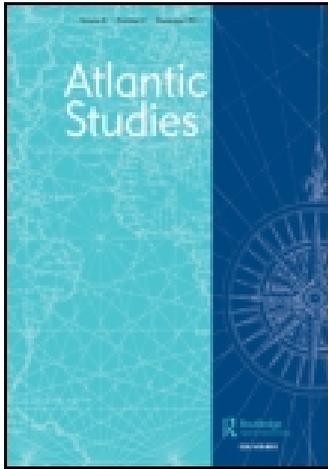


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## Of other seas: metaphors and materialities in maritime regions

Philip E. Steinberg\*

Even as ocean-region-based studies gain popularity, they all too often fail to engage the aqueous center that lies at the heart of every maritime community. Studies that seek to highlight political–economic connections across ocean basins tend to ignore the sea altogether, while those that highlight it as a site for challenging modernist notions of identity and subjectivity tend to treat the ocean solely as a metaphor. In contrast, this article argues that in order for ocean-region-based studies to reach their potential, the ocean must be engaged as a material space characterized by movement and continual reformation across all of its dimensions. Drawing on a range of theories, from conceptualizations of more-than-human assemblages to the oceanographic modeling techniques of Lagrangian fluid dynamics, this article proposes a perspective that highlights the liquidity of the ocean, so that the sea is seen not just as a space that facilitates movement between a region’s nodes but as one that, through its essential, dynamic mobility and continual reformation, gives us a new perspective from which to encounter a world increasingly characterized by connections and flows.

**Keywords:** assemblage; fluid dynamics; mobility; ocean; regionalization

The sea is not a metaphor.

So asserts Hester Blum in the first sentence of her agenda-setting article, “The Prospect of Oceanic Studies.”<sup>1</sup> Blum goes on to identify a fundamental flaw in the bulk of ocean-themed literature, maritime history, analytical work on cultural attitudes toward the ocean, and a raft of scholarship in cultural studies in which the fluvial nature of the ocean is used to signal a world of mobilities, betweenness, instabilities, and becomings. While all of these perspectives on the sea serve a purpose in that they suggest ways for theorizing an alternative ontology of connection, Blum cautions that they fail to incorporate the sea as a real, experienced social arena. Instead, she argues for a perspective that “draws from the epistemological structures provided by the lives and writings of those for whom the sea was simultaneously workplace, home, passage, penitentiary, and promise” and that is thereby “attentive to the material conditions and praxis of the maritime world.”<sup>2</sup>

I applaud Blum’s aversion to those who would reduce the ocean to a metaphorical space of connection; indeed, in the first part of this article I amplify her comments in this regard. At the same time, however, I find her alternative – the study of works that emerge from the actual, material encounters of humans with the sea – somewhat wanting. While the sea is a social (or human) space – a “social construction” – it is not *just* a social construction.<sup>3</sup> Indeed, human encounters with the sea are, of necessity, distanced and partial. The encounter from the shore, from the ship, from the surface, or even from the depths, while laden with affective feelings, captures only a fraction of the sea’s complex, four-dimensional materiality.<sup>4</sup>

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To be certain, the combination of emotional intensity with material distance that characterizes our understanding of the sea has made for some excellent literature.<sup>5</sup> Art, after all, thrives on the distance between affective and cognitive understandings.<sup>6</sup> This tension also happens to have led to some relatively enlightened environmental management practices.<sup>7</sup> But the partial nature of our encounter with the ocean necessarily creates gaps, as the unrepresentable becomes the unacknowledged and the unacknowledged becomes the unthinkable.

To that end, following a discussion of some of the problems with the way that the maritime is often considered in literary, historical, cultural, and geographical studies, I suggest three, related alternative perspectives that directly engage the ocean's fluid mobility and its tactile materiality. To be clear, my aim is not to deny the importance of either the human history of the ocean or the suggestive power of the maritime metaphor. Rather, I am asserting that in order to fully appreciate the ocean as a uniquely fluid and dynamic space we need to develop an epistemology that views the ocean as continually being reconstituted by a variety of elements: the non-human and the human, the biological and the geophysical, the historic and the contemporary. Only then, can we think with the ocean in order to enhance our understanding of – and visions for – the world at large.

### **Beyond the maritime metaphor**

The late twentieth century saw the ocean rise to the forefront of the humanities from two different perspectives. Since Fernand Braudel's classic work on the Mediterranean, scholars have sought to replace the terrestrial bias in historical and literary studies with one that focuses on ocean regions.<sup>8</sup> Land-based regionalizations, whether centered on the community, the nation-state, or the continent, typically privilege settlements, place-based identities, and the development of stable social institutions, most notably those associated with state power. By contrast, advocates of an ocean basin-based (or maritime) regionalization contend that their alternate perspective gives greater prominence to the cultural and economic interchange *between* societies that is the hallmark of historical and modern political economy.<sup>9</sup> The trend toward ocean basin-based regionalizations has accelerated in recent decades, with numerous interdisciplinary conferences, working groups, books, and journals (including, of course, *Atlantic Studies*) focusing on the study of one or another maritime region. Typically, the geographic scope of each region is defined by a central sea and – depending on the disciplinary focus of the conference, working group, book, or journal – its limits are those of that sea's historical, cultural, economic, or geopolitical watershed.<sup>10</sup>

While this is a welcome trend, it is also problematic. All too often, the ocean that binds the societies of the ocean region is undertheorized: reduced in the scholarly literature to a surface, a space of connection that merely unifies the societies on its borders. Thus, when Arif Dirlik asks, "What is in a rim?" with reference to the Pacific basin, his response inadvertently reinterprets the question as "What is *on* a rim?" or "What *passes* through the space in the *middle* of the rim?" He states: "The material basis [of the Pacific rim] is defined best not by physical geography but by relationships (economic, social, political, military, and cultural) that are concretely historical, . . . [by] motions of people, commodities, and capital."<sup>11</sup> The ocean region thus comes to be seen as a series of (terrestrial) points linked *by* connections, not the

actual (oceanic) space *of* connections. The material space in the middle – what is actually *in* the rim – drops off the map.

If this turn toward ocean region studies – which broadly can be associated with historically informed political economy – *undertheorizes* the ocean, the second foundation for the rise of ocean region studies – which can be associated with poststructuralist critical theory – *overtheorizes* the ocean. For scholars in this second group, the ocean is an ideal medium for rethinking modernist notions of identity and subjectivity and the ways in which these are reproduced through land-centered divisions and representations of space. Thus, for Deleuze and Guattari the ocean is the “smooth space *par excellence*,” a space that lies apparently, if provisionally, apart from the striations that make difference calculable and amenable to hierarchy.<sup>12</sup> Similarly, in his unpublished but oft-cited essay “Of Other Spaces,” Michel Foucault calls the ship at sea the “heterotopia *par excellence*,” a space of alternate social ordering.<sup>13</sup> These assertions, in turn, are frequently reproduced by scholars who pay little attention to the actual lives of individuals who experience and interact with the sea on a regular, or even occasional, basis. The disconnect between the idealized sea of poststructuralist theorists and the actual sea encountered by those who engage it is captured in David Harvey’s response to Foucault’s declaration that “in civilizations without boats, dreams dry up, espionage takes the place of adventure and police take the place of pirates.” “I keep expecting these words to appear on commercials for a Caribbean Cruise,” writes Harvey. “. . . And what is the critical, liberatory and emancipatory point of that? . . . I am not surprised that [Foucault] left the essay unpublished.”<sup>14</sup>

For scholars in this second, poststructuralist, group, the ocean is not so much ignored as it is reduced to a metaphor: a spatial (and thereby seemingly tangible) signifier for a world of shifting, fragmented identities, mobilities, and connections. While metaphors provide powerful tools for thought, spatial metaphors can be pernicious when they detract attention from the actual work of construction (labor, exertions of social power, reproduction of institutions, etc.) that transpires to make a space what it is.<sup>15</sup> Thus, the overtheorization of ocean space by poststructuralist scholars of maritime regions is as problematic as its undertheorization by political economy-inspired scholars.

In this light, it is interesting to compare Dirlik’s Pacific Rim with Paul Gilroy’s *The Black Atlantic*.<sup>16</sup> At first glance, Gilroy seems to cover the material (and the space) ignored by Dirlik. Whereas the distance and materiality of the ocean inside Dirlik’s Pacific Rim are seamlessly transcended by the circuits of multinational capital, the space in the middle (the Atlantic) and the frictions encountered in its crossing are central for Gilroy. *The Black Atlantic* is primarily a book about the connections that persist among members of the African diaspora and the ungrounded, unbounded, and multifaceted identities that result, and the trope of the Middle Passage is deployed throughout the book to reference the travel of African-inspired ideas and cultural products, as well as bodies, that continues to this day. Nonetheless, even as Gilroy appears to reference the ocean, the ultimate target of these references is far removed from the liquid space across which ships carrying Africans historically traveled. In fact, the geographic space of the ocean is twice removed from the phenomenon that captures Gilroy’s attention: it is used to reference the Middle Passage which in turn is used to reference contemporary flows, and by the time one connects this chain of references the materiality of the Atlantic is long forgotten. Venturing into Gilroy’s Black Atlantic, one never gets wet.

The problem, then, is not that studies that reference an oceanic center lack empirical depth. Rather, the problem is that the experiences referenced through these studies typically are partial, mediated, and distinct from the various non-human elements that combine in maritime space to make the ocean what it is. This then leads us back to Blum's call for a turn to actual experiences of the sea, as have been chronicled by anthropologists, labor historians, and historical geographers, as well as in maritime or coastal-based fiction. Unfortunately, a scholar of (Western) literature or history who pursues this agenda soon runs into methodological limits. As John Mack notes, Western accounts of "life at sea," whether fictional or historical, are typically about "life on ship," as they fail to attend to the surface on which the ship floats, let alone what transpires beneath that surface.<sup>17</sup> And yet, contrary to Dirlik's dismissal, the physical geography of the ocean *does* matter. How we interact with, utilize the resources of, and regulate the oceans that bind our ocean regions is intimately connected with how we understand those oceans as physical entities: as wet, mobile, dynamic, deep, dark spaces that are characterized by complex movements and interdependencies of water molecules, minerals, and non-human biota as well as humans and their ships. The oceans that unify our ocean regions are much more than surfaces for the movement of ships (or for the movement of ideas, commodities, money, or people) and they are much more than spaces in which we hunt for resources. Although these are the perspectives typically deployed in human-centered sea stories (i.e. the ones advocated by Blum), such perspectives only begin to address the reality of the sea that makes these encounters possible. Rather, the oceans that anchor ocean regions need to be understood as "more-than-human" assemblages,<sup>18</sup> reproduced by scientists,<sup>19</sup> sailors,<sup>20</sup> fishers,<sup>21</sup> surfers,<sup>22</sup> divers,<sup>23</sup> passengers,<sup>24</sup> and even pirate broadcasters<sup>25</sup> as they interact with and are co-constituted by the universe of mobile non-human elements that also inhabit its depths, including ships, fish, and water molecules.<sup>26</sup> Although the actions and interests of humans around the ocean's edges and on its surface certainly matter, a story that begins and ends with human "crossings" or "uses" of the sea will always be incomplete. The physical boundaries of a maritime region are indeed human-defined as Dirlik asserts, but the underlying, and specifically liquid nature of the ocean at its center needs to be understood as emergent with, and not merely as an underlying context for, human activities.

### Rethinking the ocean

On a child's world map (and even on many of those consulted by adults), the ocean appears as blue, flat, and unchanging: stable in both space and time. More sophisticated maps present the topography of the ocean floor and may even show changes in hue to represent the different depths of regional seas. Still, however, the overall aesthetic is one borrowed from representations of land: The ocean is fundamentally presented as a series of latitude-longitude points that can be characterized by certain constant values across key variables, with the most salient being the categorical divide between land that is covered by water and land that is not covered by water. This representation serves modernity well, as it reproduces the idea that the world consists of, on the one hand, static terrestrial points on the "inside" that may be settled, developed, and grouped into states and, on the other hand, aqueous points on the "outside" that, due to the absence of properties that

enable settlement and territorialization, may be written off as beyond society.<sup>27</sup> However, this representation fails to communicate the complexity of the ocean as a *mobile* space whose very essence is constituted by its fluidity and that thereby is central to the flows of modern society.<sup>28</sup>

Of course, land is also, in a geological sense, mobile. Doreen Massey points this out as she uses the geological mobility of land to undermine modernist notions of place as static and amenable to development along a single trajectory.<sup>29</sup> However, I would assert that the mobility of water is qualitatively different because its fluidity is inevitably experienced by anyone who actually encounters its physicality (as opposed to observing its representation on a map). It is readily apparent to the untrained observer that water is constituted by moving molecules and by forces that push these molecules through space and time. By contrast, the invisibility of plate tectonic movement endows terrestrial space with an aura of stability that is expressed in an idealization of place that transcends the vicissitudes of time and movement; indeed, it is the power of this image *on land* that prompts Massey to destabilize place by turning to the hidden mobilities of plate tectonics.

To develop ways for understanding the ocean as a uniquely mobile and dynamic space, as well as one with depth, it is useful to turn to the tools of oceanography, a discipline rarely engaged by humanities-oriented scholars (or, for that matter, social scientists) who adopt a regional seas perspective. In particular, I turn here to the distinction that oceanographers make between Eulerian and Lagrangian modeling techniques.<sup>30</sup> Oceanographers who work from a Eulerian perspective measure and model fluid dynamics by recording the forces that act on stable buoys. Eulerian researchers compare the presence and characteristics of these forces at different points in an effort to identify general patterns across space and time. Eulerian research remains dominant in oceanography, perhaps because it mimics the terrestrial spatial ontology wherein points are fixed in space and mobile forces are external to and act on those points, or perhaps because the alternative is both costlier and mathematically more complex.<sup>31</sup> From the Eulerian perspective, as in the modernist ontology that tends to inform our understanding of regions (whether they are defined by a central continent or by a central ocean), matter exists logically prior to movement. The fixed points of geography, represented in the world of Eulerian oceanography by buoys, would persist even in the absence of the forces of movement that cross the space between and beyond these points. Likewise, from this perspective, London and New York would exist as points on a map and, if they were settled, they would have social dynamics and institutions, even if they did not have centuries of linkages as nodes in a trans-Atlantic economy.

The alternative is to adopt a Lagrangian perspective wherein movement, instead of being subsequent to geography, *is* geography. Oceanographers working from this perspective trace the paths of “floaters” that travel in three-dimensional space, with each floater representing a particle, the fundamental unit in Lagrangian fluid dynamics. Movement is defined by the displacement across space of material characteristics within mobile packages, not abstract forces, and these characteristics are known only through their mobility.<sup>32</sup> In other words, objects come into being as they move (or unfold) through space and time. Conversely, space ceases to be a stable background but a part of the unfolding. The world is constituted by mobility without reference to any stable grid of places or coordinates. From this perspective, movement is the foundation of geography.<sup>33</sup> To return to the previous example,

London and New York exist as they are *only* in their continual reconstruction through flows of connectivity. These connections (and the space central to these connections – the ocean) can be seen only as constitutive parts/processes of the cities, not as manifestations of their external functions.

Although not specifically referencing oceanographic research, Manuel DeLanda elaborates on the conceptual links between, on the one hand, Deleuzian philosophy and, on the other hand, the Riemannian differential geometry that forms the mathematical basis for Lagrangian fluid dynamics.<sup>34</sup> In both cases, there is an “absence of a supplementary (higher) dimension imposing an extrinsic coordinatization, and hence, *an extrinsically defined unity*.”<sup>35</sup> Space, from this perspective, is less a thing or a stationary framework than a medium that is constantly being made by its dynamic, constitutive elements.

My point in introducing this strand of fluid dynamics is not to suggest that the world of ocean-basin regions can be “modeled” in Lagrangian fashion. Rather, I discuss it to suggest an alternate route for developing decentered ontologies of connection. This is, after all, the explicit goal of the poststructuralist cultural studies wing of ocean region studies and it is even implicit among political economists who seek to denaturalize the assumed primacy of the (re)production-oriented terrestrial region (e.g. the territorial nation-state). However, as I noted in the previous section, all too often this agenda is pursued by scholars who reduce to a metaphor the ocean that lies at the center of the ocean region or, worse yet, who simply ignore it. Following, but also going beyond, Blum’s provocation, I propose that, as part of the process of incorporating actual, lived experiences of the ocean into the studies of maritime regions, we need also to bring the ocean itself into the picture, not just as an *experienced* space but as a dynamic field that – through its movement, through our encounters with its movement, and through our efforts to interpret its movement – produces difference even as it unifies. A Lagrangian-inspired ontology may well provide a means for doing this.

### Rethinking the region

Ocean region studies have their origins in an explicit questioning of the assumption that the land-based region is the appropriate scope for conducting social analysis. In History departments, in particular, where academic positions are routinely connected with a specific region and a specific era (e.g. nineteenth-century Latin Americanist), scholars who have sought to define regions by oceans of interaction rather than continents of settlement and governance have had to directly challenge the disciplinary establishment.<sup>36</sup> And yet, the regionalization of the sea itself is rarely interrogated.

As Martin Lewis demonstrates, the boundaries, definitions, and namings of ocean regions have been highly variable (and, at times, quite arbitrary).<sup>37</sup> Likewise, the lines that divide ocean regions on a contemporary legal map of the sea – defining territorial waters, contiguous zones, exclusive economic zones, the High Seas, etc. – hide as much as they obscure. From the Papal Bull of 1493 that purportedly divided the ocean between Spain and Portugal to the zones ascribed to the ocean by the United Nations Convention on the Law of the Sea (UNCLOS), the history of the ocean is filled with attempts to mark off its spaces, if not as claimable territory then at least as zones where certain activities, by certain actors, are permitted and others are prohibited. And yet, even when the locations of the lines are clear and well

communicated (which, in fact, is often not the case), their meanings are worked out only through social practices. In particular, because the ocean is characterized by overlapping zonations (from the legal regions prescribed by UNCLOS to cultural understandings of regional seas to zones of geophysical interactivity and animal migrations), efforts at understanding an ocean event or image by “locating” it in an ocean region are likely to rest on simplified notions of the relationship between boundaries and events. More often than not, the definition and boundaries of an ocean region are defined by how it is practiced through the reproduction of a regional assemblage, and not the other way around.<sup>38</sup>

In short, just as ocean-region-based studies must take heed of the uniquely fluvial nature of the ocean that lies at the center of an ocean region, so they must also account for the fluidity of the lines that are drawn around and within the region. Again, this is not a problem unique to maritime regions; many pages in geography textbooks have been written that expound on where the boundaries of a specific region are (or where they should be), while more enlightened scholars have stressed that such questions cannot be answered objectively. Nonetheless, here too the ocean is an extreme case: lines drawn in and around ocean regions often take on an out-sized level of authority because they are so self-evidently divorced from the matter that is experienced by those who actually inhabit the environment. In the ocean, humans’ ability to physically transform space through line drawing is exceptionally limited.<sup>39</sup> Therefore, lines in the ocean speak not with the authority of a geophysicality that cannot be fully grasped but with the authority of a juridical system that conceivably can.<sup>40</sup>

The danger, then, is that the maritime region, although born out of a critique of the idea that the world consists of stable, bounded places where “society” is an explanatory variable, could itself emerge as an organizing trope that, through geographic shorthand, obscures the contested and dynamic nature of social processes and functions. As an “inside-out” version of the continental region, such a maritime region, like the faux-heterotopic cruise ship critiqued by Harvey, would reverse our sense of the elements and highlight some social processes (connections, migrations) over others (state-formation, settlement), but it would fall short of a fundamental epistemological revolution. “And what,” to quote Harvey again, “is the critical, liberatory and emancipatory point of that?”<sup>41</sup>

Geographers have long struggled with this problem: How can the region be employed as a concept for understanding interactions and processes (within and across its borders) without assigning it existential, pre-social properties of explanation? In their attempts at finding solutions, geographers have turned to a range of philosophical and mathematical approaches. Some have emphasized the ways in which space is co-constitutive with time while others have sought to adopt a topological perspective in which scale (and the attendant property of spatiality) is always both internal and external to the object being “located,” so that different scales cannot be ordered in a hierarchical, stable manner.<sup>42</sup>

There are potentially fruitful overlaps between this dynamic approach to space (and borders and regions) and the Lagrangian approach to fluid dynamics outlined in the previous section of this paper. In both instances, scholars abandon attempts at finding stable metrics that can fix and organize spaces and the activities that transpire within and instead turn their attention to the processes that are continually constructing spatial patterns, social institutions, and socio-natural hybrids. As I have

discussed, this approach is particularly pertinent to the study of ocean regions. By turning to the fluidity of the ocean that lies in the middle of the ocean region, we can gain new perspectives not just on the space that unites the region but on space itself and how it is produced (and reproduces itself) within the dynamics of spatial assemblages. Looking at the world from an ocean-region-based perspective thus becomes a means not just for highlighting a new series of global processes and connections, but a means for transforming the way we view the world as a whole.

### Rethinking land-sea binaries

Having discussed how an ocean-region-based perspective enables us to rethink the nature of both the ocean and the region, and how, in so doing, we develop new epistemologies for understanding the world beyond the scope of ocean regions, I want to turn to a third opportunity afforded by this perspective which all too often is lost when the ocean is reduced to a metaphor: the opportunity to rethink the binary division between land and sea.

The coast has a special place in ocean-region-based studies, as it typically marks both the limit of the region and the points where its regionalization is achieved. And yet coastlines, invariably represented as the totality of points at which land covered by water meets land not covered by water, are fictions that serve to frame a specific perspective on the world that divides space into landward state territories (“insides”) and external seas (“outsides”).<sup>43</sup> The apparent binary division of the planet’s surface into two fundamental surfaces – land and water – has been used to justify a complex and widely accepted political cosmology that complements state territory with external spaces of exception.<sup>44</sup> However, it is premised on a reduction of the space in-between – the coast – to an abstract space without dimension.

In fact, just as coasts are exceptionally rich spaces for understanding the linkages that constitute maritime regions, they are useful spaces for unpacking the fundamental binary between land and water (or dry space and wet space) that underpins the modern notion of state territoriality. Swamps, estuaries, islands (especially barrier islands), and even spaces that may be quite far from coasts, such as wetlands, ships, and ice floes all complicate the land-sea divide and thereby lead us to question assumed understandings wherein landmasses are the spaces of society and oceans are simply zones of exchange. As ocean region scholars, we should be well equipped to extend our focus from the materiality of the ocean to the materiality of the coast (and other spaces that are not clearly land or water). In so doing, we would once again be taking up the formative goal of ocean-region studies (that is, decentering the land-mass as the center of analysis) but we would also be advancing the agenda to a higher level, as we question why we ever thought of the world in a terrecentric way in the first place.

Of all these liminal spaces that are neither purely sea nor purely land, sea-ice holds particular interest, because it is juridically (and cartographically) unquestionably of the sea, but its tactile, functional, and visual properties in many cases more closely resemble land. Meanwhile, although in a different way than water, it is dynamic in both space and time (ice floes melt and form, and they move in space), and this further confounds attempts to place it in either category. The liminal status of floe ice (and shore-fast ice and ice-covered land as well) and the complex ways in which it is experienced and used as neither land nor sea has confounded explorers while providing opportunities for policy makers, indigenous and environmental

activists, and corporations who seek to establish governance institutions that lie partially outside the model of the sovereign, territorial state.<sup>45</sup>

The existence of these counter-examples should give us further pause as we construct ideal-type ocean regions that characteristically are described as having settlements on the rim and an empty surface of movement in the middle. This ideal references an imagined one-to-one correspondence between the geophysical and geopolitical properties of points on Earth's surface. However, as I have argued throughout this article, the "empty surface of movement" – whether liquid or frozen – is anything but empty. It has physical properties that contribute to the assemblage in the middle of the maritime region within which human and non-human entities travel and interact. Those physical properties must be taken seriously, not simply as a precursor to understanding the lived experiences to which Blum directs our attention, but because those properties and our interpretations of them are co-constitutive of those experiences and the spaces and times in which they occur.

### Conclusion

In her review of recent ocean-related scholarship in social and cultural geography, Kimberley Peters asks, "Oceans and seas are three-dimensional, fluid and liquid, yet they are also undulating surfaces; how does the texture, the currents and the substance of the water impact contemporary social and cultural uses of that space?"<sup>46</sup> Others have raised similar points. For instance, Elizabeth DeLoughrey asserts, "Unlike terrestrial space, the perpetual circulation of ocean currents means that as a space, [the sea] necessarily dissolves local phenomenology and defracts the accumulation of narrative."<sup>47</sup> In a similar vein, Lambert, Martins, and Ogborn write, "Clearly, climatic, geophysical, and ecological processes belong in work on the sea . . . Overemphasis on human agency, especially in accounts of the Atlantic, makes for a curiously static and empty conception of the sea, in which it serves merely as a framework for historical investigations, rather than being something with a lively and energetic materiality of its own."<sup>48</sup>

Yet even those who advocate a "more-than-human" approach have difficulty incorporating the ocean's geophysicality, not just as a force that *impacts* humans but as part of a marine assemblage in which humans are just one component. Thus, Lambert, Martins, and Ogborn discuss narratives of the White Atlantic (European migration), Black Atlantic (postcolonial connections), and Red Atlantic (the Atlantic as a space of labor) but curiously leave out a Blue Atlantic (a geophysical space of dynamic liquidity), and their example of the North Atlantic circular system supporting the "triangular trade" culminates in a distinctly human set of patterns and interrelations in which, as with all maritime trade, the underlying water is idealized as absent.<sup>49</sup> Despite their best intentions, the ocean environment, although recognized as being more complex than a mere surface, is still treated as "a framework for historical investigations."

A more systematic attempt to integrate geophysicality into our understanding of human activities in the sea can be seen in recently published works by Kimberley Peters and by Jon Anderson. Peters focuses on pirate radio broadcasters who are continually thwarted in their attempts to idealize the ocean as an abstract, extra-legal, extra-national space. Reflecting on the affective interaction between the maritime broadcaster and the sea, she conceptualizes a "hydro-materiality" that incorporates

mobile biota (both human and non-human) as well as technologies and objects.<sup>50</sup> The geophysical properties of the ocean take on an even more profound role in Anderson's research on surfing. He uses the relationship between the surfer and the wave to explore how the assemblage perspective can be expanded (or modified) to interpret fleeting moments of socio-biological-geophysical convergence. This ontology of convergence may well characterize all moments in time, but its applicability is particularly profound in the ocean because of the ocean's underlying dynamism.<sup>51</sup>

Peters and Anderson propose just two of the many ways in which we can take the ocean seriously as a complex space of circulations. These circulations are comprised not just of the people, ideas, commodities, and ships that move across its surface or the fish who swim in its water. Rather, in a more fundamental way, the ocean is a space of circulation because it is constituted through its very geophysical mobility. As in Lagrangian fluid dynamics, movement is not something that happens between places, connecting discrete points on a "rim." Rather, movement emerges as the very essence of the ocean region, including the aqueous mass at its center. From this perspective, the ocean becomes the object of our focus not because it is a space that *facilitates* movement – the space across which things move – but because it is a space that is *constituted by* and *constitutive of* movement.

This perspective not only enables us to understand the ocean in its entirety; it disassembles accepted understandings of relations between space and time, between stasis and mobility, and between human and non-human actants like ships, navigational aids, and water molecules. This perspective suggests an ambitious agenda, and one that goes well beyond more established goals in the ocean-region studies community, such as highlighting exchange over production or emphasizing the hybrid nature of cultural identities. And yet, it is only through engaging with the ocean in all its material complexity that we can develop the fluid perspective that allows us to use the sea to look beyond the sea.

### Notes on contributor

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### Notes

1. Hester Blum, "The Prospect of Oceanic Studies," 670.
2. Ibid.
3. Steinberg, *The Social Construction of the Ocean*.
4. The four dimensions referred to here are depth and time, as well as the two dimensions of area. As I argue below, after Massey, *For Space*, the space and time of the sea are inseparable from each other, as its space is continually constituted through dynamic reformations in time, and vice versa.
5. For reviews and examples, see Cohen, *The Novel and the Sea*; Raban, *The Oxford Book of the Sea*; and the annotated bibliography ("Reading the New Thalassology") in Mentz, *At the Bottom of Shakespeare's Ocean*, 101–112.
6. This is the central tension underlying the principle of the sublime; see Shaw, *The Sublime*, for an overview. With specific reference to the ocean, see Christopher Connery, "The Oceanic Feeling."
7. Philip Steinberg, "It's So Easy Being Green."
8. Fernand Braudel, *The Mediterranean and the Mediterranean World*.
9. Martin Lewis and Kären Wigen, "A Maritime Response."

10. The variance in different academic regional seas communities is striking, in part reflecting the specific disciplines that historically have been most involved in studying a specific region; see, Lewis and Wigen, "A Maritime Response." Contrast, for instance the humanities orientation of *Atlantic Studies* with the security studies orientation of the *Journal of the Indian Ocean Region*.
11. Arif Dirlik, "Introduction: Pacific Contradictions," 4.
12. Gilles Deleuze and Félix Guattari, *A Thousand Plateaus*, 479.
13. Michel Foucault, "Of Other Spaces," 27.
14. David Harvey, "Cosmopolitanism," 538, quoting Foucault, "Of Other Spaces," 27.
15. Michael Brown, *Closet Space*; Neil Smith and Cindy Katz, "Grounding Metaphor."
16. Paul Gilroy, *The Black Atlantic*.
17. John Mack, *The Sea*.
18. Sarah Whatmore, *Hybrid Geographies*.
19. Stefan Helmreich, *Alien Ocean*.
20. John Law, "On the Methods of Long-Distance Control."
21. Christopher Bear and Sally Eden, "Making Space for Fish."
22. Jon Anderson, "Relational Places."
23. Stephanie Merchant, "Negotiating Underwater Space."
24. Phillip Vannini, "Constellations of (In-)Convenience"; for a more complete discussion of the passenger who is moving about a moving vessel that is traveling through mobile space, although without specific reference to the marine environment, see, Adey et al., "Profiling the Passenger."
25. Kimberley Peters, "Manipulating Material Hydro-Worlds."
26. Although I am most directly drawing on an emergent body of work in the human geography of ocean-space, this work in turn builds on a longer tradition of social research that acknowledges non-human agency, including actor-network theory (see, Latour, *Reassembling the Social*) and assemblage theory (see, DeLanda, *A New Philosophy of Society*).
27. Steinberg, "Sovereignty, Territory, and the Mapping of Mobility."
28. Steinberg, *The Social Construction of the Ocean*.
29. Doreen Massey, *For Space*; Massey, "Landscape as a Provocation."
30. The discussion of oceanographic fluid dynamic modeling techniques in the paragraphs that follow is closely derived from Steinberg, "Free Sea."
31. Russ Davis, "Lagrangian Ocean Studies."
32. Andrew Bennett, *Lagrangian Fluid Dynamics*.
33. This aligns with a broader trend in cultural studies toward treating mobility as not merely derivative of society but constitutive of it; see, Adey, *Mobility*; and Cresswell, *On the Move*.
34. DeLanda, *Intensive Science and Virtual Philosophy*. The mathematical theory of Gottfried Leibniz looms large in this perspective as well, in particular with regard to his ontology of the fold.
35. *Ibid.*, 12, emphasis in original.
36. Bernard Bailyn, *Atlantic History*. The recent trend in history toward "continentalism" as a response to national histories reflects a similar desire to highlight interaction and exchange over idealizations of unity and stasis (see, for instance, Wood, "From Atlantic History to a Continental Approach"). That raises the question of whether centering one's region around an ocean basin is *necessary* for disrupting static views of society or whether it is just *helpful* because it so clearly reverses the orientation of nation-state-centered historic narratives. That question, however, is beyond the scope of this article.
37. Lewis, "Dividing the Ocean Sea."
38. See, Steinberg, "The Deepwater Horizon," for a discussion of this dynamic zonation with reference specifically to geopolitical understandings of the 2010 Israeli raid on a Palestinian aid convoy in international waters and on understandings of the Deepwater Horizon disaster in the Gulf of Mexico. These points are explored further, in a more historical context, in Steinberg, "Lines of Division, Lines of Connection."
39. Peters, "Manipulating Material Hydro-Worlds"; Schmitt, *The Nomos of the Earth*.
40. A similar level of authority is often ascribed to state boundary lines that divide islands, for much the same reason: Their defiance of a naturalized state-ideal makes them suspect, but

- their persistence even amidst their evident non-natural origins gives them an exceptional level of communicative power; see, Baldacchino, *The Political Economy of Divided Islands*.
41. Harvey, "Cosmopolitanism," 538.
  42. The contemporary literatures on reconceptualizing place/space and scale are extensive and, especially in the case of the scale literature, dense. For place, a good general introduction is Cresswell, *Place*, while Massey, *For Space*, is an exemplary text arguing for a process-based approach in which space is co-constitutive with time. For scale, Herod, *Scale*, provides a good overview while Marston, Woodward, and Jones, "Human Geography without Scale," is the seminal articulation of the topological perspective.
  43. Paul Carter, "Dark with Excess of Bright"; Steinberg, "Sovereignty, Territory, and the Mapping of Mobility."
  44. Carl Schmitt, *Nomos of the Earth*; for critiques, see, Connery, "Ideologies of Land and Sea," and Steinberg, "Free Sea."
  45. Craciun, "The Frozen Ocean," "The Scramble for the Arctic"; Gerhardt et al., "Contested Sovereignty in a Changing Arctic"; Shadian, "From States to Politics"; Wråkberg, "Delineating a Continent of Ice and Snow"; and Yussof, "Visualizing Antarctica as a Place in Time."
  46. Peters, "Future Promises," 1265. I would hold that the sea's "undulation" introduces the element of time, and thus a fourth dimension (see n. 4). However, Peters' question remains a powerful one, regardless of how one counts dimensions.
  47. Elizabeth DeLoughrey, *Routes and Roots*, 55.
  48. Lambert, Martins, and Ogborn, "Currents, Visions, and Voyages," 482.
  49. Connery, "Pacific Rim Discourse"; Connery, "There Was No More Sea"; Sekula, *Fish Story*; and Steinberg, "The Maritime Mystique."
  50. Peters, "Manipulating Material Hydro-Worlds."
  51. Anderson, "Relational Places."

## References

- Adey, Peter. *Mobility*. London: Routledge, 2009.
- Adey, Peter, David Bissell, Derek McCormack, and Peter Merriman. "Profiling the Passenger: Mobilities, Identities, Embodiments." *Cultural Geographies* 19, no. 2 (2012): 169–193. doi:10.1177/1474474011428031
- Anderson, Jon. "Relational Places: The Surfing Wave as Assemblage and Convergence." *Environment and Planning D: Society & Space* 30, no. 4 (2012): 570–587. doi:10.1068/d17910
- Bailyn, Bernard. *Atlantic History: Concepts and Contours*. Cambridge, MA: Harvard University Press, 2005.
- Baldacchino, Godfrey, ed. *The Political Economy of Divided Islands: Unified Geographies, Multiple Politics*. London: Palgrave Macmillan, 2013.
- Bear, Christopher, and Sally Eden. "Making Space for Fish: The Regional, Network, and Fluid Spaces of Fisheries Certification." *Social & Cultural Geography* 9, no. 5 (2008): 487–504. doi:10.1080/14649360802224358
- Bennett, Andrew. *Lagrangian Fluid Dynamics*. Cambridge: Cambridge University Press, 2006.
- Blum, Hester. "The Prospect of Oceanic Studies." *Proceedings of the Modern Language Association* 125, no. 3 (2010): 670–677. doi:10.1632/pmla.2010.125.3.670
- Braudel, Fernand. *The Mediterranean and the Mediterranean World in the Age of Philip II*. 2nd ed. 2 vols. Translated by Siân Reynolds. New York: Harper & Row, 1972.
- Brown, Michael P. *Closet Space: Geographies of Metaphor from the Body to the Globe*. London: Routledge, 2000.
- Carter, Paul. "Dark with Excess of Bright: Mapping the Coastlines of Knowledge." In *Mappings*, edited by Denis Cosgrove, 125–147. London: Reaktion, 1999.
- Cohen, Margaret. *The Novel and the Sea*. Princeton, NJ: Princeton University Press, 2010.
- Connery, Christopher L. "Pacific Rim Discourse: The U.S. Global Imaginary in the Late Cold War Years." In *Asia/Pacific as Space of Cultural Production*, edited by Rob Wilson and Arif Dirlik, 30–56. Durham, NC: Duke University Press, 1995.

- Connery, Christopher L. "The Oceanic Feeling and the Regional Imaginary." In *Global/Local: Cultural Production and the Transnational Imaginary*, edited by Arif Dirlik and Dissanayake Wimal, 284–311. Durham, NC: Duke University Press, 1996.
- Connery, Christopher L. "Ideologies of Land and Sea: Alfred Thayer Mahan, Carl Schmitt, and the Shaping of Global Myth Elements." *Boundary 2* 28 (2001): 173–201. doi:10.1215/01903659-28-2-173
- Connery, Christopher L. "There Was No More Sea: The Supersession of the Ocean, from the Bible to Cyberspace." *Journal of Historical Geography* 32, no. 3 (2006): 494–511. doi:10.1016/j.jhg.2005.10.005
- Craciun, Adriana. "The Scramble for the Arctic." *Interventions* 11 (2009): 103–114. doi:10.1080/13698010902752855
- Craciun, Adriana. "The Frozen Ocean." *Proceedings of the Modern Language Association* 125, no. 3 (2010): 693–702. doi:10.1632/pmla.2010.125.3.693
- Cresswell, Tim. *Place: A Short Introduction*. Oxford: Blackwell, 2004.
- Cresswell, Tim. *On the Move: Mobility in the Modern Western World*. London: Routledge, 2006.
- Davis, Russ E. "Lagrangian Ocean Studies." *Annual Review of Fluid Mechanics* 23, no. 1 (1991): 43–64. doi:10.1146/annurev.fl.23.010191.000355
- DeLanda, Manuel. *Intensive Science and Virtual Philosophy*. London: Continuum, 2002.
- DeLanda, Manuel. *A New Philosophy of Society: Assemblage Theory and Social Complexity*. London: Continuum, 2006.
- Deleuze, Gilles, and Félix Guattari. *A Thousand Plateaus*. Translated by Brian Massumi. London: Athlone, 1988.
- DeLoughrey, Elizabeth. *Routes and Roots: Navigating Caribbean and Pacific Island Literatures*. Honolulu: University of Hawai'i Press, 2007.
- Dirlik, Arif. "Introduction: Pacific Contradictions." In *What Is In a Rim? Critical Perspectives on the Pacific Region Idea*. 2nd ed., edited by Arif Dirlik, 3–13. Lanham, MD: Rowman & Littlefield, 1998.
- Foucault, Michel. *Of Other Spaces*. Translated by Jay Miskowicz. *Diacritics* 16 (1986): 22–27. <http://www.jstor.org/stable/464648>.
- Gerhardt, Hannes, Philip E Steinberg, Jeremy Tasch, Sandra J Fabiano, and Rob Shields. "Contested Sovereignty in a Changing Arctic." *Annals of the Association of American Geographers* 100, no. 4 (2010): 992–1002. doi:10.1080/00045608.2010.500560
- Gilroy, Paul. *The Black Atlantic: Modernity and Double Consciousness*. Cambridge, MA: Harvard University Press, 1993.
- Harvey, David. "Cosmopolitanism and the Banality of Geographical Evils." *Public Culture* 12, no. 2 (2000): 529–564. doi:10.1215/08992363-12-2-529
- Helmreich, Stefan. *Alien Ocean: Anthropological Voyages in Microbial Seas*. Berkeley: University of California Press, 2009.
- Herod, Andrew. *Scale*. London: Routledge, 2010.
- Lambert, David, Luciana Martins, and Miles Ogborn. "Currents, Visions, and Voyages: Historical Geographies of the Sea." *Journal of Historical Geography* 32 (2006): 479–493. doi:10.1016/j.jhg.2005.10.004
- Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network Theory*. New York: Oxford University Press, 2007.
- Law, John. "On the Methods of Long-Distance Control: Vessels, Navigation, and the Portuguese Route to India." In *Power, Action, Belief: A New Sociology of Knowledge*, edited by John Law, 234–263. London: Routledge and Kegan Paul, 1986.
- Lewis, Martin W. "Dividing the Ocean Sea." *Geographical Review* 89, no. 2 (1999): 188–214. doi:10.2307/216086
- Lewis, Martin W, and Kären Wigen. "A Maritime Response to the Crisis in Area Studies." *Geographical Review* 89, no. 2 (1999): 161–168. doi:10.2307/216084
- Mack, John. *The Sea: A Cultural History*. London: Reaktion, 2011.
- Marston, Sallie A., Keith Woodward, and John Paul Jones III. "Human Geography without Scale." *Transactions of the Institute of British Geographers* 30, no. 4 (2005): 416–432. doi:10.1111/j.1475-5661.2005.00180.x
- Massey, Doreen. *For Space*. London: Sage, 2005.

- Massey, Doreen. "Landscape as a Provocation: Reflections on Moving Mountains." *Journal of Material Culture* 11 (2006): 33–48. doi:10.1177/1359183506062991
- Mentz, Steve. *At the Bottom of Shakespeare's Ocean*. London: Continuum, 2009.
- Merchant, Stephanie. "Negotiating Underwater Space: The Sensorium, the Body, and the Practice of Scuba-Diving." *Tourist Studies* 11, no. 3 (2011): 215–234. doi:10.1177/1468797611432040
- Peters, Kimberley. "Future Promises for Contemporary Social and Cultural Geographies of the Sea." *Geography Compass* 4, no. 9 (2010): 1260–1272. doi:10.1111/j.1749-8198.2010.0372.x
- Peters, Kimberley. "Manipulating Material Hydro-Worlds: Rethinking Human and More-than-Human Relationality through Offshore Radio Piracy." *Environment and Planning A* 44, no. 5 (2012): 1241–1254. doi:10.1068/a444413
- Raban, Jonathan. *The Oxford Book of the Sea*. Oxford: Oxford University Press, 1993.
- Schmitt, Carl. *The Nomos of the Earth in the International Law of the Jus Publicum Europaeum*. Translated by George L. Ulmen. New York: Telos, 2003.
- Sekula, Allan. *Fish Story*. Düsseldorf: Richter, 1995.
- Shadian, Jessica. "From States to Politics: Reconceptualizing Sovereignty through Inuit Governance." *European Journal of International Relations* 16, no. 3 (2010): 485–510. doi:10.1177/1354066109346887
- Shaw, Philip. *The Sublime*. London: Routledge, 2006.
- Smith, Neil, and Cindy Katz. "Grounding Metaphor: Towards a Spatialized Politics." In *Place and the Politics of Identity*, edited by Michael Keith and Steve Pile, 67–84. London: Routledge, 1993.
- Steinberg, Philip E. "Lines of Division, Lines of Connection: Stewardship in the World-Ocean." *Geographical Review* 89, no. 2 (1999): 254–264. doi:10.2307/216090
- Steinberg, Philip E. "The Maritime Mystique: Sustainable Development, Capital Mobility, and Nostalgia in the World-Ocean." *Environment and Planning D: Society & Space* 17 (1999): 403–426. doi:10.1068/d170403
- Steinberg, Philip E. *The Social Construction of the Ocean*. Cambridge: Cambridge University Press, 2001.
- Steinberg, Philip E. "It's So Easy Being Green: Overuse, Underexposure, and the Marine Environmentalist Consensus." *Geography Compass* 2, no. 6 (2008): 2080–2096. doi:10.1111/j.1749-8198.2008.00173.x
- Steinberg, Philip E. "Sovereignty, Territory, and the Mapping of Mobility: A View from the Outside." *Annals of the Association of American Geographers* 99, no. 3 (2009): 467–495. doi:10.1080/00045600902931702
- Steinberg, Philip E. "Free Sea." In *Sovereignty, Spatiality, and Carl Schmitt: Geographies of the Nomos*, edited by Stephen Legg, 268–275. London: Routledge, 2011.
- Steinberg, Philip E. "The Deepwater Horizon, the Mavi Marmara, and the Dynamic Zonation of Ocean-Space." *The Geographical Journal* 177, no. 1 (2011): 12–16. doi:10.1111/j.1475-4959.2010.00383.x
- Vannini, Phillip. "Constellations of (In-)convenience: Disentangling the Assemblages of Canada's West Coast Island Mobilities." *Social & Cultural Geography* 12, no. 5 (2011): 471–492. doi:10.1080/14649365.2011.588803
- Whatmore, Sarah. *Hybrid Geographies: Natures, Cultures, Spaces*. London: Sage, 2002.
- Wood, Peter. "From Atlantic History to a Continental Approach." In *Atlantic History: A Critical Approach*, edited by Jack Greene and Philip Morgan, 279–298. New York: Oxford University Press, 2009.
- Wråkberg, Urban. "Delineating a Continent of Ice and Snow: Cartographic Claims of Knowledge and Territory in Antarctic in the 19th and Early 20th Centuries." In *Antarctic Challenges: Historic and Current Perspectives on Otto Nordenskjöld's Antarctic Expedition*, edited by A. Elzinga, D. Turner, T. Nordin, and U. Wråkberg, 123–143. Göteborg, Sweden: Royal Society of Arts and Sciences, 2004.
- Yussof, Kathryn. "Visualizing Antarctica as a Place in Time: From the Geological Sublime to 'Real Time'." *Space & Culture* 8 (2005): 381–398. doi:10.1177/1206331205280147