

Ships, Serials, and Infrastructures of Empire in the Nineteenth Century

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THE drive toward precision, punctuality, and an accurate global mapping of the ocean has always been in tension with the forces that undermine and undercut the attempt: human failure, bad weather, broken instruments, bad luck, and so on. The serial labor of embedding infrastructure is risky and requires both improvisatory skills and persistence. In the summer of 1865 a crew of engineers on the cable ship the *Great Eastern* was attempting to lay the Atlantic cable to establish a telegraphic link between Britain and North America. The well-known *Times* journalist, William Howard Russell, was on the ship to write a diary of events that was lithographed daily, so the whole series would be ready to be posted out to twenty-five American and sixty-five British journals as soon as the ship docked.¹ The ships that paid out the telegraph cable, and the many kinds of serial writing that took place onboard these ships, were all part of the infrastructural endeavor of the nineteenth century, and they anticipated digital culture as much as the cables did themselves. If we think of their role as actively and serially remaking positionality in this uneven imperial world, we can think of serial data produced onboard moving ships in the nineteenth century as shaping an infrastructure that powerfully anticipates the digital.

The cable-laying endeavor proved to be fraught with difficulties. The shipboard periodical, the *Great Eastern Atlantic Telegraph*, was lithographed onboard the ship, and on Saturday, August 12, 1865, it apologized that ten days of extreme anxiety had prevented publication.² The cable had been damaged, and the crew had spent long, difficult hours grappling for it on the seafloor. In the end, the expedition failed to

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retrieve or mend the cable and had to retreat, leaving only a buoy to mark the spot for the return expedition. The last issue of the shipboard *Atlantic Telegraph* carried an air, “The Buoy I Left Behind Me,” to be sung to the tune of “The Girl I Left Behind Me.”³ In 1866 the *Great Eastern* returned to the buoy, grappled the broken cable, and successfully repaired it. The transatlantic cable was finally operational, nearly a decade after the first attempt to lay it along the ocean floor in 1857. Steven Connor has noticed how striking it is that in our contemporary, digitally networked world, “‘navigation’ has become the commonest metaphor for moving through spaces of information, physical or virtual.”⁴ And it is out at sea in the nineteenth century that a digital infrastructure is emerging, both literally and materially in the gutta-percha, copper, and hemp of the submarine telegraphic cables being laid on the seafloor from the 1850s onward, but also in the ever more accurate and ever more reproducible techniques of measurement that were laying imaginary but powerful grids over the “pathless waves.” In the mid- to late nineteenth century, telegraphy was emerging as an important imperial technique because, as Simon Schaffer has suggested, “[i]mperial and colonial policy and rule hinged on techniques that could apparently guarantee the similarity of action in remotely separated sites, through navigation and telecommunication.”⁵ In terms of standardization, transmission, and control, telegraphy was promising faster connections to remote colonial spaces than even steamships could provide.

Telegraphy would also take over much of the navigational and place-making work of paper by the end of the century. “[T]he signals of the Morse instrument” allowed ships to be connected across space and facilitated the automation of imperialism.⁶ The scientific navigational and meteorological instruments on ships were calibrated to an exactitude that was designed to be as accurate as possible and to yield interchangeable, reproducible, and convertible data collected from around the globe. And the serial practices of regular record keeping, diarizing, and episodic reading out loud onboard ship were already part of a nautical and imperial culture of “punctuality,” practiced by sailors and passengers alike. This constructed punctuality, according to Giordano Nanni, “effectively embodies the site of authority that ensures a collective sense of social regularity and wellbeing.”⁷ Eli Cumings and Laurence Publicover have argued that shipboard publications are themselves “navigational instruments.”⁸ Certainly, texts produced by passengers onboard ships perform “accuracy” as if they calibrated themselves against the tables, almanacs and reckoners, position logs, charts, and texts used

and produced by the crew, so that all these forms syncopate as multiple serial practices.

Often passenger journals and shipboard periodicals themselves reproduced the formats of the log and the chart. Onboard the *James Baines*, for example, Alfred Withers entitled his 1857 passenger journal a “Log Book” and drew his own chart of the ship’s journey, and thirty-four-year-old Madge MacGillivray on the *Torrens* tracked the course of the ship on a chart in the back of the journal that she kept between 1893 and 1894.⁹ These amateur texts are also technologies to produce nautical time, and the practice of making them constituted part of the work of colonization and the remaking of space. This infrastructural work of white appropriation and settlement was demanding and continuous as, even far out at sea, space needed to be described, charted, and occupied at regular and frequent spatial and temporal intervals to maintain the infrastructural logic of empire. It was a serial work of meaning-making. Paper technologies onboard ship were predigital, but the punctuality of their data-sequencing prepared the way for the digital.

Onboard the *Lady Jocelyn* returning to England from Australia in 1869, passenger Richard Henry Horne read a new book by Charles Wentworth Dilke. Dilke’s book was called *Greater Britain: A Record of Travel During 1866 and 1867 in English-Speaking Countries* (1868), and Horne wrote admiringly of the book in the shipboard newspaper, although his review ends abruptly as the *Lady Jocelyn* “has just taken to roll so heavily, with the wind aft, and a head sea in front, that I. . . must even remain silent on the admirable . . . and no less touching chapter upon the dying out of the Maories.”¹⁰ Highly racialized, Dilke’s book celebrates the extension of a “Greater Britain” as testament to “the grandeur of our race, already girdling the earth, which it is destined, perhaps, eventually to overspread,” and ends with the prophecy, “Saxondom will rise triumphant from the doubtful struggle.”¹¹ The Maories may be “dying out,” but for Dilke, however “touching” their demise, it is a necessary step on the way to the supremacy of the Anglo-Saxon “race.” The ships carrying passengers like Horne back and forth between Britain and the colonies were themselves part of the growing infrastructure of what Dilke described as “Greater Britain.” Onboard these vessels, the relationship of the national to the global was being renegotiated as the voyages plied the ever-ramifying trade and migration routes.

The texts that these ships carried, and the documents produced onboard during the voyage, were as infrastructural as the ships

themselves. Just as Isobel Hofmeyr has suggested that “[t]he tariff manuals and handbooks of the Custom House played an infrastructural and imaginative role in the port, assisting in landing goods and passengers (of the right class and race),” so the logbooks, diaries, and shipboard periodicals produced onboard contribute to the vital place-making and place-holding work that has to be continuously performed on ship.¹² If space, like knowledge, does not exist in a fixed or stable state but has to be continuously produced, then the work of textual seriality that happens onboard ship can be theorized as infrastructural. But while “[s]tudying the space of the ship can . . . provide a much-needed lens on historical globalisation as a whole,” close attention to the embedding and maintenance of the wider imperial infrastructure can also make visible the material violence of the “historical globalisation” facilitated by the work of the ship. It can show how cables and steamships were directly connected to the kinds of sexual and racialized violence enacted in and by the colonies.¹³

The more people start to move around, the more demand there is for tracking coordinates and precise communications. The deterritorialization caused by trade and the movement of capital create a forceful compensatory demand for a culture of precision and positionality.¹⁴ The history of the transatlantic voyage in the nineteenth century is also the history of the way in which Europeans began to act at a distance, claiming authority over other societies and hierarchizing European over indigenous knowledge. Systems of slavery and systems of empire are underpinned by this asymmetric relationality that remade space in the eighteenth and nineteenth centuries.

As the *Great Eastern* chugged away from the marker-buoy to return to port in 1865, its crew having failed to rescue the broken cable, the buoy itself was given a voice in the *Atlantic Telegraph*, lamenting: “After wandering two thousand years, I was cast naked on your shores. I am very old and feeble; my ribs are broken, and the rosy hue of my skin has turned to rusty red, besides being covered with millions of filthy sea-vermin who are continually devouring me.”¹⁵ The ecological imagination of a future sea polluted by the detritus of a globalizing cable technology is surprisingly prophetic.¹⁶ As Hofmeyr writes, “[o]ver the last decades, rising sea levels and climate catastrophe have impacted powerfully on oceanic studies itself, which now grapples with how to go below the waterline and to engage with the materialities and ecologies of the marine world.”¹⁷ In the nineteenth century, the movement of people and goods by sea increased exponentially, as did the extractive practices of

imperialism and the release of pollutants by a rapidly industrializing West, helping to create the legacies of climate change, racialized violence, and biopolitical surveillance that we confront today. Anand, Gupta, and Appel have written that “infrastructure” tends to “promise modernity, development, progress, and freedom to people all over the world,” but when it fails, it reveals “fragile and often violent relations between people, things, and the institutions that govern or provision them.”¹⁸ Our global infrastructures are now under constant threat from extreme climate events. And rough seas often sink the fragile boats of those desperately trying to evade the infrastructural apparatus of state control and “home security.” The digital infrastructure that started on paper before it was networked by cables has brought connectivity and development to some populations, but it has worked to the violent exclusion of others.

NOTES

1. Russell, “1865 Great Eastern Diary.”
2. *Atlantic Telegraph*, August 12, 1865, 344.
3. *Atlantic Telegraph*, 353.
4. Connor, *Madness of Knowledge*, 293.
5. Schaffer, “In Transit,” 77.
6. *Atlantic Telegraph*, 134.
7. Nanni, *Colonisation of Time*, 6.
8. See Cumings and Publicover, “Shipboard Diaries.”
9. Diary of Alfred Withers and diary of Mrs Margaret Colquhoun Macgillivray.
10. R. H. H. [Richard Hengist Horne], “Greater Britain,” *Lady Jocelyn Weekly Mail*, September 25, 1869, 69–70, 70.
11. Dilke, *Greater Britain*, 1:vii, 2:405.
12. Hofmeyr, “Book Forum,” 256.
13. Wenzlhuemer and Offermann, “Ship Newspapers,” 115.
14. In the words of Simon Schaffer, “the production of precise and artfully designed traces of position” (“On Seeing Me Write,” 91).
15. *Atlantic Telegraph*, August 12, 1865, 346.
16. On the material infrastructure of undersea cables, see Starosielski, “Conclusion,” 225–34.
17. Hofmeyr, “Book Forum,” 255.
18. Anand, Gupta, and Appel, “Introduction,” 3.

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