

HEADNOTE: In February 2014 I presented an invited lecture (“Designing the political cartography of the oceans”) at Harvard University, in the Graduate School of Design’s in the Landscape Architecture. The talk was well received, and I was subsequently invited to contribute a short essay to *Harvard Design Magazine*, for a special issue focusing on the oceans. This was to be “400 – 600 words in length, culled from earlier writings, related to the topic of ‘Sector Theory’ that so many of us were captivated by during your talk here this Spring” (31 May 2014). A 580-word essay, along with a suggestion for an illustration, was submitted on 12 June 2014. A reply from the special issue editor (22 June 2014) began, “Thanks so much for your first draft. The subject and content are perfectly on target and extremely important.”

“First draft”? Uh-oh—sounded like I was being sucked into a process rather than asked to submit a simple essay that might be rejected for clumsy writing or factual inaccuracy, subjected to minor style-related tweaks in wording, or accepted as it. The issue editor went on, “I’ve had an opportunity to read through your draft as well as to connect with the editorial team. We have just a few questions regarding the position of the text, and style.”

He then asked for three changes, that would not only lengthen the text substantially—not good because it would take time and disrupt my research/writing plans—but also force me to take an intellectual position I was not prepared to take. Here is my reply (not redacted), sent the following day:

Let me respond to your three requested additions, which I find philosophically objectionable.

AMENDMENT ONE: “First, would it be possible to bring into the concluding discussion the perplexing condition of ice as neither land nor water, which makes territorial divisions complicated, and disputes inevitable, in light that the persistence of the Arctic ice cap (for foreseeable decades) seems to add to this polemic? Your focus on the trials and tribulations associated with the extension of the continental shelf is absolutely on target in terms of this discussion, which ironically places great levels of symmetry between legal limits and natural, physical features.”

RESPONSE: The only sector presence in the Arctic is the meridional boundary between the EEZs of Russia and the United States. The remaining operative geopolitical boundary theories in the Arctic involve EEZs, their extension onto continental shelf, and equidistance lines, historically applied to boundaries between territorial seas. The notion of the Arctic ice cap as a territory that can be subdivided seems moot insofar as the ice cap floats above the Central Arctic Ocean, which is part of the High Seas. Moreover, the ice cap’s persistence as more than a seasonal phenomenon is questionable. If anything, this area seems likely to be viewed as a commons, like Antarctica, to be protected not exploited.

AMENDMENT TWO: “Second, would it be possible to make mention or could you address the forces that are generating the level of interest in the poles, which seem to be associated with a race for resource extraction? Since sector theory seems to be contingent on the extension of state interests, it seems important to address the persistence of sector theory as a device of state power.”

RESPONSE: Although historically the poles provided a convenient goal for explorers seeking a famous first and also provided an anchor for sector boundaries, I am reluctant to read much else into them. The persistence of sector theory seems little more than cartographic puffery on the part of Argentina and a lesser urge in Australia. I fail to see where sector theory now serves either state’s possible interest in excluding other states from an extinct territorial claim. That said, the survival of these sectors on maps apparently fosters a foolish sense of entitlement that carries no weight among other nations. Whatever “device of state power” these sectors represent is entirely internal or domestic. Although Argentina might eventually decide to have another go at the Malvinas, their claim is far more a matter of proximity than anything else.

AMENDMENT THREE: “Lastly, would it be possible to speak to the differences expressed in the Arctic, by referring to countries like China who have no connection to the poles, but are coming into agreement, by proxy, with countries like Iceland where China is building their largest embassy there. This indirect connection associated with sector theory seems important to reveal emerging forms of political affiliations and alignments.”

RESPONSE: The connection here with sector theory is highly tenuous, and is not an argument I would want to make. I had not heard of China courting Iceland. Food, in the sense of Iceland’s EEZ fishing rights, seems a more plausible motive than energy, and it is not difficult to imagine Iceland’s desperate politicians making extravagant claims and promises to prop up their sagging currency. Moreover, an Icelandic sector claim would obviously be eclipsed by that of Greenland/Denmark.

“Would it be possible . . . ?” you ask three times. Perhaps, but it would also be intellectually dishonest insofar as you are trying to put words in my mouth that are not there. As editor, you would certainly be entitled to add your own speculations, under your own by-line, but if so, I would appreciate having my objections noted.

His reply, sent the same day, seemed mildly apologetic:

Let me first apologize for my message and miscommunication.

My comments were not intended to offend nor suggest any amendments. They were questions for discussion that I miscommunicated, and I apologize for any doubt that may have been expressed as a result. You are an expert in this subject and my questions revealed the limitations in my knowledge, I am sorry for this. The subject and content are still perfectly on target.

I wish to thank you for your important contribution, and I hope that we communicate in the week or so with you in regards to the selection of image(s).

Again, please accept my sincere apologies, thank you for fitting this into your summer schedule as I understand you have many other commitments.

Subsequent communication with two editors at the magazine, included an annotated copy of my essay, asking that it be juiced up and lengthened. Here's the accompanying message, sent on 7 August 2014:

My apologies for only sending you copyedits to your piece now. [name redacted] and I have reviewed your contribution, and I'm attaching our edits and comments here. The topic is essential for this issue and we are so glad to be including your voice. We do think that the piece would benefit from a more explicit angle, and would love to see you develop this in a way that speaks to a more general, interdisciplinary audience.

If you have time in the coming days to respond to our comments and make revisions, that would be great. Don't hesitate to be in touch if you have any questions.

Otherwise occupied, I didn't respond until 20 August:

I'm way behind on email as well as in the throes of polishing an NSF proposal, dealing with an M.A. thesis and galleys for Volume Six, accepting an invitation to a National Research Council workshop in California on transformative research, and coping with the start of the new semester.

"If you have time . . .," you write. Sadly, I don't, and am not likely to in the near run. If you must kill the piece, so be it.

There were other exchanges. Here's one from the special issue editor, dated 20 December 2014:

Apologies for the delay in getting back to you.

I am very, very sorry to report that the editorial group decided not to include your

article as part of the magazine, despite my repeated attempts to make it part of the issue. The guest editorial experience was a complex one, and there are 4 other authors whose contributions were not included in the final selection.

I am very upset about this, and left speechless in the final editorial decision making of the magazine. Your contribution meant a lot to me, and in the end, the issue lost the gripping focus that I envisioned. I tried everything that I could and at this point, I am not sure what else I could have done.

Nevertheless, you should have been paid the original amount of \$250 that was agreed, and if that is not the case, please let me know and I will make sure this is resolved as soon as possible.

Let me finally mention that your work has, and continues to be incredibly influential and I hope that we can find another venue to collaborate for the inclusion of your work on Sector Theory given the importance of the subject.

Again, please accept my sincere apologies for this unfortunate outcome in the past few months. It would be nice to touch base with you in the New Year, very best for the coming holidays,

It took several more email exchanges before I received payment, in two installments: \$60 in late March 2015 and the remaining \$190 in May (after I complained): a numerical, if not moral, victory.

Ironic—is this the right word?—that this headnote is almost three times as long as the essay that follows, which will probably seem a bit anticlimactic: what you get with an unembellished short take on sector theory.

## **Sector Theory**

As a geopolitical concept, sector theory is as simple as apple pie, customarily sliced along straight lines radiating from the center. Map projections on which straight-line meridians converge at the North or the South Pole make geopolitical slicing easy insofar as territorial boundaries can be plotted with a straightedge even when humans had yet to reach the center. The sector principle is at least as old as 1493, when Pope Alexander VI divided the New World between Portugal and Spain with a meridian 100 leagues west of Cape Verde. A year later the Treaty of Tordesillas moved the line 270 leagues farther west and unknowingly gave Portugal a dominant foothold in what became Brazil.

The Tordesillas Line exemplifies the role of islands in anchoring sector boundaries. The classic example is Argentina's Antarctic claim, anchored on the east by the 25° W meridian, pushed eastward from the South Sandwich Islands, which Argentina claims but the United Kingdom controls. Like circular sectors in plane geometry, Antártida Argentina has two other boundaries: the 74° W meridian on the west and the 60° S parallel on the north. That sector boundaries in Antarctica rely on round-number longitudes and latitudes underscores their questionable presence on the world political map.

That shaky existence is further highlighted by overlapping claims. Chilean Antarctica, also bounded by the 60° S parallel, extends from 90° W eastward to 53° W, thereby overlapping Argentina's claim by a 21-degree slice that includes the Antarctic Peninsula. The granddaddy of all Antarctic claims is British Antarctic Territory, first proclaimed in 1908. It not only overlaps all of Argentina's claim and 73 percent of Chile's claim but extends farther northward, to the 50° S and 53° S parallels—the latter a 1917 modification to avoid overlapping mainland Argentina and Chile. New Zealand carved out a slice of the Antarctic pie in 1923, followed by France in 1924, Argentina in 1927, Australia (two slices, interrupted by France's dainty 5° 51' sliver) in 1933, Norway in 1939, and Chile in 1940. Other nations that contemplated an Antarctic territory include Peru, Uruguay, Brazil, and Ecuador, which briefly pondered a 4-degree sector anchored by the Galapagos Islands, astride the Equator. The United States and the Soviet Union joined other non-claimants in establishing scientific stations on the southern continent and supporting the Antarctic Treaty of 1959, which banned nuclear testing and other military activity poleward of 50° S and froze all territorial claims indefinitely. Even so, hopes of eventual exploitation persist in Argentina's atlases, schoolbooks, and postage stamps.

Sector theory is less relevant in the Arctic Ocean, where there's no landmass to partition. The UN Conventions on the Law of the Sea, adopted in 1982, created Exclusive Economic Zones (EEZs), which give Russia, Canada, Norway, Denmark (Greenland), and the United States fishing and seabed mining rights to areas within 200 nautical miles of their coastlines. Farther north the Central Arctic Ocean, which contains the North Pole, is an outlier of the world's High Seas: a maritime no man's land. Russia contends that a submerged mountain range running farther north is part of its continental shelf, which would extend its EEZ to the North Pole, but dubious add-on is not a true sector: although its eastern boundary, along the 168° 58' 37" W meridian, is the poleward extension of Russia's agreed EEZ boundary with the United States, its western boundary an irregular

chain of straight-line segments. Like territorial assertions anchored by the South Pole, Russia's contested claim remains a cartographic fabrication.

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