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ABSTRACT

The Baltic Sea environment has since the early 1970s passed through several phases of spatial objectification in which the ostensibly well-defined semi-enclosed sea has been framed and reframed as a geographical object for intergovernmental environmental politics. Based on a historical analysis of this development, this article suggests that environmental politics critically depend on the delineation of relatively bounded spaces that identify and situate particular environmental concerns as spatial objects for politics. These spaces are not simply determined by 'nature' or some environmental-scientific logic, but should rather be seen as temporal outcomes of scale framing processes, processes that are accentuated by contemporary conceptions of the environment (or nature) in terms of multi-scalar ecosystems. This has implications for how an environmental concern is perceived and politically addressed.

> The first requirement of any governance regime is to define its object, an activity that is more fraught than this familiar formulation makes it appear. (Whatmore, 2002, p. 97)

1. Introduction

In the closing chapter of a collection of essays on relationships between environmental concerns and regional security in the Baltic Sea area, Westing (1989, p. 113) drew the general conclusion that 'the region of concern in relation to environmental problems is defined (delimited) largely by ecological factors rather than by political or social factors.' It is always wise to throw in a cautionary 'largely' in scholarly conclusions. In this article, however, I will propose that Westing's conclusion should be turned on its head: the 'region' of concern in relation to environmental problems is largely (but not exclusively) defined and delimited by political and other social factors; or, more to the point, I will argue that environmental concerns in important respects are framed and reframed as spatial objects for politics through processes of scaling. This has important implications for the way environmental concerns are interpreted, foregrounding some solutions and political structures while foreclosing others.

A primary aim of this article is to contribute an analysis of the spatial objectification of the Baltic Sea environment as it has evolved in the institutional framework of The Baltic Marine Environment Protection Commission – the Helsinki Commission. This is the theme of the middle and most extensive section, which charts the geo-history of intergovernmental cooperation on the Baltic Sea environment from the early 1970s to the present. This analysis draws on and seeks to contribute to the evolving literature on the 'social construction of scale' and the recent analyses of 'scale frames' in environmental debates, which is the topic of the next section.

2. Scaling and framing environmental objects

Large-scale environmental politics is typically approached as a tension between 'political spaces' associated with the modern geopolitical imagination of the World sliced into discrete state territories and 'environmental spaces' related to views of the Earth as composed of interdependent ecological systems. Camilleri and Falk (1992, p. 172) provide an example of this tension:

> On the one hand we have a conception of a world divided into separate, independent communities, delineated clearly in time and space, governed by their own sovereign authority and system of law. On the other hand is a conception of a physical, ecological and social totality, a single community of humans and other species, ultimately governed equally by natural law.

While not necessarily subscribing to the particular wording, it is fundamentally this tension that several critical analysts evoke to

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question state-centric notions of political space from an environmental position (e.g. Dalby, 2002; Kuehls, 1996). But the majority of studies concerned with large-scale environmental politics tend to reify state-territorial spaces and focus on how environmental problems can be 'solved' through intergovernmental legal systems and governance regimes; it is no coincidence that this is the perspective of three extensive studies of Baltic Sea environmental politics (Fitzmarice, 1992; Hjorth, 1992; List, 1991).[1]

My aim in the present context is not to probe the state-centric 'political spaces' of conventional environmental-political analyses and practices; this is the topic of a growing critical literature, which recently has also presented scalar takes on the theme (e.g. Bulkeley, 2005; McCarthy, 2005). Rather, my aim is to investigate the usually taken for granted 'environmental spaces' of environmental politics. As Sneddon and Fox (2006, p. 182) pointedly observe in their study of Mekong basin politics, conventional approaches 'obscures the ways in which states, non-state actors and river basins themselves interact to construct "transnational" basins through institutional and material processes.' Interacting actors and structural forces have similarly helped to produce the 'Baltic Sea' as a spatial object, and it can be argued that there generally are complex and contested geographies to the ways environmental concerns are 'framed'.

That environmental issues do not present themselves as ready-made objects is now the theme of an extensive literature. In its most radical orientation this literature involves a variety of claims about the 'social construction of nature' (Demeritt, 2002), including profound critical challenges to conceptions of 'nature' and 'culture' as separate ontological domains (Whatmore, 2002). Such arguments have bearings on the analysis of this article, a point to which we will return in the final section. My immediate concern is to accentuate a scalar dimension in the objectification of environmental concerns. The point of departure is here that contemporary environmental politics typically approach the 'environment' in terms of 'ecosystems'. With an eye on large-scale environmental politics, for example, Meyer et al. (1997, p. 630) argue:

> [T]he scientific view of nature, which has spread with increased scientific knowledge and public awareness, asserts the existence of a global and interdependent ecosystem that encompasses human beings and sustains the very possibility of life. Some components of this system are local and regional; others are intercontinental or global; rarely are they coterminous with national boundaries. The universalized conception of interdependence in such a view of nature provides a much stronger frame for international discourse and activity around the environment than did sentimental or resource views.

And in a more general formulation, Ross et al. (1997, p. 116) point out that a 'predominant contemporary characterization of nature in both science and policy is "ecosystem".' In the analysis of Sachs (1992, p. 32), the initially scientific term has in this way 'turned into a worldview', and as a worldview it 'carries the promise of uniting what has been fragmented, of healing what has been torn apart, in short of caring for the whole'. Yet ecosystems – and their more or less directly related worldviews – are by no means clear-cut spatial entities.

Early ecology, as it emerged in the late nineteenth century, was no stranger to spatial designations. For a pioneer like Frederic Clements, ecological ensembles were thus dynamic but geographically distinct and discrete communities of supra-individual organisms (Worster, 1994). Ecological units were, in other words, framed as bounded spaces. This can partly be explained by the fact that early ecologists primarily were concerned with vegetation in its abiotic environment, but the spatial stricture of this view became untenable as ecological analyses increasingly incorporated fauna and eventually also exchanges of matter and energy. Most explicitly, Tansley (1935) introduced the ecosystem concept to counter the more or less stated holism in early ecology, paving the way for an ecology inspired by physics ('systems') rather than modelled on social and biological analogies ('community' and 'organism').[2]

But his seminal article also signalled a shift in spatial perception: 'Actually the systems we isolate mentally are not only included as parts of larger ones,' Tansley (1935, p. 300) wrote, 'but they also overlap, interlock and interact with one another. The isolation is partly artificial, but it is the only way in which we can proceed.' Following Tansley's suggestion, 'ecosystem' was thus in the landmark article by Lindeman (1942, p. 400) defined as 'the system composed of physical–chemical–biological processes active within the space-time unit of any magnitude.'

Using the terminology of Collinge (1999), we might say that Tansley heralded a view of ecological ensembles as 'vertically' related in space rather than 'horizontally' separated across space; ecological ensembles were to be conceptualised in terms of spatial scale rather than as discrete spaces. And although in important respects referring to something real, ecosystems were in Tansley's conception also abstractions isolated by ecologists. More recently, Allen and Hoekstra (1992, p. 11) make a similar point: 'All ecological processes and types of ecological structures are multiscaled […] Scaling is done by the observer, it is not a matter of nature independent of observation'. Hagen (1992, p. 87) has a point, therefore, when he argues that Tansley 'freed' ecology from the 'rigid geographical basis' of earlier perspectives. But this entails ambiguities, including spatial ones:

> From the top down an ecosystem is a part of the biosphere; from the bottom up it is the organisms interacting with other organisms and nonliving features of their shared habitat. Some may even term the entire biosphere an ecosystem. Others may note that an organism such as a human serves as a habitat for a variety of other species, together with some nonliving material as in the gut, so that a single human may rate as an ecosystem. It's an elastic concept – not only with respect to scale. (Regier, 1993, p. 3)

In his critical assessment of the concept, Sachs (1992, p. 32) makes a similar point when he notes that ecosystems come in many sizes, which are 'nested like babouschka dolls, each within the next, from the microscopic to the planetary level. The concept is free-ranging in scale.' It is no coincidence, therefore, that 'Think globally, act locally' has become an environmental-political maxim: the notion of 'glocalisation' (Swyngedouw, 1997) could most certainly be applied to the broadly defined ecosystemic worldview.

This spatial ambiguity has political implications: 'To manage ecosystems, or to utilize ecosystem principles,' Ward (1998, p. 84) notes, 'boundaries must be known; managers and policymakers must be able to identify and agree upon the entity to be conserved.' Ward's focus on managers and policymakers is certainly too restricted, but her accentuation of the role of boundaries in contemporary environmental politics is suggestive (cf. Fall, 2005). We might say that environmental politics drawing on ecosystem thinking demand an objectification by area rather than type, for

[1] The publication of these studies coincided with the zenith of Baltic Sea environmental politics – the negotiation and adoption of the 1992 Helsinki Convention (see below). Since then, research interests have largely – but not exclusively (e.g. Larsen, 2005) – shifted to other facets of Baltic Sea politics.

[2] Holism has nevertheless remained a feature of much ecosystem ecology, for example in the writings of Eugene Odum and Howard Odum, and such notions are often a key future of 'lay' ecological worldviews: 'Ironically, as it has evolved, the ecosystem concept became closely identified with the very philosophy that Tansley so adamantly opposed' (Hagen, 1992, p. 136).

Fig. 1. Main and major catchment areas of the Baltic Sea (the Sound and the Danish Belt Sea are included as the southern part of the Kattegat catchment area).

example as concerning the protection of the 'Baltic Sea' rather than a particular species. Yet, as already Tansley seemed to recognise, ecosystems are not absolute spaces with well-defined boundaries. For Tansley and many subsequent ecosystem ecologists, the scaling of ecological entities is typically a methodological problem; a problem some have 'solved' by focussing on seemingly bounded entities like lakes, catchment areas or islands (Hagen, 1992). I am not the one to challenge the possibility that ecologists can devise methods that allow them to proceed from a definition of ecosystem that is neutral in scale to a meaningful definition of particular ecosystems, as argued, for example, by Pickett and Cadenasso (2002). And there might in a wider perspective be avenues for cross-fertilisation between the largely secluded scale debates in ecology and recent human geography (Sayre, 2005). But in environmental politics, the case of Baltic Sea environmental cooperation suggests that the spatiality of particular environmental concerns is neither a given nor simply a product of environmental-scientific methodology. The creation of such spatial objects should rather be seen as provisional outcomes of the production and politics of scale, because, as Swyngedouw (2004, p. 132) insists, 'nature and environmental transformations are also integral parts of the social and material production of scale.'

Marston (2000) has usefully identified three common tenets in the otherwise diverse literature on the 'social construction of scale'. First, and crucial, the literature insists that 'scale' is not ontologically given or, we may add, a simple question of methodological choice; in the words of Delaney and Leitner (1997, pp. 94–95), scale 'is not simply an external fact awaiting discovery but a way of framing conceptions of reality.' Second, these framings of reality can have both rhetorical *and* material consequences. And, Marston (2000, p. 221) finally point out, such 'framings of scale [...] are often contradictory and contested and are not necessarily enduring.'

As suggested in this outline, conceptions of scale as 'framing' is central in much of the literature, and a number of analysts have in recent years developed this notion to a variety of environmental issues. In her study of how different actors framed debates over the location of an industrial facility, Kurtz (2003, p. 894) has in this respect provided a productive conceptualisation of 'scale frames' as 'discursive practices that construct meaningful (and actionable) linkages between the scale at which a social problem is experi-

enced and the scale(s) at which it could be politically addressed or resolved.'[3]

Scale frames are in this way important for how people define the spatial extent of both a problem and its possible solutions; they situate a problem as a spatial object for particular policies and polities. And shifting the scale frame can similarly redefine the problem, foregrounding new solutions and political structures while foreclosing others.

As Mansfield and Haas (2006) show in their illustrative study of endangered Steller sea lions, scale as framing can most certainly be applied to 'single' socio-environmental problems. But questions of scale framing become particularly salient in politics that define its object in modes of understanding for which 'ecosystem' is the more or less stated metaphor. As Brenner (2001) argues, it hardly makes sense to speak of a 'politics of scale' (or, we may add, scale framing) if the notion is used to connote an aspect of socio-spatial organisation *within* a relatively bounded geographical arena. Rather, the concept should be reserved as reference 'to the production, reconfiguration or contestation of particular differentiations, orderings and hierarchies *among* geographical scales' (Brenner, 2001, p. 600). I will propose that such processes of scaling are central to ecosystem-orientated environmental politics. Actors involved in an environmental debate may not necessarily evoke particular scalar differentiations; they may, indeed, work with ideas of a relatively 'fixed' and bounded spatial entity. But because of the multi-scalar character of ecosystem thinking, a particular scale frame is always liable of being shifted or challenged by other framings. The evolution of Baltic Sea environmental cooperation provides an example of this.

3. Scaling the Baltic Sea

As an object for politics, the Baltic Sea environment has since the early 1990s routinely been visualised by images of its main catchment area (Fig. 1). And with good reason, for the catchment area is not just a suggestive representation of the environmental problems addressed by intergovernmental cooperative ventures; when superimposed upon the state borders of the area, such images of the trans-territorial catchment area are also powerful visualisations of the seemingly 'natural' need for intergovernmental cooperation. But this particular framing was slow in coming; rather than a 'given' object *for* politics, the framing is in key respects a provisional product *of* politics. In fact, it is possible to discern at least three phases in the (re)framing of the Baltic Sea as a spatial object, which will be addressed below (Section 3.2). First, however, we shall briefly look at the environmental and geopolitical settings in which Baltic Sea environmental cooperation emerged.

3.1. An ailing sea between east and west

Located between the Fennoscandian peninsular and the European continent, the Baltic Sea is a 'semi-enclosed' sea, separated from the North Sea and the oceans beyond by the narrow and shallow sills of the Danish Belt Sea and the Sound. These sills are by some seen as the 'natural' limit of the Baltic Sea (e.g. Danish Encyclopaedia, 2001). More often, however, the Baltic Sea is considered to include the Kattegat, covering a surface area of 0.42 million km^2 and draining a topographical catchment area of 1.7 million km^2 (Kautsky and Kautsky, 2000). As we will see, this larger spatial delineation is not a simple fact of nature but is in important respects a product of Baltic Sea environmental politics as it has evolved over the past three decades. For the moment, however, we shall merely acknowledge that the Baltic Sea also can be subdivided into several major sub-basins, each with particular hydrological and environmental conditions, which again can be divided into an almost infinite number of yet smaller basins. And if one wishes to include atmospheric pollution to the Baltic Sea, the space in question is significantly larger than that of the catchment area. From the outset, therefore, the spatiality of Baltic Sea environmental concerns is not a straightforward matter, a feature reflected in the assessment of Falandysz et al. (2000, p. 101):

> Although the Baltic Sea is divided into natural basins by bottom topography and economic sectors, it is largely an integrated system, highly sensitive to events in the adjacent North Sea, the land and the atmosphere. Polluted areas are related partly to distance from the North Sea, local hydrologic conditions, the catchment area of adjacent rivers and the extent of conservation measures in the surrounding countries.

In spite of such socio-environmental and spatial ambiguities, it is possible to discern some key characteristics of the Baltic Sea environment. About 200 rivers discharge into the Baltic Sea, and as the climate is humid and cold-temperate, runoff from land and precipitation easily compensate evaporation. Owning to this excess of fresh water, the outflow is about twice the inflow of more saline (and oxygen-rich) water from the North Sea. This makes the Baltic Sea the largest body of brackish water in the world, where the salinity decreases rapidly with the distance from the Danish Belt Sea and the Sound. Salinity is the most important factor affecting marine life, and the decrease in salinity is therefore followed by a dramatic decline in the number of species as one moves into the Baltic Sea. This makes the Baltic Sea a very species-poor environment, which increases the risk of key species being eliminated from the ecological systems. Besides this horizontal gradient, the water column is also stratified vertically by permanent and seasonal discontinuities in salinity and temperature. This multi-layered structure impedes the vertical water circulation, which results in accumulations of organic degradation products and, with significant variations, in the depletion of oxygen in both deep and coastal waters. This marked tendency to eutrophication is aggravated by the low influx of oxygen-rich water and the almost nonexistent tidal circulation within the Baltic Sea. And because of the narrow outlets, pollutants may reside within the sea for a long time. Altogether, this makes the Baltic Sea particularly sensitive to pollution (Falandysz et al., 2000; Kautsky and Kautsky, 2000; Helsinki Commission, 2003a).

Parallel with the growing environmental awareness in the industrial North, it was in the late 1960s that scientists became alarmed by the fragile marine environment of the Baltic Sea (e.g. ICES, 1970). The first attempt to establish some form of basin-wide intergovernmental cooperation to address such questions took place in 1969–1970 when representatives of the then seven (independent) Baltic Sea states – Denmark, Finland, the Federal Republic of Germany (FRG), the German Democratic Republic (GDR), Poland, the Soviet Union and Sweden – on two occasions met to discuss the possibility of cooperating on combating oil pollution at sea. At these meetings the parties managed to draft a limited agreement on this already limited issue, which solemnly acknowledged that 'it is necessary to take without delay complex measures for discontinuing any further pollution of the Baltic Sea and the Kattegat area and improve its quality' (Document, 1970). The agreement remained a draft, however, and already the list of participants provides a clue about the reason. The delegations from the 'western' states – which in this context also included Finland and Sweden – were thus recorded as representing 'competent authorities' on

[3] Kurtz' reference to 'social problems' probably reflects her focus on environmental justice. But to bring out the dialectical character of social and environmental change, wider perspectives may be better served by references to 'socio-environmental' or 'socio-ecological' problems (for a succinct discussion of the latter term, see Sneddon et al., 2002, p. 672).

the lower rungs of the governmental hierarchy, while the 'eastern' delegations were identified as representing their respective states. This 'western' evasion of recording a formal intergovernmental relationship with the 'east' was a clear indication that the agreement had been caught up in cold war politics – or, to be more precise, was about to fall victim to the 'German question'.

The Soviet Union had formally recognised the sovereignty of the GDR in 1954, but 'western' governments, who chose to recognise the claim of the FRG to be the sole representative of the divided Germany, did not reciprocate this move. Yet for practical reasons it was impossible simply to ignore the existence of the GDR, and neighbouring states like Denmark, Finland and Sweden therefore developed practices where relations with the GDR were maintained through formally non-state actors or state agencies on a sufficiently low level not to imply diplomatic recognition. The GDR and its 'eastern' allies, on the other hand, were eager to engage in any relation that could edge the GDR towards formally recognised statehood (Friis, 2001).

The 1970 attempt to establish an agreement on the combating of oil pollution was thus brought down by the conflict between an 'eastern' wish to engage in formal governmental relations and a 'western' preference to keep relations on a formally informal basis. Even at a time celebrated for the mild winds of détente and emerging *Ostpolitik*, cold war politics in this way blocked the first and highly cautious attempt to establish a measure of international cooperation on the Baltic Sea environment. An 'iron curtain' had not merely descended on Europe 'from Stettin in the Baltic to Trieste in the Adriatic,' as Churchill (1946) famously rumbled; it extended beyond Stettin and fouled the waters of the Baltic Sea.

3.2. Land versus sea

Cold war politics continued to haunt Baltic Sea environmental cooperation as it eventually developed over the next two decades. It was thus the prospect of an impending rapprochement between the two German states, which in October 1972 prompted the Finnish government to invite the other Baltic Sea states to participate in a diplomatic conference aimed at concluding a convention on the Baltic Sea environment. The Basic Treaty between the FRG and the GDR was signed in December 1972, and all Baltic Sea states could therefore accept the Finnish invitation, which in March 1974 resulted in the signing of the Convention on the Protection of the Marine Environment of the Baltic Sea Area – the Helsinki Convention (Helsinki Commission, 1974). The preparation of this convention marks the first phase in the spatial framing of the Baltic Sea environment.

Signed less than two years after the 'western' recognition of the GDR, Hjorth (1994, p. 21) argues, the 1974 Helsinki Convention 'was as much a contribution to détente politics as an achievement in the field of environmental politics.' Still, the convention was – on paper, at least – an ambitious environmental undertaking. The term 'ecosystem' was yet to become a household notion and was used sparingly during the early stages of the cooperative venture. But the parties' pledge to take what they variably termed an 'overall', 'total' or 'comprehensive' approach to the marine environment of the Baltic Sea was clearly based on ecosystem thinking. The government experts that met to plan a diplomatic conference on the Baltic Sea environment agreed, for example, that the conference 'ought to take an overall approach to the problem and agree upon a convention which could serve as a basis for a comprehensive system for the protection of the Baltic Sea' (Document, 1973a). Haas (1993, p. 148) has a point, therefore, when he notes that for instance the Finnish officials spearheading the undertaking 'hoped to use a treaty as an expedient way to create a diplomatic opening to the USSR and East Germany, as well as to convert their holistic ecological views into practice.'

In its approach, Fitzmaurice (1992, p. 59) argues, the 1974 Helsinki Convention was 'unique' since it was 'the first regional convention for the protection of the marine environment that adopted a "total approach" towards the convention area.' Yet, while the 'convention area' may be a reasonably straightforward concept for a legal scholar like Fitzmaurice, this is not the case when the convention is approached as an expression of scalar politics. In fact, it is possible to distinguish at least three moments in the process that led to the early framing of the Baltic Sea environment as a spatial object for politics.

The first of these moments occurred before the official negotiations commenced, at an informal meeting between representatives from Denmark, Finland and Sweden. Several issues were discussed, but we shall merely take note of a small and yet geographically significant question addressed by the meeting. In the never enacted 1970 agreement on oil-pollution, the Baltic Sea and the Kattegat had thus been mentioned as separate waters (Document, 1970). At the informal Nordic gathering, however, it was briefly discussed whether the Kattegat between Denmark and Sweden should be included as part of the Baltic Sea. In the telegraphic style of the protocol,

> It was discussed what the concept Baltic Sea includes. The Kattegat does not belong to the Baltic Sea from a geographical point of view. In addition, it was established that the Kattegat could be included in the coming regulations for the Baltic Sea if the Danish and Swedish side wish so. (Document, 1973b, my translation).

The Danish and Swedish authorities must have wished this inclusion, for the Kattegat was without further debate included in the ensuing negotiations. The parties may well have had sound environmental reasons for this. But the inclusion of the Kattegat was a *political* decision, which may help to illustrate the central point that the spatiality of an environmental concern like that of the Baltic Sea is not a simple 'fact of nature'. In the much-used image of the Baltic Sea as represented by the catchment area, the westernmost boundary of the seemingly 'natural' catchment area could just as well have been pitched up to 200 kilometres further to the east, omitting the Kattegat basin. Moreover, it can be argued that the collection and presentation of environmental data within the structure of the Helsinki Commission has been an important element in the eventual production and institutionalisation of the catchment area as the scale-frame of the Baltic Sea environment (e.g. Helsinki Commission, 2003a).

The second moment in the early framing of the Baltic Sea environment surfaced during the first formal preparatory meeting between representatives from the Baltic Sea states, where the delegate of the FRG in his opening statement seemed to question the entire enterprise: 'With regard to our particular tasks concerned with the Baltic Sea,' he said, 'we will have to ask whether specific rules are needed for the Baltic Sea' (Document, 1973c, p. 13). More specifically, the FRG argued that the Baltic Sea environment would be covered in the potentially global MARPOL convention on pollution from ships that was signed later in 1973. The other Baltic Sea states did not heed this wish of the FRG, and the FRG eventually followed the majority to establish a regional convention. But in the perspective of this article, the failed endeavour of the FRG is noteworthy as an example of what Kurtz (2003, p. 896) terms 'counter-scale frames'; that is, 'discursive strategies directed at undermining one or more elements of the scale-oriented collective action frames.' Had the FRG succeeded in framing the environmental problems of the Baltic Sea as a global concern, the problems would not only have been defined as a single-issue (ship-based pollution) rather than the more ecological 'overall' aim; it would also have entailed another governance structure than that of the Helsinki Commission to come.

If the FRG had attempted to upscale Baltic Sea environmental concerns, the third moment in the early spatialisation of the Baltic Sea environment was all about downscaling. Although habitually referring to the lack of sufficient scientific knowledge, all parties seemed to agree that land-based sources accounted for some 80 per cent of pollution to the Baltic Sea (Document, 1973c; Rotkirch, 1984). And on the first preparatory meeting, a Swedish delegate raised an issue that bore on this question. Reflecting the modern geopolitical imagination of a world bifurcated into an 'inside' and an 'outside' of territorial states (Agnew, 2003), the delegate suggested that the parties 'should consider which problems are of international and which of national concern' (Document, 1973c, p. 18). Of true international concern, the delegate argued, was oil-spills and stable pollutants like DDT and PCB, but also the marked tendency to eutrophication (oxygen reduction) in the Baltic Sea. Yet, the delegate found that there was no clear way to tackle the mainly land-based sources of eutrophication 'from an international point of view'; rather, it was 'national action' that was needed (Document, 1973c, p. 19). Thus, although eutrophication was (and is) considered to be the main environmental problem of the Baltic Sea (ICES, 1970; Helsinki Commission, 2003a), it was construed as not being an 'international' issue per se. This view was not a sudden whim of the delegate but had also been expressed by Sweden at the informal Nordic meeting (Document, 1973b), and at least the Danish and Soviet delegations voiced their support (Document, 1973c). In effect, the spatiality of the Baltic Sea environment as an intergovernmental concern was downscaled to the extraterritorial waters.

The extraterritorial waters came to prevail as the first scale frame of the Baltic Sea environment, for although the 1974 Helsinki Commission formally encompassed all sources of marine pollution, whether from land or sea, the convention was in practice restricted to the limited scale of the extraterritorial waters. An indication of this seawards bias can be found in the rules and regulation annexed to the original convention. Less than a page was thus devoted to the complex issue of land-based pollution, to which could be added a page and a half on hazardous and noxious substances. The annexes on pollution from ships and dumping at sea, on the other hand, took up some 35 pages of often highly detailed provision. Most distinctly, however, this spatial bias was brought out in Article 1, which simply stated that the convention area 'does not include internal waters of the Contracting Parties' (Helsinki Commission, 1974). And this, of course, effectively ruled out any possibility of extending the convention into the terrestrial territory of the participating states. The image of the catchment area as the scale of Baltic Sea environmental cooperation was still a distant mirage.

In significant part, this focus on the extraterritorial waters had to do with the 'strict' interpretation of territorial sovereignty by the Soviet Union (Hjorth, 1992; Darst, 2001). But much suggests that also 'western' states like Denmark and Sweden initially preferred this framing, although this had less to do with 'high' politics of sovereignty concerns and cold war politics than with domestic priorities, not least the costs involved in the cleaning of sewage and wastewater (Larsen, 2005). Whatever the underlying reason, however, this meant that the Baltic Sea environment as an object for politics was framed in the very limited scale of the extraterritorial waters, which did not correspond to the stated ambition of an 'overall' approach. The environmental problem to be addressed within the structure of the Helsinki Commission was in effect reduced to ship-based pollution, while the weighty problem of pollution from land was left to the sovereign discretions of the participating states. Thus, while allegedly about complex transboundary environmental concerns, the parties actually reproduced the spatiality of conventional governance by fixing the space of its environmental object to the inter-state of the supposedly 'common' extraterritorial waters.

3.3. The Helsinki Commission goes ashore

In spite of its manifest shortcomings, the 1974 Helsinki Convention was a small feat when it is remembered that it was concluded in the sensitive atmosphere of cold war politics, at a time when environmental issues barely had reached the governmental let alone intergovernmental agenda. Moreover, the convention was path-breaking in its ambition to approach the environmental problems of a geographical area in an 'overall' manner; that is, along lines approaching the environmental worldview epitomised by the ecosystem concept. Still, the parties largely failed to realise this expansive ambition as they embarked on the implementation of the convention under the auspices of the intergovernmental Helsinki Commission, also known as HELCOM. And this lack of substantial environmental results essentially boiled down to the limited framing of the Baltic Sea environment. In this respect, Darst (2001, p. 58) is therefore right on the point when he notes that 'while the *substantive* scope of the Commission's purview was exceptionally broad, its *geographical* scope was quite narrow.'

The most conspicuous indication of how the Helsinki Commission helped to institutionalise the extraterritorial waters as the scale of Baltic Sea environmental politics can be found in the recommendations it adopted. Until the late 1980s, the number of adopted recommendations on issues concerning coastal waters and land-based sources of pollution was thus significantly lower than recommendations relating to sea-based sources (Larsen, 2005). And this somewhat crude indicator fits well with other assessments: 'until the relatively recent political changes in the Baltic region,' Kindler and Lintner (1993, p. 11) note, 'the activities of HELCOM concentrated upon the open sea'. Formally suggested by the 1974 Helsinki Convention, the extraterritorial waters were thus through the practices of the Commission institutionalised as the environmental object for intergovernmental politics.

In the late 1980s, however, the Helsinki Commission began to loosen its spatial straightjacket. In large part, this second phase in the scale framing of the Baltic Sea environment was facilitated by the happy convergence of two ostensibly independent developments. Most noticeably, the opening for this rescaling was provided by the Soviet relaxation of its 'strict' interpretation of territorial sovereignty. In the analysis of Greene (1998, p. 180), this implied that the scope and stringency of Baltic Sea environmental commitments were substantially increased, 'not least because the USSR, under Mikhail Gorbachev, agreed that the commitments could be expanded to cover territorial seas, internal waters, and land-based sources of pollution.' But this geopolitical opening coincided with the renewed 'western' interest in environmental matters epitomised by the 1987 Brundtland Report (Anderson and Liefferink, 1997). As these twin developments emerged and merged in the Baltic Sea area, the parties to the Helsinki Convention gradually shifted their framing of the Baltic Sea environment. Tellingly, this was also the period in which the ecosystem concept in earnest – and now with some justification – entered the language of Baltic Sea environmental cooperation.

The first formal signpost in this development was the 1988 Declaration on the Protection of the Marine Environment of the Baltic Sea Area, which, with a bow to the Brundtlandian notion of 'sustainable development' as intergenerational equity, acknowledged 'the need to protect and preserve for present and future generations this most important marine ecosystem' (Helsinki Commission, 1988, p. 1). For Hjorth (1994), this indicated a shift from a cautionary 'scientific-technological' strategy to a policy-led 'political-programme' strategy. But in the perspective of this article, it is particularly noteworthy that the 1988 declaration explicitly stated the need to address land-based sources of marine pollution, both from 'point sources' such as industrial installations and urban wastewater treatment plants and from 'non-point sources' like

agricultural runoff. Slowly, but eventually surely, Baltic Sea environmental politics began to creep ashore, and this process of environmental-political amphibian metamorphosis was accelerated by the 1990 Baltic Sea Declaration.

The 1990 Baltic Sea Declaration was adopted at a time of intense geopolitical change and Stålvant (1993, p. 140) is not wide off the mark when he notes that environmental politics provided high-level politicians an arena to discuss 'wider societal goals of the transition process.' But the declaration was firmly set on environmental matters. In part, this involved a reaffirmation and strengthening of pledges made in the 1988 declaration. But the most profound feature of the 1990 declaration was arguably the parties' 'firm determination' to 'Urgently prepare a joint comprehensive programme for decisive reduction of emissions in order to restore the Baltic Sea to a sound ecological balance' (Helsinki Commission, 1990a, p. 4). This programme, the Baltic Sea Joint Comprehensive Environmental Action Programme (JCP), was prepared during 1991–1992 and was approved in 1993 (Helsinki Commission, 1993; Kindler and Lintner, 1993).

Assessments of the JCP vary (Auer and Nilenders, 2001; Greene, 1998; Ringius, 1996). But whatever its merits and shortcomings, the JCP was significant because it marked the point where the practices of the Helsinki Commission unsettled the limited scale frame of the extraterritorial waters and truly 'went ashore'. The vast proportion of the estimated costs was thus allocated to the elimination of land-based sources of pollution. Moreover, the JCP identified and mapped 132 so-called 'hot spots' for environmental cleanup and restoration (Helsinki Commission, 1993; Larsen, 2005, p. 131). That most of these hot spots were located in the 'transitional economies' that emerged from the geopolitical upheavals of 1989 and 1991 is suggestive, of course. But in the perspective of this article, it is particularly significant that many hot spots were located far ashore, not only in the states bordering the Baltic Sea, but in a few cases also in states connected to the Baltic Sea only by way of the catchment area.

The preparation of the JCP in this way marked the geo-historical moment where the catchment area emerged as the new scale framing of the Baltic Sea environment. The JCP programme-document is also among the first official Helsinki Commission publications to employ this image, which subsequently has assumed an almost emblematic status in Baltic Sea environmental politics – not just for the Commission, but also for environmental-scientific and nongovernmental actors like UNEP/GRID-Arendal and the Coalition Clean Baltic. Tellingly, it is also the image of the catchment area (and Baltic Sea environmental cooperation) that Mitchell (2002) evokes as a textbook example of 'ecosystem management' in practice.

The reframing of the Baltic Sea environment did not imply that the Helsinki Commission ceased considering ship-based pollution to be a problem, but it entailed a redefinition of the environmental problem that related sea and land, bringing the object of the Baltic Sea environmental politics significantly closer to the ecosystem worldview heralded by the Commission's aim of taking an 'overall' approach. In various ways, this also involved a reconfiguration of the political structure. The preparation and implementation of the JCP was thus not only to include neighbouring states, but also several environmental NGOs, international financial institutions, and the European Community. Most of these actors also became observers (with rights to submit proposals) in the Helsinki Commission.

Coinciding with the preparation of the JCP, the Helsinki Commission in 1990 decided to initiate a full revision of the Helsinki Convention. Apart from catching up with the post-cold war geopolitical realignments, this endeavour was part and parcel of the 'landing' of Baltic Sea environmental cooperation. The practices of the Commission were clearly running ahead of the provisions of the 1974 convention, and the working group in charge of the revision should consider 'the application area of the Convention and its possible enlargement to cover internal waters and the whole of the catchment area of the Baltic Sea' (Helsinki Commission, 1990b, p. 109). In comparison with its predecessor, the 1992 Helsinki Convention is an improvement both with respect to its political stringency and environmental scope (Ehlers, 1993). But in concrete environmental-political terms, the new convention mainly formalised the already evolving practices of the Helsinki Commission. The catchment area is not specifically mentioned in the article on the convention area, yet it includes a small but significant change, which symbolises the formal recognition of the new framing of the Baltic Sea environment: as a complete reversal of the 1974 convention, the internal waters – the sensitive interstice between land and sea – is now explicitly included in the convention area (Helsinki Commission, 1992, Article I). In a spatial sense, then, one could say that it is not just a Brundtlandian platitude when the Helsinki Commission in a publication to mark the twentieth anniversary of the Helsinki Convention used the caption: 'The Baltic Sea – our common sea' (Helsinki Commission, 1994b, p. 4).

3.4. Into a wider European space?

The space symbolised by images of the catchment area may appear a highly appropriate object for Baltic Sea environmental cooperation. Indeed, considering that catchment areas are often evoked as good examples of relatively bounded ecosystems, one could view the main topographical catchment area of the Baltic Sea as the 'logical' scale of a cooperative venture aimed at improving its marine environment along ecosystemic lines. Moreover, after the signing of the 1992 Helsinki Convention, this space was throughout the 1990s institutionalised through practices such as the implementation of the JCP – and, of course, the almost ritualistic use of images of the catchment area in publications by the Helsinki Commission and others. Yet the practices of the Commission, and in a sense the 1992 convention itself, may also open vistas for a third phase in the framing of the Baltic Sea environment. These developments are still embryonic, but a pattern is emerging.

Most conspicuously, the seeds for a possible third framing were sown by the inclusion of the European Community (EC) as a party to the 1992 Helsinki Convention. This means that the EC, from 1994 in its new draping of the European Union (EU), can act and vote on behalf of its member sates, provided, of course, that the EU member states choose not to exercise these rights themselves (Helsinki Commission, 1992, Article 23). But EU members of the Helsinki Commission are in any case bound by applicable EU directives. At the outset, when only Denmark and the FRG were members of both the EC and the Helsinki Commission, the direct implications were limited. Yet the subsequent expansions of the EU entail that all parties to the 1992 Helsinki Convention but Russia have become EU members. In the forthright words of the recent chairperson of the Helsinki Commission, this 'means that HELCOM will lose its regulating powers to a large extent' (Helsinki Commission, 2003b, p. 1). Balancing between the 'old' framing of the catchment area and a yet uncertain wider European scale, the most recent declaration of the Helsinki Commission therefore recognises that its work in the future should 'provide input to the regulatory process – pointing out the unique character of the Baltic Sea area […] by contributing and co-operating to develop a European Marine Strategy' (Helsinki Commission, 2003c, p. 3).

Yet, if not altogether unrelated, the scaling of Baltic Sea environmental politics may also take another course: towards the North Sea and North-East Atlantic, where the Helsinki Commission has an environmental-political 'twin' in the shape of the OSPAR Commission. In recognition of this affinity, the two commissions in 2003 held a joint ministerial conference. While not representing a merger, this conference signalled a *rapprochement*, which eventually may impinge on scalar articulations. So far, the most tangible

sign is the joint conference's stress on the need for 'an approach which matches the interlinkages within the marine ecosystems', and a pledge to establish 'an ecological coherent network of well managed marine protection areas' covering the North-East Atlantic and the Baltic Sea (Helsinki and OSPAR Commissions, 2003).

The fact that the Helsinki Commission (2001) at an early stage commissioned a study on the possibilities of harmonising its recommendations with the applicable EU directives is suggestive. But it remains to be seen whether this and other overtures eventually will converge in a restructuring of Baltic Sea environmental cooperation and whether this will also entail yet another reframing of the Baltic Sea environment. In a sense, however, the recent practices of the Helsinki Commission are merely catching up on an early counter-scale framing by the Coalition Clean Baltic (CCB), an NGO alliance with observer status in the Commission. In 1992, at the conference that signed the revised Helsinki Convention and approved the JCP, the CCB thus presented its own Baltic Sea Action Plan. In this document, the CCB seized the image of the catchment area. Yet the CCB did not merely superimpose the catchment area upon the state boundaries of the Baltic Sea area. Rather, to highlight that pollution to the Baltic Sea also derived from atmospheric depositions originating beyond the topographical catchment area, the CCB presented a map of this well-known image overlaid by an 'air catchment area' covering most of the European continent (reproduced in Larsen, 2005, p. 140). One can debate the significance of this particular scale framing, and we are still to see whether the nascent reframing of the Baltic Sea environment at some wider European scale will help to remedy the socio-environmental problems of the area or whether it rather will entail that the Baltic Sea environment vanishes into what Jensen and Richardson (2004) more broadly recognise as an emerging European 'monotopia'. Actually, it can be argued that already the scale frame of the catchment area is too expansive. At an early stage, Lundqvist and Loftsson (1993, p. 144) voiced such concerns:

> The view on the Baltic as one unified ecological system has been propagated. It might well be that research design and results have not explicitly supported the view of a common problem, but through the interpretation of politicians, within the HELCOM and among the public, the Baltic Sea has largely been perceived as one region.

The CCB's image of a catchment-area-upon-catchment-area is, nonetheless, a vivid illustration of how environmental politics drawing on ecosystem worldviews lend itself to the production, reproduction and contestation of particular scale frames to capture the myriad of essentially spatial relations between the inanimate and animate, including human society.

4. Conclusions

Baltic Sea environmental politics has – even when one includes the voices of NGOs – been surprisingly amicable. Challenges to the dominant scale framings have similarly been few, but the changes have nonetheless been remarkable. These framings are not innocent by-products of the cooperative venture but are in important respects implicated in how the Baltic Sea environment has been defined as an object for intergovernmental politics, foregrounding some policies and polities while foreclosing others. The Baltic Sea was with the 1974 Helsinki Convention in effect confined to the extraterritorial waters. In stark contrast to the ecosystem worldview contained in the ambition of taking an 'overall' approach, this framing implied a separation between 'land' and 'sea' and between the 'national' and the 'international', which effectively defined the problem to be tackled by the Helsinki Commission as the conventional intergovernmental issue of reducing pollution from ships at sea. These strictures were significantly overturned by the gradual reframing of the Baltic Sea environment towards the image of the catchment area. By fusing 'land' and 'sea', this framing was not only part and parcel of a redefinition of the socio-environmental problem facing the Helsinki Commission; it also implied that the Commission emerged as a more powerful institution and facilitated the incorporation of trans- and nongovernmental actors into Baltic Sea environmental politics. The possible if still embryonic reframing at some wider European scale may similarly have important consequences for how the Baltic Sea environment is perceived and politically addressed.

The geo-historical trajectory of Baltic Sea environmental cooperation is particular, of course. I will propose, however, that the case illustrates wider features of environmental politics – intergovernmental or otherwise. The key proposition is in this respect that the spatiality of socio-environmental concerns is produced through processes of scaling. Particular scale framings are in part about the production of boundaries, boundaries that (momentarily) help to define a problem and hint at its possible solutions and the political structures to do so. But in environmental politics drawing on ecosystem worldviews, such relatively bounded spaces seem particularly prone to shifts and challenges as the socio-environmental relations of a given 'ecosystem' intrinsically relate to or can be related to other geographical scales. This puts particular emphasis on the politics of scale framing.

This does not imply that scale frames are purely 'social' constructions. It is beyond the scope of this article to engage in the debate between 'realist' and 'constructionist approaches to socio-environmental issues (e.g. Burningham and Cooper, 1999; Gandy, 1996). By way of conclusion, however, we can move a little beyond the sometimes simplistic dualisms of this debate. It is to this end useful to recall Howitt, 1998 argument that the constitution of scale is not simply about (metric) *size* or *level* (in a fixed hierarchy), as conventionally conceived, but in crucial respects is about *relations* between complex and dynamic geographies. And the ecosystem concept is if anything about relations, between the animate and the inanimate and between 'society' and 'nature', all embroiled in interrelated scalar spatialities. Ecosystems are in a sense quintessential 'hybrid geographies' (Whatmore, 2002), geographies which can be seen as 'networks of interwoven processes that are human and natural, real and fictional, mechanical and organic' (Swyngedouw, 2004, p. 129). Drawing on such insights, Sneddon (2003, p. 2246) has suggestively argued that we should focus on 'how specific hybrid entities […] actively weave together human and nonhuman actors in different times and spaces, in the process producing an array of scales subject to varying interpretations.' Probing the multi-scalar character of ecosystems thinking can in this respect open a fruitful avenue to investigate the spatialities of contemporary environmental politics, a politics in which also the biological and physical components of socio-environmental networks may interact to 'support' or 'resist' particular framings. Recurring incidents of algae bloom could indicate, for example, that the Baltic Sea environment is yet to be framed at a scale that can tackle problems of eutrophication. Indeed, while there is no reason to doubt the sincere environmental concern of many (human) actors in Baltic Sea environmental politics, evidence suggests that the dominant framings of the Baltic Sea environment at gradually larger scales mainly have, so far, been driven by cold war geopolitics and Europeanisation.

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