

## **Editorial: The Ocean as Frontier**

**Abstract:** This editorial explores how the concept of the frontier calls attention to the ocean as a space of both opening and closure. Whilst the new opportunities suggested by a frontier imply an opening, the realization of these opportunities typically requires a degree of (en)closure. At the same time, however, because spaces like the ocean cannot easily be enclosed by existing political institutions, the frontier opens new spaces for regulatory and, ultimately, ethical innovations. In short, while there is much to be concerned about in the opening of the ocean as a 'frontier', this opening also presents political opportunities.

**Keywords:** Enclosure, Frontier, Ocean, Regulation, Territory

## **Frontier as Opportunity, Frontier as Limit**

In 2007, a multinational team in a Russian submersible made headlines when one of its members, oceanographer and Duma member Artur Chilingarov, planted a Russian flag on the seabed at the North Pole (BBC 2007). Although the flag planting had no legal significance and was in an area of little apparent economic value, it attracted public interest because it evoked the idea that the ocean was a *frontier*, a space that both reminds society of its limits and that suggests that these limits can be transcended.

The rhetoric of the frontier, long used to describe sites of colonial expansion and celestial exploration, is increasingly applied to marine (and submarine) spaces. A 1989 report from the US National Research Council's Marine Board directs attention to *Our Seabed Frontier* (Marine Board 1989) while in 2011 an engineering group at Rockwell Automation hailed the seabed as the *New Technology Frontier* (Rentcome and McLin 2011). The International Seabed Authority also celebrates the seabed as "the new frontier" (International Seabed Authority 2010). Turning to the ocean as a whole, the Ocean Frontier Institute, a collaborative effort of three Atlantic Canadian universities to coordinate North Atlantic research, "brings together experts from both sides of the North Atlantic to explore the vast potential of the world's ocean" (Ocean Frontier Institute n.d.). These references to the frontier concept all highlight the ocean as a space of opportunity. The ocean frontier is imagined as a space of *opening*.

Subsumed within this discourse, however, is that frontiers are also spaces of closure. As a frontier is 'opened' it is also 'closed', whether by the planting of flags, the drawing of lines on maps, the inclusion of its resources within economic calculations, or the introduction of the frontier into scientific models and systems of categorization. A frontier signifies a space where a limit is, at one and the same time, acknowledged, transcended, and reimposed.

## **Frontiers, Borders, and Margins**

In the field of boundary studies a distinction is made between a *frontier* and a *border*. A border is a division line between two equivalent entities, like two sovereign states. Although in practice borders are complex sites of interaction, legally there is no such thing as a border *zone* (Anderson, 1996). Juridically, the system of sovereign territorial states is characterised by clear, defined points at which one state's absolute authority ends and another's begins. A frontier, by contrast, is a zone of declining power, less a line that divides one 'inside' from another, equivalent 'inside' than an area of diminishing authority within which the 'inside' gradually becomes an 'outside'. A frontier, in short, is a margin. But it is a specific kind of margin that, especially in the discourse of contemporary global economic expansion, presents an opportunity. As political economist John Friedmann writes with reference to resource frontiers, these are areas "on the thinly populated margins of the national territory... [that are settled] not to

establish a more or less permanent rural settlement but to prospect for, extract, and export resources...for the benefit of the industrial heartlands of the world” (Friedmann 1996, p.2).

To realize a frontier’s opportunity, a degree of enclosure is necessary, but therein lies the rub. For there are generally good reasons why a space has not been fully incorporated as sovereign territory. Its physical properties, or its location distant from power centres, may resist control. Its populace may have successfully resisted state hegemony. The space may serve a social function that is dependent on its continued position outside state authority.

The closure of a frontier therefore always entails the opening of a conversation, for a frontier rarely can be enclosed simply by extending existing institutions to new spaces. And the construction of new institutions requires asking new questions (or revisiting old questions): For whom is the frontier being incorporated to serve? What safeguards are being implemented to protect its environment or inhabitants? How will risks and benefits be distributed? To what degree can the institutions being developed for the frontier serve as a model for other emergent spaces of opportunity and closure?

### **Opening and Closing the Ocean Frontier**

The ocean has a long history both as a space for expanding the reach of state authority and for acknowledging its limits. Indeed, the history of the modern world-economy can be read as a history of the simultaneous ‘opening’ and ‘closing’ of the ocean frontier (Steinberg 2001). The formation of mercantilist empires that claimed exclusive rights to maritime trade routes formed the foundation for modern capitalism, but their efforts to establish exclusive territorial authority in the ocean were not tenable. The sea in this era was, in a sense, less a frontier than a space *beyond* a frontier: a space that was best governed by an absence of enclosure. Later maritime powers, such as the United Kingdom in the 19<sup>th</sup> century and the United States in the 20<sup>th</sup>, understood that there was little to gain by conceiving the ocean as a frontier. They exercised their considerable military and economic power at sea to ensure that areas of the sea distant from land were open to all, and they ensured that the norms and regulations established to govern the relatively marginal activities of deep-sea resource extraction did not interfere with the dominant construction of the ocean as an unclaimable, boundary-free surface for unimpeded movement. Thus, the primary discourse of this era, at least through the mid-20<sup>th</sup> century, was that territorial enclosure should be restricted to land. To the extent that power was extended to the sea, its guiding objective was to ensure that even as the ocean was constructed as a space of order and opportunity it should *not* be constructed as a frontier.

The application of the frontier discourse to the ocean began in the mid 20<sup>th</sup>-century, in particular with recognition of the potential for the extraction of spatially fixed resources (first petroleum, and later seabed minerals and biological resources). From an economic perspective, the ocean was beginning to

look more like land: claimable, controllable, governable, and, with the advent of offshore aquaculture, even amenable to infrastructural improvements. The ocean presented an opportunity, and it was recognized that a degree of enclosure would be necessary to realize this opportunity: sovereign protections would be needed to protect prospectors; legal codes would be needed to incentivize exploratory investments; stock management would be needed to ensure long-term sustainability of resource extraction.

And yet, even as new economic opportunities were emerging that would require a degree of incorporation ('closing', as it were, the ocean frontier), the properties of the ocean that had long made it resistant to enclosure remained: the ocean was still a space of depth and dynamism, with physical properties that complicated attempts at surveillance. Even today, the ocean's primary economic function remains as a transportation surface whose value is dependent on the absence of boundaries. Furthermore, the ocean retains an essential environmental function that requires the free flow of molecules across air and land as well as at sea. In short, any effort to close the ocean as a *geographic* frontier will require the opening of new *regulatory* frontiers. And any effort to design new regulatory frontiers, in turn, will mandate an engagement with new *ethical* frontiers as decisions are made regarding who gets what, through what mechanisms, and for what ends.

The various zones codified in the United Nations Convention on the Law of the Sea (UNCLOS) – drafted to accommodate the management of a host of emergent ocean uses in the late 20<sup>th</sup> century – exemplify the regulatory and ethical frontiers that are opened as the ocean's spatial frontiers are closed. In the regions of the ocean closest to shore – the territorial sea – it is acknowledged that the frontier *could* be closed, with these waters being brought within the sovereignty of the land-based, sovereign state. Even here, however, there is a recognition that complete closure would be inimical to a global economy that is dependent on maritime trade. Therefore, even in territorial seas, ships of foreign nations are guaranteed innocent passage.

The high seas remain, fundamentally, a space of unfettered navigation that can be used freely by any entity claiming affiliation with a member of the community of states. However, this designation of the high seas as 'beyond a frontier' has been facilitated by reducing its geographical extent: under UNCLOS, the seabed beneath the high seas is governed under a separate regime that overrides the high seas properties of the water column. The high seas might yet take on some of the properties of a 'closable' frontier if new activities in distant waters, like deep sea fisheries, become more attractive economically.

Between the high seas and the territorial sea lies the exclusive economic zone (including the extended continental shelf beneath the high seas). The EEZ is a frontier of regulatory innovation in that exclusive rights to spatially delimited resources are separated from sovereign control of territory. It also, at times, leads states into new frontiers of regulation as, for instance, indigenous conceptions of the sea that include historic fishing rights and cultural meaning

are fused with a 'modern' perspective wherein the sea is excluded from notions of 'property' and 'place'.

And finally, the international seabed – 'the Area' – is a space where not only global access but the global distribution of benefits is to be guaranteed because it is the 'common heritage of mankind'. This designation raises a host of ethical questions as the state parties to the International Seabed Authority are tasked with determining what it means to have an obligation to the global community of individuals who collectively constitute 'mankind'.

Debates surrounding the 'closing' of the ocean frontier – and the consequent 'opening' of new regulatory and ethical frontiers – continue today. Environmentalists explore ways for integrating sustainability into the 'common heritage of mankind' principle, arguing that if the seabed (or, more broadly, the deep-sea environment) is the 'common heritage of mankind' then these benefits should be extended to future generations and to the ecosystem services that the deep sea broadly provides to humanity and the surrounding global ecology of which humans are just one small part. Conversely, mining firms explore ways for integrating the principle – with its emphasis on distribution of *benefits* – with private, and state-sanctioned mining initiatives that are driven by the imperative of maximizing profit for investors. Still others, such as libertarian advocates of 'seasteading', propose that the nature of the ocean opens up new frontiers in governance that maximize personal freedoms and individual choice (Steinberg, Nyman, and Caraccioli 2012). It is perhaps telling that The Seasteading Institute has branded its campaign to establish seasteads in French Polynesia as a mission to settle 'Blue Frontiers' (Blue Frontiers n.d.).

## **Reopening Ocean Frontiers**

Rebutting Artur Chilingarov's planting of the Russian flag on the seabed at the North Pole, Canada's foreign minister, Peter MacKay stated, "This isn't the 15<sup>th</sup> Century. You can't go around the world and just plant flags and say, 'We're claiming this territory'" (BBC 2007). Although MacKay was arguably misreading Chilingarov's intentions, he raises a valid point: If ever there were a time when the world's ocean frontier (or, for that matter, any frontier) could simply be 'closed' through simple acts of appropriation and incorporation into existing social structures, that time has passed.

While there is good reason to approach the conquest of ocean frontiers with caution, it would be a mistake to simply frame this as the advancement of a juggernaut of enclosure. The closing of frontiers opens new frontiers, in a cycle of opportunity as well as dispossession, and in a manner that can spur new dimensions of political innovation. And that is why this special issue is so crucial for advancing the dialogue.

## **References**

- ANDERSON, M., 1997. *Frontiers: Territory and State Formation in the Modern World*. London: Polity.
- BBC, 2007. Russia plants flag under N Pole, <http://news.bbc.co.uk/1/hi/world/europe/6927395.stm> (accessed 21 May 2018).
- BLUE FRONTIERS, n.d. Webpage, <http://www.blue-frontiers.com> (accessed 21 May 2018).
- FRIEDMANN, J., 1996. Introduction: Borders, margins, and frontiers: Myth and metaphor. In: Y. Gradus & H. Lithwick, ed., *Frontiers in Regional Development*. London: Rowman & Littlefield, 1-23.
- INTERNATIONAL SEABED AUTHORITY, 2010. *Seabed: The New Frontier: Exploration and Exploitation of Deep Seabed Mineral Resources in the Area: Challenges for the International Community*. Seminar held in Madrid, 24-26 February, [www.isa.org.jm/files/documents/EN/SpainSeminar/Introduction.pdf](http://www.isa.org.jm/files/documents/EN/SpainSeminar/Introduction.pdf) (accessed 21 May 2018).
- MARINE BOARD, U.S. NATIONAL RESEARCH COUNCIL, 1989. *Our Seabed Frontier: Challenges and Choices*. Washington, DC: National Research Council.
- OCEAN FRONTIER INSTITUTE, n.d. Homepage, <http://oceanfrontierinstitute.com> (accessed 21 May 2018).
- RENTCOME, A. AND MCLIN, R, 2011. *The New Technology Frontier: Moving Oil and Gas Production to the Seabed*. Milwaukee: Rockwell Automation.
- STEINBERG, P.E., 2001. *The Social Construction of the Ocean*. Cambridge: Cambridge University Press.
- STEINBERG, P.E., NYMAN, E.A., AND CARACCIOLI, M.J., 2012. Atlas swam: Freedom, capital, and floating sovereignties in the seasteading vision. *Antipode* 44(4), 1532-1550.