



BIROn - Birkbeck Institutional Research Online

Colas, Alex and Campling, L. (2023) Maritime temporalities and Capitalist development. *Geography Compass* , ISSN 1749-8198.

Downloaded from: <https://eprints.bbk.ac.uk/id/eprint/51282/>

Usage Guidelines:

Please refer to usage guidelines at <https://eprints.bbk.ac.uk/policies.html> or alternatively contact lib-eprints@bbk.ac.uk.

Maritime temporalities and capitalist development

Alejandro Colás¹ | Liam Campling² 

¹Department of Politics, Birkbeck, University of London, London, UK

²School of Business and Management, Queen Mary University of London, London, UK

Correspondence

Liam Campling.

Email: l.campling@qmul.ac.uk

Abstract

This intervention develops arguments in our book *Capitalism and the Sea* on the complex temporalities attached to capitalism's intense and peculiar relationship to the global ocean. Technological innovations like the steamship or containerisation plainly transformed the pace and intensity of maritime commerce, and aspects of the global economy. We take this further to argue that the very origins and periodisation of capitalism are connected to the global ocean; as will be our futures, given the unpredictable implications of the oceans acting as the biosphere's 'heat sink'. We consider several stylised expressions of time at sea: deep-time, logistical-time, life-time, and revolutionary time suggesting that the ocean world as a geographical space articulates these in distinctive and contradictory ways.

KEYWORDS

capitalism, global ocean, space, time

1 | INTRODUCTION

At the height of the Atlantic slave trade in the eighteenth century, the slave ship contained multiple, often conflicting temporalities. Enslaved Africans faced a hereditary *life time* of legal bondage and servitude which could only end through death, escape or emancipation. The seafarers tasked with transporting such bondspeople across the Middle Passage were, in contrast, some of the first free industrial wage workers of the western world—paid a cash sum for their seafaring labour which, despite the ruthless onboard hierarchies and landside coercion into service, could terminate with each voyage contract and, sometimes, by jumping ship could command better wages on a return trip (Christopher, 2006; Mustakeem, 2016; Rediker, 1987, 2008). Coordinating, disciplining, exchanging and exploiting these human bodies and their labour power was the capitalist organisation of time through the ledger sheet,

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2023 The Authors. Geography Compass published by John Wiley & Sons Ltd.

insurance policy and interest rate that measured, calculated and managed the profit accrued from human trafficking on an industrial scale. This is the *logistical time* of turnover, planning, circulation and accumulation which we suggest right at the end of this article has always contained the possibility and, occasionally, the actuality of an emancipatory politics associated to *revolutionary time*.

Underlying these three conceptions of life, logistical and revolutionary time is the *deep time* of the very longue durée, where the earth system itself bears the imprint of uneven change and continuity. The sea has acted as a singular socio-natural force in unevenly melding these diverse forms of time by generating peculiar forms of geographical distance. Profit through arbitrage—buying cheap in one shore and selling dear in the other—was realised via ocean shipping. The Atlantic in the example of the Middle Passage offered a site of 'differential accumulation', not only by moving captive humans, but also enabling the valorisation of risk in such an enterprise. The oceans threw up distinctive socio-natural perils and obstacles—from deadly storms to treacherous currents; roving pirates to onboard mutinies and rebellions—which fostered new financial instruments of credit, insurance and payment across the major ports of the Atlantic seaboard during their seventeenth- and eighteenth-century heyday. These instruments were in turn used by nineteenth-century British vessel owners when pushing out old, poorly maintained or damaged 'death ships' in the hope they might sink and precipitate insurance claims.

Here we take up some of these propositions, recently developed in our book *Capitalism and the Sea*, about the specifically maritime temporalities at play in the relationship between the social forces attached to capitalist markets and the natural powers of the blue-water part of our planet. Of course, geographical distance is socially-conditioned, and operates as much on land and by air as it does at sea. But we wish to insist that the peculiar bio-physical properties of the sea have combined with capitalist imperatives to deliver unique spatio-temporal effects. These furthermore underline the benefits of adopting a 'terraqueous territoriality' when analysing global political geography and capitalist development (Ayelazuno & Ovadia, 2022; Foley & Mather, 2019; Mallin & Barbesgaard, 2020). Recent scholarship has encouraged us to think on a planetary scale about the places where land meets sea, thus creating 'a framework within which to place a politico-scientific history of soil and water with the paradox that characterises modernity; the fixity of national belonging in a world defined by mobility' (Bashford, 2017, p. 272). Others have proposed an 'amphibious anthropology' on a more micro-ecological level that explores how 'the production of place is shaped at the confluence of land and water' in both the very concrete settings of large deltas and estuaries, and in the more conceptual sense of property and land-use in (re)definitions of coastlines, waterfronts and offshore spaces (Gagné and Borg, 2016, p. 136; see also Bhattacharyya, 2019; Benton & Perl-Rosenthal, 2020; Chalfin, 2019). 'Old' and 'new' materialisms have found in the sea, and sometimes on littorals or the hydrosphere more widely, inspiration to develop theories of contemporary society's relation to the more-than-human (e.g. Longo et al., 2015; Steinberg & Peters, 2015). But if there's one thing on which both traditions might agree on is the necessarily relational, even dialectical conceptions of society and nature which, for instance, means that an ineradicably particular matter like glacial moraine also has a universal potential as commodified fertiliser (Diamanti, 2021).

2 | DEEP TIME

Perhaps the most complex manifestation of maritime temporality relates to the ways in which industrial capitalism has over the past two centuries radically transformed the sea's primordial properties. In its ceaseless quest for both extending and intensifying the commodity frontier, capitalist enterprises have constantly developed new means of appropriating marine biomass and the energy deposited in the ocean's subsoil (as well, it should be acknowledged, as valorising new renewables like wind and wave power) thereby substantially altering the bio-physical dynamics of ocean life-systems. As we shall presently discuss, innovations like steam shipping or containerisation revolutionised both the circulation time and the rhythms of work and leisure at sea—what we label logistical and life time, respectively. There are, nonetheless, more enduring and yet unknowable expressions of deep time present in the ways global heating is warming, acidifying and expanding the oceans, with its corresponding implications for saltwater

ecosystems, the marine food chain, and life in coastal areas (Rohling, 2017; Rozwadowski, 2018; Zalasiewicz & Williams, 2014). The global ocean's role as a planetary carbon sink is having well-documented and immediately recognisable consequences for multiple sea-dependent biophysical phenomena—from bleached coral reefs and more frequent and intense coastal storms, to the demise of the Gulf Stream and the proliferation of marine 'dead zones' due to eutrophication from capitalist farming.

It is, however, the unpredictable future effects of ocean acidification, warming and expansion, and the different pace of marine carbon absorption and release that raises the most challenging issues about deep time and the sea, in the same ways that 'human-historical time and the time of geology' do 'as they relate to the concept of the Anthropocene' (Chakrabarty, 2018, p. 5). As a living four-billion-year-old element of the Earth System, the global ocean and its ice sheets connect geological deep time to contemporary conceptions of historical time. Borrowing Fernand Braudel's famous distinction, the *longue durée* of environmental change meets the human life-time of particular conjunctures and events. The sea thus becomes a privileged site not only for assessing the cumulative consequences of anthropogenic climate change, but also more philosophically, in reconceptualising notions of future life time, given the accelerating effects of positive feedback loops and tipping points associated to ocean warming. The more carbon is incorporated into the ocean, the more pH falls to levels that compromise the marine ecosystem's capacity to calcify carbonate, reducing the ability of organisms at the bottom of the food web to build shells or skeletons. In a parallel set of Earth System processes, the warmer saltwater becomes, the greater its expansion and the lighter its volume, thereby limiting the sea's overturning circulation (i.e. encouraging a noxious stratification of ocean layers). This in turn has the effect of drastically altering the distribution of oxygen, nutrients and biodiversity in the global ocean, as well as potentially changing major currents, precipitation patterns, seasonal winds and cloud cover—all of which reinforces existing marine pollution, overfishing and proliferation of invasive species caused by the 'deadly trio' of warming, acidification and deoxygenation present in previous global mass extinction events. These combine with the unknowable temporality of potential tipping points—and their interactions, such as between ice sheet and glacier collapse and Gulf stream currents (Armstrong Mackay et al., 2022). Tipping points are where deep geological time and life time most obviously entwine in a death-dance that could speed-up the generation of profound, transformative shifts in human civilisation, including an existential threat to the current global connections that typify our otherwise fractured species.

Such anthropogenic dynamics are inextricably connected to industrial capitalism, and in particular the 'great acceleration' in global greenhouse gas emissions over the past 70 years. These dynamics illustrate how the timelines of value represented in annual profits, the tax year, or even carbon offsets rub against the temporality of climate change. The volumes and rhythms of maritime carbon storage and release are difficult to compute with terrestrial conceptions of capitalist time, even if it is the latter that fundamentally feed into the former. As W. Jeffrey Bolster's magisterial 'deep' history of the North Atlantic boreal region shows, the sea has never been a passive venue of human activity, but itself a changing life-force that interacts in variegated ways with different societies: 'The ocean changes daily, seasonally, and historically, as well as over evolutionary and geological time' (Bolster, 2014, p. 17).

Another domain where the sea becomes a protagonist of debates around time is that of historical periodisation. Long-distance seaborne trade and the accompanying concentration of finance, manufacture, commerce, and peoples in port cities have been the mainstay of historical explanations for the rise of historical capitalism (Arrighi, 1994; Braudel, 2002; Wallerstein, 1974). This 'circulationist' understanding of capitalism, where the new mode of production issued from trade in commodities and the urban accumulation of wealth, is often contrasted to the so-called 'political Marxist' approach associated to the works of Robert Brenner (1977) and Ellen Meiksins Wood (1999), who insist capitalist social property relations first emerged in the English countryside during the sixteenth and seventeenth centuries through the dual process of rural dispossession and agricultural commodification. Oceanic distance is central to these competing narratives in a number of ways. As already noted, 'circulationists' place great emphasis on maritime ports (Venice, Genoa, Seville, Antwerp, Amsterdam, London) enabling the convergence of commercial, credit and insurance services in one location, thereby also encouraging modern, territorial state-building as crown or republic. The maritime networks of trade, money and merchants fostered by these nascent seaborne mercantile

empires paved the way for a capitalist world-system structured around a western European core, an Iberian, Baltic and Ottoman semi-periphery, and an extra-European tropical periphery (Wallerstein, 1974). In all this, it is the maritime integration of geographically distant markets into a single world-economy that acted both as cause and consequence of capitalist development. The oceans became in the course of the 'long' sixteenth century (1450–1650) the arteries of a world market built on conquest and plunder of the New World, as much as the accumulation of profit through international trade.

Like all acts of historical periodisation, this conventional Eurocentric narrative focused around the early-modern era is far from neutral. It raises as many questions as it answers about the geographical and environmental factors in capitalist development; factors placed front and centre in the plethora of case-studies in environmental history (e.g. Beinart & Hughes, 2009; Crosby, 2004; Richards, 2006). It is worth noting, for instance, the tight interdependence between forest management (including deforestation) in continental Europe, the British isles, and parts of North America, and the shipbuilding that underwrote both the Dutch commercial empire of early capitalism (Moore, 2010) and the nineteenth-century Pax Britannica (Melby, 2012). As this example shows, then as now, industrial capital is always-already articulated with commercial capital, both in seaward-facing societies and otherwise. As Henry Bernstein usefully notes, are not the 'competing' circulationist and political Marxist approaches simply 'holding up a mirror to each other's strengths and weaknesses?' (2013, p. 325).

A further theoretical advance is in Jairus Banaji's painstaking research (2010, 2016, 2020) into the multiple expressions of commercial capitalism across the world either side of the long sixteenth-century, which simultaneously provincialises the European origins of capitalism and invites reconsiderations of this mode of production that avoid what he deems to be excessively formalistic definitions requiring extensive free wage labour or widespread commodification as conditions of possibility. The co-existence of multiple temporalities on the Atlantic slave ship that we started out with, is especially illustrative of how capitalism has from the beginning relied on older seaborne institutions of profit and rule like slavery, piracy or maritime insurance which buttressed new social forms like generalised free wage labour, shareholder company ownership or national banks (Edwards et al., 2020). The 'oceanic turn' in recent economic and environmental history (Armitage et al., 2017) has further de-centred the historical geography of modernity and the sea, demonstrating the socio-economic and political interconnections between the Atlantic, Indian and Pacific oceans in forging the modern world (Bishara & Wint, 2020; Sivasundaram, 2020), as well as identifying the legacies and continuities of regional maritime histories upon the emerging world-system first explored in classic works by Chaudhuri (1985) and Abu-Lughod (1989).

Once again, eminently geographical phenomena such as the impossibility of permanently populating the high seas, or the challenges associated to accessing and controlling unruly coastlines, have produced distinctive legal norms like 'the freedom of the seas' and unique practices of shared or devolved jurisdiction at, or close to the sea, which Lauren Benton (2010) has labelled 'legal pluralism' (see also Merry, 1988; Colás & Mabee, 2010; Mathew, 2016; Pal, 2021). As commercial capitalism engulfed regional economies across the world, latching on to ancestral seaborne trade routes, repurposing local maritime knowledge and technologies (Sheriff, 2010), or adopting and adapting existing forms of property rights or labour exploitation at different ports (Bishara, 2017), the nature of the world market was also modified. The racialised figure of the 'Lascar' (Ahuja, 2006; Balachandran, 2012)—a semi-indentured seafarer from South Asia—played a critical role, well into the twentieth century, as the 'muscles of Empire' (Broeze, 1981). Similarly, British imperialism mobilised its extra-economic blue-water power to build strategic commercial outposts like Hong Kong or Singapore, servicing what to this day remains a global network of offshore financial markets centred in the City of London. The maritime factor in such experiences of capitalist development therefore complicates simple distinctions between colonial and pre-colonial, capitalist and non-capitalist, or indeed modern and pre-modern in the periodisation of global capitalism.

If we add to this, finally, the signal role of distinctively marine features like winds, currents, tides, reefs and sandbanks, or salinity, volume and depth in the unfolding of historical capitalism over the past 500 years, then the conjunctural emergence of this novel mode of production becomes once again conditioned by the deep geological time of the world ocean, and more widely that of the Earth System. In the age of sail, the famed monsoon winds

shaped the circuits of maritime trade across the Indian Ocean, with the merchant accounting year structured around the *Nowruz* solar calendar (Machado, 2014). Meanwhile, in the Red Sea unique wind patterns and tidal ranges—in part determined by the water's high salinity—contributed toward what historians of the area have called the 'Jidda gap' where the Hijazi port marked an 'invisible yet palpable late seventeenth- and eighteenth century split' between Ottoman-administered waters plied by Cairene merchants north of Jidda, and Yemeni governance dominated by Gujarati commercial interests to the south (Um, 2009). As recent terraqueous environmental histories of South Asia have illustrated, such natural forces have to be factored into our understanding of socio-economic and political change brought about by human agents (Amrith, 2018). Even if we wish to return to inland Europe, the role of peat-land reclamation in the birth of capitalism in northern Netherlands, brings home the complex interactions between land, water and people. From the 1300s onwards, peasant colonisation of peat bogs in Holland and Friesland eventually lead to the oxidation and subsidence of peatlands, and the accompanying exposure of compacted soil to surrounding high-water rivers. This, Robert Brenner argues, drawing from the work of Dutch economic historians, forced peasants away from arable cultivation of bread grains for subsistence, to a more market-dependent dairy farming (Brenner, 2001).

3 | LOGISTICAL TIME

The emphasis we are placing on the particularly maritime impact on capitalist development should not, however, be confused with some sort of environmental determinism. Plainly, there are bio-physical properties to oceans and their surrounding coastlines that have been transformed through time, as much as they have conditioned human evolution. We are especially interested in the varying, sometimes contradictory temporal dynamics involved in the relationship between capitalism and the sea: how a minuscule era in human existence on the planet, let alone the Earth's own history, is radically transforming the global ocean, and with it, our notions of historical time. Capitalism's revolutionary tendencies themselves contain historically-unique measurements of time which have found very powerful manifestation in the sea as a surface of circulation—a seemingly flat domain in the seamless transfer of goods and circuits of capital.

This latter conception of maritime trade as an accelerator and multiplier of profit and wealth inherent to 'free' markets has been celebrated through the very distinctive artefact of the shipping container—the box that, according to one outstanding history of this object, 'made the world smaller, and the world economy bigger' (Levinson, 2006). Yet such breathless accounts of the increasing speed and efficiency of maritime trade obscure the ways in which planning and coordination are key to the successful operation of logistical time at sea, which can be as dependent on 'slow-steaming' as it is on rapid turn-around times. As Charmaine Chua and her colleagues show (2018), from the Atlantic slave trade through to the nineteenth-century standardisation of shipping liner routes, right to the present-day just-in-time supply chains, the colonial outpost, the imperial state and multilateral governance have played vital parts in orchestrating the movement of goods and people across distant oceans. Moreover, wars, strikes, storms and tides have added friction to the idealised seamlessness of merchant shipping. Let us recall that the *Ever Given's* captain encountered heavy winds and sandstorms before the containership ran aground in the Suez Canal in 2021, and that the outsize dimensions of the vessel combined with the canal's shallowness to produce specific hydrodynamics contributing to the particular lodging of the boat in the mud and sandbanks. In the end, the ship was refloated through the thoroughly terraqueous forces of tugboats, dredging and a full moon that delivered a rising tide. In the meantime it is estimated that the blockage held up a daily trade of US\$9.6bn worth of goods from crossing the channel (Russon, 2021).

In other contexts, as Michael Simpson has so effectively illustrated with regard to giant oil terminals in the US, pausing circulation and storing non-perishable commodities can add to their value (Simpson, 2019). In the aftermath of the 2008 financial crisis, a drop in demand for global crude combined with an oversupply of oil super-tankers, creating a situation where up to 1 in 12 of the world's largest tankers were moored at port, holding crude and

gasoil rather than moving it across the oceans (Wright, 2009). This brings into focus the very temporal phenomenon of 'contango' where the spot price of commodities is lower than its futures price, thereby encouraging speculative hoarding. Another variant of accruing wealth through storage are bonded warehouses, versions of which have through the centuries proliferated in port cities as a means of avoiding excise and duty in the transshipment of goods and/or profiting from price differentials between the point of deposit 'in bond' and the later release of the warehoused product (Orenstein, 2019).

In all these instances, the sea offers opportunities for generating surplus value through movement, even when commodities stand still: 'If transportation is the circulation of goods across space, then we can think of storage as the circulation of goods across time' (Simpson, 2019, p. 119). But it is not just the shipment of goods that generates logistical time through the coordination of risk assessment, credit facilities, futures pricing, charter rates, dwell time fees, or berthing windows—the global ocean's moving biomass is also integrated into the calculus of logistical time as migratory fish stocks become the commodified object of governance by regional fisheries management organisations and adjacent bodies. Jennifer Telesca's recent legal ethnography of the International Commission for the Conservation of Atlantic Tunas, demonstrates with reference to this one organisation how 'fisheries science' effectively acts as an extension of futures markets, using exactly the same grammar of mathematical modelling to measure, inventory, valorise and then predict the behaviour of giant bluefin tuna stocks for commercial appropriation (Telesca, 2020b). 'By using such tools as visual charts, scientific models, and statistical formulas that together serve as reference points to plan, measure, and quantify time as an exercise of power' Telesca argues, 'marine policymakers have contributed determinatively to the making of the time-space they occupy: the Anthropocene' (Telesca, 2020a, p. 96).

4 | LIFE TIME

It is telling, and entirely appropriate, that one of the most influential Anglophone treatises on the making of the contemporary world takes 'The image of the ship—a living, micro-cultural, micro-political system in motion' as its leitmotif (Gilroy, 1993, p. 4). For the ship is an extraordinary space in more than one sense: while at sea, it bears the jurisdiction of its 'flag state'; when a fishing vessel, it acts as a moving factory; it is owned, leased and managed by transnational (often offshore) capital and staffed by multinational crews, yet is heavily dependent on state subsidies and riven by onboard racism and discrimination. The exceptionalism of shipping vessels, and life at sea more generally, also has some pronounced temporal features which we focus on briefly through the lens of onboard labour and leisure time as well as onshore social reproduction. The headline here is that ships are never far from land when they're at sea. A terraqueous optic upon the world allows us to recognise this predicament, whilst also acknowledging the particularly maritime segmentations and hierarchies that attend to these temporalities.

Take the organisation of labour time on ships through alternate four-hour watches. Oceanic seafarers experience unique conditions of work. Evenings and weekends are spent in a confined and hierarchical workplace where '[w]atch after watch, day by day, week after week, and month after month, sailors carry out ... tasks while eating, sleeping and living aboard worksites in motion' (Seltzer, 2004, p. 63). Crew are squeezed by the drive to maximise productivity for minimum cost in a contracted shipping time on the 'structured space' of the ship, where they reproduce daily routines for several months alongside their bosses (Sampson, 2013). While crew and officers are literally in the same boat, they are by no means equal. Captains have long been thought of as individual sovereigns on the ship: a 'hierarchical State in miniature' (ILO, 1921, p. 94).

The modern seafarer works for an average of 11 h per day, 7 days a week. A voyage may be as short as a few weeks or as long as 2 months for seafarers on cargo ships, and up to two years for crew on some fishing vessels. A typical merchant seafarer works on anything between 40 and 50 ships through a standard career, each under different employment contracts, in a life that 'swings pendulum-like between spells at sea and stays on land' (Seltzer, 2004, p. 65; see also, Walters & Bailey, 2013). In both freight transport and distant-water fisheries, seafaring work is seasonal, and often—as in the case of the Philippines—an integral component of a state-driven labour export strategy for hard-currency remittances.

Work on containers, tankers and bulk carriers is especially dull and repetitive. It is an industrial, alienated existence among a multinational crew that is generally segmented along national and racial hierarchies, where the possibilities for both on and off-work camaraderie are limited. Like domestic cooks and carers, the seafarers' workspace is the same as their lifeworld, and leisure time is restricted to onshore leave and occasional access to the Internet or, on more generous vessels, a gym, karaoke sessions, or an on-deck basketball court. Even shore leave has been curtailed by the acceleration of (off)loading turnover time through mechanisation. Seafarers are increasingly prisoners of maritime logistics networks as ports move away from city centres. In combination, these strategies save money and time for capital, while accentuating fatigue and stress and decreasing well-being for crew.

An extreme version of this control over seafarers' life-time through the exploitation of distance is the practice of abandonment, when crew are simply left ashore in an alien jurisdiction without pay or welfare support. Ship owners sometimes prefer to abandon a debt-laden vessel in a distant port without paying wages and other costs. Other times, as in the case of the Bolivian-flagged ship *Sandrien*, carrying molasses from Alan, India to Amsterdam, Netherlands, it is the vessel itself that is detained at port. In 2000, the *Sandrien* was seized by the Dutch Ministry of Environmental Affairs on grounds of it being polluted with asbestos and other hazardous materials. It was eventually dismantled in 2004, but its South Asian crew was abandoned by the ship operators to fend for themselves in the Netherlands (Wildschut & Wouda, 2001). Cases of crew abandonment increased by 138% during the recent pandemic—in 2021 alone, a total of 95 cases of abandonment were recorded involving 1399 seafarers on 94 different vessels; adding to the 367 reported cases between 2004 when the ILO database was set up and 2019 (ILO, 2022; see also Abandoned Seafarer Map, 2023; Ader et al., 2022). Thus, commodity circulation in seaborne supply chains contrasts to the static abandonment of seafaring labour.

An especially poignant episode in Sekula' and Burch's *The Forgotten Space* (2010) takes place under the shadow of office skyscrapers in Hong Kong's financial district where female Filipino domestic workers gather on their day off for an urban picnic, and occasionally meet their male seafaring counterparts. The scene neatly encapsulates the rigid sexual division of labour that is reproduced by the Philippine state in its gendered approach to labour exports, whilst also hinting at the key role of (mainly female) social reproduction on land for a male-dominated seafaring sector. The work of Gopal Balachandran (2012), Heide Gerstenberger (1996), Margaret Creighton and Lisa Norling (1996) have, among others, made clear the centrality of onshore affective, reproductive and—in complex ways—disciplinary labour among wives, relatives and lovers of those out at sea. Balachandran (2012) relates how nineteenth- and early twentieth-century South Asian seafarers for instance, were remunerated through 'family allotments' whereby shipowners made monthly payments to families of absent seafarers through a port-based registrar. Similarly, Gerstenberger narrates how the onshore lifeworld of northern German seafarers affected workplace relations and vice versa: 'social connection between the different circles of relatives, friends and acquaintances [of sailors] was close enough for anyone who behaved deviantly to understand that relatives, friends, the girl he hoped to marry—in short, everybody in his world—would sooner or later be informed' (Gerstenberger, 1996, p. 177).

5 | REVOLUTIONARY TIME

If Amsterdam is standing on Norway as Jason Moore (2010) so brilliantly put it, it is also built on the plantations of Suriname. Land and freedom reclaimed in Northern Europe was owned by those who dispossessed and enslaved in the Caribbean. And of course, all the different temporal forms discussed so far—deep, logistical and life-times; in its natural, circulating and labouring expressions—were integral to that exercise of power. We want to conclude with some speculative reflections on the theoretical and political implications of thinking terraqueously.

As mentioned at the outset, there is the issue of scale: our focus has been on the geographical distance afforded by saltwater that is not effectively occupied. For all their fluidity and changing character, coastal waters fall under delimited jurisdictions that can adjudicate authority or responsibility. (For fans of the TV series *The Wire*, in the early episodes of Season 2, a demoted McNulty must navigate these jurisdictions when determining the responsibility over

a floating body.) The closest we come to this in the oceans is the not unimportant category of the Exclusive Economic Zone. But note that, even if geopolitical economy shaped and shapes access relations in exclusive economic zones (EEZs), it is resource rights, not political sovereignty that determines the zone: it is *dominium*, not *imperium* that prevails (FAO, 2022). This distinctiveness of the blue-water part of our planet thus generates unique legal forms—not just in the shape of the EEZ, but also in flags of convenience, or in the traditions of labour arbitrage and offshoring that we discuss in our book. The relationship between society and nature thus becomes stratified: sovereignty, law, multilateral authority and the rest, impose an order on the sea, even if the refractive properties of the saltwater world and its biomass constantly challenge this social power. The point we wish to bring home then, is that, beyond scale, thinking terraqueously also implies a certain ontological hierarchy in insisting the capitalist social form is about the domination and appropriation of nature through the collective exploitation of labour, and that this therefore means recognising the stratification between human and non-human, or within complex assemblages of matter, however contingent these may occasionally appear to be. It follows that transcending these forms of domination, appropriation and exploitation requires an anti-capitalist politics.

Since capitalism is fundamentally about the valorisation of time, we see from the maritime temporalities discussed above that a democratic anti-capitalist politics calls for a revolutionary repurposing of deep, logistical and life-times in favour of our collective needs and personal autonomy, as well as the welfare of our planet. Such a political prospectus is a tall order indeed, but it is latent in the organisation of workers across the logistical supply chain, or in the saltwater cosmopolitanism that has informed the most powerful forms of working-class internationalism in the recent past (Alimahomed-Wilson & Ness, 2018; Cole, 2018; Frykman, 2020). An internationalist politics of liberation requires harnessing the best of the innovation, imagination and enterprise that seafaring has provided through the centuries (Featherstone, 2023; Linebaugh & Rediker, 2000), with the sense of belonging, stability and continuity that life on land has conventionally afforded. It is about bringing the offshore ashore, subjecting socio-economic flows to democratic control without falling into the reactionary insularity of 'socialism in one country' or nativist tropes about 'rootless cosmopolitanism'. Internationalist solidarity is also about living with our planet and its interlocking life systems. The deep time of ocean is not and never will be a stable 'backdrop' to the human story. We know that ocean acidification played a major role in at least two of the planet's previous mass extinction events (Rohling, 2017), if the political struggle and economic democracy necessary to transcend capitalist social relations helps our species to avoid a third, then it is a struggle worth fighting.

If adopting a terraqueous viewpoint gives us a sense of the opportunities and limitations accompanying struggles for democratic emancipation—from the transition to a low carbon world economy to multilateral cooperation, gender equality to different forms of internationalism—it also opens a final, related, debate around the strategic value of stoppage and disruption in democratic politics. The addition of the English word 'strike' to the lexicon of class struggle in 1768 was famously the outcome of London sailors and coal heavers 'striking the sails' (removing the topsail) of their ships in a collective act of sabotage aimed at halting the transfer of goods until they received a pay rise. The power of logistics in the reproduction of global capitalism today has put the notion of 'hydraulic' or 'supply chain' capitalism and the accompanying potential of land-side blockages at the forefront of discussions about global anti-capitalist strategies. In principle, it would only take a small number of militant workers, organised in transnational alliances, to slow down or even block the arteries of maritime logistics. But we should be mindful that cutting circulation alone will not transform capitalist social relations—like other liquid forms, capitalist flows find other ways around or under blockages, as East-West shipping did around the Suez Canal when the *Ever Given* was wedged there. Our gambit, in contrast to old and new notions of global 'delinking', is to underline the imperative for anti-capitalist politics of embracing the flows, connections and universalisation that issue from the relationship between capitalism and the sea, and to channel and harness them into more settled, enduring structures of collective distribution and democratic rule—including those of the state.

ACKNOWLEDGEMENTS

We are immensely grateful to the generous and incisive comments offered by two anonymous reviewers, and to participants at the following seminars where some of our ideas were first presented: Global Development Institute,

University of Manchester, 27 October 2021, and *Transitional Waters: FieldARTS*, University of Amsterdam, 4 July 2022.

ORCID

Liam Campling  <https://orcid.org/0000-0001-5872-0295>

REFERENCES

- Abandoned Seafarer Map (2023). <https://abandonedseafarerlog.substack.com/about>
- Abu-Lughod, J. L. (1989). *Before European hegemony: The world system A.D. 1250-1350*. Oxford University Press.
- Ader, E., Bolton, J., & Matthiessen, M. (2022). Map of seafarer abandonment. <https://abandonedseafarermap.cargo.site/>
- Ahuja, R. (2006). Mobility and containment: The voyages of South Asian seamen, c 1900-1960. In R. P. Behal & M. van der Linden (Eds.), *Coolies, capital, and colonialism: Studies in Indian labour history* (pp. 111). Cambridge University Press.
- Alimahomed-Wilson, J. & Ness, I. (Eds.). (2018). *Choke points: Logistics workers disrupting the global supply chain*. Pluto.
- Amrith, S. (2018). *Unruly waters: How rains, rivers, coasts, and seas have shaped Asia's history*. Penguin.
- Armitage, D., Bashford, A., & Sivasundaram, S. (Eds.). (2017). *Oceanic histories*. Cambridge University Press.
- Armstrong McKay, D. I., Staal, A., Abrams, J. F., Winkelmann, R., Sakschewski, B., Loriani, S., Fetzer, I., Cornell, S. E., Rockström, J., & Lenton, T. M. (2022). Exceeding 1.5°C global warming could trigger multiple climate tipping points. *Science*, 377(6), 1–10. <https://doi.org/10.1126/science.abn7950>
- Arrighi, G. (1994). *The long twentieth century: Money, power and the origins of our time*. Verso.
- Ayelazuno, J. A., & Ovadia, J. S. (2022). Ocean and land grabbing in Ghana's offshore petroleum industry: From the agrarian question to the question of industrialization. *Journal of Agrarian Change*, 22(4), 673–702. <https://doi.org/10.1111/joac.12502>
- Balachandran, G. (2012). *Globalizing labour? Indian seafarers and world shipping, c. 1879–1945*. Oxford University Press.
- Banaji, J. (2010). *Theory as history: Essays on modes of production and exploitation*. Brill.
- Banaji, J. (2016). Merchant capitalism, peasant households and industrial accumulation: Integration of a model. *Journal of Agrarian Change*, 16(3), 410–431. <https://doi.org/10.1111/joac.12175>
- Banaji, J. (2020). *A brief history of commercial capitalism*. Haymarket Books.
- Bashford, A. (2017). Terraqueous histories. *The Historical Journal*, 60(2), 253–272. <https://doi.org/10.1017/s0018246x16000431>
- Beinart, W., & Hughes, L. (2009). *Environment and empire*. Oxford University Press.
- Benton, L. (2010). *A search for sovereignty: Law and geography in European empires 1400-1900*. Cambridge University Press.
- Benton, L., & Perl-Rosenthal, N. (2020). Afterword: Land-sea regimes in world history. In L. Benton & N. Perl-Rosenthal (Eds.), *A world at sea: Maritime practices and global history* (pp. 186–192). University of Pennsylvania Press.
- Bernstein, H. (2013). Historical materialism and agrarian history. *Journal of Agrarian Change*, 13(2), 310–329. <https://doi.org/10.1111/joac.12020>
- Bhattacharyya, D. (2019). *Empire and ecology in the Bengal delta: The making of Calcutta*. Cambridge University Press.
- Bishara, F. A. (2017). *A sea of debt: Law and economic life in the western Indian Ocean, 1780-1950*. Cambridge University Press.
- Bishara, F. A., & Wint, H. (2020). Into the bazaar: Indian Ocean vernaculars in the age of global capitalism. *Journal of Global History*, 16(1), 1–21. <https://doi.org/10.1017/s174002282000011x>
- Bolster, J. W. (2014). *The mortal sea: Fishing the Atlantic in the age of sail*. Harvard University Press.
- Braudel, F. (2002). *The perspective of the world: Civilization and capitalism 15th–18th century* (Vol. 3). Phoenix Press.
- Brenner, R. (1977). The origins of capitalist development: A critique of Neo-Smithian Marxism. *New Left Review*, 1/104, 25–92.
- Brenner, R. (2001). The low countries in the transition to capitalism. *Journal of Agrarian Change*, 1(2), 169–241. <https://doi.org/10.1111/1471-0366.00007>
- Broeze, F. J. A. (1981). The muscles of empire—Indian seamen and the Raj 1919-1939. *The Indian Economic & Social History Review*, 18(1), 43–67. <https://doi.org/10.1177/001946468101800103>
- Campling, L., & Colás, A. (2021). *Capitalism and the Sea: The maritime factor in the making of the modern world*. Verso.
- Chakrabarty, D. (2018). Anthropocene time. *History and Theory*, 57(1), 5–32. <https://doi.org/10.1111/hith.12044>
- Chalfin, B. (2019). On-shore, off-shore Takoradi: Terraqueous urbanism, logistics, and oil governance in Ghana. *Environment and Planning D: Society and Space*, 37(5), 814–832. <https://doi.org/10.1177/0263775818800720>
- Chaudhuri, K. N. (1985). *Trade and civilisation in the Indian Ocean: An economic history from the rise of Islam to 1750*. Cambridge University Press.
- Christopher, E. (2006). *Slave ship sailors and their captive cargoes, 1730-1807*. Cambridge University Press.
- Chua, C., Danyluk, M., Cowen, D., & Khalili, L. (2018). Introduction: Turbulent circulation: Building a critical engagement with logistics. *Environment and Planning D: Society and Space*, 36(4), 617–629. <https://doi.org/10.1177/0263775818783101>

- Colás, A., & Mabee, B. (2010). The flow and ebb of private seaborne violence in global politics: Lessons from the Atlantic world, 1689-1815. In A. Colás, A., & B. Mabee (Eds.), *Mercenaries, bandits, pirates and empires: Private violence in historical perspective*. Hurst.
- Cole, P. (2018). *Dockworker power: Race and activism in Durban and the San Francisco Bay area*. University of Illinois Press.
- Creighton, M. S. & Norling, L. (Eds.). (1996). *Iron men, wooden women: Gender and seafaring in the Atlantic world, 1700-1920*. Johns Hopkins University Press.
- Crosby, A. W. (2004). *Ecological imperialism: The biological expansion of Europe, 900-1900*. Cambridge University Press.
- Diamanti, J. (2021). *Climate and capital in the age of petroleum: Locating terminal landscapes*. Bloomsbury Publishing
- Edwards, A. D., Hill, P., & Neves-Sarriegui, J. (2020). Capitalism in global history. *Past and Present*, 249(1), 1-32. <https://doi.org/10.1093/pastj/gtaa044>
- FAO. (2022). *Mapping distant-water fisheries access arrangements*. FAO Fisheries and Aquaculture Circular No. 1252. Food and Agricultural Organisation.
- Featherstone, D. (2023). Maritime labour, circulations of struggle, and constructions of transnational subaltern agency: The spatial politics of the 1939 Indian seafarers' strikes. *Antipode*. <https://doi.org/10.1111/anti.12790>
- Foley, P., & Mather, C. (2019). Ocean grabbing, terraqueous territoriality and social development. *Territory, Politics, Governance*, 7(3), 297-315. <https://doi.org/10.1080/21622671.2018.1442245>
- Frykman, N. (2020). *The bloody flag: Mutiny in the age of revolution*. University of California Press.
- Gagné, K., & Borg Rasmussen, M. (2016). Introduction - An amphibious anthropology: The production of place at the confluence of land and water. *Anthropologica*, 58(2), 135-149. <https://doi.org/10.3138/anth.582.t00.en>
- Gerstenberger, H. (1996). Men apart: The concept of "total institution" and the analysis of seafaring. *International Journal of Maritime History*, 8(1), 173-182. <https://doi.org/10.1177/084387149600800110>
- Gilroy, P. (1993). *The black Atlantic: Modernity and double consciousness*. Verso.
- ILO. (1921). *The International Seamen's code*. International Labour Office.
- ILO. (2022). *Database on reported incidents of abandonment of seafarers*. International Labour Organisation. <https://www.ilo.org/dyn/seafarers/seafarersbrowse.home>
- Levinson, M. (2006). *The box: How the shipping container made the world smaller and the world economy bigger*. Princeton University Press.
- Linebaugh, P., & Rediker, M. (2000). *The many-headed Hydra: The hidden history of the revolutionary Atlantic*. Verso.
- Longo, S., Clausen, R., & Clark, B. (2015). *The tragedy of the commodity: Oceans, fisheries, and aquaculture*. Rutgers University Press.
- Machado, P. (2014). *Ocean of trade: South Asian merchants, Africa and the Indian Ocean, c. 1750-1850*. Cambridge University Press.
- Mallin, F., & Barbesgaard, M. (2020). Awash with contradiction: Capital, ocean space and the logics of the Blue Economy Paradigm. *Geoforum*, 113, 121-132. <https://doi.org/10.1016/j.geoforum.2020.04.021>
- Mathew, J. (2016). *Margins of the market: Trafficking and capitalism across the Arabian sea*. University of California Press.
- Meiksins Wood, E. (1999). *The origin of capitalism: A longer view*. Verso.
- Melby, P. (2012). *Insatiable shipyards: The impact of the royal navy on the world's forests, 1200-1850*. Student Theses, Papers and Projects (History). Western Oregon University.
- Merry, S. E. (1988). Legal pluralism. *Law and Society Review*, 22(5), 869-896. <https://doi.org/10.2307/3053638>
- Moore, J. W. (2010). 'Amsterdam is standing on Norway': Part II. The global North Atlantic in the ecological revolution of the long seventeenth century. *Journal of Agrarian Change*, 10(2), 188-227. <https://doi.org/10.1111/j.1471-0366.2009.00262.x>
- Mustakeem, S. M. (2016). *Slavery at sea: Terror, sex, and sickness in the middle passage urbana*. University of Illinois Press.
- Orenstein, D. (2019). *Out of stock: The warehouse in the history of capitalism*. University of Chicago Press.
- Pal, M. (2021). *Jurisdictional accumulation: An early modern history of law, empires, and capital*. Cambridge University Press.
- Rediker, M. (1987). *Between the devil and the deep blue sea: Merchant seamen, pirates, and the Anglo-American maritime world, 1700-1750*. Cambridge University Press.
- Rediker, M. (2008). *The slave ship: A human history*. John Murray.
- Richards, J. F. (2006). *The unending frontier: An environmental history of the early modern world*. California University Press.
- Rohling, E. J. (2017). *The oceans: A deep history*. Princeton University Press.
- Rozwadowski, H. M. (2018). *Vast expanses: A history of the oceans*. Reaktion Books.
- Russon, M.-A. (2021, 29 March). The cost of the Suez Canal blockage. BBC News. Retrieved May 23, 2023 from <https://www.bbc.co.uk/news/business-56559073>
- Sampson, H. (2013). *International seafarers and transnationalism in the twenty-first century*. Manchester University Press.
- Sekula, A., & Burch, N. (2010). The forgotten space. Doc.Eye Film and WILDart FILM.
- Seltzer, M. (2004). Haven and a heartless sea: The sailors' Tavern in history and anthropology. *The Social History of Alcohol and Drugs*, 19, 63-93. <https://doi.org/10.1086/shad19010063>
- Sheriff, A. (2010). *Dhow cultures of the Indian Ocean: Cosmopolitanism, commerce and Islam*. Hurst & Company.

- Simpson, M. (2019). The annihilation of time by space: Pluri-temporal strategies of capitalist circulation. *Environment and Planning E: Nature and Space*, 2(1), 110–128. <https://doi.org/10.1177/2514848618817726>
- Sivasundaram, S. (2020). *Waves across the south: A new history of revolution and empire*. University of Chicago Press.
- Steinberg, P., & Peters, K. (2015). Wet ontologies, fluid spaces: Giving depth to volume through oceanic thinking. *Environment and Planning D*, 33(2), 247–264. <https://doi.org/10.1068/d14148p>
- Telesca, J. E. (2020a). Fishing for the Anthropocene: Time in ocean governance. In B. Wiggan, C. Fornoff, & P. Eunji Kim (Eds.), *Timescales: Thinking across ecological temporalities* (pp. 95–109). University of Minnesota Press.
- Telesca, J. E. (2020b). *Red gold: The managed extinction of the giant Bluefin Tuna*. University of Minnesota Press.
- Um, N. (2009). *The merchant houses of mocha: Trade and architecture in an Indian Ocean port*. University of Washington Press.
- Wallerstein, I. (1974). *The modern world-system I: Capitalist agriculture and the origins of the European world-economy in the sixteenth century*. Academic Press.
- Walters, D., & Bailey, N. (2013). *Lives in peril: Profit or safety in the global maritime industry*. Palgrave Macmillan.
- Wildschut, H., & Wouda, R. (2001). *Sandrien*. Stichting By the Way.
- Wright, R. (2009, November 17). Tankers store oil as futures prices rocket. *Financial Times*. <https://www.ft.com/content/29a6663e-d3af-11de-8caf-00144feabdc0>
- Zalasiewicz, J., & Williams, M. (2014). The anthropocene: A comparison with the Ordovician–Silurian boundary. *Rendiconti Lincei, Scienze fisiche e naturali*, 25(1), 5–12. <https://doi.org/10.1007/s12210-013-0265-x>

AUTHOR BIOGRAPHIES

Alejandro Colás is Professor of International Relations at Birkbeck, University of London. He is the author of *International Civil Society, Empire* and a co-author of *Food, Politics, and Society*.

Liam Campling is Professor of International Business and Development at Queen Mary University of London, where he works collectively at the Centre on Labour and Global Production. He is co-author of *Free Trade Agreements and Global Labour Governance*, and edited *Labour Regimes and Global Production* and *Journal of Agrarian Change*.

How to cite this article: Colás, A., & Campling, L. (2023). Maritime temporalities and capitalist development. *Geography Compass*, e12715. <https://doi.org/10.1111/gec3.12715>