of the data at the expense of other elements (Braun and Clarke 2006: 16). Once my pre-determined coding categories have been established, I have generated codes for each WPR question in line with the procedure specified below:

- Generating initial codes: codes used to retrieve and categorize similar data, attached to various units of data (word, phrase, sentence, paragraph) and usually encompassing a complete thought (Castleberry and Nolan 2018); inclusive copying of data extracts that involves preserving a little of the surrounding data for contextual purposes (Braun and Clarke 2006: 25);
- Searching for themes: turning codes into potential themes, i.e. broader, higher order and less descriptive categories; establishing the relationship between codes, between themes and between different levels of themes (main overarching themes and sub-themes within them) (Braun and Clarke 2006: 25);
- Reviewing themes: gathering all relevant data into each potential themes and continuously reviewing each theme to determine if it is robust in relation to the coded extracts and the entire data set (Castleberry and Nolan 2018: 810);
- Defining and naming themes: identifying the essence of each theme (and the themes overall) and what aspect of the data each theme captures; and

- Summarizing: presenting detailed and nuanced account of group of fully worked-out themes within my data, i.e. the story told by the data within and across themes; selecting 'telling' examples to demonstrate themes (Mason 2018, Braun and Clarke 2006).

It is worth noting that the thematic analysis approach is a recursive rather than a linear process, which entails moving back and forth throughout the phases as necessary (Braun and Clarke 2006). What is more, such a recursive nature of thematic analysis supports my cross-sectional data coding, which involves using the same set of codes to explore common patterns and themes across the whole of my data set and making comparisons on certain specified themes. Moreover, it is based on the assumption that meaningful knowledge about the social world may be generated through cross-sectional thinking about themes (Mason 2018). As themes capture an essence of the phenomenon under investigation in relation to my research aims and questions, it is crucial to note that the importance of the theme is not contingent upon its frequency or content but on its ability to capture some important aspects in relation to the overall research questions and its relatedness to other themes, which enables the researcher to interpret the data at higher levels than themes, i.e. to explore relationships between themes and more global findings such as discourses (Castleberry and Nolan 2018: 812; see also Preiser et al. 2022b: 274 for a description of thematic analysis as a one of the key methods in qualitative content analysis). Furthermore, it needs to emphasized that although I have engaged in a theoretically- driven thematic analysis, I have focused on "the story told by the data" rather than arranged the data to substantiate my theoretical stance (Castleberry and Nolan 2018: 810).

To ensure a fit between my epistemological perspective and the type of thematic analysis, I have opted for constructionist thematic analysis based on the assumption that meaning and experience are socially (re-)produced rather than inhering within individuals, thereby focusing on structural conditions and socio-cultural contexts (Braun and Clarke 2006: 14). I have selected two versions of constructionist thematic analysis corresponding to my combination of Bacchi (2009)'s WPR approach to policy analysis, and Stibbe (2015)'s approach to analyzing the stories-we-live-by:

1. constructionist (critical) thematic analysis within a social constructionist epistemology. The aim of this version of thematic analysis is to identify patterns as socially produced across my entire data set rather than within a data item on the basis of my predetermined coding frame, to develop relevant themes, and to analyze the underlying meaning in my data set. While this version of thematic analysis recognizes the constitutive nature of language and discourse, it does not entail a micro analysis of language use (Braun and Clarke 2006); and
2. thematic discourse analysis (with codes, themes and discourses to be identified). The aim of this version of thematic analysis is to highlight the constructive role of language and multiple meanings, as well as to trace patterned meaning (discourses) within the data set (Braun and Clarke 2014). In this thesis, the thematic discourse analysis is based on Stibbe (2015)'s approach to analyzing the stories-we-live-by.

As my data set contains both policy documents (of prescriptive nature), as well as research publications and institutional reports (of partly prescriptive but mainly descriptive, diagnostic, predictive and evaluative nature), the primary sources (the policy documents) have been analyzed in accordance with the guidelines provided for thematic discourse analysis to unveil the stories-we-live-by embedded in concrete policy proposals. However, my secondary sources (with their potential to offer different alternatives and scenarios, as well as to underscore uncertainty and complexity) have been approached in line with constructionist (critical) thematic analysis. Additionally, I have searched for two types of themes:

- semantic themes (themes identified at a semantic or explicit level). My analytic process has entailed both description (data organization, summary) and data interpretation (focusing on the significance of the patterns and their broader meanings and implications), and
- latent themes (themes identified at a latent or interpretative level). The themes have been identified through their underlying ideas, assumptions and conceptualizations impacting the semantic content of the data and underpinning problem representations (Braun and Clarke 2006: 13).

The way in which the two versions of thematic analysis, as well as semantic and latent themes have been combined in my approach to policy analysis has been demonstrated in Appendix III to this thesis.

As regards the technical aspect of organizing my data analysis process, I have decided to use MS Excel spreadsheets to organize, code and assemble my data. Although there are many Computer Assisted Qualitative Data Analysis Software (CAQDAS) programs available, the use of MS Excel spreadsheets may be as effective for developing themes from codes (Castelberry and Nolan 2018: 809, Bree and Gallagher 2016). Furthermore, I have channeled more mental energy to the data analysis and interpretation rather than complex instructions and multiple functions of the software (see Saldaña 2009: 22). In order to guarantee the transparency and consistency of my analytical process, I have included as Appendix III to this thesis a table summarizing my research design process based on the following categories: my research questions, corresponding WPR approach questions, data sources, data selection, data analysis (methods), and justification for my research choices. Its design has been inspired by the research planning suggestions made by Mason (2018).

Analytical process

This part of the research design subchapter shows the combination of Bacchi (2009)'s WPR approach to policy analysis, Stibbe (2015)'s ecological analysis of discourse (the stories-we-live-by), and Fairclough (2012)'s approach to transdisciplinary research. Presented below in the form of bullet points, the analytical steps do not reflect the more traditional approach to policy analysis based on such core components as: policy identification (agenda setting), policy formulation and adoption, policy implementation, and policy evaluation (see Thomas 2001) but follow the 'working backward' logic of the WPR approach.

Question 1: What's the 'Problem' represented to be in EU macro-regional strategies? What's the 'Problem' represented to be in the EU Strategy for the Baltic Sea Region?

The objective:

- to identify a place to begin the analysis (open up for questioning something that appears to be natural and obvious, e.g. a specific policy or a governing technique);
- to identify problem representations by working backwards from a proposal to see what is problematized, taking into account the fact that problem representations are often 'nested' (embedded) within each other (Bacchi 2009: 269);
- not to identify the intentions behind a particular policy or program nor to assess the distance between promised changes and the failure to deliver those changes; and
- to start from stated "solutions" to inquire into their implicit representations (Bacchi and Goodwin 2016: 21).

I have decided to focus on a social question (a social wrong), i.e. "aspects of social systems, forms or orders that are detrimental to human well-being and could in principle be ameliorated if not eliminated, though perhaps only through major changes in these systems, forms or orders" (Fairclough 2012: 13). In the context of macro-regional governance of the Baltic Sea, such a social question concerns the environmental status of the Baltic Sea and its governance. The aim of this analytical phase is to identify problem representations, i.e. the issues and challenges constituted by specific policies or policy proposals aimed at macro-regional integration in the Baltic Sea space. In order to identify and classify problem representations in the policy documents, I have used the questions posed by Professor Maria Ivanova when talking about the role of the Scientific Advisory

Board of the U.N. Secretary-General in generating relevant scientific knowledge to address complex global challenges[18]:

- What is? (the current situation)
- Why? (its causes)
- What ought to be? (the desired state, situation)
- How do we get there? (proposed solutions)

Applying the above-mentioned classification of the problems referred to in the policy documents has enabled me to classify them, and to "read off the implicit problem representations within them" (Bacchi and Goodwin 2016: 111) without imposing any schema upon the empirical material (Bacchi 2009), i.e. the policy proposal(s) for macro-regional governance of the Baltic Sea.

Question 2: What deep-seated presuppositions or assumptions underlie these representations of the 'Problem' (binaries, key concepts, categories)?

The objective:

- To determine how a particular problem representation is possible by identifying the meanings (presuppositions, assumptions, "unexamined ways of thinking", (knowledges, discourses)) needed to be in place for it to make sense or be intelligible:
    - knowledges (discourses) defined as general background knowledge (apparent in epistemological and ontological assumptions) and forms of relatively bounded social knowledges (such as disciplines); knowledges as forms of truth rather than "truth" (Bacchi and Goodwin 2016: 21);
- To show how these knowledges have acquired their "truth" status (the need to locate them within the relevant networks of relations and practices producing them, i.e. "discursive practices" defined as sites, "objects", and subject positions, together with interconnecting mechanisms and processes) (Bacchi and Goodwin 2016: 22);
- To seek these meanings within the policy, program or technical instrument, not in the heads of social actors;

[18] What is the added value of the UN Scientific Advisory Board? Interview with Prof. Dr Maria Ivanova. Available at: https://www.youtube.com/watch?v=eHHr57Cl8Mc. (accessed: March 30, 2020).

- To analyze how the problem representation has been constructed, i.e. which concepts and binaries it relies upon;
- To identify and reflect upon possible patterns in problematizations that may signal the operation of a particular political or governmental rationality (Bacchi and Goodwin 2016: 21);
- To critically scrutinize the "knowledge" and knowledges that together constitute the "problems", "subjects", "objects", and "places" within specific policies (Bacchi and Goodwin 2016: 36).

In order to uncover the assumptions and presuppositions underlying the identified problem representations, I have used Stibbe (2015)'s stories-we-live-by as a semiotic point of entry to identify naturalized assumptions making the problem representations conceivable and commonsensical (Bacchi 2009: 5).

Question 4: What is left unproblematic in this problem representation? Where are the silences in identified problem representations? Can the 'Problem' be thought about differently (specific policies constrained by problematizations)?

The objective:

- To encourage a critical practice of thinking otherwise;
- To destabilize an existing problem representation by drawing attention to silences or unproblematized elements within it (Bacchi and Goodwin 2016: 22);
- To identify the particular combination of practices and relations giving a 'problem' a certain shape in a specific context;
- To indicate that different practices may produce contrasting problematizations (Bacchi and Goodwin 2016: 22-23).

As the aim of this phase is to explore what has been left unproblematic or unstated in policy proposals, I have selected research publications on ocean (marine) governance to explore alternative problem representations that have been excluded from the policy documents.

Question 5: What effects are produced by this representation of the 'Problem' (discursive effects, subjectification, lived effects)?

The objective:

- To explore the effects of practices and discourses, i.e. the limits imposed on what can be thought or said about the issues under investigation, as well as to expose the discursive practices at work facilitating the process of articulating the "unspeakable" and thinking the "unthinkable" (Bacchi and Goodwin 2016: 37); and
- To consider the effects of identified problem representations (with effects being defined as political implications rather than measurable "outcomes") (Bacchi and Goodwin 2016: 23).

There are three specific kinds of interconnected effects: discursive effects, subjectification effects, and lived effects, which bridges a symbolic-material division, and demonstrates that this form of analysis does not "reside in some representational universe cut off from daily life" (Bacchi and Goodwin 2016: 23):

- Discursive effects: the terms of reference established by a particular problem representation setting limits on what can be thought and said;
- Subjectification effects: the way in which "subjects" are implicated in problem representations or produced as specific kinds of subjects;
- Lived effects: the ways in which discursive and subjectification effects translate into people's lives (Bacchi 2009).

Question 6: How could this representation of the 'Problem' be questioned, disrupted and replaced?

The objective:

- To emphasize the existence and possibility of contestation and to destabilize taken-for-granted "truths"; to challenge pervasive and authoritative problem representations (Bacchi and Goodwin 2016: 23);
- To use my ecosophy to expose discourses (shaping problem representations) that are ecologically destructive and to promote those which protect and preserve life-supporting conditions in the Baltic Sea space;
- To search for new stories-to-live-by in line with Stibbe (2018)'s Positive Discourse Analysis.

- To revisualize the macro-regional governance of the BSmR using some insights gained from a multi-modal analysis, which constitutes a semiotic point of entry into the WPR-inspired analytical framework (see Bacchi 2009).

In order to demonstrate a possible practical application of the insights gained through the integrated analysis (a practical point of entry), I have made some practical recommendations with a view to building critical social-ecological literacy as a set of transferrable sustainability skills comprising the following: ocean (ecological) literacy, systems thinking, critical thinking, and critical language awareness (see Fairclough (ed.) 2013 for the last concept). I have decided to formulate such a practical recommendation following the positive feedback I received from a Swedish colleague after my presentation on ocean literacy in the Baltic Sea region during the Participation Day, held in Gdańsk in 2019, to celebrate the 10th anniversary of the EUSBSR.

Question 7: Subjecting my ecosophy, proposals and problem representations to critical scrutiny (its implicit problematizations, presuppositions and assumptions, as well as its silences and alternative representations).

The objective:

- To reflect on self-problematization as being located within historically and culturally entrenched forms of knowledge;
- To subject my own thinking to critical scrutiny (reflexivity); subjecting my own recommendations and proposals (their origins, purposes and effects) to the WPR approach to policy analysis (Bacchi and Goodwin 2016: 24).

To conclude, what may look like a smoothly written subchapter on my research design is actually the result of an ongoing, active and reflexive process that has involved a constant questioning of my methods and approach to policy analysis, as well as moving back and forth between my data set and my methodological choices (Mason 2018: 31).

3

Empirical results and analytical discussion

This chapter presents problem representations of the macro-regional governance of the Baltic Sea identified in the selected policy documents, their underlying assumptions, and an unproblematized ocean perspective. It also explores social-ecological conditions constituted by the identified problem representations in the form of constraints imposed on thinking, being, and living (discursive, subjectification, and lived effects, respectively). Often naturalized and taken-for-granted, the problem representations stabilize these conditions, shape the relations between humans and non-humans, and conceal the political nature of the constituted conditions (Bacchi 2012, 2009). Moreover, this chapter contains a transitional chapter introducing the social-ecological approach and extrapolating likely lived effects from relevant publications.

3.1. What floats on the surface: Problematizations of the macro-regional governance of the Baltic Sea

As policies shaping environmental governance issues contain multiple problem representations, the documents regulating the macro-regional strategy for the BSR are no exception. It may be safely assumed that all the policies foster interaction, cooperation and communication, as well as focus on funding issues and result orientation (setting targets and indicators to measure progress, monitoring and evaluation). Apart from the legal and institutional frameworks to be found at the national, regional and global levels, environmental governance challenges require that the following infrastructure be in place: financial instruments and technical solutions; multiple research programs dedicated to the maintenance and functioning of marine ecosystems, and monitoring and assessment programs designed to monitor the status of the marine environment, as well as management programs aiming at the rational use of the seas and their resources (Grip 2017: 414). Both HELCOM documents and EU legislation may serve as a case in point. So it seems reasonable to ask what contribution the macro-regional strategies in general, and the EUSBSR in particular, make to the governance of the Baltic Sea.

Therefore, I have explored the added value of the macro-regional approach by analyzing the relationship between the Baltic Sea and the stakeholders engaged in its governance as constituted in the selected policy documents, as well as its

ecocultural implications. To do so, I have identified problem representations in the macro-regional approach to the governance of the Baltic Sea by posing the following questions: What's the 'Problem' represented to be in EU macro-regional strategies? What's the 'Problem' represented to be in the EU Strategy for the Baltic Sea Region? The rationale behind such a research approach has been explained in subchapter 2.6 (research design). It is noteworthy that although the identified problem representations are, to a large extent, interconnected and overlapping due to the nature of the macro-regional governance of the BSR, they have only been separated for analytical purposes. The aim of this analytical phase is to identify the proposals for change within the selected documents shaping the macro-regional integration in the Baltic Sea space (see the attached list of primary sources in Appendix I). As any proposal for change indicates what is held to be problematic, i.e. what the 'problem' is represented to be or how it is conceptualized as a particular kind of 'problem,' it is possible to 'read off' the problem representations already present in the selected policy proposals and strategies without referring to any external texts or applying a specific analytical or theoretical framework (Bacchi 2009; Bacchi and Goodwin 2016). For the purpose of their classification, I have used the following set of questions that may be asked with regard to any policy proposal: What is? (the current situation); Why? (its causes); What ought to be? (the desired state, situation); How do we get there? (proposed solutions).

Macro-regional strategies and the EUSBSR: The current situation and its causes

The idea of macro-regional cooperation in the BSmR centers on the environmental deterioration of the Baltic Sea, as well as the development challenges and potentials to be found in the macro-region that on the one hand are way beyond the capacity of the Baltic Sea states to solve them independently from each other, and too specific for the macro-region to be approached at EU level on the other (What is an EU Macro-regional Strategy? (2017)). In other words, the BSmR is a functional space that has certain common features and geographical determinants in addition to common development goals and challenges. As for the opportunities afforded by the macro-region, they may be grouped in the following way:

- The EU enlargement in 2004, which has reinforced EU integration and increased regional coherence (e.g. Report 2009/2230(INI); COM(2011) 381 final). Additionally, prominence has been given to strategic issues bringing an added value to horizontal EU policies in general, and the regional implementation of the Integrated Maritime Policy for the European Union (IMP) in the BSmR, in particular. The IMP develops in coherence with the Marine Strategy Framework Directive as its environmental pillar (Council Conclusions of 22.12.2009), which benefits the BSmR in the following way: it accounts for the specificities of the different marine regions, as well as applies the ecosystem-based approach as an overarching principle, with particular importance attached to well-managed marine protected areas as one tool within a wider integrated sea use management (ISUM) approach to maritime spatial planning and integrated coastal zone management (ICZM) (e.g. Action Plan 2009; Action Plan 2015);
- Pre-existing cooperation structures, including: the existence of leaders, i.e. regions with a strong cooperation agenda and the necessary resources or even single individuals, as well as existing national and regional authorities and organizations. Their existence is of utmost importance for the implementation of the strategy and for achieving results in all its priority areas. The requirement of transnational cooperation pervades the whole macro-regional approach, and takes the form of: the adherence to international conventions for transnational and the availability of funding sources for ubiquitous macro-region-relevant thematic issues requiring concrete transnational actions and cooperation (e.g. Action Plan 2009; Final report 2017);
- Well-established tradition of regional cooperation: activities under national and regional seas conventions, e.g. the Helsinki Convention (HELCOM), river conventions and other international conventions relating to the management of human activities impacting the marine environment; Community initiatives, such as INTERREG (now the European Territorial Cooperation programs); the Northern Dimension (a wide framework covering the Northern Regions: the Baltic Sea and Barents Regions, and the Arctic. In principle, such a tradition facilitates cooperation between the EU and its partner countries:

Norway, Iceland, and Russia; the Council of the Baltic Sea States; the Baltic Sea Parliamentary Conference, as well as the yearly meeting of the speakers of national parliaments from the region (e.g. Action Plan 2013; Action Plan 2015);

- Exceptional economic interdependence of the Member States in the region, with numerous initiatives promoting regional and cross-border cooperation for further economic growth to be supported by some of the most successful and innovative economies in the world (Germany and the Nordic countries), and the regions that are fast catching up with the European average (Poland and the Baltic States) (e.g. COM(2009) 248 final);
- The reputation of the BSmR as one of the most competitive and innovative science regions in the world, built on an excellent structure of leading universities and research institutions, thriving on networking among research funding agencies from all EU Baltic Sea states and characterized by high education levels (the best results in the EU on reading literacy, upper secondary completion rate, and public investment in education), as well as taking advantage of its very well-educated workforce, expertise in innovation (particularly in knowledge-based industries) (e.g. Action Plan 2013; Action Plan 2015);
- The emergence of a large and committed 'Baltic Sea Family' (Action Plan 2017: 30) looking for joint action and increasingly aware of the macro-region's shared natural resources and its environmental fragility, which calls for a stronger integration of neighboring countries owing to their geographic and cultural proximity (e.g. Action Plan 2015);
- The cultural dimension of the Baltic Sea macro-region offering a range of urban heritage, landscapes, seascapes and cultural landmarks, a wealth of languages and cultures, a diverse and attractive cultural life and cultural heritage of great value, including particular attractions for visitors and residents. It is culture that lies at the core of innovation, social cohesion and sustainable regional development (e.g. Action Plan 2013).

As might be expected, the opportunities to be found in the BSmR are accompanied by a number of challenges due to the geography of the BSR and its physical accessibility hampered by the very long distances by European standards, the long

external borders, as well as the extent of the sea that links but also divides the sub-regions. Located on the periphery of the economic center of Europe, the BSmR depends strongly on foreign trade, and needs well functioning transport infrastructure (e.g. COM(2012) 128 final, Final report 2017, Action Plan 2017). The challenges identified in the selected policy documents regarding the macro-regional governance of the Baltic Sea include:

- The existence of "both mature economies and countries with a lower performance on socio-economic indicators but higher growth rates" (Final report 2017: 11);
- The complexity of certain economic transitions, such as the bioeconomy, due to a large number of actors representing different sectors and engaging for different reasons, as well as the relative novelty of the policy, research and business area (Action Plan 2017);
- System overload and institutional capacity overburdening due to various administrative challenges, such as: a divide between the older and newer EU Member States concerning the quality of public institutions and accountability; lack of human resources, changes of staff and poor knowledge, as well as staffing and travel cuts (e.g. Final report 2017);
- "Overly complex governance arrangements, with fuzzy objectives" not always corresponding to the needs of the macro-region (Final report 2017: 10);
- "Asymmetries in the leadership and support for the implementation of the joint strategies between the countries and regions involved" (Final report 2017: 10), with a real progress being "hampered by the lack of compulsory strength of commitments to be followed-up and sometimes by divergent views from relevant national ministries" (Action Plan 2009: 6);
- Increased activities in the Baltic Sea resulting in competition for limited marine space between sectoral interests, such as shipping and maritime transport, extraction of gravel and minerals, offshore energy, ports development, tourism, fisheries, and aquaculture in addition to environmental concerns (e.g. Action Plan 2015);
- Lack of a uniform entity with a shared history and culture in the BSmR (different political, economic and cultural structures, including diverse means

of expression, and individual and collective memories) (e.g. Action Plan 2013); and

- Lack of a shared, common identity or a recognised brand image of the BSmR (e.g. Action Plan 2013).

Macro-regional strategies and the EUSBSR: The desired situation and proposed solutions

This part of the subchapter contains various representations of the 'problem' of the macro-regional governance of the Baltic Sea that have been classified according to the method of theme development specified in subchapter 2.6 (research design) and described as the following types of overarching 'problems':

- Macro-regional harmonization 'problem',
- Effectiveness/efficiency 'problem,'
- Potential 'problem,' and
- Commitment 'problem.'

It should be noted that the identified problem representations regarding the desired situation (What ought to be?) and the proposed solutions (How do we get there?) are interlinked and mutually reinforcing. What is more, they appear in virtually every single policy document on the list of my primary sources, which testifies to a significant amount of overlap among the texts and an incremental development of the macro-regional approach to the Baltic Sea space.

Macro-regional harmonization 'problem'

The first overarching 'problem' of the macro-regional governance of the Baltic Sea represented as a macro-regional harmonization 'problem' falls under the following headings: macro-regional relevance 'problem,' cohesion 'problem,' and connectivity/connection 'problem'.

To begin with, the 'problem' of macro-regional harmonization has been conceptualized as an inadequate macro-regional relevance and limited to three aspects: 1. macro-region-specific challenges, 2. macro-regional characteristics, and 3. macro-region-specific governance:

1. The first aspect of the macro-regional relevance 'problem' underscores the need to strengthen the macro-regional dimension of governance of the BSR by taking into account its geographical characteristics, actual

development challenges, and pressing issues pertinent to the macro-region, as well as macro-regional dynamics to make it more resilient to future environmental, societal and economic challenges (e.g. COM(2012) 128 final, COM(2014) 284 final, COM(2016) 805 final).

2. The second aspect of the macro-regional relevance 'problem' highlights the importance of macro-regional characteristics to be considered in the process of delimiting a macro-region. It includes both the recommendation to adopt a geographical and spatial focus when defining both national and transnational issues and themes of key relevance to the macro-region (its shared geography, history, shared biophysical characteristics: environmental status, biodiversity, common functional features, relevant political and economic drivers, common opportunities, threats and challenges, strengths and weaknesses) (e.g. COM(2012) 128 final, COM(2013) 468 final). The rationale behind such an approach is based on the importance to make a distinction between this approach and the more thematic-oriented EU policies and programs, as well as to ensure the added value of the macro-regional approach (e.g. Action Plan 2017). In other words, it is imperative to make the macro-region central in determining the agenda for cooperation, as well as to address transnational issues of macro-regional relevance not to be sufficiently handled by EU policy frameworks nor dealt with by the Baltic Sea states or the macro-region alone (see What is an EU Macro-regional Strategy? (2017)).
3. Finally, the third aspect of the macro-regional relevance 'problem' refers to macro-region-specific governance and is expressed through a focus on the need to select and prioritize joint transnational actions at the macro-regional scale in line with the macro-regional specificity, its core priorities and budgetary constraints (the programming of the EU funds) in order to for the macro-regional approach to bring a genuine added value. Therefore, the 'problem' of macro-regional governance has been articulated through terms, such as: a shared, strategic and focused approach; comprehensive development; flexible, well-structured and proportionate governance (no 'one size fits all' model) (e.g. 16207/14 Council Conclusions); policy-relevant evidence; and the coherence between structuring research

infrastructure and the socio-economic developments specific to the mR (e.g. Action Plan 2013, Action Plan 2107).

The overarching ‘problem’ of macro-regional harmonization has also been conceptualized as a deficient social, economic and territorial cohesion as a result of regional disparities and urban-rural discrepancies (e.g. Final Report 2017). Therefore, this problem representation encompasses a number of interrelated solutions, such as: interrregional cohesion, European regional convergence, balanced economic development based on social and economic cohesion; multi-level governance; and multi-stakeholder governance through people-to-people contacts (e.g. Council Conclusions of 26.06.2012, COM(2019) 21 final, 9101/19 Council Conclusions). Furthermore, the ‘problem’ of an deficient cohesion has been represented as the need to strive for territorial cohesion with both land and maritime dimensions, supported with clear place-based' or 'region-based' perspective' (COM(2011) 381 final: 8; Action Plan 2015: 167) to be reflected in policies at all levels to ensure a competitive, cohesive and sustainable development of the macro-region. It should be noted that different aspects of the territorial cohesion ‘problem’ have been expressed through a focus on: “reducing territorial disparities, ensuring equivalent living conditions, building on the territories, recognizing diversity as an asset, (…), allowing for a fair access to infrastructures and services, strengthening polycentricity, building good links between urban and rural areas, promoting good governance with equal participation and sharing of common resources, resting on the ecosystem-based management and planning of maritime space (Action Plan 2009: 68). Additionally, the territorial dimension of the cohesion ‘problem’ has been strengthened through an emphasis placed on the links between the EUSBSR and the existing and future macro-regional strategies (exchange of experiences and good practices, increased quality of implementation solutions, added value in strengthening European territorial cohesion, e.g. implementing the infrastructure and energy projects) (e.g. COM(2013) 468 final), as well as through the development of collaborative forums for cooperation and coordination with third countries to facilitate intraregional, interregional and EU-wide cohesion (e.g. Action Plan 2017).

The last overarching ‘problem’ of macro-regional harmonization has been framed as an inadequate connectivity/connection in the BSmR and problematized in terms of 1. connectivity issues, 2. human connection, and 3. regional identity:

1. The first group of the problem representations under the heading of connectivity issues is expressed through a focus on the need to fill the connectivity gaps in the following areas: communications systems; sustainable and efficient transport infrastructure and interconnections in the BSmR (a Baltic Sea motorway, the Trans-European Network Nordic Triangle, the Rail Baltica project, the Via Baltic highway) (e.g. Action Plan 2009, Action Plan 2013); and accessible, efficient, secure and environmentally sustainable energy markets (gas and electricity) to facilitate people to people connectivity (e.g. COM(2012) 128 final, Action Plan 2017). What is more, the connectivity issues cover the freedom of navigation in the Baltic Sea together with maritime safety (Action Plans 2009, 2013, 2015, 2017), as well as cross-border crime cooperation (e.g. trafficking) (e.g. COM(2013) 468 final), with the aim of connecting the macro-region using inclusive territorial solutions.
2. Another connectivity/connection ‘problem’ has been conceptualized in terms of human connection by focusing on the cultural and historic roots of the Baltic Sea region, which is indispensible for mutual understanding, broad cooperation in the areas of culture, education, tourism and health. To do so, the human connection ‘problem’ focuses on the need to organize student exchanges, scientific and cultural exchange programs (e.g. Action Plan 2013, Action Plan 2017, Final Report 2017), as well as to ensure access to communications networks and the internet as basis for seamless flow of information (e.g. Action Plan 2015), all with a view to developing cross-border relations with neighbors and to foster popular commitment to Baltic Sea cooperation, as well as to facilitate labor mobility and stimulate cross-border business development (e.g. Action Plan 2009). The highlighted cultural dimension of the human connection ‘problem’ is represented as having wider implications for the macro-regional development, such as: contributing to social cohesion and innovation, promoting cultural and creative industries, encouraging creative entrepreneurship, thereby generating GDP, serving as development multipliers, and having a positive

impact on sustainable economic growth, as well as increasing the economic and cultural prosperity (e.g. Action Plan 2017). Furthermore, the cultural aspect of the human connection 'problem' underscores the need to strengthen civil society and its institutions through promoting culture as a driver for social innovation and sustainable living (e.g. Action Plan 2015).

3. The last group of the problem representations comes under the heading of regional identity articulated through terms such as: cultural identity, a regional sense of identity or enhanced Baltic Sea identity. Taking into account the pan-European nature of the EUSBSR and the existence of the Baltic Sea as the uniting factor in the region, the problem representation encompasses a wide range of approaches to boost a sense of common regional identity: from facilitating smooth border crossing in the region, through raising awareness of the common natural and cultural heritage of the region as a source of shared values, to tourism cooperation combining economic benefits with the perception of the region as a shared reference point in the identity of inhabitants of the macro-region (e.g. Action Plan 2009, Action Plan 2013, SWD(2019) 6 final). What is more, the identity aspect of the connectivity/connection 'problem' in the BSmR has been problematized as falling into the following three categories: regional identity, brand, and we-feeling. One of the most challenging and ever-evolving tasks to perform in the BSmR, the first category entails building a macro-regional identity as a feeling of belonging on the basis of a common vision to be shared by as many stakeholders as possible (e.g. Action Plan 2013, Action Plan 2017). The idea of creating a common brand for the BSmR has also been conceptualized as representing the identity aspect of the connectivity/connection 'problem.' Capitalizing on the reputation of the BSmR as one of the most attractive and competitive areas in the world with dynamic economies, the problem representation underscores the need to create a Baltic Sea Region brand integrating regional attractiveness, smartness, research, innovation and cooperation, resulting in capacity-building, stronger international competitiveness, increased foreign investments, thereby creating jobs and economic growth (e.g. COM(2016) 805 final). In other words, the idea of turning the BSmR into an identifiable region through joint promotion and regional identity building has been

strongly linked to the overall goal of boosting its competitiveness to meet the Europe 2020 Strategy goals of being a smart, sustainable and inclusive region (see Europe 2020). The efforts to build a common brand for the BSmR are classified as a Public Relations 'problem' articulated through terms, such as: branding elements of the BSR and an elaborated set of images and identities of the region; surveys and marketing campaigns for the promotion of the region, especially in the fields of tourism, investment promotion and talent attraction (e.g. Action Plan 2013, COM(2016) 805 final); an improved 'region of origin' effect to ensure more global outreach and attention, economies of scale and increased resources for transnational product development (Action Plan 2013: 165). However, the focus on eliciting a sense of belonging has not been limited to the issue of identity or brand building. The need to generate more 'we-feeling' in the region (Action Plan 2013: 166) has been emphasized in the process of building a common vision for the BSmR as neither regional identity nor regional brand may be imposed from above (see Henningsen 2011).

Effectiveness / efficiency 'problem'

The second overarching 'problem' of the macro-regional governance of the Baltic Sea has been classified as an effectiveness/efficiency 'problem' and broken down into the following categories: 1. Result-orientation 'problem,' 2. Coordination 'problem,' and 3. Integration 'problem':

1. The representation of the effectiveness/efficiency 'problem' as a matter of inadequate result orientation has four different aspects: overall performance (e.g. Final report 2017), result measurement framework (e.g. SWD(2013) 233 final, 9101/19 Council Conclusions), progress measurement (e.g. Action Plan 2015, Action Plan 2017), and visibility (e.g. Action Plan 2009, Action Plan 2017). The visibility dimension of the problem representation underscores the need to articulate the macro-regional added value by focusing on concrete results, strategic and specific priorities, as well as by ensuring transparency and measurableness in monitoring and evaluation systems. However, its overall performance aspect is conceptualized in terms of supporting the strategic orientation of the macro-regional approach, facilitating inter-institutional cooperation (project development, network

interaction), identifying key drivers and barriers; making recommendations regarding policy area development; and improving the liaison between project results and policy discussion, as well as the quality of projects and processes, thereby ensuring the sustainability of their results. In order to do that, the aspect of the result-orientation 'problem' conceptualized as result measurement framework entails surveillance, a common evaluation framework, a stronger evidence-based assessment of macro-regional results, coherent use of monitoring, evaluation and result reporting of the results, as well as review of governance arrangements (e.g. Council Conclusions of 22.12.2009, SEC(2011) 1071 final). The above aspects of the inadequate result-orientation 'problem' are supported by the requirement to measure progress to determine characteristics for good environmental status and to establish targets and indicators, based on common criteria and methodological standards. The focus on progress measurement has been articulated through terms such as: qualitative and quantitative targets, milestones, timelines (e.g. 8461/17 Council Conclusions); guidelines concerning the assessment of flagship projects; setting fishing quota, allowable catches as well as reliable and compatible marine data (e.g. Action Plan 2009, Action Plan 2017).

2. The issue of inadequate coordination [19] in the macro-governance of the Baltic Sea have been expressed through a focus on the need to ensure the following:
   - Cross-boundary (trans-boundary) / cross-territorial cooperation (e.g. Action Plan 2009, COM(2016) 805 final, Final report 2017): cross-territorial topics and projects; issues placed in a multilateral setting; cooperation reaching beyond current EU borders to work as equals with neighbors and relevant third countries in the area of functional challenges (outward-looking regional development ideas); regional and cross-border cooperation for further economic growth (green growth strategies), as well as regional cooperation with the Helsinki

[19] As the terms 'coordination' and 'integration' tend to be used interchangeably, in this thesis they have been defined as follows: 'coordination' means "the process where organizations are organizing themselves so that they work together properly and well," whereas 'integration' refers to "the act where organizations are combining or adding parts of their work to make a unified whole (…) harder to achieve" (Grip 2017: 414).

Commission (HELCOM) to provide maritime safety and security, and facilitate sustainable growth;

- Cross-cutting issues (e.g. Action Plan 2015): cross-cutting links among policy areas and horizontal actions; cross-cutting topics (e.g. branding and regional identity building, public health and productive labor market and economic growth); cross-sectoral and cross-territorial (strategic focus) coordination to be included in any new EU policy and embedded in EU funds and programs of territorial relevance;
- Multi-level (cross-level) governance (e.g. Action Plan 2017): different levels of policy-makers working better together (not a new tier of decision-making); cooperation in environmental issues occurring at the macro-regional, European, and international levels; a balance between three equally important levels: ministers, national coordinators and thematic coordinators; multi-level aspects of policy design and implementation in different policy areas; the Commission cooperating with the Member States as a facilitator in the implementation of the Strategy according to the principle of subsidiarity (e.g. 15018/09 Council (GAERC) Conclusions);
- Multi-country governance (e.g. SWD (2013) 233 final): EU and non-EU countries working together on the basis of mutual interest and respect;
- Multi-actor (multi-stakeholder) governance (e.g. SWD(2013) 233 final, COM(2019) 21 final): public-private partnerships at all levels; the triple of public-business-academic sectors extended to the 'quadruple helix' by adding civil society as users (SWD(2013) 233 final: 65); joint work increasing between the Northern Dimension, CBSS, Nordic Council of Ministers and other frameworks; cooperation between authorities inside countries, as well as between sub-regional groups; the link among the political leadership, implementers, and the scientific community; regional and local stakeholders (e.g. EUCO 205/12);
- Multi-sectoral (intersectoral / cross-sectoral) governance (e.g. Action Plan 2013, Action Plan 2015, Final report 2017): various relevant sector policies to address joint challenges and potentials, as well as both financial and non-financial resources; a cooperation platform of different

clusters for interaction of all triple helix sectors: innovation milieus, clusters, SME-networks; better coordination of sector-specific initiatives and programs; a cross-sectoral, policy-oriented dialogue to address environmental challenges and to ensure a mutual reinforcement of different sectoral policies and to reduce the risk of counterproductive initiatives and measures;

- Joint actions (e.g. COM(2016) 805 final): a collective response to environmental deterioration of the Baltic Sea; a concerted action on challenges and opportunities of that region; networking; joint tools, management plans, operational design, initiatives, and approaches; bottom-up, government-driven and professional perspectives; economies of scale (clustering projects sharing similar themes); the exchange of best practices, harmonization of standards; regional marketing and branding activities;
- Alignment of policies, strategies, programs, and funds (e.g. Action Plan 2017), including: coordination between relevant EU policies, between EU and national, as well as regional policies having an impact on territorial cohesion; close coordination between priorities set in the action plan and policy development; a more efficient and coordinated use of existing resources; and the co-management of strategies, flagships, funding programs.

3. In the selected policy documents on the EU's macro-regional strategies and the EUSBSR, the different aspects of the integration[20] 'problem' have been expressed through a focus on the importance of: a) integrating environmental and socio-economic considerations in all decision-making; b) adjusting management arrangements to reflect ecosystem realities, and c) integrating knowledge into the policy-making process.
    a) Incorporating an environmental perspective policy reflections, strategies, and actions at all levels, including local and civil society discussions(e.g. COM(2014) 284 final, Action Plan 2017, SWD(2019) 6 final) :

[20] As has already been noted, there is a significant degree of overlap between the concepts of 'coordination' and 'integration,' with the latter one being harder to achieve (Grip 2017). The term 'integration' "perhaps one of the most loosely used words in the ocean management field but also a key principle for sustainable development (VanderZwaag 1996 as cited in Grip 2017: 417).

- Developing policies related to the Baltic Sea not in isolation but on the basis of connections and synergies with other policy areas due to their interlinked and interrelated nature in order to facilitate both blue and green growth;
- Integrating environmental and climate change concerns across all relevant policy fields, including energy, transport, agriculture, fisheries (both wild and aquaculture), and industrial policies;
- Mainstreaming climate action, with low-carbon economy and climate resilient society to be incorporated in the macro-regional development framework;
- Integrating the environment protection and preservation aspects of relevant HELCOM and EU legislation into all relevant priority areas of the Strategy;
- Supporting the cross-sectoral integration of the Strategy in EU-programs and instruments, as well as in regional and national policies;
- Including environmental sustainability as a central pillar in the EUSBSR and the Action Plan;
- Integrating the EUSBSR with multilateral structures and links with the EU Strategy for the Danube Region, as well as using synergy effects between the EUSBSR and multilateral cooperation structures and networks within the Baltic Sea Region: the Northern Dimension, the Council of the Baltic Sea States, the Nordic Council of Ministers, HELCOM, VASAB (Visions and Strategies around Baltic Sea), the Baltic Sea States Subregional Cooperation;
- Using the funding opportunity offered by including the macro-regional approach in the new generation of regulations according to the principle of embedding the approach in all decisions ('mainstreaming');
- Embedding macro-regional strategies into European Structural and Investment Funds;

- Including a reference to the EUSBSR in national and regional programs addressing the urgent environmental challenges related to the Baltic Sea;
- Facilitating an integrated view on the future of the European territory.

b) The second representation of the integration 'problem' in the macro-regional governance of the Baltic Sea has been focuses on the need to adjust management arrangements to reflect ecosystem realities and includes the following dimensions (e.g. COM(2009) 248 final, Council Conclusions of 22.12.2009, Action Plan 2013, Action Plan 2015, Action Plan 2017):
   - Ensuring links between different maritime actions split between different priority areas and horizontal actions, as well as facilitating effective coordination inside the Member States and through cross-border networks, which corresponds to the cross-sectoral and integrated approach of the EU's Integrated Maritime Policy;
   - Facilitating integrated approaches to issues of macro-regional importance (e.g. a cross-sectoral approach to environmental issues);
   - Supporting the integrated governance of the sea-land interface by promoting both maritime and land-based spatial planning in all Member States around the Baltic Sea with the view to: balancing sectoral interests that compete for marine space and resources and overcoming conflicts of use; achieving sustainable use of marine areas to benefit economic development, as well as the marine environment; adopting the ecosystem approach; facilitating co-ordination among the initiatives related to the Maritime Spatial Planning, the Marine Strategy Framework Directive, and integrated coastal zone management (ICZM); improving urban networking across borders and urban-rural cooperation;
   - Adopting a more comprehensive spatial development perspective, with a stronger focus on land-based SP, alongside

maritime and coastal zone management, as well as understanding the spatial implications of all activities, projects, and sector policies;

- Adopting an ecosystem-based management approach to macro-regional governance;
- Optimising the use of EU funds having regard to the critical status of the Baltic Sea to effectively integrate environmental concerns into sectoral policies, to better address the urgent environmental challenges to the Baltic Sea;
- Facilitating the integration of agricultural, environmental and rural development issues, as well as the integration of climate (sustainable urban development initiatives) in a resource-efficient, green-economy framework;
- Promoting bioeconomy owing to its cross-cutting nature and capacity: to incorporate economic, social and environmental (on land and in the sea) aspects of sustainability in agriculture, forestry, fisheries and aquaculture, and to enhance sustainability, entrepreneurship, competitiveness and growth in municipal and rural areas by building on circular thinking, as well as to facilitate a transition from a fossil-based to a sustainable bio-based society, and
- Taking into account the special characteristics of the Baltic Sea Region when formulating sectoral policies affecting the area, particularly in the fields of economy, environment, finances, transport, research and education, transport, rural development, energy and regional and maritime development.

c) The issue of inadequate integration has also been conceptualized as a matter of integrating scientific knowledge into the process of policy making, as well as of linking long traditions rooted in forestry, agriculture and fisheries together with innovation, research, and new technologies (e.g. Action Plan 2017).

Potential 'problem'

The third overarching 'problem' of the macro-regional governance of the Baltic Sea has been represented as a matter of unlocking the potential of the macro-region and classified as: capacity, education, knowledge, research, and innovation.

Capacity

To begin with, the issue of inadequate capacity encompasses a number of interrelated goals to be achieved, such as:

- Designing a multi-faceted platform for capacity building defined in terms of knowledge, competencies and leadership skills for the professional and partnership-based management of the EUSBSR and the implementation of the Strategy in a complex multilevel governance system (e.g. COM(2016) 805 final);
- Developing the institutional capacity and performance of the internal macro-regional actors managing the strategy and the individual and institutional capacity of external stakeholders to respond to the strategy; developing capacity in the area of policy development, EU policy implementation and the matchmaking of funding capacity (e.g. Action Plan 2017);
- Policy learning in the context of transnational cooperation through exchange of experience and in particular through structured cooperation on key issues of transnational concern (e.g. Action Plan 2017);
- Realizing that the local perspective and the macro-regional one go far beyond national practices and networks (e.g. Final report 2017);
- Developing new mechanisms or formats in the form of project clusters, project chains, project platforms (e.g. Final report 2017);
- Providing all partners in the multi-level governance structure with possibilities and incentives to participate in the implementation of the EUSBSR, including a strong involvement of civil society and consultative networks or platforms (e.g. 16207/14 Council Conclusions).

In other words, the 'problem' of inadequate capacity has been conceptualized as a result of the inability to ensure the joint and synergistic performance[21] of internal

[21] While capacity is defined as the sum of skills, capabilities, processes, organization and resources of the individuals and institutions involved in the macro-regional implementation either as macro-regional bodies or as stakeholders (project owners), 'performance' conceptualized as the 'services'

and external stakeholders of the macro-region. Therefore, the issue of inadequate capacity also stresses the importance of thinking more strategically and imaginatively about the opportunities available, about risks and hazard scenarios (climate change mitigation and adaptation). Moreover, it also underscores the need to foster adaptive capacities in order to cope with these challenges and to navigate the multilevel governance system of the region, in addition to mastering the knowledge of how the programming and funding structure works in the relevant programming periods (e.g. Presidency Conclusions of 29/30.10.2009).

Education

The different representations of the issue of inadequate potential also encompass the field of education which is framed as one of the factors aimed at countering social exclusion, poverty and long-term unemployment, with the remaining factors being: inclusive welfare system; well-functioning labor market supporting geographical, professional and socio-economic mobility; research; entrepreneurial mind-sets and skills, as well as competitiveness and innovation (e.g. Action Plan 2015, Action Plan 2017). To meet these objectives, there are a number of problem representations conceptualized as representing an aspect of inadequate education. Firstly, one of the representations has been expressed through an emphasis on matching educational programs and policies to the needs of the labor markets in the BSmR by adopting the following measures and approaches to educational development:

- Providing well-functioning education, flexible and able to quickly address to the needs of the labor markets, and to be shaped through a dialogue between labor market organizations, relevant authorities and education providers (e.g. Action Plan 2009);
- Using the potential of education to strengthen the macro-region's identity, its reputation for the highest innovation in Europe, and its high economic potential (e.g. Action Plan 2017);
- Combating early school leaving and improving transition from education to labor market, particularly timely in the context of demographic change and the shortage of a qualified workforce (e.g. Action Plan 2015);

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offered to the 'clients' in terms of quality, speed, usability or the macro-effects on the MRS area (Final report 2017: 110).

- Ensuring the continued presence of a skilled, efficient and well-trained and adaptable workforce with high labor mobility, including female entrepreneurs, the elderly workforce, and refugees (e.g. Action Plan 2015);
- Promoting competence development in the form of:
  - lifelong learning, with a particular role to be played by non-formal education;
  - work-based learning to fill the gap between education (training) and labor market, with a focus on the needs of the economy; and
  - vocational training for young adults covering the topic of mentorship and entrepreneurship (e.g. Action Plan 2013, Action Plan 2017) ;
- Facilitating the development of entrepreneurial mind-sets (ready to engage in new or young companies, start-ups and SMEs) through fostering entrepreneurial skills at all levels of education and a multidisciplinary approach in order to generate creative ideas, and the entrepreneurial initiative to turn those ideas into action (e.g. Action Plan 2017);
- Imparting values and fostering active citizenship among young people (e.g. Action Plan 2013).

Secondly, another problem representation of the inadequate education in the BSmR focuses on the central role to be played by universities as centers of excellence ready to form networks, to increase student and researcher mobility within the macro-region, and to attract students and researchers from outside the Baltic Sea region, as well as to engage in international competition in the area of research and innovation (e.g. COM(2011) 381 final, SWD(2019) 6 final). Such a conceptualization of the role of universities in the BSmR results from the ambition to coordinate tertiary education, science and research policies in the Baltic Sea region for a common tertiary education, and to ensure an intensified transnational use of the research facilities, which may lead to creating a common region for education and research capable of providing well-educated workforce and world class graduates (e.g. Action Plan 2017). Then, apart from its role in developing innovative economies, the issue of inadequate education has been problematized in terms of education for sustainable development to correspond to the pillars of Europe 2020, as well as to improve the environmental management in the BSmR (e.g. Action Plan 2013, Action Plan 2017). In other words, the aim of

education for sustainable development (or learning about sustainability) is to establish the Baltic Sea Region as a region of sustainable development (Action Plan 2013: 80).

Knowledge

Another aspect of the inadequate potential in the BSmR has been framed in terms of the need to generate knowledge. As a cross-cutting issue, the 'problem' of knowledge has been articulated through terms such as: scientific knowledge, knowledge transfer of best practices, knowledge-intensive products and services (e.g. Action Plan 2009, Action Plan 2015); and valuable knowledge compiled in cooperation with various sectors (e.g. industry, education, energy and transport), as well as entrepreneurial dynamism and intensive links between top-level knowledge institutions, private investors, incubators and related business services (e.g. Action Plan 2015, Action Plan 2017). It is noteworthy that the issue of the flow of knowledge has been framed in the following ways:

- As strengthening the knowledge dissemination process between policy-makers and researchers to provide policy-relevant results (e.g. SWD(2013) 233 final);
- As transfer of knowledge and competence from the Nordic countries and Germany as innovation top-performers to Poland and the Baltic States (e.g. Action Plan 2009, SWD(2013) 233 final);
- As intensive linkages between top-level knowledge institutions, private investors, incubators and related business services, as part of the process of investing in production, knowledge and innovation (e.g. Action Plan 2015);
- As linking existing knowledge, expertise and long traditions rooted in forestry, agriculture and fisheries together with innovation, research, new technologies and investment, which invites public and private (companies and citizens alike) actors to cooperate in innovative, cross-sectoral seetings that are often outside their comfort zone (Action Plan 2017).

Research

The above problem representations are inherently linked to another dimension of the deficient potential in the BSmR, i.e. the need to conduct macro-region-relevant research, which, in turn, is inextricably interwoven with the call for a variety of innovative approaches. As regards research cooperation in

the BSmR, the issue of deficient potential in this area has been represented as the need to create a sustainable research framework the aim of which is to support sustainable development through scientific outputs facilitating the implementation of ecosystem-based management to the use (and protection) of the macro-region's natural resources (Action Plan 2013). Such a research framework strategy has been made contingent upon the following: overcoming fragmentation of Baltic Sea research; ensuring an active regional science-policy dialogue linking common values and aims based upon sound scientific evidence with a broad stakeholder contact (communities and sectors) (e.g. Action Plan 2017); and engaging in a policy-driven, fully integrated and joint research effort based on extensive stakeholder consultations to improve the efficiency and effectiveness of the BSmR's environmental research programming (SWD(2013) 233 final: 47).

Innovation

Another aspect of the potential 'problem' has been problematized in terms of innovation linked to the idea of creating a permanent area of common prosperity with a high level of competitiveness (Report 2009/2230(INI): 4). The issue of inadequate innovation in the BSmR has been problematized in the context of:

- Transnational and transregional research focusing on the specific strengths of the BSmR (the development and commercial exploitation of joint research projects) (e.g. Action Plan 2013);
- Legal harmonization: the harmonisation of different legal and regulatory environments for Foreign Direct Investment (FDI); the joint development of new and better innovation support instruments, including Intellectual Property Rights (IPR) support (e.g. Action Plan 2017); and
- Sustainable economic growth: linking smart specialization strategies and clusters to better connect the ecosystems and industrial and innovation policies within the macro-regions (clean technologies and eco-innovations in the area of marine energy and blue biotechnology, medical equipment, creative industries, the food manufacturing industry, and the maritime industries); enhancing sustainable production processes; increasing company profits whilst reducing economic and

environmental costs and without exhausting the resource base or the eco-systems on which they depend (resource efficiency); and ensuring the transition of the BSmR's economy away from a traditional high-footprint industrial focus towards more sustainable profit-making sectors; as well as facilitating the development of digital economy (e.g. Action Plan 2013, Action Plan 2015).

Commitment 'problem'

The last overarching 'problem' of macro-regional of the Baltic Sea represented as a result of inadequate commitment has three dimensions that have been categorized as follows: 1) broad and long-term involvement, 2) political backing, and 3) ownership:

1) The first dimension focuses on keeping all stakeholders committed and motivated in the long-run, ensuring the commitment and goodwill of the participating countries, collective steering and a common sense of purpose based on a long-term perspective; longer-term institutional arrangements, long-term strategic thinking and long-term sustainability (institutional stability; allocation of sufficient and adequately trained human resources at regional, national, and European levels); shared commitment expressed through making the macro-regional approach central to political agendas in the respective countries (e.g. COM(2012) 128 final, SWD(2013) 233 final).
2) Another aspect of the inadequate commitment centers on the importance of political backing conceptualized in the following terms: political leadership in each area taken by participating countries, regions or organizations, to be supported by the Commission as a facilitator (effective, strategic, high-level leadership); political visibility, the commitment of political players across the macro-region in the form of willingness (an understanding of the EUSBSR concept and its value to a given municipality (region)) and ability (resources, tools, the regulatory framework) (e.g. Council Conclusions of 15.11.2011, SWD(2013) 233 final); the political prioritization of the EUSBSR within the national administrations; high-level political momentum and pressure; a shared level of ambition across the national actors, translating political commitment into action, and evaluating

new governance structures to be established in the Member States to coordinate the EUSBSR and adapting them to the assigned tasks (e.g. COM(2016) 805 final).

3) The last dimension of the inadequate commitment focuses on creating a wide feeling of ownership by stressing the importance of involvement, commitment and ownership of stakeholders and partners at the local and regional level as part of a bottom-up approach. The 'problem' of ownership has been framed in terms of a sense of common (shared) responsibility, as well as horizontal responsibility of the governments as a whole; a growing need for deepening trust between countries and people; fostering active citizenship. Furthermore, the concepts of continuity, accountability and legitimacy have been invoked with the aim of reinforcing ownership (e.g. Stockholm Joint Declaration 2009, COM(2013) 468 final, Action Plan 2017).

Concluding remarks

The analysis of the problematizations of macro-regional governance of the Baltic Sea has focused on the policy documents shaping the EU's macro-regional strategies and the EUSBSR. Naturally, they differ in terms of their focus and specificity, with the EUSBSR being for obvious reasons more tailored to the needs and characteristics of the Baltic Sea. However, no distinction has been made between them, the reason being that there is a significant degree of overlap among their problem representations of the macro-regional approach. Applying the set of the questions and theme development analysis as specified in the subchapter on research design has enabled me to identify implicit problem representations of macro-regional governance of the Baltic Sea and classified them as: macro-regional harmonization 'problem' (macro-regional relevance, cohesion, and connectivity/connection); effectiveness/efficiency 'problem' (result-orientation, coordination, and integration); potential 'problem' (capacity, education, knowledge, research, and innovation), and commitment 'problem' (broad and long-term involvement, political backing, and ownership). As may easily be noticed, these four overarching problem representations are mutually reinforcing and, to a certain degree, overlapping due to the multi-dimensionality of the analyzed governance framework. Since problem representations tend to nest (or are embedded one)

within the other, it may well be possible to identify and classify other implicit problem representations (Bacchi 2009; Bacchi and Goodwin 2016). However, due to the multidimensional nature of the macro-regional governance approach, I have decided to focus on those that may create its added value in the context of the extremely dense legislative, institutional and operational framework already present in the BSmR. It is also noteworthy that although the documents contain various categories and aspects of implied 'problems,' they have not been given a similar amount of attention and interest: some of their dimensions have been highlighted, some backgrounded, marginalized or even distorted, which has been subject to critical scrutiny in the following chapters.

3.1.1. The stories-we-live-by: Underlying assumptions identified in the documents shaping macro-regional strategies and the EUSBSR

The aim of this subchapter is to uncover deep conceptual premises lodged in the selected policy documents shaping the macro-regional governance of the Baltic Sea and underlying the problem representations identified in the previous subchapter. In other words, this section explores the conceptual logics underpinning the problem representations of the macro-regional governance of the Baltic Sea by investigating the stories-we-live-by (Stibbe 2015), i.e. presumptions about the nature of the relationship between people and the life-sustaining system, deeply engrained and based on deep-seated cultural presumptions, and to be uncovered on the basis of their linguistic manifestations (the patterns of language or clusters of linguistic features arising from the underlying stories) (Stibbe 2015). While the rationale for combining Bacchi (2009)'s 'What's the 'Problem' represented to be?' approach with Stibbe (2015)'s stories-we-live-by has been explained in subchapter 2.5 (analytical framework), it also needs to be underscored that in my thesis the pronoun 'we' refers to dominant discourses (prevalent ways of thinking) shaping the macro-regional approach and identified on the basis of the selected policy documents. Therefore, the pronoun 'we' should not be interpreted as referring to any particular group of people or the whole Baltic Sea community as sharing these cultural assumptions. What is more, the underlying assumptions, i.e. the stories-we-live-by have been identified on the basis of the pre-formulated conceptual framework consisting of place, problem, subjects, objects, and developed for the purpose of this analysis into the following categories:

the primacy of growth and progress; the exclusion of ecological education and other ways of knowing; and the separation between humans and the ecosystem.

The primacy of growth and progress

The selected policy documents shaping the macro-regional approach to Baltic Sea governance present a vast of array of multi-dimensional and interlinked challenges facing the whole BSmR and pointing to the three dimensions of the sustainable development triad: environment-society-economy. They range from public health, education, environmental challenges through economic development, innovation and competition to man-made threats, lack of commitment or common reference frameworks, as well as inadequate institutional settings, thereby including borderless, cross-cutting and cross-sectoral issues of concern (e.g. Actions Plan 2015, 2017). "Without a clear picture of the region, and an awareness of sensitive areas, populations, economic pressures and other factors, sustainable development is not feasible" (HA Spatial Planning. Action Plan 2013: 169). While the identified challenges are problematized in terms of their complexity, uncertainty, as well as multi-level, multi-scale and multi-stakeholder interconnections and interdependencies, they are all subordinated to the primary and pervasive goal of ensuring growth. For example, almost all documents shaping the macro-regional approach to Baltic Sea governance share a universal concern for ensuring that the overarching purpose of (sustainable) economic development in the BSmR is served by its healthy population, as well as by the healthy marine ecosystem capable of providing healthy fish stocks, other goods and employment opportunities (e.g. Action Plan 2017). To begin with, it needs to be emphasized that the problem of development of the Baltic Sea macro-region is not framed in terms of unlimited economic growth – the core economic paradigm responsible for the exhaustion of natural resources and the destruction of life-sustaining ecosystems, as well as based on the idea of unlimited growth on a finite planet (Stibbe 2015: 24-29). Nonetheless, the linguistic data generated in the course of the theme development analysis clearly demonstrate that it may be safely classified as ambivalent discourse. While such as discourse deals with some of the ecological problems caused by destructive growth-oriented discourses, it still takes root in the same society as the destructive discourses, and tends to avoid ecocentric discourses, thereby succumbing to short-term political or commercial interests. Such

ambivalent discourses may include ways of thinking, as well as practices typical of the following approaches to environmental governance: environmentalism, sustainability or natural resources (Stibbe 2015: 29-30). As far as the macro-regional documents are concerned, on the one hand they contain references to bioeconomy, sustainability, circular thinking, transnational and long-term strategic thinking, and even the decoupling of economic growth from environmental degradation (Action Plan 2013), which may send a clear signal of the determination to rethink the concept of growth and to take an alternative development path. However, on the other such a commitment appears to clash with the idea of 'growth' as represented in the selected documents shaping the macro-regional dimension of Baltic Sea governance. Firstly, it is noteworthy that the idea of 'growth' in the selected policy documents is linguistically represented in a variety of ways, such as 'growth', 'growth and jobs', 'innovation and growth,' 'economic growth,' 'blue growth', 'sustainable development,' 'smart, sustainable and inclusive growth,' 'sustainable growth and development,' 'sustainable economic growth,' 'sustainable economic development' or 'sustainability, entrepreneurship, competitiveness and growth' (Action Plans 2013, 2017). Such linguistic maneuvers clearly testify to the fact that either there is no consensus as to the selection of a common development trajectory among the Baltic Sea states (see Grönholm et al. 2015) or the growth-oriented terms have simply been used as synonyms. Whatever the reason, the fact remains that the multiplicity of adjectival modifiers (blue, smart, sustainable, inclusive, economic) or their absence, the nature of the relation between 'growth' and 'jobs' ('growth' and 'innovation'), as well as the inconsistent use of the terms: 'growth' and 'development' may lead not only to terminological confusion but also to the EUSBSR's vision of development of the BSmR being blurred by the apparently ill-defined concept of 'growth' in the context of various environmental governance challenges, including climate change (see Bińczyk 2018). In other words, the multiple versions of the term 'growth' are trigger words which may activate in the minds of readers an economic development frame strongly tying the macro-regional governance of the Baltic Sea to the fuzzy concept of economic growth. Due to its inherent instability and interest-driven malleability, such a frame may pose numerous challenges with regard to the vision of development in the BSmR, which may raise the following legitimate questions: Does the economic frame favor the status quo (a business-as-usual kind of

approach), and deemphasize the intrinsic value of species and the whole ecosystem by failing to incorporate important moral and ethical concerns that humans may have for the natural environment? Has the original frame of sustainable development based on the intra- and inter-generational equity been modified (e.g. occurring through the addition of an adjectival modifier to the primary trigger word as in 'sustainable economic development) or displaced, i.e. a new frame has taken over and now occupies the ground previously covered by another frame but without replacing it completely, e.g. 'smart, sustainable and inclusive growth'? If such a tendency continues, will a series of incremental modifications added to the economic development frame result in a completely opposite frame, e.g. a new sustained growth frame? (Stibbe 2015: 53-60).

Secondly, both the macro-regional strategy documents, as well as the EUSBSR make frequent references to 'Europe 2020: A strategy for smart, sustainable and inclusive growth' (Europe 2020), adopted by the European Council, in March 2010, and prepared in response to the economic and financial crisis. As the successor of the 'Growth and Jobs Agenda,' the strategy emphasizes the following developmental dimensions:

- Smart growth: developing an economy based on knowledge and innovation;
- Sustainable growth: promoting a more efficient, greener and more competitive economy;
- Inclusive growth: fostering a high-employment economy, where all communities and regions participate and flourish.

Additionally, Europe 2020 lists the following five goals:

- 75% of the population aged 20-64 in employment;
- 3% of the EU's GDP invested in research and development;
- Successful implementation of the EU's environmental goals, i.e. a 20% reduction in CO_2 emissions and a 20% increase in renewable energies;
- A minimum of 40% of the younger generation to obtain a tertiary degree, and 10% fewer early school leavers;
- 20 million fewer people should be at risk of poverty.

While clearly Europe 2020 does not resort to the metaphor that economic growth is like 'a rising tide lifting all boats' (Stibbe 2015: 73), it contains many loaded terms, such as knowledge and innovation (smart growth); more efficient, greener and more

competitive economy (sustainable growth); high-employment economy (inclusive growth), which may evoke a story of technological progress based on the assumption that virtually all problems, including the environmental ones, may be solved through technological innovation without making it contingent on various changes to be made to the very structure of society (Everett and Neu 2000 as cited in Stibbe 2015: 146-147). Moreover, the framing of technological progress devoid of such a comprehensive insight may trigger the problem frame through its focus on the 'problem-solution' pair. As the reasoning process in this case follows a simple pattern that once a 'solution' is applied, a given 'problem' ceases to exist, it leads to a situation in which the 'false hope of solvable, discrete problems is soon exhausted by the problem's complexity' (Cachelin et al. 2010 in Stibbe 2015: 51), as well as downplays the importance of adopting a resilience approach in the context of uncertain and unpredictable environmental challenges (Stibbe 2015; also Folke et al. 2016). To summarize, it is evident that the selected policy documents promulgate the business-as-usual story, i.e. promoting economic growth and technological development as the way forward for society.

The direction-setting concept of 'forward' may easily be identified in the expectations formulated with regard to the BSmR. Despite the fact that the macro-region is characterized as a highly heterogeneous area in economic, environmental and cultural terms, the Baltic Sea states share many common resources and demonstrate considerable interdependence, which lays the groundwork for multiple aspirations to be realized by turning the BSmR into: a health region; a common cultural region; a leader in design; common region for education and research; a model region in the provision of comprehensive and sustainable social services and human rights for vulnerable groups crossing borders; a model area for the development of alternative management set-ups and instruments in support of the reform process (e.g. a more regionalized management and decision-making approach); and a model for sustainable labor market development in Europe; or a model maritime region for clean shipping and a leading region in maritime safety and security (e.g. Action Plan 2015, Action Plan 2017). While there is nothing inherently wrong with setting goals to be achieved or framing a vision for the entire BSmR, it needs to be underscored that the story of progress promulgated in the selected policy documents is based on an evaluative

orientation that the 'forward' orientation is inherently good as opposed to the 'backward' one. In other words, such areas of human activity as technological innovation or knowledge-based economy may be mapped onto 'forward,' while alternative visions, such human embeddedness in nature or prosperity without growth (see Jackson 2009), tend to be mapped onto 'backward,' which creates a perception of progress as inevitable and unstoppable (Stibbe 2015: 10). This relatively simple story exploits various appraisal patterns which represent the idea of progress in the BSmR, and may be divided into explicit (e.g. good, bad, right, and wrong) and implicit (e.g. smart, agile, natural) expressions having either positive or negative connotations (Stibbe 2015: 84). The most representative themes identified in the selected policy documents and shaping the story of progress in the context of Baltic Sea macro-regional governance include the framing of the Baltic Sea in terms of:

- one of the most attractive and competitive areas in the world; a prosperous place; a smart, sustainable and inclusive region (e.g. Action Plan 2017);
- a global leader; one of the world's leading areas in terms of competitiveness and ecological sustainability; a green region, an eco-region; a leading region in offshore renewable energy; an eco-efficient region (e.g. Action Plan 2013);
- a functional area; a close geographical area with enough fast communication and interaction between people and milieus (e.g. Action Plan 2017);
- a model for providing the basis for a knowledge-based economy and for implementing a shared strategy together in a sustainable way in a broad spectrum of activities; a region recognized by global actors as the best innovation space hosting and deploying world-class expertise and strategic alliances in selected fields by using the Grand Challenges approach as its main logic (e.g. Action Plan 2015); and
- its positioning in the EU and on the global map by advancing its growth and competitive potential through partnership between businesses, governments, and academia (e.g. Action Plan 2017).

Such a framing of progress in the BSmR triggers a positive appraisal of the development direction and vision for the following reasons: Firstly, it contains attitudinal terms, such as leading, smart, attractive, competitive and prosperous,

which explicitly carry a positive sense to be preserved even if the particular words have been removed from their current context (Stibbe 2015: 89). Secondly, some of such positive terms (e.g. attractive, competitive) have further been strengthened by turning them into their superlative form with the modifier 'the most.' Then, such positive words tend to cluster together (e.g. 'smart, sustainable and inclusive' or 'attractive and competitive'), which produces a cumulative effect intensifying the desirability of a particular version of progress (Stibbe 2015: 84). Finally, the story of progress as envisioned for the BSmR in the selected policy documents is triggered by such terms as 'advancing its growth,' 'becoming a global leader,' or 'the best innovation space,' all of which contain the spatial direction 'up' cognitively aligned with 'good' (Lakoff and Johnson 1980 in Stibbe 2015: 90). While the effects of such an ambivalent discourse shaped by the story of the primacy of growth and progress will be further explored in subchapter 3.2, it needs to be emphasized that such an inbuilt positivity characterizing the terms: 'forward,' 'innovation,' 'growth' or 'progress' relies on overly instrumental and technological means-ends philosophies, which may hinder critical reflection on our ultimate ends, i.e. those related to good and bad or right and wrong (Brown 1996 in Stibbe 2015: 191).

The exclusion of ecological education and other ways of knowing

Another story-we-live-by identified in the selected policy documents shaping the macro-regional approach to Baltic Sea governance may be described in terms of the backgrounding of ecological education and other ways of knowing. As far as the social actors to be involved in the macro-regional governance of the Baltic Sea are concerned, the selected policy documents propose a multi-level governance approach, including: the supranational level, the macro-regional and above-the-state-level regional, ones as well as the national, regional and local ones (e.g. SWD(2013) 233 final, Action Plan 2017, COM(2019) 21 final). The predominantly top-down macro-regional approach has a number of implications for how the social actors are represented and how their roles are allocated, which has been analyzed in terms of Van Leeuwen (2008)'s socio-semantic framework. As regards the representation of the social actors, they have predominantly been represented collectively, with some of them referred to explicitly using their official names. They include:

- the EU and its institutions: the EU Commission; the Council, the European Parliament; the Committee of the Regions; the European Economic and Social Committee; European Investment Bank;
- the High Level Group;
- above-the-state-level regional authorities and organizations: the Helsinki Commission (HELCOM), the Northern Dimension, the Council of the Baltic Sea States, the Nordic Council of Ministers, VASAB (Vision and Strategies around the Baltic Sea); Baltic Sea Parliamentary Conference, Hanseatic Parliament; the Baltic Development Forum, the Association of Northern German Chambers of Commerce and Industry, Baltic 21, the Baltic Sea Labour Network, the Task Force on Organised Crime in the Baltic Sea Region;
- pan-Baltic organizations and NGOs: Baltic Sea States Sub-regional Co-operation; Baltic Metropoles Network; Euroregion Baltic; the Union of Baltic Cities; the Conference of Peripheral Maritime Regions – Baltic Sea Commission; Baltic 7 Islands; Baltic NGO Forum; Baltic Sea NGO Network;
- individual regions and cities (Blekinge, Hamburg, Helsinki, Kalmar, Mecklenburg-Vornpommern, Pomorskie, Skåne, Southwest Finland, Västerbotten, Zealand); and
- non-EU state entities: Norway, Iceland, Russia, Belarus.

Furthermore, the social actors have been assimilated as groups in two ways. The first one is called aggregation (Van Leeuwen 2008), which means that the social actors in the BSmR have been represented through the use of statistics in the following manner: a population of nearly 90 million (almost 85 million inhabitants or 17% of EU population). The second one is referred to as the category of collectivization, according to which social actors are represented in terms of a community, a homogenous, consensual group) (Van Leeuwen 2008: 37-38). As far as the BSmR is concerned, most of its social actors have been represented collectively in the selected policy documents. They include:

- the Member States;
- participating countries; neighboring countries;

- high level officials in each participating country; political leaders; policy makers; ministers;
- national representatives;
- national agencies, county administrative boards, regional associations;
- the maritime administrations of the coastal countries; water and waste water utilities;
- parliaments at different levels;
- regional and local politicians, governments and government agencies; regional and local authorities; administrators; staff;
- experts; science community; academia; universities; R and D organizations; top-level knowledge institutions; independent consultants; research centers;
- multidisciplinary group of people to reflect on climate adaptation in a policy-science-business set-up;
- international financing institutions;
- the private sector; business; enterprises, private investors, incubators and related business services; local business, universities; university start-up companies, spin-offs;
- port organizations, the shipping industry;
- the media;
- the individuals and institutions involved in the implementation of macro-regional strategies either as macro-regional bodies or as stakeholders / project owners;
- all relevant actors; relevant stakeholders; interested stakeholders; engaged actors; cross-level actors; regional stakeholders; strategy ‘insiders’ and ‘outsiders’;

  the greater stakeholder community; key marine stakeholders;
- external neighbors; accession countries; third countries; participating candidate countries and potential candidate countries;
- civil society; NGOs; pan-Baltic organizations; stakeholder platforms involving civil society and other organizations;
- subnational authorities, municipalities; individual euro-regions; regions, counties, cities;
- well-educated population; and

- coastal countries; local communities; a maritime community.

Furthermore, some of the social actors in the macro-regional governance of the Baltic Sea have been associated in such a manner that they form groups which have never been labeled in the text, although the actors or groups (either generically or specifically represented) who make up the association have been referred to (Van Leeuwen 2008: 38-39). In the selected policy documents certain social actors have been associated through parataxis, e.g. 'businesses, governments and academia,' 'companies, researcher and public stakeholders,' 'research centres/universities, businesses or citizens' (Action Plan 2017: 23, 110). As these are neither stable nor institutionalized groups, they have been represented as an alliance existing only in relation to a specific activity or set of activities, e.g. to enter into a partnership or to engage in a project (Van Leewuen 2008: 38-39). However, it should be noted that the same actors have also been represented in a multi-partner setting as 'a multi-partner – the so-called triple of public-business-academic sectors, recently extended to the 'quadruple helix' by adding civil society as users' (SWD(2013) 233 final: 65). What is more, some of the social actors have been categorized in terms of functionalization and identification. The former category refers to the activity they engage in or their role, the latter – to what they, more or less permanently, are (Van Leeuwen 2008: 40-43). In the selected policy documents, some of the social actors have been categorized in term of the functions performed in the following manner:

- Member States' representatives;
- Key implementers:
  - EU level: the European Commission high-level group of EU macro-regional strategies with representatives from EU Member States and non-EU countries;
  - national and regional level: National Contact Points (NCPs), Priority Area Coordinators (PACs), Horizontal Action Leaders (HALs), Flagship Project Leaders (FPLs);
- Managing Authorities of relevant Operational Programmes;
- Macro-regional actors: managers, facilitators, service providers to the macro-regional stakeholders;
- Steering groups for a given topic at the level of the macro-region;
- Infrastructure planners;

- Local implementers;
- The Nordic countries and Germany represented as innovation top-performers in a position to help Poland and the Baltic States in the process of catching up **(**SWD(2013) 233 final**:** 55);
- Skilled and efficient workers bringing additional prosperity; and
- Tourists, entrepreneurs, investors, researchers.

As far the category of identification is concerned, some of the social actors to be engaged in the macro-regional governance of the Baltic Sea have been subjected to classification in terms of their age and gender (Van Leeuwen 2008: 42), e.g. 'female entrepreneurship', 'women and men in entrepreneurship,' 'youth,' or 'elderly' (e.g. Action Plan 2017, Final report 2017) Other social actor representations in the selected policy documents include:

- abstraction, i.e. a type of impersonalisation which uses abstract nouns typically used for non-human subjects (Van Leeuwen 2008: 46), e.g. 'human capital,' 'human resources' or 'workforce' (e.g. COM(2009) 248 final, SWD(2019) 6 final); and
- genericization, i.e. the generic representation of social actors as classes (Van Leeuwen 2008: 35-36), e.g. 'ordinary citizens,' 'information society,' and 'society as a whole' (e.g. Action Plan 2009, Action Plan 2015, SWD(2016) 443 final).

The social actors involved in the macro-regional governance of the Baltic Sea may also be represented as 'agents' or 'patients' in various social practices envisioned in the selected policy documents. It is noteworthy that in my thesis I apply the sociological concept of agency as sociological agency that may be realized in numerous ways: not only as linguistic agency (the grammatical role of 'agent') but also using possessive pronouns or a prepositional phrase with 'from' (Van Leeuwen 2008: 23). Although the macro-regional policy approach is primarily a top-down initiative, with the role of agents played mainly by the supranational and macro-regional institutions and cooperation networks, the selected documents also provide numerous possibilities for entering into meaningful cooperation in the following manner:

- events: participatory workshops with the support of experts; sector-specific ministerial meeting (e.g. COM(2014) 284 final, SWD(2016) 443 final);

- cooperation formats and mechanisms: networking, project clusters, project chains, project platforms beyond the traditional project format; transnational clusters; a civil society forum (e.g. Action Plan 2013, Action Plan 2015, Final report 2017);
- tools: an interactive web based tool for sharing experiences and good practices; a targeted website, a bimonthly newsletter; a digital database; a platform for exchanging knowledge; local media; a special web portal devoted to the EUSBSR; the Europa website (e.g. COM(2009) 248 final, SEC(2011) 1071 final, Council Conclusions of 26.06.2012);
- ways of interacting:
  - informing relevant stakeholders; information dissemination; awareness raising about planned actions and desired results; communication of the purpose and achievements of macro-regional strategies; transnational networks for increasing information flows and efficiency by sharing resources; monitoring and presenting the results (measures: targets and indicators) to the general public in an easily understandable and communicative way (e.g. SWD(2016) 443 final, Action Plan 2017);
  - a bottom-up process of consultation; working structures around policy areas to be carried and driven forward by engaged actors from across the region; bottom-up development of priorities and thematic orientations; the on-going dialogue between program managing authorities and strategy actors; science-policy-business dialogues (e.g. Action Plan 2009, COM(2013) 468 final, SWD(2016) 443 final);
  - broad involvement; stronger involvement of civil society and consultative networks or platforms; better involvement of the social and economic partners; more active participation of the private sector, regional, local and civil society in the implementation of the strategies by providing the appropriate conditions for various stakeholders to apply with projects for funding under the programs; full engagement of non-EU countries at all levels; cross-level involvement through the involvement of cross-level actors; active engagement of multiple actors; both conceptual and practical participation of all relevant public and private stakeholders; early-stage involvement of all relevant actors;

a mixed participation of the private/public sectors and local and regional actors (e.g. Council Conclusions of 26.06.2012, Action Plan 2017, Final report 2017); and

- feedback from all interested stakeholders requested by the EU Commission to be included in the Annual Report (Interim report 2010).

It may be safely assumed that the social actors have been endowed in the selected policy documents with both active and passive roles. While all the possibilities offered by the macro-regional approach to Baltic Sea governance are aimed at multiple stakeholders who may be described as either beneficiaries, i.e. social actors who benefit from an action, or as stakeholders undergoing an activity (Van Leeuwen 2008: 30, 33), they have been provided with ample space for various kinds of types of engagement along the deficit-dialogue-participation continuum (Trench 2008). What is more, the social actors referred to in the selected policy documents have been activated in two ways: through 'circumstantialization' in the form of a prepositional circumstantial with 'from,' e.g. 'continued input from the public'(COM(2013) 468 final: 9) or 'the input / involvement from different levels and from different actor groups at these levels: public, private, civic society'(Final report 2017: 126), as well as through the use of premodification of a noun phrase (see Van Leeuwen 2008: 33) as in 'people-engagement-based political perspective' (Final report 2017: 157). However, it needs to be remembered that the selected policy documents only provide multiple options for engagement which should be verified in the context of particular projects, networks, platforms , and events in terms of the nature of stakeholder engagement, and analyzed using transitivity processes in which activated social actors are coded as 'actor' in material processes, 'behaver' in behavioral processes, 'senser' in mental processes, 'sayer' in verbal processes or 'assigner' in relational processes (see Stibbe 2015: 35). However, this type of investigation is clearly outside the scope of this thesis and, therefore, has been included in the subchapter 5.3 (further avenues of inquiry).

Despite the extremely dense institutional frameworks and networks of variously represented social actors (stakeholders), both the macro-regional strategy documents, as well as the EUSBSR have failed to include certain actors, which has been analyzed in terms of Van Leeuwen (2008)'s category of exclusion. The exclusion has taken the form of suppression and backgrounding. In the first

case the relevant action has been included but all of the actors involved have been excluded, with no trace left to retrieve them: “Cooperation and exchanging good practices in ecological education and climate change mitigation is important." (Action Plan 2013: 29). The suppression of the social actors in this quote excludes any reference to the social actors for whom cooperation and exchanging good practices is important, as well as any reference to the social actors who should engage in such practices. The postmodifier ‘important’ would clearly benefit through the inclusion of relevant social actors through a postmodifying phrase with ‘to’ or ‘for.’ The same holds true for the nominalized phrases (‘cooperation’ and ‘exchanging good practices’). It would introduce clarity as to who the responsible social actors are if the phrases were followed by an appropriate preposition. Naturally, apart from its linguistic dimension, the above suggestion has other important implications. The suppression of relevant social actors raises doubts as to the text authors’ motivations, the possibility of blocking certain information or the avoidance of an inconvenient situation (see Van Leeuwen 2008: 30). The second type of exclusion identified in the selected policy documents is referred to as backgrounding, i.e. the failure to mention social actors in relation to a given action or practice, without foreclosing the possibility of making an inference about their identity (Van Leeuwen 2008: 29). In the following excerpts:

- ‘further joint efforts link long traditions rooted in forestry, agriculture and fisheries together with innovation, research, and new technologies’ (Action Plan 2017: 64); and
- ‘the bioeconomy approach (…) links industrial technologies (e.g. biotechnology, nanotechnology, and information and communication technologies) with local and tacit knowledge (Action Plan 2017: 61),

the social actors who are supposed to represent the long traditions, as well as the local and tacit knowledge have been deemphasized or backgrounded rather than excluded. Yet it is possible to infer the presence of traditional communities having access to other ways of knowing.

The above analyzed erasure, i.e. the exclusion of ecological education and other ways of knowing, appears to be strictly connected to the representation of education and training in the selected policy documents. In the event of framing a given issue, it needs to be taken into account that erasing a certain dimension of the issue (be it

in the form of suppression or backgrounding) is usually accompanied by making other aspects of it more salient (Stibbe 2015: 160). The same holds true for the issue of education and training as envisioned in the selected policy documents. While the issue of ecological education and education for sustainable development has clearly been backgrounded in the whole macro-regional approach, the area of education and training has been represented using words which may trigger a marketization frame (see Fairclough (1993)' s view on the marketization of public discourse in the context of universities). Virtually every single aspect of education and training (entrepreneurship; universities; research programs; lifelong learning) has an in-built labor-market and sustainable-growth orientation that may hinder alternative ways of thinking about skills, capacity and educational development in the BSmR. The primary focus has been set on fostering entrepreneurial mind-sets defined as: "Talents with entrepreneurial mind-sets need to be traced early in school, their interest and ability for business needs to be supported and encouraged throughout their educations towards new companies or intrapreneurial development in existing ones. Entrepreneurial skills need to be fostered at all levels of education" (Action Plan 2017: 77). The other trigger words and phrases that activate the marketization frame in the context of education in the BSmR include: appropriate economic knowledge provided to teachers; an entrepreneurial culture; the spirit of enterprise at universities; or labor-market demands. It should also be noted that the issue of education and training is also considered in the context of health, tourism, and culture (common history and cultural heritage), as well as a regional identity and active citizenship (e.g. Action Plan 2009, Action Plan 2013). While there is nothing inherently wrong in approaching the issue of education and training in terms of labor market dynamics, it is the sheer predominance of the market-orientation approach over other more comprehensive ones (see chapter 4 of this thesis) that appears to be difficult to reconcile with the complex challenges facing humanity in general, and the Baltic Sea community in particular, in the 21st century.

The separation between humans and the ecosystem

The last story-we-live-by that has been identified in the selected policy documents may be framed in terms of the separation between humans and the ecosystem, and clearly underlies the previously analyzed stories-we-live-by, i.e. the primacy of

growth and progress, and the backgrounding of ecological education and other ways of knowing. In the selected policy documents the Baltic Sea has been framed both non-metaphorically and metaphorically as an environmental problem, a geographical (functional) area, a sensitive ecosystem, an economic asset, respectively), with metaphors defined as a special type of framing (Stibbe 2015: 65). The decision whether a given framing of the Baltic Sea is metaphorical or non-metaphorical in nature has been taken on the basis of a general view on metaphor that assumes a general reader whose knowledge corresponds to the meaning of words corresponding with the entries in the Macmillan dictionary (Steen et al. 2010: 112). Therefore, the target frame of the Baltic Sea has been represented with source frames grouped in the following categories:

1. environmental problem (challenge)

- environmental degradation (algae blooms, dead zones on the bottom, air pollution, marine litter and noise, chemical pollution); multiple stressors: (fishing industry, heavy ship traffic; infrastructure development); increased coastal zone activities; other environmental governance challenges, e.g. climate change; land-based sources of pollution (cross-cutting issues) (e.g. Action Plan 2013, Action Plan 2017);
- its own very specific characteristics and challenges; the environmental quality of the Baltic Sea; the environmental safeguarding of the Baltic Sea (e.g. Action Plan 2017);
- the marine environment to be protected through a network of ecologically representative and valuable off-shore and coastal protected areas, preserving natural zones and biodiversity, and assessing the conservation status of marine biodiversity, as well as through the sustainable management of the Baltic Sea basin and the protection of water and the marine environment to ensure the health of marine and coastal environment (e.g. COM(2009) 248 final, COM(2011) 381 final);
- the mitigation and remediation of historical contamination in the Baltic Sea region still causing negative effects in the Baltic ecosystem (Action Plan 2015);

- obtaining good environmental status of and biodiversity in the sea: reducing nutrient inputs, promoting clean shipping, and dealing with hazardous substances and illegal discharges (e.g. COM(2012) 128 final);
- risks for the environment (as a semi-enclosed sea); the impacts of hazardous spills (e.g. Action Plan 2015);
- one of the most heavily trafficked seas in the world (e.g. Action Plan 2013);
- the urgency of the common environmental challenges facing the Baltic Sea (Action Plan 2015: 40);
- its poor state threatening the quality of life for the 80 million inhabitants living around it (COM(2012) 128 final: 7); and
- the problems facing the sea, including algae blooms, dead zones on the bottom, air pollution, marine litter and noise and the negative environmental consequences of overfishing and heavy ship traffic (e.g. Action Plan 2009).

2 . geographical and functional area

- marine ecosystem; a sea basin; a regional sea; an international sea; Baltic coast, Baltic area;
- the specific environmental, coastal area (SWD(2013) 233 final);
- large-scale landscape feature (SWD(2013) 233 final: 24); large space (Final report 2017: 10); wider geographical space (SWD(2016) 443 final: 6);
- one of the largest bodies of brackish (part saline) water in the world (e.g. Action Plan 2009);
- the waters of the Baltic Sea not the easiest to navigate (Action Plan 2013: 116);
- limited marine space (competition, conflicts) (Action Plan 2009: 69);
- almost an internal sea of the EU following the 2004 enlargement (Report 2009/2230(INI): 3);
- the extent of the sea that links but also divides the regions (Action Plan 2013: 32); and
- the dominant natural feature of the region, giving it its unity and identity (Action Plan 2009: 58).

3. a sensitive, fragile ecosystem (sensitive patient):

- unique and particularly sensitive eco-region; environmentally fragile (brackish, semi-closed waters and densely populated shores) (e.g. Action Plan 2009, Action Plan 2015);
- a unique ecosystem; the ecosystem extra sensitive to changes in its physical and chemical composition (e.g. Action Plan 2013); and
- a Particularly Sensitive Sea Area; a SOx Emission Control Area (SECA; NOx emission control area; a Special Sewage Area (e.g. Action Plan 2017: 36).

4. an economic asset:

- "the greater sustainability of goods and services relying on a healthy marine ecosystem" (Action Plan 2017: 37); marine resources as key component of our natural capital (economic opportunities to be pursued "in a sustainable manner in order for the marine environment to continue to provide its key ecosystem services like the natural regulatory functions that help combat climate change or slow coastal erosion") (Action Plan 2017: 51);
- sustainable growth and jobs in marine and maritime sectors (Action Plan 2013: 25);
- the need for a clean, sustainable and prosperous Baltic Sea (e.g. SWD(2013) 233 final);
- preserving environmental resources: a common public good and priority (COM(2019) 21 final: 5);
- the value of marine ecosystem goods and services and the protection of the marine environment as a precondition for sustainable development and prosperity;
- more healthy fish stocks and marine eco-systems (e.g. Action Plan 2017); and
- securing the full economic potential of the goods provided by the sea.

While it is evident that the Baltic Sea has neither been erased nor backgrounded in the selected policy documents, its representation has been distorted for the following reasons: Firstly, the Baltic Sea has been reduced to a polluted, passive and sensitive ecosystem which needs to be protected and adequately managed to ensure the continuous supply of its goods and services, as well as to facilitate the use of its marine space, thereby leading to the erasure of the Baltic Sea as

a complex life-sustaining system. Secondly, despite the fact that the marine space provides all four ecosystem services (to be explored in greater detail in section 3.1.2), the Baltic Sea has primarily been conceptualized in terms of the provisioning ecosystem services, with one notable exception being a reference to the regulating ecosystem services provided by the Baltic Sea: "Pursuing these [economic opportunities] in a sustainable manner is essential for the marine environment to continue to provide its key ecosystem services like the natural regulatory functions that help combat climate change or slow coastal erosion" (Action Plan 2017: 51). Next, the use of nominalizations (e.g. environmental degradation or pollution) effectively suppresses the expression of agency, as these forms do not require the identification of expressed actors as causing these problems (Stibbe 2015: 147). Naturally, this analytical remark should not be interpreted as the call for engaging in any form of naming and shaming practices but rather as the need to establish a clear and transparent conceptual link between environmental destruction and people destroying the ecosystems they depend on through their individual and collective choices, decisions and actions (Stibbe 2021, 2015). Then, the health metaphor as used in relation to the ecological state of the Baltic Sea marine environment fails to embed humans within the larger life-supporting system. According to Stibbe (2015), "humans could be mapped onto doctors whose role is to help ecosystems heal from the outside, rather than being a part of the ecosystem themselves" (Stibbe (2015: 72). Finally, the patterns of language used to represent the condition of the Baltic Sea, such as 'risks for the environment,' or 'environmental challenges facing the Baltic Sea', have drawn an artificial line between humans and the marine ecosystem by failing to appreciate the fact that as people are embedded in the biosphere (of which the Baltic Sea is an integral part), with all of their activities dependent upon its health and stable condition, the problems 'facing the Baltic Sea' are simply theirs, in fact of their own making (see Stibbe 2015: 144). All of these framings promote the predominantly utilitarian and anthropocentric view of the relation between humans and the Baltic Sea, as well as push the multi-dimensional nature of the marine ecosystem into the background, thereby reinforcing the story of human-ecosystem separation. The wider implications of all the identified stories-we-live-by have been presented in subchapter 3.2.

Concluding remarks

The representations of the macro-regional governance of the Baltic Sea in the selected policy documents are an example of ambivalent discourse (Stibbe 2015: 29-30), which both holds promise for governing the complex human-ecosystem relations in a more comprehensive and sustainable way, as well as requires the rethinking of macro-regional governance of the Baltic Sea along more critical lines. It is particularly relevant in light of the identified mismatch between the challenges and expectations formulated with regard to the BSmR on the one hand, and the representation of the marine ecosystem and of stakeholders capacity (education, training, other ways of knowing) on the other. Furthermore, the identified stories-we-live-by have demonstrated the fact that we (humans) are governed through a hard-to-eradicate human-ecosystem binary, as well as the presumption that only 'growth' coming in its multiple, inconsistent guises may provide prosperity and wellbeing. It needs to be underscored that such stories-we-live-by represent deep-seated cultural assumptions, and have serious implications for how our thinking, being and living may be constrained (see Bacchi 2009). However, before I analyze the identified problem representations and their underlying assumptions (the stories-we-live-by) in terms of my ecosophy (Stibbe 2015) to determine their constitutive effects, I will focus on the issues or concepts that have not been problematized in the identified problem representations by adopting the ocean perspective explored in the next section.

3.1.2. The ocean perspective: What has been left unproblematized

While the previous parts of the chapter have explored the problem representations to be identified in the macro-regional and EUSBSR documents, as well as their underlying assumptions, this part of the thesis focuses on what has been silenced (left unproblematized) (Bacchi 2009) or erased (Stibbe 2015) in the selected policy documents. In order to answer this question, I have decided to approach the issue of macro-regional governance of the Baltic Sea from the perspective of ocean governance for a number of reasons. Firstly, it needs to be underscored that managing the space and resources of the Baltic Sea falls into the category of regional seas governance or integrated marine (ocean) governance (see Tanaka 2018, 2008, 2004; Pyć 2011; van Tatenhove 2011). Secondly, as the EUSBSR is the EU's first macro-regional strategy for a marine basin, the BSmR may not be

compared to any other macro-region in order to determine what may have been silenced or unproblematized. Then, it needs to be remembered that the BSmR may be referred to as a macro-region in the making (Gänzle and Kern 2016) or work in progress, which opens space for the critical interrogation of the current approach to its governance, as well as for looking at the macro-region from a different, albeit a bird's-eye-view, perspective, i.e. the ocean perspective. Finally, the Baltic Sea is an integral part of the Global Ocean, the understanding of which may serve as a common point of reference, as well as provide an appropriate spatial and temporal scale for the challenges and expectations formulated with regard to the BSmR in the selected policy documents, as the Global Ocean is the largest ecosystem on Earth. Global ocean governance together with climate change, desertification, and deforestation, represents some of the most complex and interdependent systems of the contemporary world. According to the World Social Science Report 2013, the global environmental changes cover all the biophysical changes on the planet's land and in its oceans, atmosphere and cryosphere, many of which are driven by human activities (ISSC/UNESCO 2013: 3). The atmosphere, land, water, ice, and life interact "in complex ways at various spatial and temporal scales with numerous positive and negative feedbacks at all levels" (Stel 2013: 194). Ocean governance, like climate change governance, constitutes a global environmental issue that requires a holistic, interdisciplinary and multi-level approach (local, national, regional, supranational, and international), as well as ecosystem-based management. As the Global Ocean is regarded as a complex social-ecological and life-supporting system, integrated ocean governance involves reconciling the human use of ocean space and resources with the need to protect marine environment (Pyć 2011). Adopting the ocean perspective in the context of the macro-regional governance of the Baltic Sea may help understand all the interdependencies, interconnections to be found at the following interfaces: local-global, land-ocean, ocean-atmosphere, with no respect for political boundaries (Pyć 2011, Gee 2019). Moreover, such an approach paints a big picture of the seas and oceans as social spaces, communication spaces, and cultural spaces, as well as places as experienced and cherished by people (Gee 2019: 38). As a fluid and dynamic system in constant flux, the Global Ocean is perpetually being remade (Steinberg 2014 as cited in Gee 2019: 25), which makes it crucial for humans to rethink conceptions of ocean space in terms of both geophysical and social

processes (Gee 2019: 26). Unfortunately, in their analyses humans tend to focus on particular ocean uses or the movement of species rather than the entire experienced ocean space. Setting the human conceptualization of the ocean space on a more holistic path is also hampered by the use of maps and planning documents which tend to breed a false sense of the static concealing the absence of permanent material places in the ocean, as well as masking the continuous movement of the water (Steinberg 2014 as cited in Gee 2019: 33). Furthermore, the prevailing representation of the ocean space as delimited, sounded, harvested and industrialized testifies to the strictly utilitarian relationship with the ocean (Gee 2019: 34). However, the above-described attitude to the Global Ocean tells only one side of the story. Other dimensions of the ocean space may be brought to the surface by reconceptualizing it in more non-utilitarian terms, such as: understanding the diversity and beauty of the Global Ocean, as well as human-ocean interconnections; the significance of the ocean to humankind as a whole; greater awareness of the fragility of the ocean; and the human dimension of the ocean as a place of attachment (Gee 2019: 34-35, 38).

Fig. 11. The planet Earth. Source: www.rawpixel.com

The Global Ocean governance: Grasping the ungraspable through metaphors

Therefore, in order to analyze silences in the current problematizations of the macro-regional governance of the Baltic Sea, I have identified alternative

problem representations in relevant research literature on ocean governance through the analysis of metaphors used in the process of legitimating integrated ocean governance. Capturing fluidity, interdependencies, interconnections, interfaces, and synergies that occur at the interfaces of ocean-atmosphere, water cycle, nitrogen cycle and carbon cycle, as well as moving effectively along the global-regional-local continuum in the context of environmental governance challenges is by no means an easy thing to do. The overwhelming task is further complicated by the need to legitimize the integrated approach in terms of resilience, sustainability, and ecosystem-based management. In order to do so, both state and non-state actors need to rely on specialized (scientific) knowledge. As with other global environmental governance challenges, the input of scientific research into the process of policy-making is of the utmost importance (ISSC/UNESCO 2013).

However, one may wonder why it is metaphors that have been chosen as the focus of this analysis. Firstly, to underscore the complexity of the integrated approach to the governance of the world's largest ecosystem, experts working in the field often resort to metaphors regarded as important legitimation tools. According to Fojt (2009), "that metaphor is used in science is hardly a contentious issue" (Fojt 2009: 9). What is more, "metaphor (…) [is] considered a necessity in scientific and educational discourse, where it is held to have organizing, theory-constitutive, educational, and persuasive functions' (Steen et al. 2010: 107). Secondly, the primary function of similarity-creating metaphor is to grant cognitive access to phenomena otherwise unavailable to analysis; in other words, to "make the unconceivable conceivable" (Fojt 2009: 161). Thirdly, the use of metaphors both shapes and reflects our communication on environmental matters, supports ecologically (un)sustainable approaches, and encourages our respect and care for the natural environment (Stibbe 2015, Fill and Műhlhäusler 2001). Then, metaphors influence our perception of the natural world, shape scientific facts and have a persuasive ability by helping us interpret the novel by invoking our shared cultural context (Larson 2011: 3, 6), which is clearly linked to the interconnectedness of their linguistic, cognitive, affective and cultural dimensions (Cameron 2010: 78). What is more, metaphors perform a variety of functions: from facilitating cognitive access, distributing emphasis (highlighting and downplaying), through generalizing and economizing linguistic expression, to

imparting knowledge at the intuitive level (Fojt 2009: 169). Last but not least, they simplify complex concepts and scientific ideas to broad audiences (Twardzisz 2013, Lakoff and Johnson 1980). Therefore, the next part of this section explores various conceptualizations of the Global Ocean (the ocean space), and thereby human relations to this ecosystem as reflected in the metaphors used in selected academic texts to legitimize an integrated approach to ocean governance. It is based on the analysis of the source domains that have been established for this target concept (cross-domain mapping (Lakoff 1993), as well as by determining the relevance of the identified metaphors to the area of macro-regional governance of the Baltic Sea. In this study, the target domain[22] is the Global Ocean and other related concepts, such as: World Ocean, ocean space, oceans, sea, high seas, coast, marine ecosystem. What is more, the scope of this study covers both direct and indirect metaphors that facilitate our conceptualization of the Global Ocean and our relation to this ecosystem (human-ocean interactions). In the course of the analysis it has been found that despite some overlap between the identified categories, the Global Ocean is metaphorically represented as: a complex network, an asset, and as a common good. This analysis is also based on the assumption that underlying conceptual metaphors have their surface linguistic realizations (Twardzisz 2013, Fojt 2009, Lakoff 1993). As each of these conceptual metaphors has been linguistically realized in a number of ways, the most representative text samples have been given below.

The Global Ocean (the target domain) as a complex network (the source domain) and its linguistic realizations (underlined))

As the largest and the least known ecosystem on Earth, the Global Ocean is characterized by complexity, uncertainty, and non-linearity. In addition to numerous interfaces, interconnections and interactions (land-sea interface, land-based sources of pollution, ocean-atmosphere interactions, and climate regulation), various stakeholders, conflicts of use and multiple stressors exert a significant influence on the state of the Global Ocean.

1. Ocean space is in fact a <u>social-ecological concept</u> that deals with sustainability challenges which are the consequence of the complex

[22] The target domain: the conceptual domain we try to understand through metaphorical expressions drawn from the source domain (see Lakoff and Johnson 1980 for conceptual metaphors).

interactions between humans and the marine environment on all scales, from local to global (Stel 2013: 198).

2. (…), ocean space is a critical player in the Earth System; it is central to climate regulation, the hydrological and carbon cycles and nutrient flows, it balances levels of atmospheric gases, it is a source of raw materials vital for medical and other uses, and a sink for anthropogenic pollutants (Stel 2013: 200).
3. [Ocean space] is our life support system, as well as the cradle of life (Stel 2013: 208).
4. Applying the notion of ocean space refers to a holistic approach, the 4D-aspects of this part of the Earth System (Stel 2013: 198).
5. Ocean space – 1.37 bln km^3 of water covering some seventy percent of the Earth surface – is a different world, which we barely know, even today. (…) It is home to the greatest abundance and diversity of life in the world, and the known universe. (…) Ocean space also is a highly dynamic world with complex currents, waterfalls and cataracts (Stel 2013: 198).
6. The ocean is the flywheel of the climate system (…) (Stel 2013: 198).
7. (…) marine governance depends (…) on the cultivation of a broad ocean constituency in the public realm that supports a more sustainable ecological approach to planning, decision-making and policy making (McGinnis 2012: 55).
8. Having colonized and modified most of the land on our planet, modern society has turned to the sea as the last frontier on Earth (Lemonick cited in Norse 2005: 424).
9. The coast is an exemplary site of contest with competing interest groups mobilizing research to appeal to the state for the securing of hegemony over its appropriate use. (…) In coastal contexts (…) there is the possibility that scientific knowledge as a power resource is not uniformly perceived as legitimate especially considering the coastal zone is a site of conflict between interest groups (Nursey-Bray et al. 2014: 113).
10. The oceans are the classic case of an open access (i.e. no property rights) resource because of their fluid interconnectedness (…) (Costanza 1999: 204).

The Global Ocean (the target domain) as an asset (the source domain) and its linguistic realizations (underlined))

Both tangible and intangible values and qualities have been assigned to the Global Ocean. Not only is the ocean space used to exploit marine resources but it is also perceived in terms of spiritual services, as well as esthetic and cultural heritage values (a sense of place and identity).

1. This reflects renewed appreciation of the sea as a critical territorial asset which is closely interconnected with the environmental, economic and social wellbeing of nation states (Kidd and Shaw 2013: 186).
2. (…) the sea as a carrier of cultural ecosystem services, defined by and large by intangible values such as aesthetic and spiritual significance (Gee and Burkhard 2010: 350).
3. The North Sea is also identified as a carrier of existence value (…) because it exists independent of any human use (Gee and Burkhard 2010: 355).
4. The sea seems a classic case of directional service flow (…) where the service is provided in one place (…) but the benefit reaped in another (Gee and Burkhard 2010: 357).
5. (…), market prices are inadequate measures of the social value of ocean assets and require corrective incentives to guide behavior (Costanza 1999: 205).
6. Ocean space is also a crucial element of the biosphere, and delivers ecosystem services that dwarf traditional economic returns (Costanza et al. cited in Stel 2013: 198).
7. In general, appreciation of the oceans and coasts as critical natural capital is poor and underdeveloped (Patterson and Glavovic 2013: 19).
8. (…) oceans are the 'new frontier' of economic development, offering seemingly endless potential for exploitation. (Patterson and Glavovic 2013: 12).

The Global Ocean (the target domain) as a common good (the source domain) and its linguistic realizations (underlined))

As an example of shared responsibility and common concern, the ocean space should be managed, not appropriated, for the benefit of both present and future generations:

1. The establishment of statutory laws would enable citizens, ocean management agencies, and courts to best apply the public trust doctrine to the long-term stewardship of ocean resources (McGinnis 2012: 77).
2. Stewardship of the oceanic commons is essential – and it is not just as question of science or law (McGinnis 2012: 88).
3. The open waters of the High Seas, (…), still are a global common, where the 'tragedy of the commons' in deep-sea fishery is part of daily life (Ostrom et al. cited in Stel 2013: 199).
4. (…) marine ecosystems are commons belonging to all the people of the nation; they are coasts as critical natural capital managed by state and federal governments acting as trustees on behalf of the people as owners (Young et al. 2007: 29).
5. (…) the first step towards zoning for long-term sustainability, and the protection of global marine resources and critical ecosystem functions (…) would be a series of international UNCLOS-style conferences to discuss the steps toward some degree of global Mare Reservarum (Russ and Zeller 2003: 77).
6. Because the oceans are common property, regulating their use faces at least four issues (Sanchirico et al. 2010:1).
7. The oceans are ultimately the heritage of all of humanity (Costanza 1999: 211).
8. (…) contemporary international law of the sea divides the ocean into multiple jurisdictional spaces, such internal waters, territorial seas, contiguous zone, EEZ, archipelagic waters, continental shelf, high seas and the deep sea-bed which is the common heritage of mankind (Tanaka 2004: 483).

In the course of the above analysis a wide range of metaphors has been identified and shown to correspond to diverse fields of knowledge, and to represent different

discourse communities by conceptualizing the Global Ocean in terms of a complex network, an asset, and a common good. Moreover, these linguistic tools appear to be apt at highlighting the complex nature of the Global Ocean, as well as at reflecting and our perception of the human-nature relationship in general, and of the human-ocean interaction in particular. Through these metaphors the Global Ocean is conceptualized as a complex socio-economic-ecological system characterized by uncertainty and numerous interdependencies, and as an ecosystem to be governed sustainably and held in trust. Its governance requires an interdisciplinary cooperation of diverse discourse communities, and the participation of non-expert stakeholders (policymakers, local marine communities) in problem framing and knowledge production (see Steffek 2009 for speakers to be involved in legitimatory discourses, such as representatives of the state, independent experts, activists and lobbyists, journalists, and citizens). Such a broad and inclusive participation in ocean (marine) governance (extended peer communities, including non-scientists engaged in decision-making processes) corresponds to various uncertainties and complexities, as well as the importance of different legitimate perspectives to be recognized (Funtowicz and Ravetz 1993).

The analysis has covered only those metaphors that are used to refer to the Global Ocean, i.e. oceans, seas, bays, and straits, and to legitimize its integrated approach taking into account the following: the complexity and interconnectedness of the ecosystem, human-ocean interactions, as well as multiple uses of the ocean and the protection of marine environment. Although for the sake of clarity the metaphorical representations of the Global Ocean have been grouped in the following higher-level categories: a complex network, an asset, and a common good, the metaphors representing the different categories have often been used in a single article. Their combined use reflects the complexity of the global environmental governance issue, as well as makes reference to various ocean-related fields of knowledge, such as: law, economics, ecology, natural sciences, social sciences, and political sciences. Furthermore, the use of these metaphors underscores the necessity to involve many stakeholders whose approach to ocean governance is very often shaped by their social and cultural values. The identified metaphors also testify to the move away from the idea of ocean space as an extension of terrestrial space (linked to extending jurisdictional authority

seaward by states and to the increasing industrialization of marine resource exploitation) toward some degree of ownership or at least custodianship of sea areas to prevent a tragedy of the commons, which is clearly at odds with a purely spatial and rational perspective that relies solely on physical data and scientific evidence (Gee 2019: 38). What is more, the metaphors represent the Global Ocean not only in terms of various material, tangible entities to be measured and researched but also as a place that may engender care, emotional attachment and personal connection, as well as esthetic appreciation and a sense of responsibility, thereby making room for traditional, deeper and more informal ways of knowing the sea (Gee 2019: 38-40).

It is noteworthy that the identified metaphors do not exhaust all the diverse possibilities of conceptualizing the ocean space (e.g. the role of the sea in military expansion, the changing role of the sea in times of climate change, or the perception of remoteness of the sea by those living a long distance from the coast (Gee 2019: 43). Yet they capture the multidimensionality of this experienced, conceptualized and lived space (see Nash 2016), which allows for multiple ocean realities to be created for a variety of reasons (Gee 2019: 40). Although the metaphors identified may be used to facilitate our comprehension of the complex governance challenge, they should be approached critically, as will be shown in subchapter 5.2.

Relevance of the ocean perspective to the macro-regional governance of the Baltic Sea

While it is obvious that there are clear differences between the Baltic Sea and the Global Ocean with regard to the Baltic Sea's size, biochemical conditions, flora and fauna, as well as well as governance frameworks, the analysis of ocean metaphors has enabled me to identify other beneficial ways of thinking about the marine space which have been left unproblematized in the macro-regional documents shaping the process of Baltic Sea governance. To determine their suitability for governing the life-supporting system of the Baltic Sea, I have analyzed them in light of my ecosophy (Stibbe 2015)) and found that they are apt at: conveying the complexity, multi-dimensionality and interconnectedness of the Global Ocean system of which the Baltic Sea is an integral part; enabling one to rethink the process of marine governance in terms of long-term socio-ecological sustainability (reconciling the use of all ecosystem

services provided by the ocean space with the unquestionable need to protect and preserve it for the benefit of future generations); and embedding humans and their activities within the biosphere, thereby implying the existence of environmental limits (see Stibbe 2015: 67-68). In other words, the identified metaphors facilitate the transition from the one-sided and one-dimensional view of the Baltic Sea as a fragile ecosystem, an environmental problem or an economic asset (as has been demonstrated in section 3.1.1) to the adoption of a different mind-set shaped by the ocean perspective capable of reconceptualizing the Baltic Sea and its macro-regional governance in the following terms:

1. Social-ecological, life-supporting system, the cradle of life and part of the biosphere (see Folke et al. 2021, 2016). While this theme will be explored in chapter 4, it needs to be emphasized that such a re-orientation of thinking about the Baltic Sea governance in the macro-regional context clearly testifies to the multi-dimensionality of the marine ecosystem, as well as may be used to facilitate its legal protection and integrated governance. It may also serve as a way of strengthening the institutional capacity needed to adequately respond to its dynamic development, taking into account all of its legal, economic, social, political and cultural dimensions (see Pyć 2011).
2. Regulatory and supporting ecosystem services (in addition to the provisioning and cultural-esthetic referred to in the policy documents on the EU's macro-regional strategies, and the EUSBSR). As the analysis of the metaphors used to legitimize the integrated governance of the Global Ocean has demonstrated, due to its complex interconnections and interdependencies the Global Ocean provides all the ecosystem services that are usually classified as follows:
    - provisioning (products obtained from ecosystems: energy, seafood, biomedical, transportation, national defense);
    - regulating services (benefits obtained from the regulation of ecosystem processes): flood prevention, climate regulation, erosion control, control of pests and pathogens, and water quality;
    - cultural services (nonmaterial benefits obtained from ecosystems): educational, recreational, heritage, esthetic and spiritual; and
    - supporting services (services necessary for the production of the remaining ecosystem services): biological diversity maintenance,

nutrient cycling, primary productivity, and photosynthesis (Examples of ecosystem services 2010).

Both of economic and non-economic value, all of the ecosystem services performed by the Global Ocean highlight the linkages that exist between humans and the biosphere, and underscore the fluidity and interconnectedness of the ocean space, as well as emphasize the importance of tailoring the ecosystem-based management approach to the nature of this complex challenge. As far as ecosystem services are concerned, the same holds true for the Baltic Sea, which as a life-supporting system also provides all the services which are likely to be irreplaceable (Garpe 2008). They include:

- supporting services (biogeochemical cycling, maintenance of primary production, maintenance of food web dynamics, maintenance of biodiversity, maintenance of habitat, maintenance of resilience);
- regulating services (climate and atmospheric regulation; sediment retention, mitigation of eutrophication, biological regulation, control of hazardous substances);
- provisioning services (provision of food fit for consumption, provision of inedible goods, provision of genetic resources, provision of marine resources for the pharmaceutical, chemical and biotechnological industry, provision of ornamental resources, provision of energy, provision of space and waterways);
- cultural services (enjoyment of recreational activities, enjoyment of scenery, contribution to education and scientific information, maintenance of cultural heritage, inspiration for art and advertisement, the preservation of nature for ethical reasons) (Garpe 2008).

However, as has already been shown, it is provisioning and cultural services provided by the Baltic Sea that have mainly been incorporated into the documents shaping the macro-regional governance of the Baltic Sea to the exclusion of the supporting and regulating ecosystem services, which testifies to the lack of recognition for the life-supporting and not readily quantifiable services (Garpe 2008).

3. Heritage. Reconceptualizing the macro-regional governance of the Baltic Sea in terms of heritage follows from a logical line of reasoning. Firstly, the idea of heritage brings to the fore the importance of protecting and preserving the marine ecosystem not only for present but also future generations, which corresponds to the concept of sustainable development as defined in the WCED report: Our Common Future (WCED 1987) in terms of intra- and inter-generational justice (equity). What is more, the idea of heritage is needed to fill the void in the conceptualization of life-supporting marine systems, as the ecosystem services approach appears to be just part of a larger solution, not the solution itself (Norgaard 2010: 1226). In other words, the very idea of extending the concept of common heritage of mankind to the regional governance of the Global Ocean enables one to adopt a more unifying perspective toward human-ocean relations that integrates the trans-spatial (all people living on the Earth) and trans-temporal (present and future generations) aspects of marine governance, as well as serves as an intergenerational bridge (based on the experience of past generations) (Pyć 2011: 44-45). What is more, there are many metaphorical entailments that can be drawn from the source frame of 'heritage,' such as a common good, public trust resource, stewardship, custodianship, which, in turn, make humans assume the roles of carers, trustees, stewards, custodians and guardians, thereby creating a coherent network of the metaphorical entailments shaping the perception of marine governance of the Baltic Sea in terms of common heritage (Stibbe 2015). Such an approach corresponds to the need to engage caring and diligent international community having both the awareness of complex marine interconnections and challenges, as well as the capacity to protect the marine space (seas and oceans) at multiple levels (from the global, through regional to the local level), with a particular role to be played by engaged local communities of both coastal and landlocked states as a prerequisite for the stability of human-ocean interactions (Pyć 2011: 75).
4. Values. The identified metaphors do not frame the Global Ocean in terms of either instrumental (the value of an entity as merely a means to an end) or intrinsic (the value of nature, ecosystems, or life as ends in themselves, irrespective of their utility to humans) values, i.e. they move beyond its

> economic benefits and utilitarian value to embrace a more responsible relationship between the biosphere and human population (Gee 2019: 35). The importance they attach to the integrated ocean governance may be best described in terms of relational values which place an emphasis on meaningful relations and responsibilities between humans, and between humans and nature by integrating plural values of ecosystems beyond intrinsic and instrumental values, and focusing on the ecological conditions ensuring the preservation of life on Earth, as well as the social conditions for maintaining harmonious human–nature relationships (Arias-Arévalo et al. 2017).

Although there is no one-to-one correspondence between the Baltic Sea and the Global Ocean, one may identify various correlations that should not be overlooked. Both the Baltic Sea and the Global Ocean are life-supporting systems and part of the biosphere with countless interconnections and interdependencies occurring across space and time, as well as numerous social-ecological challenges emerging along the global-local continuum (e.g. climate change, melting ice, rising sea levels). Both of the marine spaces provide four irreplaceable ecosystem services, form part of heritage of mankind, and depend on meaningful relations between them and humans. Moreover, establishing the conceptual link between the Baltic Sea and the Global Ocean appears to be crucial in light of the newly adopted High Seas Treaty (2023), with its wide-ranging implications for marine transportation in the Baltic Sea (see Ytreberg et al 2022 for the load of metals and polycyclic aromatic hydrocarbons (PAHs) from shipping and leisure boating, relative other sources, to the Baltic Sea). In this way, the Baltic Sea may become an integral part of the ocean-climate nexus with its crucial role "for climate change processes, as well as bringing the ocean health on a path to recovery" (Ocean-Climate Nexus 2022: 5). Additionally, the various spatial metaphors used to make seas and oceans more conceivable testify to the observation that both regions and oceans are time-contingent and context-dependent spatial entities that may disappear when they are no longer reproduced by society (Gee 2019: 43), which is in line with Bacchi (2009)'s approach to the process of making and unmaking places, problems, subjects, and objects. Furthermore, the adoption of the ocean perspective in the context of the BSmR may help breed the outward-looking

regional mind-set referred to in the macro-regional policy documents (e.g. COM(2013) 468 final).

Yet the question remains as to whether such an ocean perspective may be applied to the Baltic Sea as a socio-political space that has been shaped with a divisive, sectorial and fragmented mind-set reducing the Baltic Sea to an environmental problem or an asset to be exploited as well as a space that has witnesses various conflicts ranging from the military to boundary delimitation ones (see North 2016, Franckx 2012). Another issue that needs to be solved is connected to the (im)possibility of designing a coherent, ecosystem-based approach to the governance of the Baltic Sea taking into account the variety of diverging representations of the marine space as a natural habitat, an economic resource, a recreational place and a cultural seascape, with its nature of being in constant flux, as well as the interplay of various values, interests and power relations. (Gee 2019: 42, 43). All things considered, one should not underestimate the life-sustaining role of the Baltic Sea ecosystem and the existence of a habitable marine space in the macro-region dependent upon its social-ecological state, which requires rising above any divisions or the macro-region's troubled past and appreciating the complex marine ecosystem in its entirety, as well as reflecting such an approach in macro-regional governance practices. However, before any recommendations are made as to how to nurture such a mind-set, the next part of the thesis will explore constitutive effects of the implicit problem representations of macro-regional governance of the Baltic Sea, of their underlying assumptions (the stories-we-live-by) and of the unproblematized dimensions of macro-regional governance of the Baltic Sea identified by applying the ocean perspective.

3.2. Social-ecological conditions constituted by the identified problem representations

The previous chapters have explored various aspects of the problem representations identified in the policy documents shaping the macro-regional approach to Baltic Sea governance: the implicit problem representations of macro-regional governance of the Baltic Sea, their underlying assumptions (the stories-we-live-by), and the unproblematized dimensions of macro-regional governance of the Baltic Sea identified through the application of the ocean perspective. In this subchapter the focus has been set on their constitutive effects, i.e. discursive, subjectification,

and lived effects, which are interrelated and mutually reinforcing but only separated for the purpose of this analysis (Bacchi 2009). The overall goal of investigating constitutive effects is based on the assumption that some problem representations may be beneficial to some members of social groups or detrimental to others, including non-humans and ecosystems. However, the following caveats need to be made to proceed with the analysis of constitutive effects: no suggestion is made as to any standard or predictable pattern of problem representation effects; and this type of analysis of constitutive effects does not follow "the standard policy approach to evaluation with a focus on outcomes," thereby questioning the premise of evidence-based policy lying behind such measurement approaches to evaluation (Bacchi 2009: 15). In fact, constitutive effects are more subtle in their impact and influence, which requires that they be approached from various theoretical perspectives and rethought in terms of their long-range impacts by asking the following sub-questions:

- What's likely to change with this representation of the problem?
- What's likely to stay the same?
- Who is likely to benefit from this representation of the problem?
- Who is likely to be harmed by this representation of the problem? (Bacchi 2009: 18).

In order to operationalize the concept of constitutive effects in the context of the macro-regional governance of the Baltic Sea, the identified problem representations serve as a point of departure for extrapolating constitutive effects (discursive and subjectification ones) which, in turn, produce specific social-ecological conditions through highlighting certain aspects of the 'problem(s)' to the exclusion of others. Furthermore, the identified problem representations have a material dimension in the form of lived effects in the sense that they produce real consequences in living arrangements (Bacchi 2009). To satisfy the requirement of analyzing constitutive effects from a normative position (Bacchi 2009), I have applied my ecosophy based on the concepts of human embeddedness in the biosphere, as well as the need to operate in a non-dualistic and critical space to facilitate the transition to social-ecological sustainability, in order to evaluate the constitutive effects of the identified problem representations shaping the macro-regional governance of the Baltic Sea. As '[t]he overall goal is to be able to say

which aspects of a problem representation have deleterious effects for which groups, and hence may need to be rethought' (Bacchi 2009:18), my analysis of the constitutive effects produced by the identified problem representations focuses only on their effect,s with the aim of uncovering them and reflecting on their implications in light of my ecosophy and selected research publications, thereby paving the way for alternative ways of thinking about the macro-regional governance of the Baltic Sea to be explored in the next chapter. Naturally, the adoption of such an approach does not imply the absence of beneficial constitutive effects that may also be produced as a result of the identified problem representations but rather underscores the negative effects of erasing, backgrounding or distorting certain issues and perspectives that have been identified on the basis of my ecosophy and selected research publications in order to identify potential interventions to reduce or eliminate those effects (Bacchi 2009).

However, before I proceed to the analysis of the constitutive effects of the identified problem representations, two issues should be taken into account. First, it needs to be stressed that my analysis of the internal coherence of the macro-regional approach to Baltic Sea governance does not explore the adequacy of its financial resources or measurable targets/indicators per se due to my lack of expertise in these areas. Their existence, however, has been underscored in subchapter 3.1. and considered only in relation to other problem representations and their implications for the macro-regional governance of the Baltic Sea. The other issue concerns my decision to combine the discussion of both discursive and subjectification effects in order to avoid unnecessary repetition due to multiple overlaps between these two analytical categories. What is more, such a step is justified in light of the fact that any framing of a given issue does not only structure it but also brings a particular set of participants into the governance process, as well as shapes relationships between them (Stibbe 2015: 54). Therefore, the constitutive effects in this thesis have been grouped in the following manner:

- Discursive and subjectification effects: Tinkering around sustainability in the Baltic Sea macro-region with a market-orientation mindset; and
- Likely lived effects: Up-(de-)grading the habitability of the Baltic Sea macro-region in the context of social-ecological resilience.

However, likely lived effects will be analyzed in subchapter 3.3 on the social-ecological approach: In order to establish likely lived effects of the identified problem representations in the selected policy documents shaping the macro-regional governance of the Baltic Sea space, I have juxtaposed their discursive and subjectification effects with the trends and predictions formulated for the Baltic Sea (region, macro-region) in relevant publications, and analyzed them in terms of social-ecological resilience (see Folke et al. 2016). As the social-ecological approach to governance is the main conceptual thread running through subchapter 3.3, I have decided to move the analysis of likely lived effects for the Baltic Sea macro-region to that subchapter in order to avoid any unnecessary repetition.

Discursive and subjectification effects: Tinkering around sustainability in the Baltic Sea macro-region with a market-orientation mindset

Located within the inclusive scope of any given problem representation, discursive effects are defined as limitations imposed on what can be said or thought and identified in light of the implicit problem representations (subchapter 3.1), their underlying assumptions (section 3.1.1), and the silences identified in the problem representations (section 3.1.2), which underscores their contingent, political nature (Bacchi 2009). The possibility that certain ways of thinking may have been eliminated, crucial dimensions of a particular issue – suppressed or backgrounded, and viable options for social change – closed off, may have deleterious effects for both human and non-human actors (Bacchi 2009: 16, 40). The analysis of subjectification effects, on the other hand, is based on the understanding that discourses make certain subject positions available. Therefore, it concentrates on how problem representations constitute subject positions, i.e. how policies establish social relationships and our place (position) within them, as well as how problem representations within policies divide people and attribute responsibility. In other words, the aim of analyzing subjectification effects is to determine the standpoint from which a person (or a group of people) in a given position makes (make) sense of the social world (Bacchi 2009: 16-17, 40).

As far as the macro-regional governance of the Baltic Sea is concerned, the identified problem representations revolve around the overarching discourse of sustainable development, i.e. the dominant discourse which other discourses cluster

around (‘a nodal discourse’ (Fairclough 2012). In this part of the thesis I have explored the discursive and subjectification effects of the identified discourses shaping the macro-regional governance of the Baltic Sea in terms of the constraints imposed on ways of thinking and of being. They have been grouped under the following headings:

- Constrained thinking and being with regard to development trajectories for the Baltic Sea macro-region, and
- Constrained thinking and being with regard to stakeholder non-financial resources.

Before I actually proceed to the discussion of the discursive and subjectification effects of the numerous problem representations of the macro-regional governance of the Baltic Sea, it needs to be underscored that the term ‘constraint’ may have both positive and negative connotations. In the former scenario, operating within certain limits set either by people (e.g. available materials and other resources) (Acar et al. 2019) or by the biosphere (e.g. planetary boundaries (Steffen et al. 2015); the ecological ceiling (Raworth 2017)) may be seen as a way to boost creativity and innovation or to create a safe operating space for humanity (Rockström et. al. 2009). However, imposing constraints on alternative ways of thinking or on the available positions to be assumed by actors (stakeholders) in order to cap, whether intentionally or unintentionally, their creative and change-making potential should be exposed and challenged.

3.2.1. Constrained thinking and being with regard to development trajectories for the Baltic Sea macro-region

Both the EUSBSR and other documents shaping the EU’s macro-regional policy fail to provide a clear vision for the development of the BSmR. Despite their being embedded in the nodal discourse of sustainable development, the idea of economic development of the Baltic Sea macro-region revolves around the concept of growth which, as has already been noted in section 3.1.1., comes in various ecologically palatable guises. Not only may the inconsistent use of the development-related terms, as well as the predominant focus on growth lead to terminological and conceptual confusion but it may also create numerous tensions and inconsistencies among the problem presentations of macro-regional governance of the Baltic Sea. Additionally, the state of the conceptual chaos may impose constraints on

alternative ways of thinking about the development of the BSmR, thereby decreasing the number and quality of available positions to be occupied by stakeholders in the process of marine governance. As the governance of the Baltic Sea in the macro-regional setting has primarily been problematized in terms of sustainable development (its nodal discourse), it has naturally fallen prey to some of its shortcomings, including its overreliance on technological solutions, in-built economic growth and a 'dangling' environmental component. Needless to say, all these categories are interrelated and mutually reinforcing, and have only been separated for the purpose of this analysis.

Overreliance on technological solutions

As has already been noted in subchapter 3.1. and section 3.1.1., the macro-regional approach to the governance of the Baltic Sea is firmly grounded in the idea that virtually all problems, including the environmental ones, may be solved through: technological innovation; smart, sustainable and inclusive growth, as well as digital economy (see Fisher and Freudenburg 2001 in Stibbe 2015: 146-147). To create a space for the development of clean technologies and eco-innovations in the area of marine energy and blue biotechnology, medical equipment, creative industries, the food manufacturing industry and the maritime industries, the following infrastructure needs to be in place: a complex network of transnational and transregional joint research projects; harmonized legal and regulatory environments for Foreign Direct Investment (FDI); the joint development of new and better innovation support instruments, including Intellectual Property Rights (IPR) support; and smart specialization strategies and clusters to better connect the ecosystems and industrial and innovation policies within the macro-regions (see Action Plans 2013, 2015, 2017). Therefore, the effect produced by the representation of the problem of unlocking the potential of the Baltic Sea macro-region primarily through technological innovation and its accompanying legal, financial and research infrastructure has been premised on the idea that the complex challenges facing the BSmR (with the extremely sensitive marine ecosystem at its center) constitute predominantly technological problems to be addressed through technological solutions and market mechanisms (see Bińczyk 2018). By establishing the primacy of the discourse of science, technology, law and economy in solving the socio-ecological problems referred to in the macro-regional

documents shaping the governance of the Baltic Sea, the effect of the identified problem representation produces the following socio-ecological conditions:

- The interests of the market, business and industry placed ahead of other solutions and approaches, thereby hierarchically structuring the socio-ecological relations in the BSmR and attributing the primary responsibility for its development to market, business and industrial players (see Bińczyk 2018); and
- An unshakable belief in the power of modernization through scientific and technological development to deal with complex and interrelated challenges, ranging from population growth, energy supply to environmental degradation (see Stibbe 2015, Du Pisani 2006).

Simultaneously the effect produced by the representation of the problem of unlocking the potential of the BSmR primarily through technological innovation silences alternative representations of the issue of technological innovation in the macro-region. First, the predominant focus on technological solutions as a way to solve the complex socio-ecological challenges in the BSmR and to ensure its prosperity underplays the importance of introducing other changes, i.e. those regarding the structure of society, individual and collective choices, as well as mindsets (Everett and Neu 2000 as cited in Stibbe 2015: 146-147). Moreover, such a technology-dominated perspective tends to disable other ways of knowing, which will be further explored below in the context of the knowledge production process promoted in the BSmR and its implications. Second, by reinforcing the 'problem-solution pair' explored in section 3.1.1., the overreliance on technological solutions in the context of complex socio-ecological challenges overlooks the fact that certain challenges, e.g. climate change, are not a problem to be fixed through technological solutions but need to be treated as a predicament to which there is no solution and which will not disappear. Instead, framing such a complex issue in terms of a predicament requires that responses be made in the context of uncertainty and complexity, as well as efforts be undertaken to adapt to such circumstances by making a variety of adequate lifestyle choices (Stibbe 2015: 52). However, the apparent lack of conceptualizing certain challenges in terms of a predicament, which requires moving beyond technological innovation, clearly downplays the importance of adopting a resilience approach in the context of uncertain and

unpredictable environmental challenges (Stibbe 2015: 52). Third, the problem-solution paradigm is clearly reinforced through the perception of nature is terms of a machine consisting of an assembly parts to be fixed or replaced, which may eliminate the need to consider the system as a whole or to change larger social and cultural systems underlying various environmental challenges. Such a problem-solution paradigm, in turn, may frame such issues as easy or routine assignments, as well as position them within the grasp of scientists and engineers, justifying the exploitative and managerial character of Western civilization (Verhagen 2008 in Stibbe 2015: 69). Next, the selected policy documents promulgate the business-as-usual story, i.e. promoting economic growth and technological development as the way forward for society, which may be called into question in light of the policy-dependent nature of technologies, dominant power relations, as well as the reductionist character of market and technological approaches to complex (wicked) problems (Bińczyk 2018). Then, the effect of representing the issue of unlocking the potential of the BSmR through technological innovation and digital literacy with their inbuilt positivity discussed in section 3.1.1. may underplay the importance of critically reflecting on the predominantly technological approach to the governance of the BSmR, as well as ignore the need to develop other types of literacy in the context of complex socio-ecological challenges (see Pollock 2016 for eco-literacy and systems thinking as applied to tourism). Finally, the macro-regional documents shaping the governance of the Baltic Sea make references to grand challenges (e.g. Action Plans 2013, 2015, 2017), with one of the most representative excerpts stating that: "The long-term vision is to establish the BSR as a functional region recognized by global actors as the best innovation space hosting and deploying world-class expertise and strategic alliances in selected fields by using the Grand Challenges approach as its main logic" (SEC(2011) 1071 final: 48). The Grand Challenges may be defined as follows: "the Grand Challenges is a family of initiatives fostering innovation to solve key global health and development problems. Each initiative is an experiment in the use of challenges to focus innovation on making an impact"[23]. While the contribution of engineering and technological innovation cannot be overestimated in light of the advancement

[23] The definition available at: https://grandchallenges.org/about (accessed: April 2, 2021).

of humanity in various fields, the following issues regarding its blatant predominance tend to be hidden:

- The desirability of grand visions of 'high-tech solutions' in the context of trends toward sustainability, simplicity and reusability;
- The authorship and framing of the Grand Challenges and their implications for recommending particular solutions;
- The failure to acknowledge the contribution of engineering and technology to the emergence of these challenges, as well as their consequences for social justice;
- The separation of the technical dimension of human activities from the social, political, ethical and cultural realms of the challenges, thereby reinforcing the 'technical/social dualism' and oversimplifying socio-ecological problems, as well as leading to the exclusion of non-experts and 'non-technical' professionals, such as: sociologists, historians or ethicists;
- The predominance of engineering and technological solutions over critical and social-justice-oriented paths for technological decision-making; and
- The perception of progress in the context of the Grand Challenges as a purely technological issue (Cech 2012: 88-92).

Therefore, in light of the above critique, the Grand Challenges approach adopted as the main logic in the macro-regional approach to the governance of the Baltic Sea appears to be in dire need of critical reflection regarding: problem definition and problem solution; technical and non-technical factors shaping a given problem; the selection of problems; the interests involved; the parties benefiting from, and carrying the burden of, a given problem framing; the incorporation of technical and non-technical expertise and voices; and the embracing of uncertainty and complexity typical of the challenges to be addressed (Cech 2012: 92-93, Ravetz and Funtowicz 2003, 1993).

In-built economic growth

Another constraint imposed on both thinking about the macro-regional development of the BSmR may be categorized as an omnipresent concept of economic growth deeply ingrained in the sustainable development paradigm. The taken-for-granted idea of economic growth has infiltrated virtually all problem representations

shaping the macro-regional governance of the Baltic Sea, as well as has become its main premise in the following areas:

- Regional and cross-border (cross-territorial) cooperation as one of the ways of ensuring better coordination;
- Innovation (smart specialization strategies and clusters; clean technologies and eco-innovations in the area of marine energy and blue biotechnology, medical equipment, creative industries, the food manufacturing industry and the maritime industries), all of which have been aimed at unlocking the potential of the macro-region;
- Culture as a binder for human connection in the BSmR;
- Cross-cutting topics, such as: branding and regional identity building, public health, and productive labor market; and
- Bioeconomy with its integrative and cross-cutting incorporating economic, social and environmental aspects of sustainability in agriculture, forestry, fisheries and aquaculture.

The effect of problematizing the economic development of the BSmR predominantly in terms of growth has a number of serious ecocultural implications. From the very outset, it makes it extremely difficult to move beyond the predominantly GDP mindset in conceptualizing alternative development paths for the BSmR (see the following website: https://ec.europa.eu/environment/beyond_gdp/index_en.html for the 'Beyond GDP' initiative), as the current economic system depends on continual growth, as measured by GDP, and fails to measure adequately returns on natural or social capital (Pollock 2016: 19, 60; Sutton 2009: 19). Therefore, the effects of subjecting culture, wellbeing, as well as human and ecosystem health to the primary objective of ensuring GDP-based economic growth, albeit modified through the following terms: sustainable, smart, inclusive or green, reinforce the assumption that only 'growth' coming in its multiple, inconsistent guises may provide prosperity, wellbeing and sustainability. Such an assumption runs counter to the letter to the EU signed by 238 academics calling for the urgent need to prioritize human and

ecological wellbeing over GDP and growth in the context of declining productivity gains, market saturation and ecological degradation[24].

Moreover, similarly to the management of the Global Ocean, the whole macro-regional approach to the Baltic Sea governance as evidenced in the analyzed policy documents is pervaded by the duality between an industrial, exploitative ('blue growth') perspective, and the environmental perspective (Gee 2019: 36), which has been reflected in the following excerpt: "The aim of eradicating discards in the Baltic Sea is to contribute to more healthy stocks and marine eco-systems, secure the full economic potential of the goods provided by the sea, satisfy growing consumer demands for sustainable fisheries products and gain a more reliable picture of the stock situation and thus strengthen the biological advice." (SEC(2011) 1071 final: 64). The above quotation appears to be symptomatic of the growth-and-progress mindset underlying the macro-regional approach to the governance of the Baltic Sea coupled with the continued pressure put on the marine ecosystem to cater for commercial interests and increasing consumption patterns, albeit subject to a sustainable and science-based approach to the management of marine resources. While the selected macro-regional policy texts problematize the issue of Baltic Sea governance in terms of environmental protection, a healthy marine ecosystem and good ecological status, the whole idea of development of the BSmR has strongly been premised on the instrumental rationale for "protecting the resource base upon which economic and social activities depend" (Gee 2019: 37) to ensure blue and green growth. In other words, the complex environmental concerns regarding the Baltic Sea constitute an integral part of the macro-regional approach as long as they are aligned with core governmental objectives driven by economic growth, thereby reproducing the dominance of business-as-usual as evidenced in the Integrated Maritime Policy predominantly resting on the Lisbon agenda for growth and jobs (Gee 2019: 36). The attempt to reconcile two apparently contradictory approaches to the marine space, i.e. exploitation and conservation, rests on the assumption that it is possible to foster economic expansion through growth, entrepreneurship and

[24] "The EU needs a stability and wellbeing pact, not more growth" Sept 16, 2018. Letters. Economic policy. Available at: https://www.theguardian.com/politics/2018/sep/16/the-eu-needs-a-stability-and-wellbeing-pact-not-more-growth. (accessed: May 11, 2019).

competitiveness, as well as to enhance sustainability and circular thinking (Action Plan 2015: 59), which may lead to conceptual and terminological confusion at best, and to failure to reflect ecosystem realities in various policy arrangements at worst. Furthermore, the dubious duality of blue growth and environmental perspective lies at the heart of a prevalent misperception that economic (blue) growth and the marine environment are equal components of the development equation in the BSmR.

Although the macro-regional governance of the Baltic Sea has predominantly been problematized in terms of the hard-to-eradicate human-ecosystem binary, as well as the presumption that only 'growth' coming in its multiple, inconsistent guises may provide prosperity and wellbeing, the macro-regional documents shaping the governance of the Baltic Sea make some, albeit very tentative, references to the idea of moving beyond the growth paradigm and embracing resource efficiency. Such an approach has been based on the concepts of decoupling and circular thinking introduced in the context of bioeconomy. "There is a clear need to promote a decoupling of economic growth from environmental degradation. Therefore, the horizontal action will focus on sustainable solutions throughout the entire value chain from biomass to food, bioenergy and bio-based products, looking at its potential to create solutions for sustainable economic, social and environmental development" (Action Plan 2013: 180). However, if one takes into account the following:

- two kinds of decoupling: 'relative decoupling' (slowing the rate of environmental impact in relation to economic growth by promoting efficiency) and 'absolute decoupling' (delinking of economic growth and environmental impact by breaking the link entirely), with the latter being essential to remaining within ecological limits; and
- the impossibility of achieving 'deep' resource and emissions cuts without confronting the nature and structure of market economies, as well as the culture of consumerism,

the idea of decoupling in the context of macro-regional governance of the Baltic Sea may be labeled as a myth (Bińczyk 2018: 149; Pollock 2016: 59; Jackson 2009: 8, 9).

Although the terms such as: bioeconomy, sustainability, circular thinking, transnational and long-term strategic thinking may signal a tentative commitment to post-growth, the in-built growth component pervading all the macro-regional approach to Baltic Sea governance may hamper any efforts to rethink the concept of growth and to take any alternative post-growth development paths, including but not limited to: prosperity without growth (Jackson 2009), doughnut economics (Raworth 2017), the construct of flourishing as human beings within the ecological limits of a finite planet and an alternative to purely economic indicators (Pollock 2016, Jackson 2009). In light of the above discussion about the constraints imposed on thinking about possible development trajectories, it may safely be assumed that the identified overreliance on technological solutions and in-built economic growth in the context of the macro-regional governance of the Baltic Sea both shape and reflect the predominant way of thinking about the relationship between humans and the life-supporting marine ecosystem to be discussed below.

Dangling environmental component

In contrast to the concept of economic growth perceived as an integral and taken-for-granted part of the sustainable development triad, the environmental component of the sustainable development paradigm has been granted a more problematic status in the documents shaping the macro-regional approach to Baltic Sea governance. For the purpose of my analysis, I have labeled the 'Save the sea' objective as a 'dangling' environmental component of the macro-regional development. My use of the adjective 'dangling' has been inspired by an English grammatical error called a dangling modifier[25] to underscore the unclear, incorrect and highly problematic position of the environmental component in the whole sustainable development triad. The effect of problematizing environmental governance of the Baltic Sea (the Save the sea objective) in terms of 'separate but interconnected' rather than 'distinct but not separate' objectives produces a number of social-ecological conditions by focusing on some aspects to the exclusion of others. All of them revolve around the idea of the Baltic Sea as a dangling environmental component of the sustainable development paradigm for the BSmR:

[25] Dangling modifier: a word or phrase that modifies a word not clearly stated in the sentence. e.g. **Having finished the assignment**, the TV was turned on). Source: https://owl.purdue.edu/owl/general_writing/mechanics/dangling_modifiers_and_how_to_correct_them.html (accessed: May 11, 2019).

- The reduction of the Baltic Sea to a geocultural location or an economic resource to the exclusion of its agency as a natural force having a non-monetary value (see Bińczyk 2018: 123-124), thereby generating focus on the predominantly instrumental values attached to the Baltic Sea to the exclusion of the relational ones, as well as on its provisioning and esthetic (cultural) ecosystem services while erasing the regulating and supporting ones;
- The framing of the Baltic Sea as an environmental problem, which may attribute the responsibility for its ecological state to environmentalists, ecologists or marine experts (Stibbe 2015: 46) rather than expand the concept of stakeholder beyond its narrow and instrumental definition to include a wide variety of stakeholders, including living and non-living entities, as well as past and future generations (Reed et al. 2009); and
- The internal contradiction of the ecosystem-based management (ecosystem approach) as applied to the marine space to be found between the separation between humans and the marine ecosystem on the one hand, and the need to include humans as part of the ecosystem as a prerequisite for the introduction of ecosystem approach in the BSmR in a holistic way as defined by Söderström (2017: 4-5).

Furthermore, the predominant sustainable development paradigm pegging "environment" against "economy" (Bradshaw et al. 2021), and through extension – against "society" turns the environmental component into something external to human beings (an externality), which makes the adequate incorporation of environment into both cost assessments and worldviews extremely challenging (Pollock 2016: 57). While the selected policy documents problematize the issue of integration in terms of the need to incorporate environmental and socio-economic considerations in all decision-making, as well as environmental and climate change concerns across all relevant policy fields, the question remains whether the dominant discourse of economics bringing the natural world into an economic frame rather than placing economics within an ecological frame (Stibbe 2015: 152) may be justified in light of human embeddedness in life-supporting ecosystems (Bińczyk 2018: 186; Daly 1994 in Jansson 2005: 201). As such a dichotomy pushes the multi-dimensional nature of the marine ecosystem into the background, as well

as reinforces human centrality, exceptionalism, and alienation from nature (Stibbe 2015), there is a need for "new macro-economics for sustainability to be ecologically and socially literate, ending the folly of separating economy from society and environment" (Jackson 2009: 10). All the effects of representing environmental protection of the Baltic Sea in the macro-regional approach appear to fly in the face of scientific research on planetary boundaries, the ecological ceiling, the embeddednesss of societies and their cultures (including economies) in the biosphere (Raworth 2017, Rockström et al. 2009), i.e. the topics to be explored in chapter 4.

The above constraints on thinking about development trajectories to be pursued in the BSmR have a profound effect on who it is possible for its actors (stakeholders, residents) to be or to become (Bacchi 2009). In the context of economic development of the BSmR, the stakeholders have been reduced to human capital, human resources or workforce. Each of these labels or categorizations carries serious implications and testifies to the prevalence of 'marketization' (Fairclough 2003), i.e. the transformation of social spheres into aspects of the financial markets (Pollock 2016, Fairclough 2003). Innocent as they may sound, the concepts of 'human capital' and 'human resources' project the image of humans as economic entities specially trained to perform labor rather than as individuals with distinct needs and competences. This observation has been shared by Bourdieu in his comments on academic ability and academic investment: "despite its humanistic connotations, [human capital] does not move beyond economism" (Bourdieu 1986: 17). In their research work on educational policy, Hyslop-Margison and Sears (2006) state "the human capital discourse establishes artificial parameters on the boundaries of social reality by circumscribing transformative possibilities within the bounds of neo-liberal ideology" (2006: 81). In the selected policy documents, the concept of human resources has been found in the context of: a shortage of staff within the national administrations; the efficient use of human resources; and the development of human resources through strengthening individual managing capacities of key actors to be equipped with tools and information needed to manage transnational cooperation in a broad sense (COM(2016) 805 final, SEC(2011) 1071 final). Another subject position available for stakeholders in the BSmR is that of workforce, e.g. "a shortage of skilled

workforce," "well-educated workforce" (Action Plan 2015), which may evoke an image of employees as army troops subject to the discipline imposed not by military drills but by training and rules shaped by a predominantly labor-market orientation.

What is more, the use of positively charged concepts, such as science, technology, research, and innovation in the context of possible development trajectories should be put under critical scrutiny by both internal and external stakeholders, which, in turn, requires that they be equipped with relevant skills and competencies to do so. Whether that is the case in the macro-regional approach to Baltic Sea governance has been investigated in the following section on constrained thinking and being with regard to stakeholder non-financial resources.

3.2.2. Constrained thinking and being with regard to stakeholder non-financial resources

The phrase 'stakeholder non-financial resources' has been selected as an umbrella term for a number of interrelated categories, such as education, knowledge, and identity, all of which are of utmost importance to the macro-regional governance of the Baltic Sea, and have been identified in the relevant problem representations. It should also be acknowledged that such 'soft topics' as education, skills, and research are very broad and politically sensitive, and may be affected by resource constraints, conflicting visions and interests, as well as sectoral mindsets (Final report 2017: 109), which may prove particularly challenging to agree upon in such a diverse marine space as the BSmR. Nonetheless, such topics do deserve research attention as their quality and scope may affect not only the way in which the marine space is socially constructed but also its ecological condition and habitability. In the course of my analysis the constraints imposed by the identified problem representations in the macro-regional policy documents shaping Baltic Sea governance have been divided into: market-oriented approach to education and skill development; the intricacies of the science-policy-practice nexus; and Baltic brand-identity, all of which are interrelated and mutually reinforcing components in the process of stakeholder capacity development in the BSmR.

Market-oriented approach to education and skill development

As has already been underscored in section 3.1.1., the exclusion of ecological education and other ways of knowing in the form of suppression and backgrounding, respectively, and the salience of predominantly market-driven approaches to education, training and skill development, are two sides of the same coin. However, it is not the very presence of labor market dynamics shaping the educational realm that I find problematic and highly questionable but the labor-market and sustainable growth orientation permeating virtually every single aspect of education and training (entrepreneurship, universities, research programs, and lifelong learning). As will be shown below, such a framing of the educational sector may hinder alternative ways of thinking about skills, capacity and educational development. The effect of representing the 'problem' of unlocking the potential of the macro-region through education premised on the idea of matching educational programs and policies to the needs of labor markets, thereby constituting the blatant predominance of market mechanisms and concerns in the shaping of educational programs, may have far-reaching social-ecological consequences, way beyond that of skill development. To begin with, the close alignment between the education policy and labor market demands focused on the needs of economy testifies to "a long-standing and familiar narrative of education" as a prerequisite to economic growth and security, as well as international competitiveness, "comfortably fitting a discourse emphasizing technological innovation," thereby making education part of the economic agenda (Bacchi 2009: 207, 209). Then, the process of skill development has predominantly been tailored to the needs of economy through the tracking, fostering and supporting of entrepreneurial mind-sets at all levels of education, with the aim of equipping them with entrepreneurial skills and making them ready to engage in new or young companies, start-ups and SMEs (Action Plan 2017: 77). It is true that the macro-regional approach to Baltic Sea governance mentions the need for a multidisciplinary approach in order to generate creative ideas, and the entrepreneurial initiative to turn those ideas into action (Action Plans 2015, 2017). However, the question remains as to what it may actually refer to in the world in which education systems are under increasing pressure from business and industry, with the primary focus being on economy- (business-) relevant knowledge and skills mostly shaped by policies, business advice and consultancy

still drawing on the principles and assumptions developed in a previous century at the expense of the humanities and a general education that encourages critical thinking and creativity (Pollock 2016: 4, 10). The predominantly entrepreneurial imprint has also been left on universities, with their central role in the process of forming networks, facilitating student and researcher mobility, as well as fostering entrepreneurial culture (SEC(2011) 1071 final). However, the following issues may impose constraints on thinking if not subject to critical interrogation, as "too many universities and colleges continu[e] to base their policies, curricula and operations on unsustainable rather than sustainable assumptions" (Armon 2020a: 20):

- the nature of the academia-business interaction in light of the marketization of higher education institutions (Fairclough 1993), and the industrialization process (involving more standardization, specialization, centralized control and greater focus on specific vocational, employment-ready skills) (Pollock 2016: 4);
- the issues of power and knowledge as may be evident in the context of partnership between businesses, governments, and academia or a dialogue between labor market organizations, relevant authorities, and education providers (Action Plan 2015) in the process of positioning the macro-region in the EU and on the global map by advancing its growth and competitive potential (Action Plan 2015); in other words, what role does academia play in the process: of a game changer or just a commercially relevant educational service provider addressing problems set by others?
- the relationship between the spirit of enterprise at universities (an entrepreneurial culture or labor-market demands) (SEC(2011) 1071 final) and their role as an inclusive and critical space (see Barnett 2018 for his idea of the ecological university). In other words, what is the main goal of education? To empower students and enhance their prospects for thriving? (Armon 2020a: 19) However, "[i]f the answer is to serve the economy, it will be structured and operate very differently than if its primary purpose is to enable individuals to flourish in a changing world" (Pollock 2016: 18);
- the kind of methods used and skills developed in academia that affect the whole educational process: mainstream management methods;

reductionist approaches to problem solving OR systems thinking; a relational, holistic, participatory and systemic approach; and interdisciplinarity geared toward the nature of complex challenges, diversity and multiple interdependencies (Armon 2020a: 19, Pollock 2016: 13, 15, 66);

- the correspondence between the expectations formulated with regard to the macro-regional development and complex environmental governance challenges facing the BSmR as identified in subchapter 3.1. on the one hand, AND the educational mindset which has the potential of breaking out from the silo thinking associated with traditional subject-oriented education (Pollock 2016: 49); and
- the kind of the macro-region's identity, innovation and economic potential to be strengthened by education.

All of the above issues are in dire need of being addressed and reflected upon:

1) In light of the education system's bias toward industry and technology fostering competition, injustice and "minds unchecked by the heart," which diminish nonviolent relationships with others and the natural world (Schumacher in Armon 2020a: 20), and
2) In the context of powerful disciplinary controls shaping pedagogies, curricula, hiring and promotion practices, scheduling, funding, and space allocation, i.e. the constraints which "too often [are] out-of-date or irrelevant as humanity is confronting massive threats to its existence" (Armon 2020b: 232, 234).

Taking all of the above constraints into account, one may wonder what is meant by the concept of 'active citizenship' and of 'education for sustainable development'. How should the "overall aim of imparting values, building a personality, and fostering active citizenship" (Action Plan 2013: 76) be understood in light of the exclusion of ecological education and other ways of knowing, and the primary focus on entrepreneurial skill development, as well as the absence of critical thinking and systems thinking? What is the interplay between the market-driven educational offer shaped at the macro-regional level on the one hand, and a sense of urgency and even "students' despair, fear and hopelessness about damaged futures

they feel powerless to repair" (Armon 2020a: 25)? Following on from that, the question remains as to the nature of education for sustainable development based on a vague and highly contentious concept of sustainable development malleable enough to include multiple, often contradictory and interest-driven goals, thereby rendering it meaningless, as well as conceptually and politically dead (Sneddon 2000). In the same vein, the area of culture has been assigned a role to play in facilitating human connection. Apart from its creative, connecting, discipline-spanning and GDP-generating potential, culture has been framed as a catalyst for social and economic innovation and a driver for social and sustainable development, as well as sustainable living to strengthen civil society and its institutions (Action Plan 2015). Promising as it sounds, one may ask a legitimate question: What is the vision of sustainable living that culture is supposed to promote in light of the economic growth imperative and the overreliance on technological solutions coupled with the need to cater for the needs of economy through the provision of predominantly entrepreneurial mindsets equipped with mainly entrepreneurial skills?

This question inevitably leads to another constraint imposed on thinking about the issue of literacy. Apart from reading literacy perceived in terms of reading literacy as one of the benchmarks of high education levels (Action Plan 2013: 76), an overwhelming support has been given to the development of digital literacy and ICT training (the use of modern ICT in high-quality education and communication) (SEC(2011) 1071 final.). While no attempt is made to reject this kind of literacy, the effect of problematizing the issue of literacy premised on the development of digital literacy and constituting the predominance of the technological discourse in educational development produces social-ecological conditions which may exclude other types of literacy involving eco-literacy and systems thinking (see Pollock 2016: 60 for the deficiencies related to curriculum development in the area of tourism and hospitality), leaving stakeholders ill-equipped to deal with the complexity and uncertainty inherent in the macro-regional governance of the Baltic Sea. Therefore, the resultant, almost universal overemphasis on the development of technical, managerial and entrepreneurial competences to the exclusion of critical, holistic and systems thinking skills may reflect "a worldview steeped in hierarchy, specialization, and competitiveness, and

the research and pedagogic paradigm (…) still based on an epistemology based on material reductionism, and the primacy of empirical observation backed by quantitative analysis and evaluation" (Pollock 2016: 60). What is more, the predominance of digital literacy and ICT training and the exclusion of critical and systems thinking, as well as ecoliteracy appears to be symptomatic of shallow environmentalism, with its main focus on technical solutions to environmental problems (immediate physical factors or symptoms) rather than on subjecting to critical scrutiny their underlying cultural, political and psychological causes (Stibbe 2004: 243), which is in line with a 'logic of appearances' rather than an 'explanatory logic' (Fairclough 2003: 95).

As a result, the constraints imposed on thinking about education, training and skill development correspond to the subject positions made available in the selected policy documents. They paint a picture of one-dimensional human beings conditioned throughout their educational cycle to develop skills shaped predominantly by labor market dynamics to the exclusion of other skills necessary to meet complex challenges of the 21st century. Succumbing to the discourse of neoclassical economics, which provides a narrow, selective and oversimplified version of people as managers, consumers and economic actors (Stibbe 2015, 2020: 6), as well as adaptable, skilled, efficient, qualified, well-educated and well-trained workforce and world class graduates (Action Plan 2015), the macro-regional approach to Baltic Sea governance fails to make other subject positions available, including but not limited to: stewards, carers, critical thinkers, agents of change, uninterested outsiders or uncalled participators (Raworth 2017, Miessen 2010, Nussbaum 2010). While it goes without saying that being a manager does not preclude the possibility of acting as a carer, steward and a critical thinker, these qualities have completely been overlooked in the selected macro-regional policy documents. According to David W. Orr,

"The plain fact is that the planet does not need more successful people. But it does desperately need more peacemakers, healers, restorers, storytellers, and lovers of every kind. It needs people who live well in their places. It needs people of moral courage willing to join the fight to make the world habitable and humane. And these qualities have little to do with success as we have defined it." (Orr 2004 in Stibbe 2015: 86).

Last but not least, the effect of problematizing educational development in the BSmR in terms of lifelong learning may act as a double-edged sword. On the one hand, the origins of the concept date back to the 1960s/1970s, when lifelong learning involved 'the holistic formation of a well-rounded, civically aware, personally fulfilled and critically minded citizen' (Mitchell in Bacchi 2009: 223). However, on the other the concept appears to have been hijacked by the discourse of economics, which has many possible implications:

- A lifelong commitment undertaken by political subjects to reskill when necessary, which has been tightly linked to a market-oriented agenda and the needs of economy (Bacchi 2009: 222, 225);
- the production of a particular kind of political subjects, i.e. entrepreneurial subjects who invest in themselves and in their futures (Bacchi 2009: 204);
- the focus shifting "from individuals as citizens with citizen rights to individuals as consumers with consumer rights" (Axford and Sneddon in Bacchi 2009: 225); and
- the explicitly instrumentalist approach to lifelong learning, with the EU funding "typically going into workplace training programs rather than into curricula emphasizing social or civic education" (Bacchi 2009: 223).

It is noteworthy that the market-oriented understanding of lifelong learning co-occurs with other knowledge-related concepts, such: knowledge production, information society or knowledge-based economy (Bacchi 2009: 224), all of which will be explored below in the context of the constraints inherent in the science-policy-practice.

The intricacies of the science-policy-practice nexus

In the area of ocean governance, a science-based approach to the issue of management of the ocean space, as well as of living and non-living marine resources is of particular importance (Pyć, 2011: 288-289). As the macro-regional approach to Baltic Sea governance epitomizes marine environmental governance, the issue of knowledge production (creation) and dissemination has been given ample space in the identified problem representations as one of the various strategies employed in ocean and coastal management (Bennett 2019: 2). While scientific expertise appears to be a prerequisite for solving environmental problems, and policy-makers depend on scientists for the provision of specialized knowledge

(Steffek, 2009: 313), the intersection of science and policy poses many challenges. In the selected policy documents the issue of unlocking the potential of the macro-region has been problematized in terms of capacity building, knowledge production and dissemination, as well as macro-region-relevant research and macro-region-specific governance. As the identified problem representations contain numerous loaded terms[26], they may have the potential to constrain thinking and being if taken for granted and left unquestioned. All the loaded terms revolve around the highly contested concept of knowledge that may be perceived as research, as well as a social and marketable product (Bacchi 2009: 234, 235). For the purpose of this analysis, the loaded terms and their potentially constraining effects have been grouped into three interrelated generic categories, i.e. knowledge holders, research process, and delivered evidence, as well as subject to critical interrogation in light of relevant research work along the science-policy-practice continuum.

Knowledge holders

The effect of problematizing the issue of deficient potential of the BSmR premised on the need to engage in a macro-region-relevant research creates conditions which underscore the importance of combining a dialogue between scientists and policy-makers with a broad stakeholder contact with communities, the Baltic21 sectors (e.g. industry, education, energy and transport) and knowledge-based industries, top-level knowledge institutions, private investors, incubators and related business services. The list of knowledge holders has been extended to include those who represent existing knowledge, expertise and long traditions rooted in forestry, agriculture and fisheries (Action Plan 2017). While there is nothing inherently wrong with these goals and ambitions with regard to the groups of stakeholders to be engaged in the process of knowledge production, they need to be subject to critical scrutiny to uncover their potentially constraining effects:

1) The suppression of relevant social actors to be responsible for ecological education, as well as the backgrounding of the social actors who are supposed to represent the long traditions and the local and tacit knowledge in the context of the predominance of techno-scientific-business discourse communities. Such an exclusion may create an imbalance in knowledge

[26] Loaded terms: Contested, overused, and ultimately unsatisfactory terms that are both empty and loaded. Far from being neutral categories, these terms acquire their meaning through defining the range of their signification and connotation (Garber 2012).

inputs into the macro-regional governance of the Baltic Sea between experts and non-experts (extended peer community; non-academic knowledge holders) in the process of scientific knowledge production (Funtowicz and Strand 2007, Funtowicz and Ravetz 1993);

2) The emphasis on integration and consensus-making (consultations, dialogue) concealing conflicts and friction inextricably linked to the process of knowledge co-production, which may hamper the emergence of alternative legitimate concerns and exclude experimental ways of thinking and other ways of knowing (Miessen 2010); and
3) The predominance of the knowledge-based paradigm in the form of knowledge society (also: knowledge economy or knowledge-intensive products and services), which may: define knowledge in narrow, economic and instrumental terms rather than as a global public good, and depoliticize the process of knowledge construction through underplaying the power-knowledge connection, as well as privilege scientific, evidence-based knowledges over subjugated knowledges, e.g. contextualized, embodied, lay knowledge (Bacchi 2009: 239, 240).

Research process

Both state and non-state actors need to rely on scientific knowledge that appears to be one of the most important legitimation strategies used in global environmental governance in general, and in integrated marine governance in particular. In fact, there are "few policy areas in which scientific expertise and data play such a central role; in which claims to scientific rationality are so crucial in justifying political programs and measures (…)" (Steffek, 2009: 313). It is noteworthy that as knowledges perform a critical function in the area of governing practices and of making worlds, the process of producing knowledge through research is a form of political practice (Bacchi and Goodwin 2016: 15, 83). Therefore, problematizing the issue of deficient potential of the BSmR in terms of the need to engage in a macro-region-relevant research, and underscoring the importance of "an active regional science-policy dialogue (…) link[ing] common values and aims (…) founded upon sound scientific evidence and communicated within effective stakeholder platforms (Action Plan 2015: 23); and engaging in a "policy-driven, fully integrated joint research programme, based on extensive stakeholder

consultations" (SEC(2011) 1071 final: 126) may generate numerous doubts and legitimate questions in light of the available research on the complexity of the science-policy interface and the process of knowledge production. First, the issue of science-policy dialogue involving the knowledge dissemination process between policy-makers and researchers to provide policy-relevant results may raise objections in light of the post-normal approach to science as the science-policy interface appears to be a far cry from the ideal of impartial scientists providing value-free knowledge to policy-makers for implementation (see Funtowicz and Strand 2007, Cortner 2000, Wynne 1992 for the misperception of scientific expertise as a value-free endeavor). It needs to be reflected upon that science is a very political practice charged with values held by scientists who not only follow the norms of their respective disciplines but also represent policy communities and institutions having their own preferences and biases, which makes it necessary to consider the following issues:

- Arguable claims and results, problem framing, methodological assumptions, selection criteria, scientific model design, multiple uncertainties and complexities (Funtowicz and Strand 2007, Cortner 2000, Wynne 1992);
- The preference for technical framing of political problems that are dealt with in isolation from values, human behavior or open discussion, and solved using technical measures regarded as more "politically palatable" (Cortner 2000: 24);
- Narrowly defined complex problems "reduced to manageable proportions" that tend to have little relevance in the area of environmental policy-making (Cortner 2000: 26);
- The rationality-based approach to science involving the reliance on scientific arguments, empirical methods and models used to analyze quantifiable and "unbiased" factual data, as well as the need to supplement the approach with the contribution to be made by other stakeholders who are in the position to question their assumptions and identify biases and inconsistencies, as well as by experiential knowledge to be shared by the public (Cortner 2000: 25);

- Conflicting power relationships, expert disagreement, lack of scientific knowledge or conflict of interest in a situation when experts are also stakeholders (Maxim and van der Sluijs 2011: 482-483).
- Value judgments made in the course of a scientific research process hidden by scientific jargon; the inherently value-laden aspect of the process usually overlooked, which eliminates the need for public discussion (Cortner 2000: 24-25);
- Expert authority waning due to their professional autonomy being increasingly surrendered to policy-making processes, and to public access to the information previously held secret by scientists, as well as to the multitude of scientific solutions (Van Leeuwen 2008: 107);
- Scientists often perceived as government advisors or even lobbyists working for the government (Saltelli and Funtowicz 2014: 79);
- The traditional division between scientists providing the means and politicians deciding the ends not corresponding to reality as scientific means usually have non-scientific implications that need to be assessed in social, moral and political terms. Therefore, the interaction between the scientist and the politician tends to be far more complicated than the traditional model suggests (Weinberg 1972: 209); and
- A clear demarcation between the institutions (and individual scientists) providing the science, and those entities that use it no longer viable. It appears to be impossible to conclusively separate facts from values due to the complexity and indeterminacy of complex systems (…)" (Funtowicz and Strand 2007).

Second, the issue of inadequate innovation in the BSmR has been problematized in the context of transnational and transregional research focusing on the specific strengths of the BSmR (the development and commercial exploitation of joint research projects), as well as the transfer of knowledge, competence and best practices from the Nordic countries and Germany as innovation top-performers to Poland and the Baltic States (SEC(2011) 1071 final, COM(2009) 248 final). Therefore, in light of the above considerations it appears to be reasonable to ask questions regarding the nature of transnational and transregional research and knowledge transfer, and the direction of knowledge transfer (see Stibbe 2004: 256-

257 for shallow environmentalism as evident in the unidirectional transfer of technical knowledge to the exclusion of a productive intercultural dialogue on ecological issues). What is more, the issue of research transfer needs to be kept under critical scrutiny due to various modes of governance, organizational practices, funding regimes, and institutional arrangements among stakeholders increasing reliance of researchers on government funding that may affect the subjectivities of researchers in terms of their productivity, calculation or relevance, all of which is coupled with the highly political nature of research "hidden in the innocuous language of information" (Bacchi 2009: 146-147). That is why the loaded nature of the term 'research transfer' may be partially offset by making transparent the rules and tendencies shaping the interaction between researchers and decision makers (Bacchi 2009: 145-146). Next, one of the effects of problematizing the macro-region-specific governance of the Baltic Sea in terms of the need to ensure the coherence between structuring research infrastructure and the socio-economic developments specific to the macro-region may be seen as reinforcing the turn to useful research, i.e. academic research perceived as a means to economic and social development much more than a cultural end in itself (Solesbury in Bacchi 2009: 241). It is undeniable that such an imbalance may be encountered in the design of broadly understood research infrastructure. However, both the problem representation and Solesbury's comment may perpetuate the divide between socio-economic and cultural dimensions of development while underplaying the necessity to embrace the broader social-ecological aspects of development in the BSmR, and the embeddedness of economy and culture in society. Finally, if applied unreflectively or left unquestioned, the concept of knowledge may be used interchangeably with the one of information, which may lead to: the instrumental understanding of knowledge as fixed and transferrable bits of data or as a traded commodity, the widespread endorsement of evidence-based policy, as well as the prevalence of the problem-solving paradigm to the exclusion of other ways of knowing (Bacchi 2009: 232, 233). This, in turn, may result in the construction of the problem-solving political subjects through scientific theories and the kinds of truth produced by them (Bacchi 2009: 233, 235), with the central role to be played in this process by researchers due to the fact that '[their] research is itself a process of governing and constituting subjects' (Marston and MacDonald in Bacchi 2009: 235).

Delivered evidence

The process of knowledge production in the BSmR also revolves around the concept of evidence. The effect of problematizing macro-region-specific governance of the Baltic Sea in terms of policy-relevant evidence or of deficient potential of the BSmR premised on the need to engage in a macro-region-relevant research based upon sound scientific evidence to provide policy-relevant results (Action Plan 2015) creates the following social-ecological conditions:

- The prevalence of problem-oriented research and problem-solving paradigm, which may imply the presence of objective pre-existing problems to be discovered by disinterested researchers, and to be addressed through relevant evidence; and
- The promulgation of a sanitized and decontextualized version of knowledge constructed as separate from those producing it and from its crucial influence in shaping social relationships and social practices, with policy-makers taking rational decisions on the basis of the evidence made available to them (Bacchi 2009: 242, 246).

However, what is left unquestioned in the adoption of evidence-based approaches is the scope (range) of the forms of evidence, the value of other ways of knowing, and the criteria for selecting evidence for specific political agendas to solve pre-set problems, as well as the distinction to be made between designating a problem and representing a problem in a particular manner (Bacchi 2009). Failure to address these issues may result in the displacement of more contextual interpretative forms of research by evidence-based approaches, the lack of problem-questioning approach, the perception of policy-making and research production processes as depoliticized (Bacchi 2009: 253).

All the above components of a knowledge production process may testify to the predominance of techno-scientific-economic discourse and evidence-based practices over the pluralist-participatory ones (bottom-up perspectives) (see S. Cummings et al. 2018 for perspectives on knowledge and the knowledge society within the Sustainable Development Goals), which may blur the deeper social and cultural causes of the complex challenges faced in the BSmR (Stibbe 2015: 3). In line with the predominantly techno-scientific discourse shaping the macro-regional

governance of the Baltic Sea, there is a strong emphasis on problematizing effectiveness and efficiency in terms of result orientation (e.g. quota, targets, indicators, guidelines). While setting targets and relying on measurements is justified in the context of marine environmental governance, some of its aspects, including but not limited to trust, capacity, commitment, ownership, engagement, or public participation, are equally important but of non-quantifiable nature, i.e. not amenable to measurement (see Maxim and van der Sluijs 2011 for the importance of qualitative aspects). The overreliance on quantitative data by the science-policy interface may exclude qualitative aspects that "illuminate public debate and inform decision-making processes" (Maxim and van der Sluijs 2011: 483), as well as may instill in stakeholders the representation of a policy or strategy as neutral, technical and best left to politicians and other experts (Bacchi 2009: 253). However, failure to ponder on all of the above mentioned questions and doubts may underplay the transformational potential of knowledge to be found in new approaches to knowledge, such as transdisciplinary research, which are better able to take into account non-linear processes and to solve complex problems through the process of knowledge co-creation (Cummings et al. 2018: 738). While the aim of drawing on scientific knowledge and expertise is to increase moral authority, credibility or legitimacy, it needs to be underscored that "knowledge is also linked to power, as dominant discourses, institutional histories, personal connections, and access to financing can influence how knowledge is produced and used" (Bennett 2019: 6, 7). Moreover, there are multifarious effects of the intricate relationship between science and politics that "can be difficult to separate" (Bennett 2019: 7).

The awareness of all the above constraints that may be imposed on thinking and being in the context of macro-regional governance of the Baltic Sea appears to be crucial not only in light of the complex social-ecological challenges facing the macro-region but also with regard to the ambitious expectations formulated vis-à-vis the marine space, its stakeholders and their engagement in the selected policy documents. On the other hand, developing such an awareness may also be perceived in terms of excessive pressure and requirements put on relevant stakeholders with regard to their mindsets, skills and educational profiles. Therefore, at this point it is crucial to investigate the problematization of Baltic

identity as an enabling or disabling factor in the process of fostering a sense of stakeholder commitment and ownership in the context of the BSmR.

Baltic brand-identity

Moving from the more concrete to the more abstract, the documents shaping the macro-regional approach to Baltic Sea governance problematize the issue of identity in the BSmR in terms of regional identity, regional brand, and we-feeling, with a full awareness of their inherent limitations, particularly in the context of the "overwhelming diversity of this 'meta-region'" (Andersson 2007: 122). In the process of constructing a common or enhanced regional identity and regional brand for the Baltic Sea macro-region there is a wealth of resources to be tapped into, for example: common natural and cultural heritage; broad cooperation in the areas of culture, education, tourism and health; and scientific and cultural exchange programs. However, it needs to be remembered that it may be challenging to assess the 'level' of regional identity, as well as that neither regional identity nor regional brand may be imposed from above, thereby highlighting the need for we-feeling in the process of building a common vision for the BSmR (see Henningsen 2011). Comprising regional identity, brand identity and we-feeling, the grading of Baltic brand-identity intensity in the selected policy documents corresponds to a variety of research approaches to the construction of identity in the BSmR (see Henningsen (2011) for awakening a transnational, Baltic we-feeling rather than searching for a common 'identity'; Andersson (2007) for the opportunities and challenges linked to the process of brand building for the BSR, and Maciejewski and Rydén (eds.) (2002) for different parameters in the process of regional identity formation). Nevertheless, the problem representations centering on the process of Baltic regional identity tend to silence alternative representations of this complex issue. Envisioning the three scenarios for the development of Baltic Sea identification and image building, the problem representations premised on building human connection have erased the identity of care and responsibility (Pollock 2016: 29; Stibbe 2015) with one notable exception being 'stewardship' invoked only in the context of the fishing industry (Action Plans 2017, 2015, 2013). While a reference has been made to raising awareness of the common natural and cultural heritage of the region as a source of shared values (Action Plan 2015), the absence of the Baltic Sea as the heart of the macro-region with the potential to shape

the regional identity of its inhabitants (see Henningsen 2011: 26-27) reinforces the perception of the marine environment as a dangling component of the macro-regional approach to Baltic Sea governance. However, in the words of Lennart Meri as cited in Henningsen (2011):

> "(…) the Baltic Sea, the Sea itself, is the substantive element of the region; a branding strategy based on this fact is always true. If nothing else, there's room for a history of longing for the sea; from such a history, were it ever written, one could develop a Baltic Sea identity that would be more convincing than a history of the adventures (or misadventures) of clever Hanseatic merchants" (2011: 61).

What is more, the identified problem representations focusing on the process of building an identity for the BSmR have failed to account for another type of identity that is not only social or cultural in nature but also ecological (see Milstein and Castro-Sotomayor (eds.) (2020) for the concept of ecocultural identity), the issue to be explored in chapter 4.

Concluding remarks

As has already been mentioned, the problem representations of the macro-regional approach to Baltic Sea governance constitute both discursive and subjectification effects producing enabling and disabling conditions for its integrated governance. While no attempt has been made to disregard their positive effects, I have focused on the negative or problematic ones contested in light of my ecosophy and the available research literature. What is more, it needs to be underscored that apart from various erasures and inconsistencies identified in the effects constituted by the problem representations, I have also investigated the effects through the lens of loaded terms which, if left unquestioned, tend to be empty (Garber 2012). Largely based on the 'tired and compromised concept' of sustainable development (Stibbe 2014: 124) oscillating between ecological modernization and Rio sustainability (see Hassler 2005: 221 for the comparison between these two concepts) or between weaker and stronger sustainability (Baker 2015), the constraints imposed on thinking and being with regard to development trajectories for the BSmR and stakeholder non-financial resources appear to be clearly at odds with the nature of multifarious challenges facing the macro-region. Therefore, questioning and removing the interrelated constraints may not only increase the internal consistency

of the EUSBSR but also upgrade the habitability of the BSmR. However, as 'problems' are made, they can also be unmade and remade (Bacchi and Goodwin 2016: 109), which will be explored in greater depth in chapter 4, with the following subchapter setting the stage for such reconceptualizations.

3.3. The social-ecological approach: Reconnecting the Baltic Sea macro-region to the biosphere (including likely lived effects)

The macro-regional governance of the Baltic Sea runs the risk of being compromised by a significant discrepancy between the developmental expectations formulated vis-à-vis the BSmR and its multiple and cross-cutting social-ecological challenges (subchapter 3.1.) on the one hand, and the underlying assumptions of the identified problem representations (section 3.1.1.), as well as the constraints imposed on thinking and being with regard to possible development trajectories envisioned for the BSmR and stakeholder non-financial resources (subchapter 3.2.) on the other. As evidenced in the selected policy documents, the complex challenges together with ambitious policies and actions represented through the use of:

- adjectival modifiers, such as: joint, shared, common, collective, concerted, mutual, integrated, bottom-up, government-driven or professional;
- prefixes, such as multi-, cross-, inter- or trans-; and
- gerund structures, e.g. aligning; embedding; anchoring; mainstreaming; matchmaking; circular thinking; long-term thinking; place-based policy-making, with all of them underscoring the importance of synergies, overlaps, flexibility, proportionality, adaptation, active involvement and common responsibility (ISSC/UNESCO 2013),

appear to be clearly at odds with their embeddedness in the "tired and compromised 'sustainable development' discourse" (Stibbe 2014: 124), with the nebulous idea of development, human-ecosystem separation, as well as market-oriented education and training. As a result, the identified problem representations with their underlying assumptions and constraints have hardly provided a space for rethinking the human-ecosystem relation, development trajectories and stakeholder non-financial resources as represented in the macro-regional approach, particularly when we bear in mind that not only is the BSmR a macro-region in the making (Gänzle and Kern (eds.) 2016) subject to ongoing modifications but also a complex

social-ecological system, which "involve[s] collaborative learning and problem solving, multiple sources of expertise generated by both scientists and non-academic knowledge holders who co-design, co-produce and co-implement new knowledge" (ISSC/UNESCO 2013). In other words, the ambitious expectations and complex challenges framed in terms of the above prefixes and gerund structures may hardly be matched by the representations of the BSmR and its governance as evidenced in the selected policy documents, particularly in the context of the complex social-ecological challenges, with the climate crisis as an all-encompassing threat. Therefore, the aim of this chapter is to lay the foundation for rethinking the BSmR along social-ecological lines by reconnecting it to the biosphere (see Folke et al. 2016). Hopefully, it may partly address some of the macro-regional problems represented as inadequate macro-regional relevance (macro-regional characteristics and governance, and macro-region-specific challenges) deficient coordination and integration, as well as commitment, ownership and political backing (subchapter 3.1.). Such a capacity-building approach appears to be in line with:

- Stibbe (2021, 2015)'s suggestion to search for positive and inspiring stories-to-live-by as they are "the secret reservoir of values" (Okri in Stibbe 2015: 1) "(…) bear[ing] tremendous creative power. Through them we coordinate human activity, focus attention and intention, define roles, identify what is important and even what is real" (Eisenstein in Stibbe 2015: 1);
- Stibbe's idea of re-minding, i.e. explicitly calling attention to the erasure of an important area of life in a particular text or discourse and demanding that it be brought back into consideration (Stibbe 2015: 162);
- Pollock (2016: 13)'s observation that "we are still very much in transition from one story to another and experimenting as we go along"; and
- Raworth (2017)'s recommendation: "Change one word and you can subtly but deeply change attitudes and behavior."

All of the above observations and recommendations appear to resonate with Bacchi (2009: 237-8)'s urge to create the space for challenge (spaces for interrogation and correction) in which dominant discourses shaping problem representations, their underlying premises and ecocultural implications may be challenged and replaced not only by social or political elites but also 'common people.' Such

a reflexive space has the potential to create discomfort or even unease, with the aim of unmasking naturalized, taken-for-granted problem representations, and to facilitate the search for alternative understandings, framings and actions constituting specific conditions for both humans and non-humans (Stibbe 2015, Bacchi 2009).

Being in-between stories (Pollock 2016: 6) has further been accentuated through the liminal and transitional character of this subchapter straddling the need to reconceptualize the BSmR through reconnecting it to the biosphere, and the constraints imposed on living (likely lived effects) in the BSmR through the lens of social-ecological resilience. It is also noteworthy that both this subchapter, as well as chapter 4 is based on the following assumptions:

- Both of them offer a framework rather than a model or theory to envision the BSmR and its governance in alternative ways as a common conceptual framework identifies universal elements, basic working parts and critical relationships among these elements, thereby organizing diagnostic, descriptive, and prescriptive inquiry (McGinnis and Ostrom 2014), which corresponds to the nature of the Baltic Sea space to be explained below, as well as the need to create a supportive space with enabling conditions for reimagining the macro-regional governance of the Baltic Sea (chapter 4);
- The identified problem representations, their underlying assumptions and effects need to be read in connection with one another in order to determine the degree of internal consistency of the EUSBSR in light of its declared commitment to the interrelatedness of its objectives (e.g. Action Plan 2009: 4); and
- The search for creating a supportive space with enabling conditions for reimagining the macro-regional governance of the Baltic Sea has been informed by my ecosophy and the ocean perspective (section 3.1.2.), with the view to ensuring the correlation between the expectations and challenges formulated with regard to the BSmR, and the implicit problem representations and the social-ecological conditions constituted by them (subchapter 3.1. and 3.2., respectively).

The nature of the Baltic Sea space

Before any attempt at the reconceptualization of the BSmR is undertaken, it may be advisable to delve into the very nature of the marine space revolving around the inherent fluidity of the sea. As "an actor in its own right," the marine ecosystem is represented as dimensional, powerful, replete with life and infused with human experience (Lehman 2013 as cited in Jay 208: 456), which carries the following implications:

- Multiple and complex interactions between humans and the marine ecosystem due to the three dimensional nature of the space to be governed, including its temporal variations (Jay 2018: 457), which is in line with Stel (2013)'s 4D perspective of the ocean space or even a five-dimensional approach (including the air above the sea and the substrate) (Gee 2019: 34);
- Often-transitory configurations and human interventions due to the unbounded, dynamic and mobile nature of the sea, and many of its occupants typically with a distant reach (Jay 2018: 455-456; also Gee 2019; Stel 2013; Pyć 2011: 100; Wolnomiejski and Pawlikowski 2006; Tanaka 2004); and
- Far-reaching and unintended consequences generated through human intervention owing to the sensitivity to change demonstrated by the marine space (Jay 2018: 457; also Pyć 2011: 100; Wolnomiejski and Pawlikowski 2006).

Therefore, in light of the above characteristics, it seems to be reasonable to move away from perceiving the Baltic Sea predominantly in terms of an environmental problem or a resource to be exploited, and to embrace the notion of lively and relational space (Jay 2018) when problematizing its macro-regional governance, which, needless to say, may have a number of implications. Apart from de-centering humans through the (re)introduction of "the non-social into the ontology, in the form of active, non-human entities" (Jay 2018: 456), the perception of the Baltic Sea in terms of lively and relational space may generate the following reconfigurations along the human-ecosystem line:

- The co-evolution of actors and outcomes occurring in the context of 'undefined becoming,' with new interconnections analyzed without

predetermined ends (Boelens and de Roo 2015 in Jay 2018: 463), or "(…) of becoming, existing as nodal moments, temporary permanencies or temporary constellations within ever-changing often far-reaching flows and networks" (Haughton and Allmendinger 2015 as cited in Jay 2018: 454; also Stel 2013); and

- "a heightened level of human connection with surrounding materiality, forming an assemblage of entangled interactions" (Jay 2018: 456; also Stel 2013).

In other words, the very nature of the Baltic marine ecosystem with its multiple interactions across spatial and temporal scales needs to be translated into a growing awareness of the Baltic Sea space as a lively space, "where time is breathed in, taking space from being understood as a static and momentary image to a moving and continually changing entity" (Massey 2005 as cited in Jay 2018: 462). Additionally, the reconceptualization of the Baltic Sea space as a lively space may reconfigure the relation between people and the Baltic Sea in terms of co-producers of spatial patterns and outcomes through the integration of both the non-human and the material into the macro-regional governance (Jay 2018: 456; see also Stibbe 2015). This, in turn, underscores the importance of more active imagery facilitating the transition from technically-oriented attempts for achieving fixed goals in uncertain and complex governance settings to more communicative and shared approaches for addressing complex issues (Jay 2018: 463; also Pollock (2016)).

The appreciation of the fluid, dynamic and interconnected nature of the sea as shown above has been foreshadowed in section 3.1.2. (the ocean perspective). As the Baltic Sea is an integral part of the Global Ocean, the proposed ocean perspective has brought to the surface several unproblematized aspects of the Baltic Sea macro-regional governance, such as the possibility of representing the Baltic Sea as a social-ecological, life-supporting system, common heritage and a part of the biosphere, providing all four ecosystem services in the context of a meaningful human-ecosystem relationship. The inclusion of these perception-altering components into the macro-regional approach would undoubtedly correspond to the lively and relational nature of the Baltic Sea, thereby strengthening the internal consistency of the EUSBSR. However, as 'problems' are made, they may also be unmade and remade (Bacchi 2009; Bacchi and Goodwin 2016), which, in my

thesis, has taken the form of reconnecting the BSmR to the biosphere through its reconceptualization along more social-ecological lines in the hope of realigning the macro-regional trend with the notions of ecosystem stewardship and human embeddedness in the biosphere.

Reconceptualizing the Baltic Sea space along social-ecological lines

As has already been noted, in the selected policy documents the Baltic Sea has been represented as: a geographical location; a sensitive area and a fragile ecosystem; as a marine space to be administered and designated in a particular way (e.g. a Particularly Sensitive Area or SOx Emission Control Area); an environmental problem to be fixed by planning, coordination, and project-based initiatives; and a body of water to be crossed and exploited, which paints only a partial picture of the marine space. If we do agree that ecology and society are inseparable and interwoven (Bennett 2019), then it may reasonable to rethink the Baltic Sea space in terms of a social-ecological system to highlight the fact that natural and social systems should be studied as an integrated whole as people are part of nature (Guerrero et al. 2018, Folke et al. 2016). As the human uses of the marine space cover both social systems (property rights, systems of knowledge, political context, and ethics) and ecosystems combined in a complex interacting system, both social systems and ecological systems need to be governed as a unified socio-ecological system (Pyć 2011: 289), which apparently makes the delineation between social and ecological systems artificial and arbitrary (Guerrero et al. 2018, Erixon et al. 2018, Berkes and Folke 1998). It is noteworthy that social-ecological systems are also referred to as coupled systems (Arias-Maldonado 2016,), socio-ecological systems (Preston et al. 2013), "socio-ecosystems" (Herrero-Jáuregui et al. 2018), coupled human-environment systems (Turner et al. 2003) or even complex adaptive systems (Levin et al. 2013), with the list of possible human-in-nature framings being far from exhaustive. The interconnectedness of people and nature (social and ecological systems) has been highlighted through the use of such concepts as ecosystem services (humans co-creating and benefitting from nature) and resilience (the capacity of a system to absorb and utilize shocks, reorganize and then continue to develop without losing fundamental functions) (Erixon et al. 2018), which may facilitate the understanding of the ways in which humans affect, and are affected by, nature (Herrero-Jáuregui et al. 2018).

Apart from resilience, social-ecological systems as complex adaptive systems possess emergent properties[27] (Herrero-Jáuregui et al. 2018), as well as clearly point toward a relatively low proportion of truly intact ecosystems, which necessitates operating at the social-ecological interface to fully appreciate the complexity of the anthropogenic transformations (Herrero-Jáuregui et al. 2018, Arias-Maldonado 2016). Interestingly enough, research based on the social-ecological system paradigm has been referred to as an emergent "third" space transcending the mere sum of social and ecological research practices and disciplines (De Vos et al. 2019). The concept of 'thirdspace' appears to be also applicable to social-ecological systems as they are real-and-imagined spaces, simultaneously material and symbolic, real and constructed, represented in concrete spatial practices, as well as in images, which lays the foundation for transdisciplinarity and conceptual openness (Soja 1996) in an effort to create an action-oriented intermediary space to be drawn on to negotiate and resolve differences in diverse transitional cross-cultural processes **(**Bachmann-Medick 2016). All the components resonate well with the character of the BSmR being in the making (or in the state of becoming) as both a real and constructed space, which unlocks the potential for new framings, actions, and space-based politics (Bachmann-Medick 2016), thereby highlighting the need to combine social constructionism with critical realist ontology (Elder-Vass 2012). Moreover, the reframing the Baltic Sea space as a social-ecological system, with all of its linguistic, conceptual, and material implications, may entail the reconceptualizaton of humans as "stewards navigating the system from within" rather than only polluters or resource managers (Erixon et al. 2018: 2).

The idea of social-ecological systems based on an integrated human-in-nature perspective is inextricably linked to the concept of social-ecological resilience (Folke et al. 2016)) which may, in light of my ecosophy, hold promise for the BSmR in the making, and serve as an enlivening alternative to the concept of sustainable development. While 'resilience' has been defined by the Stockholm

[27] Emergent properties: collective properties, critical attributes of biological systems. The understanding of their individual parts alone is insufficient to understand or predict system behaviour. Thus, emergent properties necessarily come from the interactions of the parts of the larger system. Available at: https://www.britannica.com/science/systems-biology#ref1218077. (accessed: January 16, 2021).

Resilience Center[28] as the capacity to deal with change and continue to develop, social-ecological resilience is the capacity to adapt or transform in the face of change in social-ecological systems, particularly unexpected change, in ways that continue to support human well-being (Biggs et al. 2015 as cited in Folke et al. 2016, Folke et al. 2010), with adaptability referring to human actions that sustain, innovate, and improve development on current pathways, and transformability as shifting development into new pathways and even creating novel ones (Folke et al. 2010). Neither a top-down nor a bottom-up approach to governance, the concept of social-ecological resilience has been selected as one of the possible development trajectories for the BSmR due to its potential to:

- Embed the development and well-being of the BSmR in the biosphere;
- Highlight the dynamics occurring in the marine system across spatial and temporal scales (Folke et al. 2016; also Stel 2013); and
- Introduce the concept of human development in the BSmR "in tune with the biosphere" (Folke et al. 2016) to account for the following:
    - Dynamic planetary boundaries and ecological thresholds and tipping points at large scales, with the potential to trigger irreversible changes or even shift the Earth system into a different state (Steffen et al. 2015; Rockström et al. 2009);
    - Dynamic interactions between the governance of the marine ecosystem and the social, economic, and cultural contexts in which it takes place, with humans and their values, preferences and belief systems, as well as economic drivers, technological change, political, economic, institutional constraints and opportunities perceived to be integral parts of ecosystems (Folke et al. 2016, Cortner 2000);
    - Stewardship of the capacity of the marine system to sustain both humans and non-humans from the local to the global and across scales (Folke et al. 2016; Stel 2013), to be facilitated through an ethically-grounded development of managerial skills (Folke et al. 2016) together with adequate competencies and skills to operate under the conditions of change, uncertainty and complexity (Saltelli et al. 2014; Maxim and van

[28] Stockholm Resilience Center Resilience Dictionary, Available at: https://www.stockholmresilience.org/research/resilience-dictionary.html (accessed on: June 6, 2020.

der Sluijs 2011, Funtowicz and Ravetz 1993, Wynne 1992); and

- Continuous learning as well as generating diverse kinds of knowledge (collaboration across scientific disciplines, as well as local site-specific ecological knowledge) (Folke et al. 2016), which is in line with the need to co-design, co-produce and co-deliver knowledge in open knowledge systems, as well as the use of context-sensitive and qualitative social science knowledge about the world marked by its cultural, socio-economic, and intellectual diversity (ISSC/UNESCO (2013).

In other words, all of above-listed components of building social-ecological resilience come down to searching for biosphere-based sustainable development with people embracing the idea of stewardship in governance and operating in synergy with life-supporting ecosystems. While there are no recipes for building resilience, a series of critical questions needs to be asked about the potential winners and losers of a particular policy arrangement (Folke et al. 2016), as well as about the manner of implementing a given solution in a local or a macro-regional context, which has partly been addressed through the development of critical social-ecological literacy as suggested in the next chapter. The very introduction of the concept of social-ecological resilience, especially when occurring in a supportive space with enabling conditions (see chapter 4 of the thesis) may re-orient not only thinking and acting with regard to the development of the BSmR but also reframe the interrelated notions of human-ecosystem relation and stakeholder non-financial resources.

Ambitious (and even utopian at times) as it may sound, the perspective opened up through social-ecological resilience of humans as "dwelling in the biosphere" (Cooke et al. 2016) and as skillful stewards of the marine and terrestrial spaces in a biosphere context, as well as carriers of institutional and social memory of resource and ecosystem dynamics (Folke et al. 2016) appears to be of particular relevance in the context of likely lived effects of the problem representations identified in the selected policy documents shaping the macro-regional governance of the Baltic Sea.

Likely lived effects: Up-(de-)grading the habitability of the Baltic Sea macro-region through the lens of social-ecological resilience

Apart from having the discursive and subjectification effects presented above, the problem representations identified in the macro-regional approach to Baltic Sea governance also generate lived effects, i.e. material impacts on the bodies and lives of those affected by the conditions produced by the problem representations (Bacchi 2009). In other words, the need to investigate lived effects is based on the assumption that policies create problems representations which, in turn, produce effects in the real by materially affecting lives (Bacchi 2009: 17-18, 40). While there are various ways of investigating lived effects of a given public policy or a strategy (e.g. interviews and ethnographic studies (Bacchi 2009; Bacchi and Goodwin 2016), I have identified them through the juxtaposition of the discursive and subjectifications effects (the constraints imposed on thinking and being, as evidenced in the policy documents) on the one hand, and the trends and predictions formulated vis-a-vis the Baltic Sea in selected research publications. Their correlation has been analyzed in terms of social-ecological resilience as the policy documents shaping the macro-regional governance of the Baltic Sea point toward multiple challenges (to be) encountered in the BsmR, from climate change, through marine ecological deterioration to societal needs (e.g. health, energy or clean water).

What is more, looking at the discursive and subjectifications effects identified in the macro-regional approach to Baltic Sea through the lens of social-ecological resilience appears to be justifiable in light of the fact that the all-encompassing threat of climate change affects both humans and non-humans across the board, and it may hardly be expected that technology will single-handedly solve it (Stibbe 2015). Therefore, this global-local challenge needs to be framed in terms of a predicament rather than a problem to be fixed. The acceptance of the predicament frame is, in turn, compatible with the resilience principle revolving around the idea of adaptation and response to unavoidable developments and disruptions (Stibbe 2015: 52).

The reason why I have decided not to conduct any interviews or engage in participant observation but rather opted for extrapolating lived effects through the above-described juxtaposition instead lies in the fact that I have adopted

a comprehensive, big-picture approach to analyzing the macro-regionalization strategy for the Baltic Sea. As has already been explained, such an approach corresponds to the multi-dimensional, multi-level and multi-stakeholder nature of the governance process, as well as focuses on the multiple cross-sectoral and trans-boundary interactions and interconnections occurring in the Baltic Sea space. Conducting interviews or engaging in participant observation has turned out to be virtually impossible due to my concerns related to formulating appropriate interviewee selection criteria and ensuring the representativeness of the generated sample (see Mason 2018).

The wide range of both challenges and expectations formulated with regard to the BSmR, and presented in subchapter 3.1. clearly testifies to the importance of the marine space to a wide range of stakeholders engaged in all sorts of complex interactions at the science-policy-practice interface and policy arrangements, as well as dependent upon the marine space for continued prosperity, wellbeing and stability. However, as the identified problem representations together with their constitutive effects have shown, there are many tensions and inconsistencies to be found in the selected policy documents shaping the macro-regional governance of the Baltic Sea, which makes it virtually impossible to determine exactly what kind of material impact the identified problem representation will have on both humans and non-humans alike, let alone on particular sectors, groups of stakeholders, and their bodies and livelihoods. The difficulty to do so stems from the multidimensional nature of the marine governance issue linked to other environmental governance challenges of a local, regional and global nature (see ISSC/UNESCO (2013). Living as we do in a world where "facts are uncertain, values in dispute, stakes high and decisions urgent" (Funtowicz and Ravetz 1993: 744), I have preceded the expression 'lived effects' with the adjective 'likely' to underscore the tentative nature of the conclusions drawn in this subchapter. However, the fact that it is difficult to make predictions for such a complex marine governance challenge should not be tantamount to abandoning the whole endeavor altogether. While the degree to which individual stakeholders, communities and sectors will be impacted by both the symbolic (discursive) and material (non-discursive) aspects of macro-regional governance of the Baltic Sea may vary significantly, at the end of the day their health, wellbeing and livelihoods are

contingent on the ecological condition of the Baltic Sea as a life-sustaining system (see Stibbe 2015). Irrespective of their identity, competences, and resources, the residents (actors, stakeholders) of the BSmR share a common denominator which may take the form of a single, yet multifaceted, question of whether the BSmR, with the Baltic Sea at its heart, will remain a safe, living and sustainable space for both humans and non-humans. Therefore, for the purpose of this part of the subchapter, I have selected the term 'habitable' to refer to the BSmR as a space "providing conditions that are good enough to live in or on"[29] to capture the idea of a livable marine space. However, as the adjective 'habitable' may evoke various associations, I envision the habitability of the BSmR in terms of social-ecological resilience as explained above.

The trends and forecasts regarding the Baltic Sea space may be summarized as revolving around the representation of the Baltic Sea as a time machine (Reusch et. al. 2018). The use of the 'time machine' metaphor may undeniably evoke technical and mechanistic associations clearly at odds with the lively and relational nature of the marine ecosystem. Interestingly enough, the representation of the Baltic Sea as a 'time machine' with all of its implications for the habitability of the BSmR both for human and non-humans appears to cover all the trends and predictions made for the marine space to be found in the following research publications: Söderström (2017); Gilek et al. (eds.) (2016)**;** Gilek and Kern (eds.) (2015), as well as HELCOM (2018), and WWF (2012). Despite the understandable differences in their scope, layout, and impact, the research publications and institutional reports are unanimous with respect to the magnitude of the looming threat of climate change and its social-ecological consequences. Whether directly or indirectly, they highlight the status of the Baltic Sea as a testing ground for climate change-induced developments and regard the governance of the marine space as a litmus test of its adequacy to tackle complex social-ecological challenges. Furthermore, the metaphor of 'time machine' (Reusch et al. 2018) as used in reference to the Baltic Sea is particularly apt at conveying the spatial and temporal aspects of interconnections occurring at the global-local interface, thereby connecting the Baltic Sea to the Global Ocean.

[29] The Cambridge Dictionary of English. Available at: https://dictionary.cambridge.org/pl/dictionary/english/habitable (accessed: February 23, 2021).

Some positive developments in the Baltic Sea space notwithstanding,[30] the marine ecosystem experiences multiple stressors (climate change, warming, deoxygenation and acidification, as well as governance complexity (e.g. intersectorial conflicts and complex management scenario) (Reusch 2018: 1, 2, 6). The regional sea has been described as a particularly well-suited "time machine" for other marine and coastal areas "on a slower trajectory of anthropogenic perturbation" (Reusch 2018: 1) for the following reasons:

- its exceptional combination of an early history of multistressor disturbance and ecosystem deterioration and early implementation of cross-border environmental management, coupled with good data availability and the implementation of an advanced multinational governance and management structure to address these problems coupled with its limited habitat size and cross-border nature of regional perturbations;
- the possibility of dramatic changes occurring both gradually and abruptly ("regime shifts") under mounting anthropogenic pressure; and
- the danger of compromising positive developments (successful trend reversals) under new (worsened) ecological circumstances, e.g. with the Baltic Sea experiencing above-average rates of climate change, nutrient reduction goals running the risk of being offset by increased freshwater run-off, enhanced nutrient remineralization, and water stratification due to ocean warming (Reusch et al. 2018: 1, 2,10).

In light of the above challenges facing not only the Baltic Sea but also humans and non-humans intertwined in the social-ecological system, the governance of the regional sea needs to entail the following: a conservation-prone public attitude; macroregional policy frameworks; enhanced coordination and integration between sectorial policies to effectively tackle imbalanced power relations and opposing agendas; adaptive management approaches (sustainable stewardship management); marine stewardship and participatory approaches (more inclusive governance arrangements based on stakeholder participation, multiple perspectives and social

[30] For example: the availability of scientific data and relatively advanced understanding of the ecosystem structure and processes, as well as an informed science-based management approach, coupled with a long record of international cooperation, a well-developed governance structure and the improvement of overall ecosystem status (Reusch et al. 2018).

learning); and a dedicated ecosystem management approach to address global changes increasingly affecting the Baltic Sea space (Reusch et al. 2018: 7, 10, 11).

Taking into account the fact that the BSmR is a space particularly suited for tracking climate-induced changes with all their social-ecological consequences, the question remains whether the identified problem representations with their underlying assumptions, unproblematized aspects, and constraints (discursive and subjectification effects) as evidenced in the selected policy documents shaping the macro-regional approach to Baltic Sea governance may contribute to maintaining the habitability of the BSmR in the long-term. While it is clearly beyond the scope of this thesis to give an unequivocal answer to this question, I have nonetheless decided to juxtapose the challenges identified for the Baltic Sea space as a 'time machine' with the above-mentioned problem representations and their constraining effects, which may yield some insights into their adequacy when viewed through the lens of social-ecological resilience. I have already highlighted the tentative nature of this part of my analysis due to the complexity and uncertainty inherent in the governance of any marine space. However, the following legitimate question may generate some insights with regard to the likely lived effects to be experienced in the BSmR. In light of the fact that the Baltic Sea space has been affected by climate-induced changes, both social-ecological and global-local in nature, how may the discursive and subjectification effects of the identified problem representations materially affect the present and future habitability of the BSmR through the lens of social-ecological resilience, if we take into account the fact that:

1. The representation of the human-ecosystem relation in the Baltic Sea space reinforces the separation between humans and the marine ecosystem, turns the latter into a dangling environmental component of the sustainable development triad, thereby concealing its social-ecological and life-supporting dimension, failing to appreciate its regulatory and supporting ecosystem services (in addition to the provisioning and cultural-esthetic ones referred to in the selected policy documents), as well as its status as common heritage – all of which is clearly at odds with the need to embed the development of the BSmR and all human activities in the biosphere, as well as to accommodate the dynamics occurring in this complex marine system across spatial and temporal scales;

2. The overreliance on technological solutions may hardly be reconciled with the fact that the climate-induced social-ecological changes in the BSmR need to be framed as predicaments rather than as problems to be fixed through technology, thereby necessitating the choice of the resilience principle;
3. The prevalent goal of economic growth built into the sustainable development triad clearly clashes with the need to facilitate the stewardship of human development in the BSmR in tune with the biosphere, as well as with the importance of integrating dynamic planetary boundaries, potential thresholds, and tipping points at large scales into macro-regional development scenarios; and
4. The exclusion of ecological education and other ways of knowing coupled with market-oriented approach to education and skill development in the context of the intricacies of the science-policy-practice nexus fails to match the critical importance of developing the competencies and skills connected with biosphere stewardship (continuous learning and knowledge generation across diverse disciplines and knowledge systems about social-ecological systems, ecosystem services and their dynamics, as well as the inclusion local site-specific ecological knowledge into transformative governance in the context of uncertainty, complexity and change) (Folke et al. 2021, 2016)?

In short, the degree of fit between the social-ecological challenges (to be) encountered in the BSmR on the one hand, and the discursive and subjectifications effects of the identified problem representations on the other, is highly questionable from the perspective of ensuring social-ecological resilience in the BSmR. Admittedly, the discussion of the likely lived effects produced by the identified problem representations in the real by materially affecting human and non-human lives in general, as well as meaningful access to, and engagement in, policy-making processes at the macro-regional level in particular, may be described as informed speculation at best, and tea leaf reading at worse. However, it may be considered sufficiently reliable, given the juxtaposition made between the discursive and subjectification effects of the identified problem representations in the macro-regional strategy and the relevant scientific predictions made for the BSmR through

the lens of social-ecological resilience (Folke et al. 2016), to determine what its missing components may be in light of my ecosophy and to ensure the internal consistency of the macro-regional approach. All these interrelated cross-cutting challenges of both social and ecologial nature may impact the health and wellbeing of both human and non-human residents of the BSmR connected in a myriad of ways, as well as the life-sustaining marine ecosystem. Naturally, there are lessons to be learnt from the metaphorical representation of the Baltic Sea as a time machine, which clearly points to its two interrelated governance dimensions: resilience (Stibbe 2015) and spatiotemporality (see Stel 2014 for the 4D perspective of the ocean space). Last but not least, it should be noted that the social-ecological challenges facing the BSmR may not be confined to the its drainage basin but may be intensified through global crises (e.g. climate refugees[31]), thereby reinforcing the need to foster the understanding of the BSmR along the global-local continuum.

Concluding remarks

The aim of this liminal and transitional chapter has been to reconnect the BSmR to the biosphere along social-ecological lines, as well as to attempt to render insights into the material dimension of the Baltic Sea space in terms of the likely lived effects through the lens of social-ecological resilience. While the social-ecological approach has been selected to counter the pervasive and distorted image of human-ecosystem relations in the BSmR, as well as its implications for possible development trajectories and capacity building, the choice of social-ecological resilience has been motivated by the direct or indirect representation of the Baltic Sea as a time machine in the context of climate change. What is more, the social ecological approach and the biosphere-based governance has brought to the fore the concept of marine stewardship (Reusch et al. 2018). In light of the above, the following chapter will attempt to create a capacity-building or -enhancing space to develop marine stewardship in the context of the challenges (to be) encountered in the BSmR.

[31] The concept of 'climate refugee.' Towards a possible definition. Author: Joanna Apap. European Parliamentary Research Service. Feb 2019. Available at: https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/621893/EPRS_BRI(2018)621893_EN.pdf (accessed March 27, 2021).

4

Alternative representations of the macro-regional governance of the Baltic Sea and a practical recommendation

This chapter starts with my quest for creating a supportive space with enabling conditions for reimagining the macro-regional governance of the Baltic Sea along social-ecological lines. Then, it attempts to reconceptualize stakeholder non-financial resources to match the complexity of the Baltic social-ecological system. Finally, this chapter offers a practical recommendation in the form of critical marine literacy.

4.1. In quest for a supportive space with enabling conditions for reimagining the macro-regional governance of the Baltic Sea along social-ecological lines

The analytical results generated in this thesis have demonstrated a certain discrepancy between on the one hand the expectations formulated vis-à-vis the BSmR and the challenges (to be) encountered in the marine space, and the human-ecosystem relation, the growth-based development trajectory, and inadequate stakeholder non-financial resources as represented in the selected policy documents shaping the macro-regional governance of the Baltic Sea. Although the analysis of the likely lived effects may only be treated as informed speculation based on available scientific knowledge, it has underscored the urgent need for embedding the governance of the BSmR in the biosphere to account for multiple social-ecological developments occurring along the global-local continuum. Therefore, the aim of this subchapter is to attempt to create a supportive[32] space with enabling conditions[33] for reimagining the macro-regional governance of the Baltic Sea along social-ecological lines through visually reconnecting the BSmR to the biosphere, as well as through creating the enabling conditions necessary for the development of marine stewardship as required by the biosphere-based development scenario outlined in the previous part of the thesis. In other words, this subchapter is based on the soft space notion of a 'spatial imaginary,'

[32] The use of the term 'supportive' has partly been inspired by the Reasonable Person Model, with its emphasis on creating supportive environments satisfying people's basic informational needs (Kaplan and Kaplan 2003).

[33] The term 'enabling conditions' has been defined as centering on conditions facilitating approaches to addressing social and ecological challenges (Huber-Stearns et al 2017).

which may facilitate the creation of a preferred reality through the act of representation (Haughton and Allmendinger 2015 in: Jay 2018: 452). It is noteworthy that this subchapter and its section on critical marine (social-ecological) literacy do not constitute a collection of randomly selected ideas that I have come across in the course of my research project and found appealing. The suggestions and recommendations made in this part of the thesis attempt to tie up some loose ends in the macro-regional approach with regard to the identified problem representations and their underlying assumptions, erasures and constraints imposed on thinking and being, in order eliminate the above mentioned discrepancy. All the suggestions and recommendations with regard to the revisualization of macro-regional governance the BSmR, as well as the enabling conditions to support such a transformation (ocean (marine) literacy, (social-)ecological university, and ecocultural identity) have been informed by my biosphere-based ecosophy.

Visualizing the reconnection of the Baltic Sea macro-region to the biosphere

This section of the subchapter continues the theme of reconnecting the BSmR to the biosphere in terms of the social-ecological approach introduced in subchapter 3.3. The process of reconnecting the BSmR to the biosphere may be facilitated not only through the introduction of the linguistically-represented conceptual modifications but also through some insights gained from a multi-modal analysis, which constitutes a semiotic point of entry into the WPR-inspired analytical framework (see Bacchi 2009). Far from offering a fully-fledged multimodal approach to the analysis of the selected policy documents shaping the macro-regional governance of the Baltic Sea, I have decided to focus on the revisualization of the relation among the three objectives of the EUSBSR – the semiotic configuration which, in light of my ecosophy, may reinforce the idea of human-ecosystem separation in the BSmR, thereby oversimplifying the nature of the Baltic Sea space. In other words, the aim of using certain insights from the multimodal analysis as presented below is not to take advantage of its full potential (see, for example, van Leeuwen (1999) for the analysis of speech, sound and music; Kress and van Leeuwen (2001) for a new theory of communication in the context of interactive media; Iedema (2003) for multimodality and resemiotization), but only to visually reconfigure the relation among the Baltic Sea and the biosphere, with its multiple implications for the macro-regional governance

of the marine ecosystem. As will be shown below, such a visual reconfiguration corresponds to the notion of the Baltic Sea as a lively and relational space (see Jay 2018). In order to visually buttress the reconceptualization of the Baltic Sea space along the social-ecological lines suggested above, I have asked myself two interrelated sets of questions:

- **What is** and **why** when it comes to the visual representation of the EUSBSR objectives?
- **What if** the relation among them has been reconfigured to match the complexity of the interactions occurring in the social-ecological system, as well as to include the idea of various social-ecological limits shaping its development, and **how** may the complexity be visually integrated into the existing 'Save the sea – Connect the region – Increase prosperity' framework?

As shown below, the EUSBSR objectives to: Save the sea – Connect the region – Increase prosperity (Fig. 12 (A) and (B)) are patterned on the sustainable development triad based on the social, economic and environmental components (Fig. 12 (C)). Far from being neutral, visual representations or other semiotic resources are charged with meaning (Kress and van Leeuwen 2006, van Leeuwen 2005). The EUSBSR is no exception in this regard. Both Fig. 12 (A) and Fig. 12 (B) have an in-built separation between the components, with the former underscoring a linear relation among them, and the latter – some sort of a tentative interconnection among them highlighted through the use of partly overlapping circles. While in the context of a particular project or setting such a visual representation might be justified in the name of simplifying or breaking a complex policy arrangement or governance setting into more manageable components, it becomes highly problematic when the separation among, or the division into, the environmental, social, and economic pillars or components, constitutes an underlying and taken-for-granted assumption or a story-we-live-by. As such, it shapes and reflects our relation to the marine space, with its multiple ecocultural implications for possible development trajectories, as well as stakeholder non-financial resources, as has been identified in the context of the BSmR in the analysis of the selected policy documents.

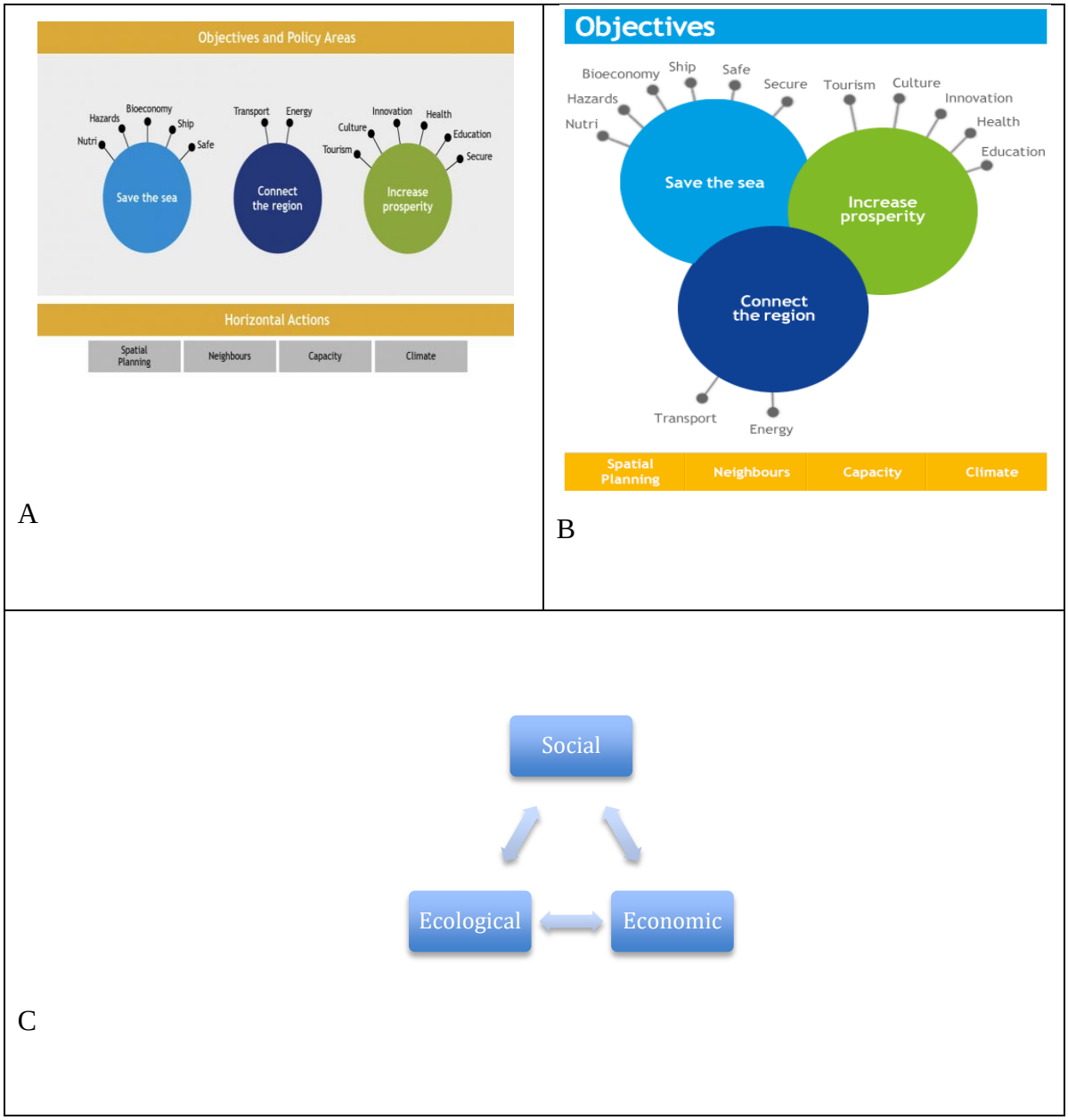

Fig. 12. The three objectives of the EUSBSR (A). Source: www.balticsea-region-strategy.eu.
Another visualization of the EUSBSR objectives (B). Source: SWD(2016) 443 final: 9.
The classical sustainable development triad based on three equal components: social, economic and ecological (C). Source: WCED 1987.

As the figures presented above are based on either a linear and separate-but-interconnected pattern or an unclear relation among the components (through partially covering a circle representing one objective with another circle), they reinforce the predominant paradigm pegging "environment" against "economy" (Bradshaw 2021). What is more, such a visual 'externalization' of the environmental component (the Baltic Sea) may run the risk of simply dropping it or failing to adequately recognize if a conflict with socio-economic objectives

arises, thereby making reconciliation between the environmental and economic strands difficult (Gee 2019: 38).

Such an approach to framing relations between people and the life-sustaining ecosystem appears to be clearly at odds with the idea of human embeddedness in the biosphere, as specified in my ecosophy. As there is no point in fighting the existing reality, and one needs to design a new model that will render the old one obsolete (Raworth 2017), I have attempted to come up with a visual representation of macro-regional governance (the EUSBSR) that has the potential to eliminate the idea of separation among humans and the marine ecosystem; to account for the constant and multiple interactions occurring between the human and ecological systems which are shaped in the context of various policy arrangements (see Van Tatenhove 2011), as well as to acknowledge the existence of a number of ecological limits within which humans engaged in the integrated governance of the marine space need to operate. Therefore, I have selected the following visual representations capturing the complexity of operating within a social-ecological system (Fig. 13 (A)) or the safe and just space for humanity (Fig. 13 (B)) to serve a source of inspiration for revisualizing the macro-regional governance of the Baltic Sea space. The former representation of the social-ecological system paradigm links the social (human components and social processes) with the ecological (ecological components and processes) through their integrated governance (management practices, adaptation, and resources), as well as adds to the mix political and economic factors, and large-scale biogeochemical conditions (Virapongse et al. 2016: 84), thereby reinforcing the idea of distinct-but-not-separate systems the governance of which necessarily entails uncertainty, unpredictability and complexity (see Funtowicz and Ravetz 1993). The latter, on the other hand, focuses instead on creating a safe operating space for humanity to thrive between the environmental (ecological) ceiling of the planet and the social foundation of the society (Raworth (2012: 4)). Although the figures offer a slightly different take on the social-ecological paradigm, they undoubtedly share a clear-cut common denominator – the symbol of a circle shaping the relation between social (socio-economic) and ecological systems, which highlights the circularity and non-linearity of the processes occurring along the social-ecological continuum, as well

as the intertwined nature of social and ecological systems or even human embeddedness in the biosphere.

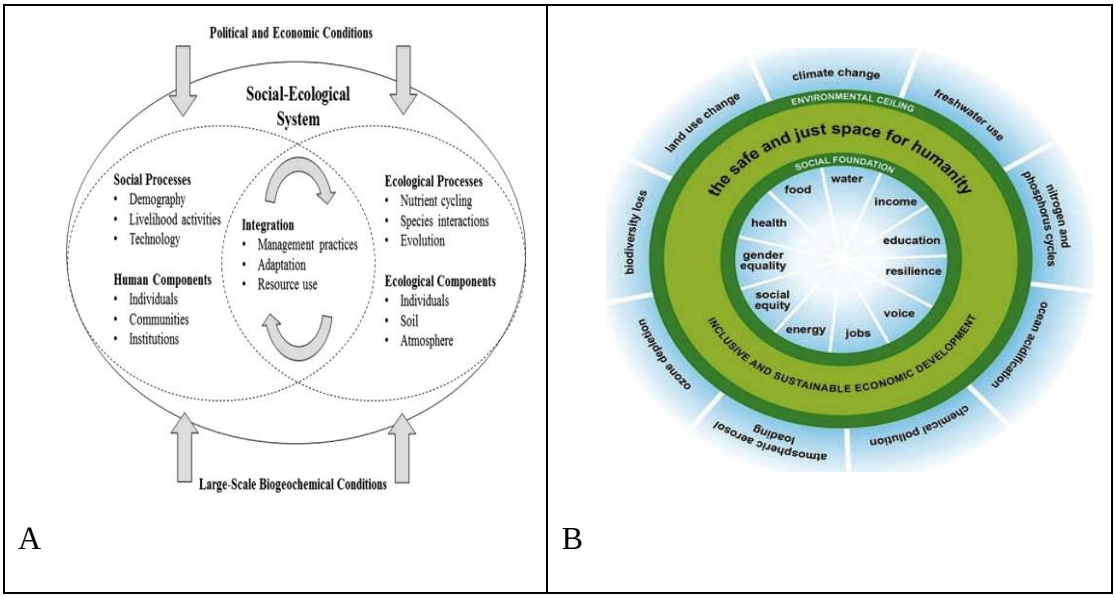

Fig. 13. Depiction of a social-ecological system (adapted from SNRE, University of Florida, (2015). (A) Source: Virapongse et al 2016: 84.

The safe and just space for humanity. The 11 dimensions of the social foundation are illustrative and are based on governments' priorities for Rio+20. The nine dimensions of the environmental ceiling are based on the planetary boundaries set out by Rockström et al. (2009). (B) Source: Raworth (2012: 4). A Safe and Just Space for Humanity Oxfam Discussion Paper, February 2012.

Therefore, driven by my ecosophy and inspired by the above-described figures, I have produced my own visualization of reconnecting the BSmR to the biosphere while preserving the original framework of the EUSBSR's objectives. Before I actually draw some insights from such a revisualization, I need to make the following reservations:

- The proposed revisualization of the BSmR along the social-ecological lines and in accordance with my ecosophy does not completely reject the visual representation of the EUSBSR objectives, which is line with Bacchi (2009)'s recommendation that particular problem representations be kept under the condition that they are subject to critical interrogation (Bacchi 2009: 238);
- The separation into social, economic and environmental components may be justified only for practical purposes; otherwise, it may be highly detrimental from the vantage point of my ecosophy when it becomes an

underlying principle guiding complex interactions along the human-nature interface; and

- It is beyond the scope of this thesis to answer the question whether the proposed changes with regard to the visualization of the macro-regional governance of the Baltic Sea, as well as to the enabling conditions envisioned to support the reconnection of the BSmR to the biosphere may be addressed within the current social order or socio-economic system or through changing it (see Cummings et al. 2018: 732) – a dilemma marked in the form of gray circles representing the EUSBSR objectives and their respective policy areas (PAs); yet without specifying whether the circles stand for the current objectives to be modified in accordance with my recommendations or the future ones to be formulated in line with a new system or social order.

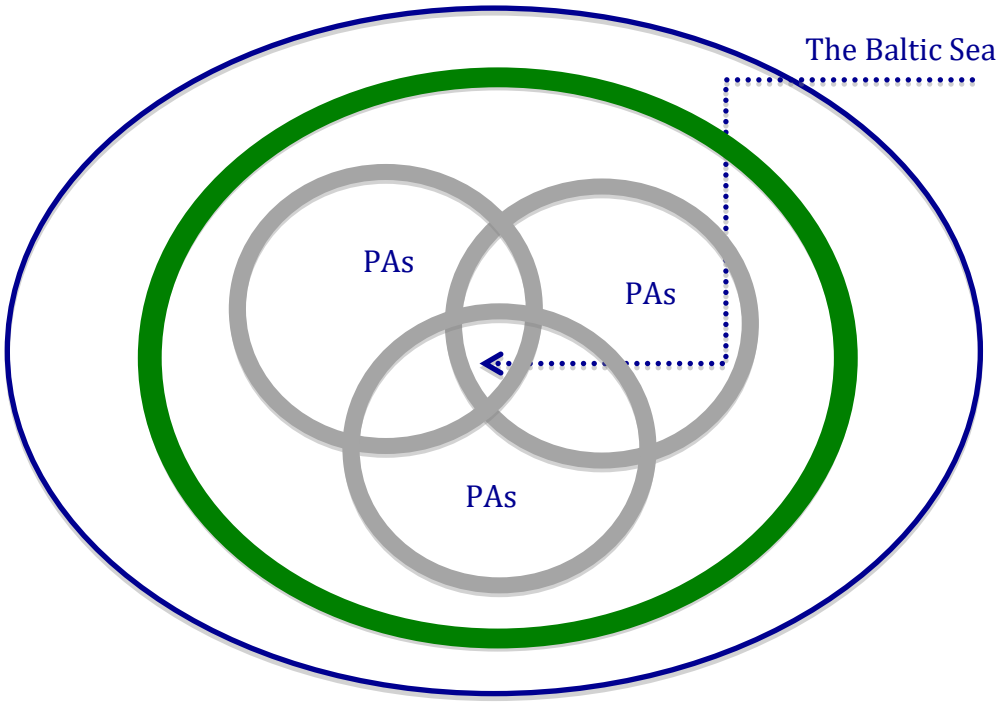

Fig. 14. A possible revisualization of the macro-regional governance of the Baltic Sea inspired by Fig. 13 (A) and Fig. 13 (B). (Note: The image does not include any Horizontal Actions as they have been incorporated into Policy Areas in the Revised Action Plan replacing the Action Plan of 17 March 2017 – SWD(2017) 118 final).

Inspired by the factors and interconnections inherent in any social-ecological system (Fig. 13 (A)), as well as by the safe and just space for humanity (Fig. 13 (B)), the design of Figure 14 has, to a large extent, been driven by the need to

incorporate into the visual representation of the BSmR the idea of circularity, non-linearity, and human embeddedness in the biosphere. To that end, the symbol of a circle has not only been used to depict the shape of the individual components but, first and foremost, to capture the relations between (among) them, which has reinforced the notion of interaction and integration, as well as non-linearity (Kress and van Leeuwen 2006: 27, 51) occurring in the governance of complex adaptive systems (Levin et al. 2013). Furthermore, the idea of reconnecting the BSmR to the biosphere has been captured through visually embedding the three overlapping circles representing the macro-regional governance of the Baltic Sea (the EUSBSR objectives), with the Baltic Sea in the area of their common overlap, in:

- The Global Ocean as the largest ecosystem on Earth, of which the Baltic Sea is an integral part (the navy blue ellipsoid representing the Blue Planet); and
- The safe and just space for humanity, with the ecological ceiling represented as the green circle (Raworth 2017).

Not only has the BSmR been visually reconnected to the biosphere (i.e. the Global Ocean with its multiple interactions, interdependencies and interlinkages occurring along the global-local continuum) but also the Baltic Sea itself has been placed at the very heart of the macro-region, as shown in the area of common overlap of the three circles representing the EUSBSR objectives. Such a visual reconfiguration has a number of implications in terms of the center-margin model of composition (Kress and van Leeuwen 2006). As the center acts as the nucleus of the information to which all the other elements are in some sense subservient (Kress and van Leeuwen 2006: 196), such a central position assigned to the Baltic Sea corresponds to its function as a life-supporting (life-sustaining) ecosystem, as well as turns the Baltic Sea into a prime mover of governance arrangements (see Kress and van Leeuwen 2006: 196), with all policy areas either directly or indirectly related to, and dependent upon, the Baltic Sea and its ecological state. The center-margin composition gathers the elements (policy areas) around the center, i.e. the Baltic Sea, by connecting them and holding together what is arranged around it and establishing a relationship of equality among these elements (see van Leeuwen 2005: 205-206). Furthermore, such a composition is based on the assumption that the elements (i.e. policy areas) "belong to, all gain their identity from, and lend their identity to the central concept," i.e. the Baltic Sea (van Leeuwen 2005: 208), which

is in line with my ontological perspective and epistemological position based on realist social constructivism (Elder-Vass 2012).

Additionally, problematizing the macro-regional governance of the Baltic Sea as a social-ecological system embedded in the biosphere has other important implications. On the one hand, connecting social systems and natural systems within the social-ecological paradigm in the context of the BSmR results in more than just compounded components that happen to be welded together but still retain their separateness, particularly when taking into account the character of "a socionatural entanglement—that is, an irreversible, complex, and increasingly hybrid socionatural system" (Arias-Maldonado 2016). On the other, these two systems have not been fused either, i.e. their distinct identities have not disappeared or the systems have not become one semantic entity, which might have rendered the fused structure no longer analyzable (see Kress and van Leeuwen 2006: 52-53 for conjoining, compounding, and fusing participants). Although my revisualization offers a relatively simple image of reconnecting the BSmR to the biosphere, it has accomplished the following tasks: the integration of the ocean perspective into the revisualization (in line with the section on the ocean perspective), and the relocation of the Baltic Sea to the center of the BSmR and its governance (in line with my ecosophy), as well as the incorporation of ecological limits (e.g. the ecological ceiling (Raworth 2017) or the planetary boundaries to operate in a safe space (Rockström et al. 2009), which may generate the following ecocultural implications:

- The Baltic Sea placed at the heart of the BSmR not only in purely geographical terms but also its ecological state treated as a prerequisite for its continued existence and wellbeing, which has been highlighted in the World Wildlife Fund's Position on the EU Strategy for the Baltic Sea Region: "In order to go beyond rhetoric, however, and actually achieve a truly integrated approach to the challenges facing the Baltic Sea the strategy must recognize that a healthy Baltic Sea is the basis for a prosperous and attractive Baltic Sea region and take an ecosystem-based approach to the management of the sea. All human activities taking place in the Baltic Sea must be governed by, and kept within the limits of, what

the ecosystem can sustain. The ecosystem approach must be the underlying principle on which the entire strategy is based." (WWF 2009);

- The Baltic Sea perceived as a life-sustaining system with its multiple interconnections along the sea-land-atmosphere interface, and inextricably linked to other marine and terrestrial ecosystems along the global-local continuum, as well as subject to both large-scale biogeochemical conditions and political and economic ones (see Fig. 13 (A) and (B));
- The Baltic Sea represented as a participant (agent) at the heart of policy-making processes, as a dynamic space affecting and being affected (Jay 2018) rather than as 'a sick patient in a stable condition' [34];
- The Baltic Sea itself to be rethought as a connecting medium, materially and institutionally linking environmental, socio-cultural and economic goals (Jay 2018: 459-460), which is in line with the very definition of the macro-region as an area imagined or constructed around a common feature (the Baltic Sea as a common regional sea) for functional cooperation to tackle common challenges (Gänzle and Kern 2016); and
- The Baltic Sea seen as a social-ecological system, with its co-evolving and intertwined social and natural systems interplaying in complex ways (Folke et al. 2016), with the biosphere perceived as the foundation for economy, culture and society, and the necessity to approach the macro-regional governance of the Baltic Sea in terms of planetary boundaries or a safe operating space for humanity on Earth (Folke et al. 2016, Steffen et al. 2015, Rockström et al. 2009). In other words, the Baltic Sea space in the macro-regional setting has been imbued with its lively and relational qualities (Jay 2018).

Hopefully, the multimodal analysis has generated some critical insights for the macro-region in the making, particularly relevant to the notion of the Baltic Sea as a time machine in the context of human-induced climate change, carrying multiple and cross-cutting implications for the social-ecological resilience of the marine space (see the analysis of likely lived effects in subchapter 3.3). However, it is noteworthy that the revisualization of the macro-regional governance of the Baltic Sea needs to be accompanied by an attempt to provide Baltic Sea

[34] The author of this comparison unknown to me.

residents and relevant stakeholders with a supportive space with enabling conditions (stakeholder non-financial resources) to deal with complex social-ecological challenges, as "people are not just interacting with but are inhabitants of the biosphere together with all other life on Earth, shaping its resilience in diverse ways, from the local to the global, consciously or unconsciously" (Folke et al. 2016). To mark the transition from pictures to words to be made in the next subchapter, the whole revisualization of reconnecting the macro-regional governance of the Baltic Sea to the biosphere in general, and to the Global Ocean in particular, may be expressed in the following manner:

> "Even if you never have the chance to see or touch the ocean, the ocean touches you with every breath you take, every drop of water you drink, every bite you consume. Everyone, everywhere is inextricably connected to and utterly dependent upon the existence of the sea." (Earle 2009: 17).

4.2. Reconceptualizing stakeholder non-financial resources to match the complexity of the Baltic social-ecological system

While the revisualization of the macro-regional governance of the Baltic Sea presented above may result in rethinking possible development trajectories together with the human-ecosystem relation along social-ecological lines, it needs to be buttressed with adequate stakeholder non-financial resources to match the complexity of the challenges (to be) encountered in the BSmR, which is line with the following observation made in the context of marine spatial planning: "(…) humans are embedded into ecological systems, subjected to causal interactions as much as the rest, yet with unique reflective capacities to bring to bear on, for example, the co-production of spatial arrangements" (Conley 1997; Murdoch 2006 ac cited in Jay 2018: 456). As such a revisualization as a stand-alone measure may not suffice to challenge the constraints imposed through the identified problem representations on thinking and being with regard to the macro-regional governance of the Baltic Sea, I have introduced three interrelated, mutually reinforcing concepts of ocean (marine) literacy, (social-)ecological university, and ecocultural identity in the hope of creating enabling conditions to address the following deficiencies identified in the selected policy documents:

- The suppression of ecological education;

- The predominant market orientation of universities; and
- The overarching 'problem' of inadequate commitment represented in terms of ownership and political backing, as well as broad and long-term involvement.

It needs to be underscored that the concepts presented below to create enabling conditions for reimagining the macro-regional governance of the Baltic Sea along social-ecological lines should be perceived in terms of processes rather than states as the BSmR is subject to an on-going formation (a macro-region in the making (Gänzle and Kern 2016), as well as shaped by social values and cultural traditions (Steffek 2009), which appears to be in line with the concept of culture transferred from the realm of a state or an entity to the category of processes (Bauman 2017).

While there is no guarantee that the supporting concepts will provide enabling conditions for finding a new story-to-live-by (or stories-to-live-by) in the BSmR, they have the potential to fill the void between the social-ecological challenges at hand, to aid in rethinking the role of academia, and to align certain worthy concepts with the social-ecological paradigm. As is the case with other categories used in this thesis, the supporting concepts have been divided into separate categories only for the sake of clarity. In reality, they are so interconnected and mutually constitutive that considering them in isolation does not do justice to the complexity of the whole endeavor. However, for the purpose of this analysis, the concepts of ocean (marine) literacy, (social-)ecological university, and ecocultural identity have been arranged in such an order to reflect the transition from skill development to ensuring long-term commitment, with the capacity building process also capable of following a different sequence.

Ocean (marine) literacy

As a response to the suppression of ecological education and the introduction of the vague concept of education for sustainable development as identified in the selected policy documents, I recommend that ocean (marine) literacy be fostered in the BSmR as one of the basic skills to be mastered in the context of the complex challenges (to be) encountered in the BSmR. In a nutshell, ocean literacy is defined as an understanding of the importance of the ocean to humankind (i.e. understanding of the ocean's influence on you – and your influence on

the ocean) within the framework of the Essential Principles and Fundamental Concepts about the ocean.[35] By analogy, an ocean-literate person "understands the Essential Principles and Fundamental Concepts about the ocean; can communicate about the ocean in a meaningful way; and is able to make informed and responsible decisions regarding the ocean and its resources" (Ocean Literacy 2020). It needs to be emphasized that the term 'ocean literacy' (or ocean (marine) literacy) is used in reference to the Baltic Sea to underscore the fact that the sea is part of the Global Ocean as the largest ecosystem on Earth, with its multiple interactions with the atmosphere and terrestrial ecosystems, thereby linking the global perspective to regional, national and local actions. Particularly, the first ocean literacy principle stating that Earth has one big ocean with many features (Ocean literacy 2020) is useful as it challenges the perception of the Baltic Sea as not a genuine sea. Applicable, mutatis mutandis, in the context of every marine ecosystem, ocean literacy covers not only knowledge acquisition and understanding development in the realm of human-ocean interconnections but also entails meaningful communication, and informs choices and decisions made with regard to marine ecosystems, which is clearly in line with older approaches to education in the Baltic Sea region (e.g. Baltic 21E) or the more recent endeavors, e.g. the Sustainable Development Goals.[36] Furthermore, the introduction of ocean (marine) literacy into the macro-regional context does not only fill the void identified in the selected policy documents shaping the macro-regional approach to the Baltic Sea but also corresponds to a reimagined mission for universities and other institutions of higher education vis-à-vis the complex social-ecological challenges envisioned in the selected policy documents.

(Social-)ecological university

In order to expand the role of academia beyond just fostering entrepreneurial mindsets and skills to cater mainly for labor market demands as proposed in the selected macro-regional policy documents, I recommend that academia as a whole give priority to comprehensive sustainability education based on:

[35] Ocean literacy. Available at: https://www.seachangeproject.eu/seachange-about-2/ocean-literacy. (accessed: November 10, 2019).

[36] The 17 Goals. The UN Department of Economic and Social Affairs. Sustainable Development. Available at: https://sdgs.un.org/goals (accessed: March 2, 2021).

- Holistic systems thinking, ecological consciousness uniting cognitive, affective, imaginative, sensory, esthetic, intuitive, and spiritual perspectives;
- A shift in consciousness toward valuing the wellbeing of all lives and the natural world;
- Transformative learning that integrates relational, reflexive, systemic, and action-oriented approaches, all of which needs to be aimed at cultivating an ethic of care (values, attitudes, beliefs); fostering resilience and regeneration (knowledge and skills); and advocating for life's flourishing (informed action) (Armon 2020a: 19-20, 23).

Academia appears to be in dire need of such a transformational change in the context of economically-driven, performance-based and technological ways of thinking and operating, as well as university policies, curricula and operations based on unsustainable rather than sustainable models and assumptions (Armon 2020a: 20, Armon 2020b: 232; Shaw 2022). Therefore, it is my strong belief that problematizing education in the BSmR in terms of the above approach may help align it with the multi-level and trans-boundary challenges (to be) encountered in the marine space. Therefore, the idea of the ecological university (Barnett 2018) may serve as a source of inspiration and a goal to strive for in the development of the macro-regional education, both formal and informal. As an attempt to "forge new relationships between the university, humanity and the world (in its fullest sense)" (Barnett 2018: 14), as well as to embrace its role in developing a strong institutional culture of sustainability and in reconnecting humans to the biosphere (Salvioni et al. 2017, Colding et al. 2017), the ecological university may be best conceptualized in terms of the following spaces:

- … as a real, embedded and interconnected space: Interconnected with several zones of the world, the ecological university is implicated in the following seven ecosystems: knowledge, social institutions, persons, the economy, learning, culture, and the natural environment (Barnett 2018: 21, 22). While each university appears to be placed differently vis-à-vis these seven ecosystems, they are integral to its operations. Moreover, diverse ecological opportunities arising for each university are linked to its sense of embeddedness of humanity in all the systems of the world, both human and non-human (Barnett 2018: 18), which perfectly corresponds with

the concept of social-ecological systems proposed by Berkes, Folke, and Colding (eds.) (1998). As a glonacal institution, the ecological university operates at different levels and develops in multiple directions (Barnett 2018: 36, 114);

- … as an ethical, engaged and trans-engaged space: The university of the 21st century is perceived as an institution having an active concern for the whole Earth, and even the universe, i.e. the wellbeing of all the ecosystems (Barnett 2018: 21-22). Such a view clearly corresponds to Sally Weintrobe's concept of the culture of care and uncare analyzed in the context of global social-ecological challenges discussed within the framework of liquid modernity (Bauman et al. 2017). As an ethical institution, the ecological university bears responsibility for the ecosystems it is embedded in, and assists in restoring them to good health (Barnett 2018: 21). Not only does its engagement concern the seven ecosystems but it also takes the form of its active networking with its local community and reaching out to the wider citizenry and civil society at the global, national and local levels (Barnett 2018: 173, 175). Furthermore, the operations of the ecological university entail: promoting cooperation among various disciplines; identifying its possibilities in and across the world; engaging with the world across all seven of its ecosystems; orienting itself toward specific communities, as well as advancing human understanding in those communities, e.g. in urban situations in the vicinity of the university; and including the challenges of the world in its curricula. The ecological spirit of such a university at different levels of its operations can be observed through its transformation, open conversations, and continuing co-production of knowledge (Barnett 2018: 51-52);
- … as an open and inclusive space: The ecological university can be characterized by a double openness: the openness of mind and of society (Barnett 2018: 19), which highlights the need for different legitimate perspectives and entails cooperation among experts, non-experts, local communities, civil society, and the global community. Such an open approach appears to be in line with the idea of extended peer community proposed within the framework of post-normal science, according to which

the quality of scientific inputs to the policy-making process depends on the participation of an 'extended peer community,' i.e. all stakeholders (scientists, policy-makers, and the public) affected by a given environmental governance issue (Funtowicz and Ravetz 1993: 744). In other words, the extended peer community is represented not only by experts holding some form of institutional accreditation but also by all individuals having an interest in the resolution of the issue (Funtowicz and Strand 2007); The aim of the open dialogue is to discuss the quality of scientific evidence and policy proposals according to both scientific criteria and the non-expert knowledge of the world (Maxim and van der Sluijs 2011: 491). The idea of the extended peer community to be found in the philosophy of the ecological university also makes space for indigenous, non-mathematical ways of knowing and modes of understanding (Barnett 2018: 97);

- … as a critical space: The ecological university accepts the responsibility to help its students in the 21st century to become global citizens (also known as ecological and lifewide learners, self-sustaining learners, nomadic learners) who move across different learning spaces (on / off campus) and learn across multiple spaces of their lives, as well as participate in the wider global world of learning. In order to assist students in becoming reflective about the dimensions of the world and in acquiring multiple learning experiences, the ecological university needs to encourage critical thinking and action (Barnett 2018: 123-137). The issue of educating students as self-reflective world citizens has also been raised by Martha Nussbaum (2010), who has underscored the potential of the humanities at all levels of education to create competent, empathetic and knowledgeable global citizens having the ability to criticize authority and to cultivate sympathy for the underprivileged, as well as to develop competence to tackle complex global challenges;
- … as a creative, imaginative and transdisciplinary space: The identification of each university's ecological possibilities requires creativity, imagination and institutional fearlessness. It is linked to the perception of the world as characterized by complexity, multiple layers, and interconnections, as well as having a real dimension (Barnett 2018). Such a world conception is

> shared with both Nordic ecophilosophy and critical realism whose common ground consists, among others, of: critical realist ontology; the world seen as differentiated, stratified and consisting of open systems; interdisciplinarity; and non-dualism between humans and nature (Høyer and Næss 2012: 15). As for the complexity and uncertainty of the world, the ecological university is simultaneously implicated in many systems characterized by a non-linear set of interactions within and across systems the outcome of which is hard to predict (Barnett 2018: 47). Therefore, it is crucial to integrate various disciplines and in particular highlight the role of the humanities in understanding ecological crises (Tyburski 2013). As there are multiple fields and interests interacting in the university setting, the ecological university as a transgressive institution needs to engage across diverse disciplines, ecosystems, institutions, practices, persons and the world (Barnett 2018: 46, 53).

Running counter to the notion of the entrepreneurial university (Barnett 2018), i.e. the predominant representation of the role of universities in the BSmR, the multidimensional view of the academic space embraces the fact that university campuses are in fact urban spaces whose ecological and social interconnections with their local communities and surrounding areas need to be supported (Erixon et al 2018), which may be facilitated through shifting unsustainable mindsets and behaviors into sustainable thinking and living on campuses and in communities (Armon 2020b: 232). Therefore, reimagining the role of academia along these lines in the Baltic Sea macro-regional context would undoubtedly take the discussion about sustainability at university campuses to the next level through the introduction of an integrative approach to sustainability encompassing curriculum, campus, community, and research (Leal Filho et al. 2015). Based on its permanent openness, its concern for the local community and the implications of the project for the wider world, as well as the identification of unforeseen possibilities and working across disciplinary boundaries and spatial scales (Barnett 2018), such a reorientation of the idea of the university in the BSmR may accommodate the following ambitions deemed highly relevant in the context of the challenges (to be) encountered in the BSmR as identified in the selected policy documents:

- The importance of dual thinking, i.e. the combination of both systematic (logical, conceptualized), as well as associative (creative, imaginative and emotional) modes of thinking in the process of scientific knowledge production, which underscores the mutually supportive relation between arts and science (Scheffer et al. 2015), as well as corresponds to the concept of abstract, relative and relational space to be experienced (empirically observable), conceptualized (cognitively represented), and lived (imagined; approached through emotional and cultural engagement) (see the Harvey-Lefebvre matrix (Nash 2016: 149, Nash 2018) in subchapter 2.6;
- The search for transdisciplinary ways of approaching environmental governance challenges (Finke 2017) or even undisciplinary ones (Haider et. al 2017), which provides a space for joint collaboration of early-career researchers with early interdisciplinary backgrounds to match the complex nature of today's sustainability challenges through an iterative and reflexive process that balances methodological groundedness and epistemological agility. Far from erasing the boundaries between various disciplines, the undisciplinary process, in my view, attempts to unbreak the artificial divisions among them in the spirit of concilience capturing the sense of unity among scientific disciplines (Wilson 1998). Not only does such a ground-breaking approach to knowledge production reflect the nature of ecosystems as open, changing, and complex systems including humans and their values and preferences but it also "drop[s] the artificial distinction between the biophysical and social sciences, and the hard and soft sciences, and speak[s] just of science" (Cortner 2000: 26, 27). What is more, engaging in a trans- or un-disciplinary context while exploring the human-biosphere interface may help identify multiple synergies and overlaps among various disciplines, as well as generate unexpected and highly relevant questions and insights (see Berger 2014 for the power of inquiry to spark breakthrough ideas); and
- The adoption of the natureculture paradigm (Harper 2016: 94, 95-96, 99, 102) as:
    - Both a theoretical and practical tool for transdisciplinary analysis of the planet's social, cultural and environmental complexity;

- A wider, cross-disciplinary multi-area striving for the dissolution of the boundaries between the sociocultural and the ecological while searching for connections and overlaps in both the problems and the solutions;
- An attempt to challenge the Western nature-culture dichotomy juxtaposing the 'human' (cultural, linguistic, anthropological, social, the anthroposphere) and the non-human or the natural (environmental, ecological, green, animal, vegetal and the ecosphere) in both theory and analysis, which corresponds to the concept of the natureculture continuum as evident in new human-non-human linkages (Braidotti 2019: 35); and
- A move toward a holistic, systemic, integrated natureculture perspective which enables one to navigate regional interests in the context of global challenges, which is clearly resonates with the ecological condition of the Baltic Sea as a time machine (Reusch et al. 2018) in the context of human-induced climate change.

Apart from the sustainability-related function of academia in the BSmR as reimagined above, universities may also play a role in creating a regional identity in the macro-region through their exceptional position as places of the regional discourse which foster a regional sense of community, and contribute to building the 'learning region,' as well as facilitate strong higher education networking (Lindroos and Musiał 2014, Ewert 2011, Musiał 2006). Although the institutional and representational frameworks and scientific foundations appear to be in place in the BSmR, the recognition of a common Baltic identity appears to be lacking (Henningsen 2011). While the documents shaping the macro-regional approach to Baltic Sea governance problematize the issue of identity in the BSmR in terms of regional identity, regional brand and we-feeling as has been shown in the subchapter on the constitutive effects, the identified problem representations focusing on the process of building an identity for the BSmR have failed to account for another type of identity that is not only social or cultural in nature but also ecological (Milstein and Castro-Sotomayor (eds.) (2020)), thereby having a tremendous potential to inform along social-ecological lines the process of regional identity formation currently underway in the BSmR.

Ecocultural identity

Based on a simple, yet often contested, assumption that humans are both cultural (intellectual) beings and biological (ecological) organisms embedded in life-supporting systems, the concept of ecocultural identity may be explained as follows: "all of us, each and every one, are always participants in crisscrossing sociocultural and ecological webs of life, whether consciously or not" (Milstein and Castro-Sotomayor 2020a: 16), which reiterates the main tenets of the social-ecological paradigm, i.e. human interlinkages and interdependencies with the natural world. Through widening the human perception of selfhood, the concept may aid in creating an immersive space in order to account for more-than-human intersectionality, to bridge the nature-culture divide, as well as to underscore the social, cultural, economic, political and ecological aspects of identity (Milstein and Castro-Sotomayor 2020a). Both universal and culture-specific, individual and collective in nature, the concept of ecocultural identity may not only expose one of the most detrimental myths our unsustainable civilization is based on but also integrate both cultural dimensions and youth perspectives, as well as open a space for alternative ways of thinking about human-nature relations (see Stibbe 2021, 2015, 2014a, 2014b). Although ecocultural identity is an old concept, it has virtually been erased from academic and public discussions when compared to the myriad of identities discussed in various settings: local, national, regional, macro-regional, supranational or international (Milstein and Castro-Sotomayor 2020a).

The notion of identity often co-occurs with the one of citizenship, and the EUSBSR is no exception in this regard. As the concept of active citizenship has been invoked in the context of PA Education – Developing innovative education and youth (Action Plan 2013), it might be advisable to realign this worthy concept with the social-ecological paradigm as recommended in this thesis. Therefore, I suggest that the concepts of environmental and ecological citizenship be reflected upon with the aim of lending the vague concept of active citizenship more precision and concreteness to correspond to multiple social-ecological challenges (to be) encountered in the context of the macro-regional governance of the Baltic Sea. As might be expected, both of these terms, are highly contested, as will be shown in chapter 5. However, in the context of the macro-regional governance of the Baltic

Sea it may be useful to tap into their perception-changing potential and to rethink rights and obligations formulated with regard to the interactions occurring at the human-environment interface and their wide-ranging implications (skills, attitudes, choices, and behaviors) (Pallet 2017, Dobson 2007). Mutually reinforcing as they are, the concepts of environmental citizenship and ecological citizenship differ in certain respects, with the former focusing on the contractual responsibilities and territory of the state; the relationship between the state and the citizen; and contractual rights and entitlements within the public sphere, as well as entailing the extension of rights-based discourse to cover environmental rights (Dobson 2003 as cited in Humphreys 2009: 171-172), and the latter highlighting non-contractual responsibilities based on the concept of the ecological footprint, i.e. the environmental impact of humans on ecological systems (Dobson 2003 as cited in Humphreys 2009: 173).

The urgency of creating a supportive space with the above-described enabling conditions becomes even more apparent in the context of complex governance settings and policy arrangements, including but not limited to marine spatial planning (Saunders et al. 2019, Jay 2018, Pyć 2016) or the conscious travel approach with its emphasis on regenerative economy (Pollock 2016), with relevant stakeholders (actors, residents) having multiple identities and belonging to multiple discourse communities (see Jopek-Bosiacka 2010 for the definition of a discourse community; and also Saltelli et al. 2014 and Cortner 2000 for the blurred distinction between scientific communities and policymakers). However, the question remains as to how the above-outlined concepts and suggestions may be translated into practice to ensure that the EUSBSR:

- Provides education and training matching the complexity of the social-ecological challenges at hand; and
- Counteracts tokenistic participation (Ehler et al. 2019, Flannery et al 2018) through facilitating real and meaningful engagement of diverse stakeholders.

Therefore, in order to enliven the marine space, as well as to ensure the internal consistency of the macro-regional strategy, a practical recommendation is made with regard to building capacity in the BSmR in the form of developing critical marine literacy, which will be explored below.

4.3. Critical marine literacy: Practical recommendations

Outlining a proposal for developing critical marine literacy in the context of the macro-regional governance of the Baltic Sea, this subchapter constitutes my practical point of entry into the WPR-inspired analytical framework (see Bacchi 2009). Not only does it follow Stibbe (2018, 2015, 2014)'s recommendation to redesign educational programs in line with one's ecosophy but it may be extremely useful for the development of marine citizenship and stewardship in complex governance arrangements involving a marine space and its resources (see Kelly et al. 2019 for the interconnections among ocean literacy, marine stewardship, citizen science, and social license to operate). Intended as the blueprint for honing crucial sustainability-related skills, this subchapter offers a possible practical application of the insights gained through the integrated analysis based on Bacchi (2012, 2009)'s WPR approach to policy analysis, and Stibbe (2018, 2015, 2014)'s ecological analysis of discourse.

Although the content of a critical marine literacy development program, as well as the context and manner of its implementation may vary significantly, it is advisable to conceive of critical marine literacy as:

- A set of transferrable skills relevant and useful across various areas of life; and
- An on-going and never-ending process rather than a state or an accomplishment.

What is more, the degree to which such literacy will be developed may differ significantly among actors having multiple identities and performing different roles (see Pollock 2016: 73 for the roles played by stabilizers, visionaries, and bridge builders in the transition from an old to a new model for how we live on earth).

While subject-matter knowledge is a prerequisite for marine literacy, it appears that a critical approach to the study of the human-nature connection is needed to ensure full marine literacy in the context of the BSmR. Therefore, the adjectival modifier 'critical' has been added to the name of the literacy to highlight the need for critical thinking and critical language awareness, as will be explained below. While ocean literacy is a widely accepted term, I have decided to use the term 'marine literacy' to explicitly refer to any marine ecosystem. Moreover, the type of literacy to be

developed in the macro-regional context may also be termed as critical social-ecological literacy, with the modifier 'social-ecological' used to account for the macro-regional strategies developed around a common terrestrial feature rather than a marine ecosystem. Needless to say, the distinction made between marine (or ocean) literacy and social-ecological literacy is artificial and arbitrary as all the ecosystems in the biosphere are inextricably linked, with the Global Ocean embracing 97% of the biosphere (Earle 2009). The practical recommendation has been divided into three categories presented in the form of bullet points: the purpose, components, and predicted outcome of critical marine literacy.

The purpose of critical marine literacy is to:

- Facilitate the development of alternative scenarios, social-ecological awareness, and critical sustainability skills, as well as bottom-up governance (ISSC/UNESCO (2013);
- Find a common ground amid unavoidable conflicts and friction due to the culture-specific, system-bound, context-dependent nature of the macro-regional governance of the Baltic Sea; and
- Help stakeholders envision alternative scenarios (Stibbe 2015, 2014; Bacchi 2009).

The components of critical marine literacy

Rather than reinventing the wheel, I recommend that the following skills that may be honed in readily available courses and other settings fall under the umbrella term of critical marine literacy:

- Marine (ocean) literacy as defined in the previous part of the subchapter, which also enhances interactions with the ocean through experiential learning to nurture marine stewardship (Guest et al. 2015);
- Sustainability skills, including: commons thinking; systems thinking; new media literacy; grounded economic awareness; advertising awareness; emotional well-being; a learning society; citizen engagement – all of which aim at empowering people to read society critically, and to challenge unsustainable development trajectories and social structures (Stibbe and Luna 2009); and

- The stories-we-live-by (Stibbe's 2015 book, as well as an online course in ecolinguistics), i.e. the fundamental stories that societies are based on to be revealed through the analysis of linguistics clusters that form particular worldviews or 'cultural codes' (Stibbe 2015, 2014a, 2014b), and critically analyzed from an ecological perspective and in terms of their potential to destroy or preserve life-sustaining relations among humans, non-humans, and their natural environment.

Predicted outcome of developing critical marine literacy may be as follows:

- Ocean-literate citizens likely to embrace the role of marine stewards and to translate knowledge into action (Guest et al. 2015);
- Critical language awareness (critical understanding of how language works in various social contexts) as language use plays a crucial role in shaping human perception, understanding, decisions, and actions, as well as access to resources and power relations among discourse participants (Fairclough (ed.) 2013; Steffek 2009; Fairclough 2003, 1995); see also Stibbe 2014a for raising awareness of the role of language in ecological destruction or protection);
- Be[ing] better lifelong learners and better adapters to change, by enabling [people] to be better questioners" (Berger 2014: 49);
- Possible increase in communicative competencies, deliberative capacities, and social learning (Fischer 2003: 201-202);
- The sense of empowerment, the awareness of various discursive practices, as well as the ability to analyze, evaluate and challenge the dominant discourses (Stibbe 2015);
- Enhanced knowledge co-production and public participation, thereby strengthening the legitimacy of governance processes (Cortner 2000); and
- BSmR stakeholders turned into real actors, innovators and game-changers rather than passive stakeholders regurgitating information provided to them in a top-down fashion (see Trench 2008, Rowe and Frewer 2000).

The above-listed predictions are clearly in line with the critical sustainability skills set out in Baltic 21E, such as: as critical thinking; making informed choices as critical and conscious consumers, professionals, decision-makers, employees, students, parents and voters; examining facts critically and participating in

discussions; reflecting critically on their place in the world and on the meaning of sustainability; envisioning alternative ways of development and living; evaluating and understanding the consequences of alternative visions; learning how to negotiate and justify choices between visions, and making plans for achieving these, as well as participating actively in community life to realize such visions (Baltic 21E).

Hopefully, such literacy may be integrated into the supportive space for reimagining the macro-regional governance of the Baltic Sea as envisioned in this subchapter (see Fig. 15 below), and become an important mainstay of the EUSBSR through its integration into curricula taught in both formal and informal educational settings for the reasons explained above.

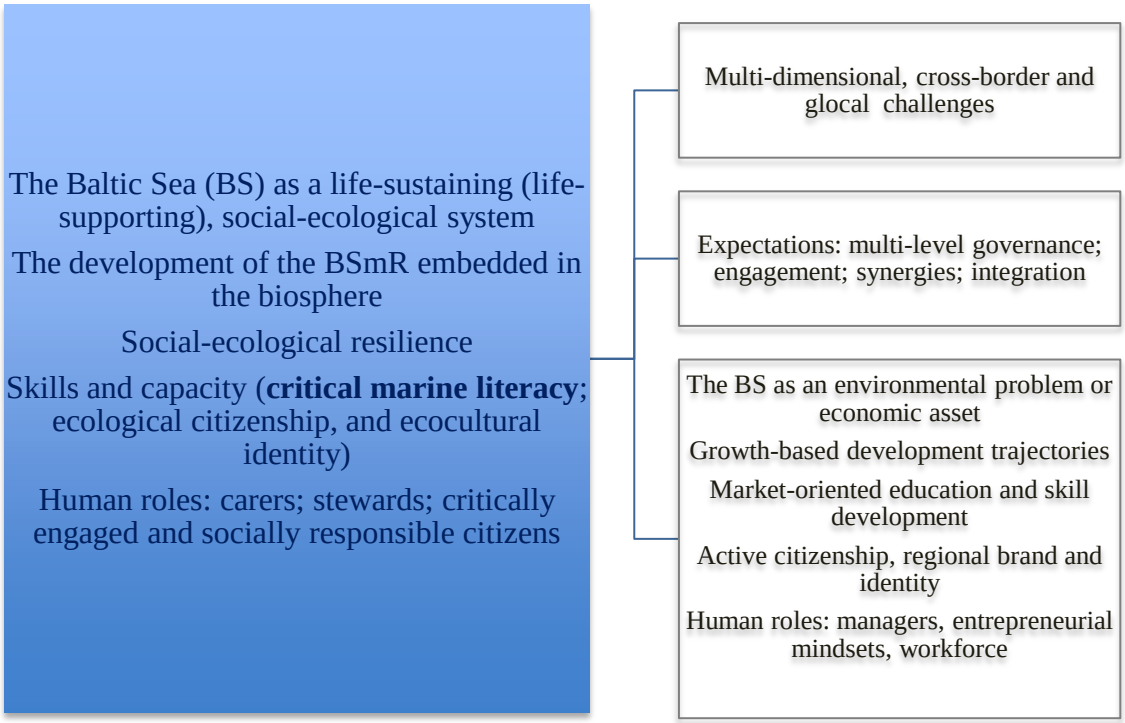

Fig. 15. My recommendation for creating a supportive space with enabling conditions for reimagining the macro-regional governance of the Baltic Sea along social-ecological lines (the left-hand side of the diagram) to increase the internal consistency of the EUSBSR in its current wording (the right-hand side of the diagram).

Concluding remarks

My quest for a supportive space for reimagining the macro-regional governance of the Baltic Sea has, to a large extent, been driven by the overarching goal to create

enabling conditions to become a good ancestor (see Krznaric 2021 for the concept of the good ancestor and thinking long term in a short-term world), which perfectly corresponds to the original definition of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987). True to the mission of the future-oriented pre-figurative humanities (Domańska 2017), the quest has highlighted the need for alternative ways of thinking, and future scenarios, as well as for achieving critical hope in the face of multiple social-ecological challenges threatening the wellbeing and stability in the BSmR. While this chapter may be seen as a partial response to the challenges and expectations formulated with regard to the BSmR in the selected policy documents, as well as a possible way to improve the internal consistency of the EUSBSR, even the most convincing and well-intentioned problem representations unavoidably qualified by the whole research process design need to be subject to critical interrogation, which will be performed in the following chapter.

5

Concluding and pointing a way forward

In this chapter, I reflect upon my main research results and the contribution I have made to the understanding of macro-regional governance of the Baltic Sea. To satisfy the need for self-reflection, I subject my own problem representations to critical scrutiny. What is more, by referring to the Ocean Decade, I strengthen the conceptual link between the Baltic Sea and the Global Ocean, as well as offer my final reflections regarding the research topic.

5.1. Overview of the main findings

In the course of my project, I have provided answers to the research questions that have guided my work. As for the manner in which the issue of macro-regional governance of the Baltic Sea has been represented through problematizations to be found in policy documents shaping the EU macro-regional dimension, the identified problematizations have been classified as follows: macro-regional harmonization 'problem' (macro-regional relevance, cohesion, and connectivity/connection); effectiveness/efficiency 'problem' (result-orientation, coordination, and integration); potential 'problem' (capacity, education, knowledge, research, and innovation), and commitment 'problem' (broad and long-term involvement, political backing, and ownership). These four overarching problem representations are mutually reinforcing and, to a certain degree, overlapping due to the multi-dimensionality of the analyzed governance framework. Then, their underlying assumptions have been explored through the lens of the stories-we-live-by (Stibbe 2015) to yield the following results: the primacy of growth and progress; the exclusion of ecological education and other ways of knowing; and the separation between humans and the ecosystem. Such an analysis has revealed a mismatch between the challenges and expectations formulated with regard to the BSmR on the one hand, and the framing of the marine ecosystem and of stakeholders capacity (education, training, other ways of knowing) on the other. Special emphasis has been placed on an unproblematized aspect of the Baltic Sea governance at the macro-regional level, i.e. the lack of the ocean perspective in thinking about the BSmR. The adoption of such a perspective would help rethink the Baltic Sea in terms of common heritage, a life-sustaining system, part of the biosphere in general, and of the Global Ocean in particular, as well as highlight

all the ecosystem services provided by the Baltic Sea and its vulnerability to numerous social-ecological challenges emerging along the global-local continuum.

The identified problematizations with their underlying assumptions and deep-seated cultural beliefs may have serious implications for how our thinking, being, and living may be constrained (discursive, subjectificaiton and lived effects) (Bacchi 2009), which constitutes certain social-ecological conditions. They have been classified as follows: constrained thinking and being with regard to development trajectories for the BSmR, and with regard to stakeholder non-financial resources. Constituting the material dimension of the macro-regional governance of the Baltic Sea, the (likely) lived effects have been extrapolated through the lens of social-ecological resilience to account for the threat posed by the climate crisis.

In order to represent the problem of macro-regional governance of the Baltic Sea differently, I have suggested that a supportive space be created with enabling conditions for reimagining the macro-regional governance of the Baltic Sea along social-ecological lines. Moreover, stakeholder non-financial resources, such as marine literacy, social-ecological university, and ecocultural identity, have been introduced to increase the internal coherence of the strategy in light of my ecosophy and the available research works. Not only the suggested resources fit together but also reinforce each other, thereby facilitating the creation of a supportive space for reconceptualizing the macro-regional governance of the Baltic Sea according to the social-ecological approach (Folke et al. 2016). In order to meet the challenges and expectations as specified in the selected policy documents, these concepts are to be applied in local contexts, and culture-specific settings while providing a common frame of reference.

To summarize, the following insights have been gained in the course of my PhD research project:

- Integrated governance

By putting the Baltic Sea at the heart of the challenges (to be) encountered in the BSmR and reconceptualizing the marine ecosystem as a life-sustaining system, the project has focused attention on the Baltic Sea as common heritage for the coastal states and their neighbors whose wellbeing and livelihoods depend, to a large extent, on its ecological condition. In this way it has further strengthened the need for intensified transnational cooperation in the BSmR.

- Critical approach

By critically interrogating the interrelated concepts of development, growth, and human-ecosystem relations, as well as education, science, research and innovation, the project has rethought the "tired and compromised" discourse of sustainable development (Stibbe 2014) of the BSmR in terms of biosphere-based sustainability and social-ecological resilience (Folke et al. 2021, Folke et al. 2016) to account for complex social-ecological challenges facing the macro-region, e.g. climate change. Such a reconceptualization entails the mobilization of "ingenuity, innovation, technology, and collaboration" (Folke et al 2016). Therefore, in order to reimagine the macro-regional governance of the Baltic Sea along the social-ecological lines, the project has attempted to create a supportive space with enabling conditions, with special emphasis placed on the development of relevant skills, as well as the involvement of young people and local and regional communities.

- Supportive space

Inspired by the Quintuple Helix innovation model connecting scientists, policymakers, business representatives, and society, highlighting the role of the natural environment, and combining the concepts of innovation and ecological sustainability (Carayannis et al. 2012), the project has made a practical recommendation for developing critical marine literacy as a transferrable skill to be acquired and applied across the board. Combining social-ecological awareness and critical sustainability skills, the aim of the critical marine literacy program is to facilitate the development of alternative development scenarios for the BSmR, to integrate academic and non-academic ways of knowing as well as to create a 'common ground of explanation' (Wilson 1998), thereby helping diverse stakeholders co-create knowledge in inter-, trans- or even un-disciplinary settings (Haider et al. 2017).

5.2. Reflexive account of the research process

While the previous empirical parts of the thesis have identified the problem representations, their underlying assumptions, as well as the constraints imposed by them on thinking, being, and living in the context of the macro-regional governance of the Baltic Sea, I have also put forward suggestions with regard to the unproblematized aspects of Baltic Sea macro-regional governance together with possible ways of reconceptualizing the BSmR and its governance along social-

ecological lines. Although my suggestions and recommendations are derived from relevant research publications to ensure the internal consistency of the macro-regional strategy, their selection have, to a large extent, been determined by my scholarly self (see Neumann and Neumann (2015) for the relation between the research process and situated knowledge) in the form of my ecosophy, research motivation, as well as many conceptual and analytical choices made in an iterative and non-linear fashion throughout the research process. Therefore, the aim of this reflexive part is, for obvious reasons, not to follow to a T Bacchi (2009)'s approach to self-problematizations as specified in her Question 7 but to critically interrogate them in light of the available research literature. Needless to say, my problematizations fall short of being a panacea for all of the challenges (to be) encountered in the BSmR. However, this subchapter does not aim at discrediting or rejecting them either. Quite the contrary, by highlighting certain contentious issues related to my problematizations (e.g. any inconsistencies, dubious linguistic and conceptual choices or hard-to-eradicate constraints), this subchapter attempts not only to increase their legitimacy but also to foster transparency about how my research process has qualified my problem representations. In other words, one needs to be cautious when applying them on the ground, in local and site-specific contexts, with full awareness of their pros and cons. To size up the ecocultural implications of my problem representations (linguistic and conceptual suggestions, as well as the practical recommendation), the following analytical choices to be found in the relevant chapters of my thesis have qualified my research process:

- The Baltic Sea put at the heart of the macro-region, with all of its ontological and epistemological implications;
- The focus on the relations among humans and their life-sustaining ecosystem (Stibbe 2015) in terms of (critical) ecolinguistics (also called ecological analysis of discourse) facilitating the study of the impact of language use on the life-sustaining relationship among people, other organisms, and the physical environment; analyzing clusters of linguistic (and semiotic) features that together produce our perception of the human-nature connection (Alexander and Stibbe 2014: 104-110); examining the role of language use in the destruction or protection of social-ecological systems; and critiquing forms of language contributing to ecological

destruction, and aiding in the search for new forms of language inspiring people to protect the natural world (Stibbe 2015). The two remaining strands of ecolinguistic research have only been briefly mentioned: 1) language ecology (language diversity and all related topics, including minority languages, language endangerment and language death; the link between the loss of languages and the loss of species; further insights into language diversity and environmental diversity and the question of how language construes our view of nature and environment); and 2) transdisciplinary science (a dialectical philosophy) transcending traditional linguistics and creating an awareness of the interdependency of all things and ideas; a philosophy of interaction and harmony, including even more diverse philosophical traditions from all parts of the world. Within this strand ecolinguistics is no longer seen as a discipline within the study of language but as a unified ecological worldview expressing harmony between humans and nature; the earth perceived as a living unity and a complex system (Fill and Penz 2017);

- The search for new stories-to-live-by (see Stibbe 2015) in a time of liminality, liquid modernity, and being in-between stories (Bauman et al. 2017, Pollock 1016, Berry as cited in Stibbe 2015);
- The macro-regional governance of the Baltic Sea approached through the lens of integrated marine governance (van Tatenhove 2011);
- The macro-regional governance of the Baltic Sea approached at a meta-level to determine the added value of the macro-regional strategy, and to ensure its internal consistency in light of my biosphere-based ecosophy;
- The problem-questioning rather than problem-solving paradigm (Bacchi 2009), which has entailed the need to work backward from policy proposals;
- The post-normal approach to science, with its emphasis on complexity and uncertainty in the context of environmental governance challenges (climate change or marine governance), as well as the pressing need to engage both experts and non-experts (extended peer community; non-academic knowledge holders) in the process of scientific knowledge production (Funtowicz and Ravetz 2003, 1993). The post-normal approach to science is

viewed in this thesis as a sensitizing concept rather than a fully fledged theory (Wesselink and Hoppe 2011);

- Post-modern (ecological) worldview shaping thinking around the concept of regenerative economy (Pollock 2016); and
- Transformative learning (Armon et al. (eds.) 2000), and systems-based education (see Pollock 2016 for the need to teach eco-literacy and systems thinking in the context of tourism; see Sutton 2009 for educating for ecological sustainability using the Montessori approach to pedagogy).

All the conceptual and analytical choices have been made in a way that appears to be most adequate to answer my research questions, which has entailed making the most of the available methods and tools through their modification and adaptation by trial and error, with full awareness of their heterogeneous form and origin, as well as their original purposes (see Derrida (1978)'s discussion of Lévi-Strauss's bricolage in Thomas 1998: 156). Such an approach to designing my research process appears to be in line with Mason (2018)'s suggestion to combine relevant approaches to policy analysis to investigate its selected aspects (Mason 2018: 24), with the concept of discourse as the central organizing concept running like a common thread through the above-described methodological and analytical approaches. However, it needs to be remembered that such an approach to research design affords both opportunities and challenges. First, the process of assigning my thesis to a particular field of research has proved to be challenging but thought-provoking, resulting in the selection of cultural studies as the field in which the thesis will be defended. Second, I need to admit that I have neither practical experience in working within the framework of the EUSBSR or its flagships, nor any knowledge with regard to the financial aspects of the macro-regional strategy or their alignment with relevant programming periods. Then, as far as my relation to the EUSBSR is concerned, I perceive myself as one of its stakeholders (as a Baltic Sea resident), as its beneficiary[37], and as an 'uninvited outsider' (Miessen 2010). The last category appears to correspond to my status as a PhD student (a researcher), as well as to my choice to embrace the category of distance to bring

[37] My participation in the BUP research school in Rogów, Poland, in 2017, as well as the Rectors' Conference in Turku, Finland, in 2018.

a fresh perspective into the research work on the macro-regional governance of the Baltic Sea.

Analogously to the previously mentioned issues, distance may act as a double-edged sword. On the one hand, both the physical distance (my research stay at the University of Massachusetts-Boston), as well as the conceptual distance (my ocean governance background and participation in sustainability-related conferences and research schools in Poland, Sweden, Denmark, Norway, Finland, Germany, and the Netherlands) have enabled me to leave the familiar and venture into the unknown, as well as to approach the BSmR through the lens of integrated marine governance. This, in turn, has made me stop and critically reflect on the very idea of the macro-regional governance of the Baltic Sea, thereby adopting a meta-level perspective and working backward to uncover implicit problem representations in the selected policy documents (Bacchi 2009) – to the best of my knowledge – a missing perspective in a wealth of the research carried out in the area of the macro-regionalization trend. On the other hand, the fact that English is the language of the thesis, as well as of the selected policy documents and research publications (articles, books, and reports) has its pros and cons: it facilitates communication and knowledge exchange but potentially excludes local, subnational, and national perspectives available in local and national languages spoken in the BSmR. Finally, it needs to be highlighted that the time span covered by the thesis has witnessed major crises experienced by both academia and the biosphere (Shaw 2022). Thus, notwithstanding all the challenges referred to above, my research has been guided by the overarching goal to create a common platform or a departure point for diverse stakeholders (a supportive space with enabling conditions to reimagine the macro-regional governance of the Baltic Sea along social-ecological lines). Far from being an attempt to impose any linguistic or conceptual choices, the space has been conceptualized in such a manner so as to correspond to the idea of consilience, according to which the unity of knowledge should be reflected across disciplines in an effort "to create a common groundwork of explanation" (Wilson 1998: 8).

Although the above suggestions have been made to open up space for discussion and to facilitate stakeholder capacity to reimagine the macro-regional governance of

the Baltic Sea, I have nonetheless decided to investigate my problematizations through a critical lens in the following sequence:

- Introducing the ocean perspective into the BSmR context through metaphors;
- Embracing sensitizing concepts revolving around the social-ecological paradigm; and
- Navigating multiple uncertainties and complexities.

Introducing the ocean perspective into the BSmR context through metaphors

When analyzing metaphors used in promoting socioecological sustainability, "we need to go beyond the question of whether they are apt descriptors (…), and carefully consider their wider implications" (Larson 2011:16-17). Although the injection of the ocean perspective into the macro-regional governance of the Baltic Sea is justified on the grounds that the Baltic Sea is an integral part of the Global Ocean with its multiple implications, such a problematization of marine governance deserves a closer scrutiny. As linguistic tools having the potential to construct reality, metaphors are very often culture-specific devices (see Lakoff and Johnson 2003 for conceptual metaphors as culturally dependent). For example, the metaphor of the ocean as the last (final) frontier makes a reference to the concept of the last frontier found in American culture to capture the experience of the Westward Movement: "(…) the essence of frontiers is not demographic but, rather, their coherent set of legal, economic, socio-psychological, and ecological attributes that come into being when people gain open access to resources, whether following initial discovery or conquest of indigenous peoples" (Norse 2005: 424). While it can hardly be denied that the exploration of the Global Ocean resembles the frontier experience in many respects, it does not necessarily need to strike a familiar chord with representatives of other cultures. The same holds true for the depiction of the Global Ocean as a public trust resource, which clearly invokes a public trust doctrine according to which public trust resources are held in trust for the benefit of a larger community of people (Osherenko 2007: 366-367). While the public trust doctrine is crucial for preserving natural and cultural resources for public use, with the government entrusted with the responsibility to protect

and maintain them, it may constitute a system-bound concept (a common law doctrine) not to be found in other legal cultures.[38] As national law constitutes an independent legal system with its own terminological apparatus and underlying conceptual structure, its own rules of classification, sources of law, methodological approaches, and socio-economic principles (Jopek-Bosiacka 2010: 190), the source domain of public trust resource may be more prevalent and, therefore, more acceptable in the context of marine governance in the Anglo-Saxon culture. It needs to be remembered that the texts selected for the introduction of the ocean perspective represent English legal discourse and reflect the tradition of common law systems (e.g. the UK, the US or New Zealand), which despite their apparent differences share a common set of characteristics (Jopek-Bosiacka 2010: 190-191). While a certain degree of cross-fertilization between different legal systems may easily be encountered (see, for example, Marmo 2006 for cross-fertizilization between civil law and common law countries in the field of human rights and criminal proceedings), the cultural specificity of legal frameworks needs to be addressed when searching for metaphors to reflect the cross-cultural and trans-boundary nature of marine governance in general, and of the Baltic Sea in particular.

What is more, by promoting the view of the Global Ocean as an asset or resource, the metaphors simultaneously reflect an anthropocentric approach to the Global Ocean and our relation to the ecosystem usually synonymous with its overexploitation accompanied by the lack of shared responsibility. It is, however, worth remembering that traditional marine communities, such as native Hawaiians or Maori people, may hold a less anthropocentric (or more precisely, a biocentric or ecocentric) attitude to the Global Ocean by emphasizing their spiritual connection to the Ocean as a life-giving force with all its parts being interconnected (Pyć 2011: 159). As environmental governance issues are socially constructed, they are "imbued with cultural traditions and charged with social values" (Steffek 2009: 313). Apart from their being system-bound and culture-specific concepts, metaphors have the potential of highlighting certain aspects while at the same time hiding others (Lakoff and

[38] Public trust doctrine. Legal Information Institute. Cornell University Law School. Available at: https://www.law.cornell.edu/wex/public_trust_doctrine (accessed on: May 6, 2020).

Johnson 1980), which has been captured by Goatly (1997) in the following way: ”[M]etaphors are not a mere reflection of a pre-existing objective reality but a construction of reality, through a categorization entailing the selection of some features as critical and others as non-critical…“ (1997: 5). To illustrate this process, let us consider the metaphor of the Global Ocean as an asset (provider of natural resources and ecosystem services). While the linguistic device clearly highlights its economic opportunities and benefits to be enjoyed by people, as well as a sense of adventure and exploration, it may also downplay the impact of economic activities and potential disasters on the ecosystem, and ignore the resulting destruction of marine habitats by hiding the complexities, uncertainties, and interdependencies inherent in the Global Ocean system. Therefore, it appears that the metaphor of nature as a fixed stock of capital providing a flow of services is clearly “insufficient for the difficulties we are in or the task ahead“ since the ecosystem services approach is just part of a larger solution, not the solution itself (Norgaard 2010: 1219, 1226). While it establishes a conceptual link between ecological and economic systems, it “blinds us to the complexity of natural systems, the ecological knowledge available to work with that complexity, and the amount of effort, or transaction costs, necessary to seriously and effectively engage with ecosystem management“ (Norgaard 2010: 1219, 1220).

Admittedly, metaphors may be seen as both powerful and challenging devices used to legitimize different courses of action in marine governance. Although in the course of the study the metaphorical representations of the Global Ocean have been grouped for the sake of clarity into the higher-level categories (‘complex network’, ‘asset’, ‘common good’), the metaphors representing the different categories have very often been used in a single article to reflect the complexity of the issue and to stress the importance of interdisciplinary cooperation among legal sciences, economics, natural sciences, and social sciences. While the study has only focused on identifying the metaphors facilitating our conceptualization of the Global Ocean, the list of the metaphors to be used to legitimize integrated ocean governance is by no means exhaustive. Apart from the hiding and highlighting effects of metaphor use, the feasibility of introducing the ocean perspective in the BSmR may be put into question in

the context of unavoidable conflicts and friction due to the culture-specific, system-bound, context-dependent and sector-oriented nature of its governance of the Baltic Sea.

Embracing sensitizing concepts revolving around the social-ecological paradigm

To visually reconnect the BSmR to the biosphere in line with my ecosophy, I have used insights from multimodal analysis only as a source of inspiration for revisualizing the macro-regional governance of the Baltic Sea to the exclusion of a wide range or semiotic resources (both static and dynamic), visual systems of meaning making (Liu 2013), which may come in handy in the analysis of policy-communicating texts to be suggested as a further avenue of inquiry in the next subchapter. Moreover, in order to conceptually support the reconnection, I have used a number of concepts centering around the social-ecological paradigm that have served as sensitizing concepts defined by Blumer (1954) in the following manner: "A definitive concept refers precisely to what is common to a class of objects, by the aid of a clear definition in terms of attributes or fixed benchmarks… A sensitizing concept lacks such specification of attributes or benchmarks and consequently it does not enable the user to move directly to the instance and its relevant content. Instead, it gives the user a general sense of reference and guidance in approaching empirical instances. Whereas definitive concepts provide prescriptions of what to see, sensitizing concepts merely suggest directions along which to look" (1954: 7).

My selection of the concept of 'social-ecological system' as a way of reconnecting the BSmR to the biosphere has been driven by the need to combine both natural and social systems to be studied as an integrated whole as people are an integral part of nature (Folke et al. 2016). While the term 'social-ecological system' is a concept in transition rather than "a buzzword, empty of significance" (Herrero-Jáuregui et al. 2018), it would significantly benefit from a shared definition and its consolidation in the context of sustainability science (Herrero-Jáuregui et al. 2018). It is also noteworthy that at the level of text and its representation of a particular aspect of the world made through particular discursive choices (the text-critical part) the concept integrates both the social and ecological dimensions of human existence. However, at the level of the lexicon (the system-critical part) it reinforces

the nature-culture dichotomy through the use of a particular anthropocentric language structure that may condition speakers to rely on environmentally unsustainable perceptions (Stibbe 2015; see Fill and Mühlhäusler 2001: 6 for the distinction between the text-critical and system-critical part), which runs counter to the idea of people's embeddedness in the biosphere (Folke et al. 2021, Braidotti 2019, Harper 2016, Stibbe 2015).

The same holds true for many terms used to capture their complexity and interrelatedness, such as: society-economy-environment (sustainable development), social-ecological systems, coupled human-environment system, human-nature connection, human ecology, humans-in-nature, economy-in-society-in-nature, biolinguistic, and biocultural diversity, which clearly demonstrates the amount of linguistic maneuvering in the English language that goes into the process of reconceptualizing the notion of ecology so that it covers a very broad concept of 'interaction of some things with other things', including the relationship of language to its biological and physical environment (Stibbe 2015 : 8). An analogous linguistic and conceptual battle is fought over the use of the following concepts: anthropocentrism, biocentrism, ecocentrism, anti-anthropocentric biocentrism or anthropocentric biocentrism (see Rülke et al. 2020; Stibbe 2015; Watson 1983), with the view to reconfiguring the distorted human-biosphere relation along the anthropocentrism-ecocentrism continuum. Such culture-specific and context-dependent terms as: the (natural) environment, the natural world and the human world, reinforce the nature-culture dichotomy at the level of language use, thereby shaping our perception and way of thinking (Fill and Penz 2017). It may partly be due to the fact that there is no single concept in the English language to convey the meaning of 'people-in-nature' as opposed to, for example, polysynthetic, indigenous languages capturing complex natural phenomena in a single word (Grenoble and Olsen 2014). Undoubtedly the grammar and lexicon of indigenous languages reflect the fact that indigenous peoples are more attuned to their environment and have never lost their connection to the biosphere in the first place.

Another sensitizing concept that deserves critical scrutiny is (marine) stewardship directly following from the idea of social-ecological resilience (Folke et al. 2016). While 'stewardship' may epitomize a loaded term, it may be useful to consider replacing it with the concept of 'care' to stress the fact that life-sustaining

ecosystems are not only the objects of managerial practices but also of care (see Stibbe 2015 for the ethic of care, as well as IUCN/UNEP/WWF (1991)). The issue of using the term 'care' was also raised by one of the participants at the Stockholm Resilience Centre Conference, in 2017 (Resilience Frontiers for Global Sustainability), which reminded me of the Plain English Movement[39] or its Swedish counterpart, Klarspråk, [40] i.e. the initiatives that might serve as a source of inspiration for rethinking the use of the loaded terms referred to in my thesis (see subchapter 3.2. of this thesis).

As regards the introduction of the concepts of ocean (marine) literacy and the ecological university, the question remains whether they will be viewed in terms of a feasible utopia as the subtitle of Barnett (2018)'s book on the ecological university may suggest. Crucial as these concepts are, their implementation may depend upon the degree of willingness on the part of the Member States to cooperate in the area of education as there is no obligation to do so: "All activities are voluntary and education is not an EU policy. This may explain why ministries and agencies are still not playing an active role in the Priority Area Education" (SEC(2011) 1071 final: 87).

As for my practical recommendation, i.e. the need to foster critical marine literacy in the BSmR**,** it is noteworthy that in the area of ecological sustainability the term 'literacy' may come in different guises to capture human-environment connection:

- Environmental literacy (information about environmental issues and problems, as well the attitudes and skills for solving them; mainly focus on the environment as a series of issues to be resolved through values and action);
- Ecological literacy (knowledge about the environment necessary for informed decision-making; the understanding of environmental realities, their cause and effect relationships, as well as the complexity of studied objects and phenomena, allowing for more enlightened decision-making; the understanding of a system's dynamics and ruptures, as well as its past and alternate future trajectories); and

[39] Peter Tiersma, The Plain English Movement. Available at: http://www.languageandlaw.org/PLAINENGLISH.HTM. (accessed: May 6, 2021).

[40] Klarspråk. Available at: https://www.isof.se/sprak/klarsprak.html (accessed: May 6, 2021).

- Ecoliteracy (literacy arising from the broader humanities; an understanding of the principles of the organization of ecosystems and the application of those principles for creating sustainable human communities and societies; well-rounded abilities of head, heart, hands, and spirit resulting in an organic understanding of the world and participatory action within and with the environment) (McBride et al. 2013).

However, it needs to be remembered that it is not a rigid categorization (McBride et al. 2013), and ecological literacy may also be conceptualized as embracing key concepts related to environmental governance, such as complexity, holism, sustainability and systems thinking (Capra 1996, Orr 1992), as well as be referred to as sustainability literacy (Stibbe 2009 (ed.)).

As it is "not self-evident that action follows directly from awareness and knowledge" (Leal Filho 2003: 645), both critical marine literacy and the idea of the ecological university (Barnett 2018) are crucial but insufficient to respond the complexity of the social-ecological challenges (to be) encountered in the BSmR. While the concepts of ecological citizenship and ecocultural identity have been proposed to fill the commitment void problematized in the selected policy documents as an inadequate political backing or sense of ownership, they also need to be kept under microscopic scrutiny to make the most of their potential. As regards ecological citizenship, the term 'citizenship' in the context of environmental governance may also be modified by the following adjectives: 'environmental' or 'ecological,' with far-reaching implications for the meaning of these two concepts (Pallet 2017; Dobson 2007; Dobson 2003 as cited in Humphreys 2009). To make things complicated, there are "many varied definitions of Environmental Citizenship [to] be found within the literature. Some of them are quite similar, and important overlaps can be observed; however, others can be quite different with contradictions in their philosophy and approach" (Hadjichambis and Reis 2020: 1). To make things even more complicated, one may also come across 'sustainable citizenship' as an emerging model of general citizenship, with "people assum[ing] non-reciprocal responsibility for a series of spatial, temporal, and material relationships involved in sustainable development" (Micheletti et al 2012: 144) or 'systems citizenship' to be developed in the context of a learner-centered, systems-based education system (Senge 2006 as cited in Sutton 2009: 20). Yet

another layer of complexity related to the use of the term ‘ecological citizenship’ may be added through its representation as a much broader issue straddling the national-global, the public-private and the present-future dimensions of environmental governance, which may raise the question of its legitimacy (Matti 2008).

Last but not least, the concept of ecocultural identity may also generate controversy or raise a few eyebrows in diverse communities. Although it is an old concept having the potential to make the ecocentric paradigm wide enough to include humans, it has unfortunately been removed from academia (Milstein and Castro-Sotomayor 2020a: 17). While ecocultural identity is integral to who humans are, how they behave and relate to each other, as well as to non-human beings and the entire planet, it may be hard for some to accept the fact that it is not yet another ‘self’ to be added to the mix (Milstein and Castro-Sotomayor 2020a), with all its implications for expanding human identity beyond the well-known labels (Stibbe 2015, Bacchi 2009) and embedding it in the biosphere (Folke et al. 2021, Folke et al. 2016). That is why the introduction of the concept of ecocultural identity may generate the following questions: Is ecocultural identity yet another kind of identity to be embraced in the world of multiple identities? Is it something alien to our culture? Has it been imposed by expert discourses in a top-down manner or has it emerged in a bottom-up fashion? Has ecocultural identity been invented or artificially produced? Or maybe it is an integral part of the individual and collective self to be (re)discovered through both individual and collective stories, memories, and experiences related to the Baltic Sea and its governance? The same may hold true for other sensitizing concepts, for example marine literacy or ecological citizenship, which may be operationalized and implemented in various contexts, without explicitly being labeled as such.

As all the sensitizing concepts put forward in the thesis constitute merely a blueprint for reimagining the macro-regional governance of the Baltic Sea along social-ecological lines, their definitions, scope and usefulness need to be tested on the ground to verify whether and how they resonate with local, regional and macro-regional communities, in diverse multi-stakeholder settings, thereby subjecting them to critical scrutiny in culture-specific contexts. What is more, caution in the form of careful analysis and judgment needs to be exercised to detect glittering

generalities, i.e. “attempt[s] to sway emotions through the use of shining ideals or virtues, such as freedom, justice, truth, education, democracy in a large, general way” (Hobbs and McGee 2014: 59) or distorted altrustic frames problematized by Stibbe (2015) in the following manner:

“In general, there seems to be a tendency for frames which originate in altruistic attempts to make the world a better place to be modified towards more extrinsic efforts towards self-enrichment and profit. This is partly through the reinterpretation of frames by powerful forces, for example when ‘sustainable development’ is appropriated by rich countries and used to mean maximising their own economic growth. It also occurs when well-intentioned organisations reframe their activities in more extrinsic terms in order to win funding or support from powerful forces. While this may be justified as necessary in order to have more influence in the world, it is self-defeating if that influence becomes so distorted that it achieves the opposite of the original intention. It may be necessary, therefore, to be constantly aware of the tendency for frames to become corrupted by extrinsic forces, and, when necessary, promote new frames which refocus on the original intentions and goals” (2015: 61).

That is why I have strongly advocated for the development of critical thinking and critical language awareness as an integral part of marine literacy (my practical recommendation).

Navigating multiple uncertainties and complexities

Although both the metaphors, as well as the sensitizing concepts hold promise in the context of the macro-regional governance of the Baltic Sea, they are not to be applied in a decontextualized vacuum but in a highly complex social-ecological environment comprising diverse stakeholders, multiple governance levels, institutional settings and arrangements, as well as cultural backgrounds. Therefore, it needs to be remembered that their potential may be compromised by multiple sources of uncertainty, including but not limited to:

- Political and economic factors (political and geopolitical tensions), e.g. EU disintegration, external challenges, loss of interest or leaving the EU by one of the Baltic Sea states (Szulc 2019: 196);

- The Baltic Sea States following different development trajectories, with the apparent lack of distinction being made between growth as quantitative change, and development as qualitative change (see Viederman 1993 in Du Pisani 2006: 92);
- Differences and divisions occurring not only between or among the Baltic Sea states but also among various discourse communities, groups operating across borders in the BSmR, as well as taking the form of divergent visions, expectations and values as our discussion of human-ecosystem interaction depends, to a large extent, on the way in which we create, negotiate, and contest the meaning of environment-related problems, as well as on the degree to which our perception of environmental issues is shaped by our value systems and cultural traditions (Steffek 2009: 313);
- Large-scale biogeochemical factors and unforeseeable influences (Jay 2018: 461-462), as well as complex social-ecological systems (e.g. integrated marine governance) defined as wicked problems, i.e. issues lacking consensus in terms of their definition and solutions, as well as calling for adaptive multi-level governance, and conflict and uncertainty management (Akamani et al. 2016);
- Individual and collective action or inaction, awareness or lack thereof, as well as political impotence or political anti-environment agendas in the context of complex social-ecological challenges (Bradshaw et al. 2021, Bauman 2018, Pollock 2016, Stibbe 2004);
- Academic challenges arising in the context of market orientation of universities and other institutions of higher education (see Fairclough 1993 for the marketization of academic discourse) and very often taking the form of:
    - Problems with securing funding for inter- or trans-disciplinary projects perceived as a rewarding but also an 'uncomfortable' space in education and research[41];
    - Traditional academic thinking, silo mentality and reductionism (Pollock 2016: 66);

[41] An issue raised during my participation in the Stockholm PhD Student Dialogue on Sustainability, Södertörn University, November 2018.

- Academic institutions dominated by established disciplines not structured for the levels of interdisciplinarity necessary to apply systems thinking in both their intellectual and practical endeavors (Pollock 2016: 14-15); and
- Challenges to education for sustainable development or sustainability education, including but not limited to: lack of economic and human resources, the limited credit for interdisciplinary studies, unclear relationship between education for sustainable development and environmental education (Leal Filho 2003: 649), coupled with the need for inter-institutional coordination, re-orientation of both formal and informal education toward sustainability, as well as an easily assimilated language for non-specialists (Leal Filho 2003: 650-651), all of which appears to be still true today (see Armon et al. (eds.) 2020 for the need to prioritize sustainability education);

- The very nature of the marine space with unmatched complexity, multiple interdependencies occurring across time and space, which may hamper the application of a systems lens (Pollock 2016: 14-15);
- Dilemmas and intricacies of stakeholder participation in marine policy processes (unsatisfactory outcomes of stakeholder processes; representation of stakeholders, and dilemmas of multi-level governance);[42]
- Institutional misfit and human motivation (human agency) on the one hand, and the biophysical systems on the other (see Vatn and Vedeld (2012) for their analysis of the overlapping concepts of fit, interplay and scale in the context of environmental governance); and
- Complex governance arrangements; supranational regulatory institutions and structures, as well as bilateral, issue-specific collaboration; regional alignment and international cooperation at lower levels through issue-specific transnational working groups or workshops (Hassler et al. 2018, Van Tantenhove 2011); and

[42] The issues were discussed during MARE Policy Day 2017 (Stakeholder participation in marine management: connecting practice with theory) as part of the MARE Conference, held in Amsterdam, in 2017: People and the Sea IX: Dealing with Maritime Mobilities. Available at: https://marecentre.nl/policy-day/policy-day-2017/ (accessed: December 6, 2020).

- Sustainability-related actions, initiatives and practices compromised through the so-called "bolt on" approach to sustainability in the area of education and business (see Pollock 2016: 60 on the need to do more than just bolt on some sustainable practices to business as usual), as well as failure to address the systemic (root) causes of our unsustainable civilization and to fundamentally change the stories-we-live-by (Pollock 2016, Stibbe 2015).

While it is possible that some state and non-state actors (e.g. universities or schools) in the BSmR may have higher ecological standards than those specified in the EUSBSR (see Ciechanowicz-McLean and Nyka 2016: 180), and some or all of the recommendations made in my thesis have already been implemented, the following quote appears to be of particular relevance to our macro-region in order to prevent the EUSBSR from losing momentum:

"Without investing energy in processes to create socio-environmental communication capital, such as meeting spaces (to exercise debate, participation, trust, engagement, and empowerment), there is no environmental governance, which requires a balanced empowerment among actors. Without empowered actors, there are no governance processes. Without power balance among actors, there is no governance. Without the perception that the environment is a common good, there is no governance. Without creating processes of socio-environmental communication capital, there is no governance. Finally, without shared values and mutual trust, there is no governance" (Mazzarino et al. 2020: 11).

Concluding remarks

The aim of this subchapter has been to subject my own problem representations and recommendations to critical scrutiny by paying special attention to their inherent weaknesses, with the view to ensuring transparency of my research process and to strengthening my overall vision of the macro-regional governance of the Baltic Sea. While looking through a critical lens at my ocean metaphors to be applied in the macro-regional context, the sensitizing concepts, as well as multiple uncertainties and complexities at hand, I have left intact the very essence of my ecosophy, i.e. human embeddedness in the biosphere, which – in light of my ecosophy supported by both my values and the available scientific research – is

a non-negotiable human condition. It goes without saying that in order to get to know the world one needs to experience it firsthand (Schlögel 2016) and that "places cannot be defined rationally – they can only be sensed and felt. (…)" (Pollock 2016: 47). However, my thesis has dealt with representations of the marine space shaped by the macro-regionalization trend rather than a particular place or places in the BSmR, to be accessed only through the analysis of the selected policy texts, with the concept of 'text' defined as the concrete realization of abstract forms of knowledge (Lemke 1995). Based on the problem-questioning paradigm (Bacchi 2009), my research work has underscored the importance of adopting a reflexive approach to verify at the meta-level whether the EUSBSR as a relatively new idea and a source of inspiration for other macro-regions is playing the same old song, galloping in the wrong direction or trying to solve contemporary challenges with a mindset largely similar to that which has created them in the first place[43]. Furthermore, the insights generated in the course of my research project may be applied, mutatis mutandis, in the context of other macro-regions, as well as of environmental governance challenges, such as: deforestation or desertification. While my research project has focused on ensuring the internal consistency of the EUSBSR vis-à-vis the identified mismatch between the challenges and expectations formulated with regard to the Baltic Sea macro-region on the one hand, and the framing of the marine ecosystem and of stakeholder capacity, the macro-regional strategy may well be analyzed within a different paradigm and approached in multiple ways, some of which will be suggested in the following subchapter.

5.3. Further avenues of inquiry

As the previous subchapters of this thesis have clearly demonstrated, the Baltic Sea with its surrounding terrestrial areas has inspired multiple research works spanning its diverse representations in terms of its geographical location, ecological fragility, economic and cultural importance, its geopolitical and security dimensions, as well as regionalization trends. While my thesis has attempted to make a contribution to the understanding of the macro-regional governance of the Baltic Sea through critically interrogating its representations and their ecocultural implications in

[43] The statement attributed to A. Einstein. Source: https://www.businessinsider.com/we-cant-solve-problems-by-using-the-same-kind-of-thinking-we-used-when-we-created-them-2012-4?IR=T (accessed: March 2, 2019).

accordance with Bacchi (2009)'s problem-questioning paradigm combined with Stibbe (2015)'s stories-we-live-by, it is no more than just a drop in the ocean of infinite research possibilities in the area of the macro-regional governance of the Baltic Sea. Therefore, I would like to suggest three avenues of inquiry that either directly flow from the thesis (a multi-scalar approach, and fully-fledged multimodal analysis) or fill a certain empty space intentionally unexplored in the thesis (Bacchi (2009)'s Question 3: How has the problem come about?):

1. Adopting a multi-scalar approach to analyzing a given aspect (a setting, a governance arrangement) of the macro-regional governance of the Baltic Sea, which may entail the incorporation into respective research projects of themes, such as power and politics; knowledge and narratives; scale and history; and justice and equity (Bennett 2019), with the issue of scale in the context of social-ecological governance being addressed in terms of: the degree of fit between institutions and the biophysical systems (Vatn and Vedeld 2012); and the implications of different scalar framings in the context of integrated marine governance (Bennett 2019), as well as scalar constructions, practices, dilemmas and politics, as well as new scalar imaginaries (Newig and Moss 2017). Furthermore, the multi-scalar approach may also embrace cross-cultural settings with the aim of tracing the journey of problem representations in various settings in terms of cross-cultural and cross-national comparisons (Bacchi 2009). Such a research orientation may also result in respective research projects being carried out in local and national languages spoken in the BSmR, which may, in turn, aid in the search for new narratives, imagined future paths, and cultural repertoires, as well as collective imaginaries and capabilities (Hall and Lamont 2013), as the BSmR appears to be in dire need of a new story-to-live-by (or stories-to-live-by).
2. Performing a fully-fledged multimodal analysis (for example, inspired by van Leeuwen (1999)'s analysis of speech, sound and music; Kress and van Leeuwen (2001)'s new theory of communication in the context of interactive media; Iedema (2003)'s multimodality and resemiotization) of policy-communication genres, such as leaflets, factsheets, reports, posters or presentations, brochures and studies, as

well as audiovisual materials[44] used to explain a given policy (strategy) (see Krzyżanowski (2013)'s distinction between policy-making and policy-communicating genres). Such a multimodal analysis of the available materials may provide insights to support further research in the context of public communication of science or expert knowledge (Trench 2008); and

3. Exploring a possible synergy between Schmidt (2008)'s discourse-institutional analysis and Bacchi (2009)'s Question 3: How has the problem come about? It might be interesting to track the stages of development of macro-regionalization discourses in the area of Baltic Sea governance with its ecocultural implications prior to the adoption of the EUSBSR in 2009, and to verify the extent to which certain discourses have been institutionalized to the exclusion of others in order to answer the question regarding the examination of the origins, history and mechanisms of the problem representations shaping the macro-regional governance of the Baltic Sea (Bacchi 2009 : 10-11, 14). It may be reasonable to investigate the issue in more depth as there might be a synergy to be discovered between:
    - Institutional dynamics originating from the emergence of new ideas, concepts and narratives in society which, in turn, become strongly institutionalized in social practices and affect social outcomes (Arts and Buizer 2009). The process is linked to the ideational foundation of institutions the analysis of which may generate insights into institutional change or even crises (Schmidt 2008); and
    - The genealogical approach incorporated in Bacchi (2009)'s Question 3 regarding the origin and mechanisms of problem representations, which requires that the following be examined:
        - Twists and turns in institutional practices and developments;
        - The power relations affecting the success of some problem representations and the defeat of others (Bacchi 2009: 65);

[44] Library – EU Strategy for the Baltic Sea Region. Available at: https://ec.europa.eu/regional_policy/pl/policy/cooperation/macro-regional-strategies/baltic-sea/library/#4. (accessed: September 3, 2020).

- The connections, encounters, supports, blockages, plays of forces, and strategies traced in the process of shaping a 'problem' (Bacchi and Goodwin 2016: 34); and
- The conditions allowing a particular problem representation to take shape and to assume dominance by tracking the emergence of a particular way of thinking (Bacchi 2009: 212).

If pursued, the above-mentioned avenues of inquiry would enhance my understanding of how the macro-regional dimension of Baltic Sea governance is implemented on the ground, i.e. in real life projects, settings and arrangements. Additionally, they would help fill the void with regard to the origin, history and mechanisms of the identified problem representations in the macro-regional context. The question: "How has this representation of the problem come to prominence?" (Bacchi 2009: 264) has intentionally been omitted in my thesis as it has not been directly related to the aim of my thesis and the corresponding research questions. Furthermore, the genealogical approach underlying the question requires both having access to different kinds of documents (often not publicly available or simply inaccessible) and tracing long detailed records of decision-making in order to identify specific institutional developments supporting particular ways of seeing (problematizations) (Bacchi 2009: 44). Naturally, the above list of the further research directions is by no means exhaustive as it only covers those avenues of inquiry directly stemming from my thesis. However, as has been shown above, the identified avenues of inquiry point in various research directions, thereby opening space for further critical interrogation.

5.4. Post-2020 outlook: Navigating the macro-regional governance of the Baltic Sea in the Ocean Decade

While in 2009 there were voices heard along the lines of: "A general understanding and a relatively naïve but well-meaning expectation has been that environmental challenges would unite the region and consequently have spillover effects in other policy areas such as the economy, for instance" (Antola 2009: 13-14), today it is crucial to go the extra mile and to perceive the Baltic Sea in terms of a coupled social-ecological system (see Arias-Maldonado 2016, Folke et al. 2016), with the overarching goal of ensuring a resilient biosphere as a precondition for human

existence on this planet (Folke et al. 2021). In other words, what might have appeared to be utopian or idealistic over ten years ago or what appears to be infeasible even today may turn out to be a necessity in a few years to come. In a recent study from the Swedish Agency for Economic and Regional Growth, 'Looking towards 2030: Preparing the Baltic Sea Region for the future,' "deepening conversations about the environment" has been indicated as one of the themes to influence the BSR after 2020 (Toptsidou and Böhme 2018: 10). Therefore, one should never lose sight of the very core of the EUSBSR, i.e. the Baltic Sea with its virtually countless interdependencies across the land-atmosphere interface, as well as its interconnections with human activities and governance arrangements. Such a vision may hardly materialize when humans are artificially separated from the life-supporting system of the planet due to one underlying cause explained by ecoliteracy founder Fritjof Capra (1996) in the following manner:

> "Ultimately, these problems must be seen as just different facets of one single crisis, which is largely **a crisis of perception** (…) The recognition that a profound change of perception and thinking is needed if we are to survive has not yet reached most of our corporate leaders, either, or the administrators and professors of our large universities" (Capra 1996: 4; my emphasis).

His comments were true almost 30 years ago, and they are unfortunately still true today. Admittedly, there are no silver bullet solutions to wicked problems, with the macro-regional governance of the Baltic Sea being one of them, nor is there any single 'best' perspective, which requires critical thinking, reflexivity and dialogue, collective inquiry, and pragmatism in the face of complex challenges encountered in the 21st century (West et al. 2021: 112).

The Baltic Sea space, be it discursively constructed as a marine ecosystem, a common resource or an EU macro-region, epitomizes a liminal space, both familiar and unknown; secure, yet intimidating (Downey et al. 2016: 3) – a space in which:

- The search for (re)orientation (anchoring the space in social, political and cultural actions) is accompanied by the call for realizing diversity (taking into account the multiplicity, heterogeneity and diversity of spaces) (Peters and Kessl 2000: 27);

- The yearning for freedom co-exists with the quest for security (Yi-Fu Tuan's assertion that "place is security, space is freedom" in: Downey et al. 2016: 2); and
- Deep water renewal caused by the inflow of oxygen-rich saline water from the North Sea (Mohrholz et al. 2015) is just as important as enabling conditions for reimagining its governance in the following manner:

"There's no shortage in today's world of wicked problems wrapped around beautiful questions – meaning that somewhere deep inside that thorny issue, embedded at the core, lies an undiscovered question of great value. If those questions can be brought to the surface, we may be able to see the essence of the problem more clearly" (Berger 2014: 213).

Therefore, all the approaches adopted with regard to the BSmR need to reflect "the evolution of regional institutions and the EU strategy for the Baltic as an example of **fluid, expanding governance spaces**" (Metzger and Schmitt 2012 in Jay 2018: 458, my emphasis). Could the concept of ecocultural identity help foster Balticness, or to be more precise, 'Baltic Sea-ness'[45]? Could the idea of critical marine literacy aid in the development of what Zaucha et al. refer to as a 'lingua franca macro-regionalis' (2020: 69)? Could these two sensitizing concepts provide the highly institutionalized and networked space of the BSmR with common identity and a shared mental map[46]?

Last but not least, the sense of urgency stemming from multiple challenges facing the Baltic Sea macro-region has further been magnified with the UN declaring the Decade of Ocean Science for Sustainable Development (2021-2030) and stating that "the Ocean holds the keys to an equitable and sustainable planet" (www.oceandecade.org). As the Baltic Sea is an integral part of the Global Ocean, with all its ecocultural implications, then one may ask the following rhetorical question in the hope of restoring the Baltic Sea to its rightful place as a life-sustaining system:

[45] The idea of 'Baltic Sea-ness' has been taken from Antola (2009: 33)

[46] This question has been based on the description of the Nordic Region, with its strong institutional framework, as well as common identities and a shared mental map (Götz 2003 as cited in Antola 2009: 10).

What does the Global Ocean (with the Baltic Sea as an integral part of it) do
when it doesn't sustain human and non-human life on this planet,
be it locally, (macro-)regionally or globally?[47]

[47] The framing of this question has been inspired by Bauman (2017)'s view of the structurizing role of culture expressed as follows: "What does the river (the wind) do when it doesn't flow (blow) (2017: 376)?"

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Appendix I
Primary sources: Policy documents (2009 – 2019)

Macro-regional strategies

(Source: https://ec.europa.eu/regional_policy/en/policy/cooperation/macro-regional-strategies/
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(Source: Library – EU Strategy for the Baltic Sea Region, https://ec.europa.eu/regional_policy/en/policy/cooperation/macro-regional-strategies/baltic-sea/library/ Note: the website no longer available)

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Appendix II
Approaches to investigating the space-discourse-materiality interface

My research topic: macro-regional governance of the Baltic Sea	The Harvey-Lefebvre matrix (spatio-temporal and spatio-social dimensions) (Nash 2016: 149, Nash 2018)	Social reality (both material and semiotic; real and constructed, conceptually mediated) (Fairclough 2012)	The sociology of space (Martina Löw (2016)'s relational concept of space)
Discursively constructed marine space (both real and constructed) ▪ My research object: the interrelations among the following categories: • marine area (place) • issues, challenges • actors (subjects) • rules, resources (objects) (the categories based on: Van Tatenhove (2011), Stibbe (2015), Bacchi and Goodwin (2016))	Relational space (relations, power, interests, values): • experienced (invisible values and forces at work to produce processes and facts) • **conceptualized (cognitively represented; conceptual framework for apprehending the relationship of forces and values)** • lived (imaginative, emotional, cultural engagement with relationships and values)	Social structures, mechanisms, forces (general and abstract); socio-political context; abstract social relations	Social structures
	Relative space (process) • experienced (observable processes producing facts) • **conceptualized (cognitively represented; conceptual framework for apprehending processes)** • lived (imaginative, emotional, cultural engagement with processes)	Social practices; discursive processes • genres: ways of acting • discourses: ways of representing • style: ways of being	Actions
	Abstract space (mind-independent existence; empirically observable) • experienced (empirically observable; observable facts) • **conceptualized (cognitively represented; conceptual framework for identifying facts)** • lived (imaginative, emotional, cultural engagement with facts)	Social events (particular and concrete), e.g. texts	Material objects

Representation of the issue of macro-regional governance of the Baltic Sea

Semiotic point of entry (Fairclough 2012): Stibbe's stories-we-live-by (2015)

<table>
<tr><td>Research questions</td><td>WPR approach (Bacchi 2009): the questions selected for the purpose of my research work</td><td>Ecological analysis of discourse (Stibbe 2014, 2015) combined with Fairclough (2012)'s CDA in the context of transdisciplinary research</td></tr>
<tr><td>Area of research interest: the Baltic Sea and its macro-regional governance</td><td></td><td>Focus on a social wrong (a social question): selecting a research topic (topics) to be approached in a transdisciplinary way and translating it (them) into an object of research (Fairclough 2012)
Focus on discourses having a significant impact on life-supporting ecosystems (Stibbe 2015)</td></tr>
<tr><td>1. How is the issue of macro-regional governance of the Baltic Sea represented through problematizations to be found in policy documents shaping the EU macro-regional dimension?</td><td>Question 1: What's the problem represented to be in a specific policy (policies or policy proposals)?

Question 2: What presuppositions or assumptions underlie this representation of the problem (binaries, key concepts, categories)?

Question 4: What is left unproblematic in this problem representation? Where are the silences in identified problem representations? Can the problem be thought about differently (specific policies constrained by problematizations)?</td><td rowspan="3">▪ Identifying obstacles to addressing the social (question) wrong (to explore the way of structuring and organizing social life that prevents the social wrong from being addressed):
• analyzing dialectical relations between semiosis and other elements, i.e. texts, orders of discourse and other elements of social practices;
• selecting texts and points of focus and categories for their analysis in line with the object of research;
• carrying out analysis of texts, i.e. both interdiscursive analysis and linguistic/semiotic analysis, with textual analysis being only a part of semiotic analysis (discourse analysis):
o textual analysis to be adequately framed within discourse analysis, with the aim to develop a semiotic 'point of entry' into objects of research constituted in a trans-disciplinary way, i.e. through dialogue between different theories and disciplines (Fairclough 2012)
Stibbe's stories-we-live-by as a semiotic point of entry (2015) and his approach to ecological analysis of discourse (2014); the analysis of clusters of linguistic features conveying particular worldviews or 'cultural codes' to uncover (hidden) stories; using one's ecosophy to expose ecologically destructive discourses and/or to promote discourses protecting life-supporting conditions
▪ Considering whether the social order 'needs' the social wrong (whether the social wrong in focus inherent to the social order, whether it can be addressed within it or only by changing it?) (Fairclough 2012)
▪ Identifying possible ways past the obstacles (moving from negative to positive critique); identifying (with a focus on dialectical relations between semiosis and other elements) possibilities within the existing social process for overcoming obstacles to addressing the social wrong in question (Fairclough 2012)
Stibbe's Positive Discourse Analysis (2018)</td></tr>
<tr><td>2. What social-ecological conditions are constituted through such problematizations?</td><td>Question 5: What effects are produced by this representation of the problem (discursive effects, subjectification, likely lived effects)?</td></tr>
<tr><td>3. How may the 'problems' of macro-regional governance of the Baltic Sea be represented differently in order to correspond to the multi-dimensional nature of the marine space?</td><td>Question 6: How (where) has this representation of the problem been produced, disseminated and defended? How could it be questioned, disrupted and replaced?</td></tr>
</table>

Appendix III
Research design

Research questions	WPR approach (questions) (Bacchi 2009)	Data sources	Data selection	Data analysis (methods)	Justification
1. How is the issue of macro-regional governance of the Baltic Sea represented through problematizations to be found in policy documents shaping the EU macro-regional dimension?	Question 1: What's the problem represented to be in a specific policy (policies or policy proposals)?	Policy documents: macro-regional strategies and the EUSBSR	Websites of the relevant institutions (macro-regional strategies and the EUSBSR) and research publications	Constructionist thematic analysis The pre-determined coding criteria: - the current situation (state) - its causes - the desired situation (state) - proposed solutions • theme identification level: semantic	To identify the proposals for change (proposed solutions) within the selected policy documents To detect implicit problem representations from specific proposals (starting points for analysis)
	Question 2: What presuppositions or assumptions underlie this representation of the problem (binaries, key concepts, categories, underlying assumptions)?	Policy documents: macro-regional strategies and the EUSBSR	Websites of the relevant institutions (macro-regional strategies and the EUSBSR) and research publications	Thematic discourse analysis: Stibbe's approach to analyzing the stories-we-live-by (= a semiotic point of entry) The pre-determined coding categories: - marine area (place) - issues, challenges - actors (subjects) - rules, resources (objects) • theme identification level: latent (underlying ideas and concepts identified in the data)	To track underlying concepts shaping and reflecting the approach to macro-regional governance of the Baltic Sea as evidenced in the data set To reveal deep-seated ways of thinking underpinning political practices
	Question 4: What is left unproblematic in this problem representation? Where are the silences in identified problem representations?	Research publications (books, articles) on marine (ocean) governance	The a priori thematic saturation	Thematic discourse analysis: Stibbe's approach to analyzing the stories-we-live-by (= a semiotic point of entry) The pre-determined coding categories: - marine area (place) - issues, challenges - actors (subjects) - rules, resources (objects)	To determine whether problem representations can be thought differently

				• theme identification level: latent (underlying ideas and concepts identified in the data)	
2. What social-ecological conditions are constituted through such problematizations?	Question 5: What effects are produced by this representation of the problem (discursive effects, subjectification, likely lived effects)?	Research publications and institutional reports on environmental governance (marine governance, climate change, and other anthropocentric changes	The a priori thematic saturation	Constructionist thematic analysis The pre-determined coding categories: - marine area (place) - issues, challenges - actors (subjects) - rules, resources (objects) • theme identification level: semantic	To consider the effects of the identified problem representations
Research questions	**WPR approach (questions) (Bacchi 2009)**	**Data sources**	**Data selection**	**Data analysis (methods)**	**Justification**
3. How may the 'problems' of macro-regional governance of the Baltic Sea be represented differently in order to correspond to the multi-dimensional nature of the marine space?	Question 6: How could identified problem representations be questioned, disrupted and replaced?	Research publications (books, articles) on social-ecological systems as well as concepts and ideas supporting the social-ecological approach (e.g. ocean literacy, environmental citizenship, ecological identity, resilience and sustainability)	The a priori thematic saturation	Constructionist thematic analysis The pre-determined coding categories: - marine area (place) - issues, challenges - actors (subjects) - rules, resources (objects) • theme identification level: semantic ▪ insights from Stibbe's stories-to-live-by ▪ insights from multimodal analysis (a semiotic point of entry)	To recommend alternative ways of thinking (or alternative problem representations) To visually reconceptualize the notion of sustainable development To offer a different perspective on the relation among the environmental, economic and social aspects of sustainable development
	Re: Question 6: my recommendation for a possible practical application of generated insights.	The recommendation inspired by the analysis of my data set, additional reading on flagships, as well as the information found at the websites dedicated to HA Capacity and PA Education (= a practical point of entry)			To demonstrate how both the WPR approach combined with Stibbe's approach to ecological analysis of discourse may inform educational programs and policy development

	Question 7:	Answered by reading the secondary sources (academic/research publications and institutional reports) and listing any reservations and critiques regarding my ecological framework (positionality), theoretical assumptions and methodological choices as well as conceptual and practical recommendations.	To ensure reflexivity through subjecting my recommendations and assumptions to critical scrutiny; To acknowledge my role as a researcher in the analytical process; To identify alternative scenarios, solutions (if any) and critical remarks regarding my choices and recommendations

Appendix IV
List of figures

Appendix V
List of abbreviations

BSmR	Baltic Sea macro-region
BSR	Baltic Sea Region
CBEES	Centre for Baltic and East European Studies
CDA	Critical Discourse Analysis
EU	European Union
EUSBSR	EU Strategy for the Baltic Sea Region
HELCOM	Helsinki Commission
ICZM	Integrated Coastal Zone Management
IMP	Integrated Maritime Policy
ISSC	International Social Science Council
ISUM	Integrated Sea Use Management
IUCN	International Union for Conservation of Nature
PA	Policy Area
SME	Small and medium-sized enterprise
UN	United Nations
UNEP	United Nations Environment Programme
VASAB	Visions and Strategies around the Baltic Sea
WFD	Water Framework Directive
WPR	What's the 'problem' represented to be
WWF	World Wildlife Fund

OŚWIADCZENIA

Ja, niżej podpisana(y) oświadczam, iż przedłożona praca doktorska została wykonana przeze mnie samodzielnie, nie narusza praw autorskich, interesów prawnych i materialnych innych osób.

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