## **Stranded Liabilities**

Gisa Weszkalnys

The shaping of post-carbon worlds is as much about figuring out what is to come as about dealing with what endures. For the hydrocarbons industry, this involves the permanent closure, plugging, and abandonment of oil and gas wells, and the dismantling, disposal or recycling of physical installations. In mature hydrocarbon basins, such as the U.K.'s North Sea, the so-called decommissioning of assets that have reached their end of life has become an acute preoccupation, despite soaring corporate profits and the current push for growing "indigenous" production to uncouple from Russian supplies. To give you a sense of the scale: Around 870 wells on the UK Continental Shelf are currently suspended, and there are plans for decommissioning more than 2000 wells over the next decade alone.<sup>1</sup> Tens of thousands of tons of obsolete topsides and substructures will require removal. The estimated portfolio of remaining decommissioning costs from U.K. offshore production, transportation, and processing infrastructure stands at £51 billion.

The intensifying climate emergency and the temporary reduction in fossil fuel demand caused by the COVID-19 pandemic have rapidly pulled the industry's retirement debt forward in time. There's now an urgent concern, first, with creating sufficient decommissioning capacity to meet the challenge and, second, preventing corporate disengagement from decommissioning responsibilities. The U.K. industry regulator, for example, has ramped up its efforts to encourage operators and infrastructure owners to exercise stewardship of late-life assets, improve planning, and achieve cost efficiencies (OGA 2021). Looking to the United States, the think-tank Carbon Tracker (2020) warns of a risk of "stranded liabilities," a scenario where companies fail to cover the accelerated costs that come with retiring installations in accordance with environmental guidelines. The worry is that governments and taxpayers may have "to clean up the messes private companies have left behind" (CIEL 2021).

Viewed through the lens of the Plantationocene, those stranded liabilities become more than a financial problem. Scholars have invoked the Plantationocene to expose the grounding of contemporary capitalism and the planetary collapse associated with (though not exclusive to) it in the specific logics of subjugation and extraction developed in colonial plantations. They draw attention to the geographical and racialized unevenness of ecological destruction and climate injustice, and to the histories of difference, exploitation, and collusion, as well as struggle, they embody and perpetuate (Davis et al. 2019). Significantly, this encompasses the energy systems underpinning these developments. The fossil economies that emerged with the deployment of carbon-based energy, as Jobson (2021) demonstrates, have continued to rest on an abstract notion of labor divorced from its creative capacities—or "dead labor"—born in systems of slavery and the plantation. Fossil capital and racial capital are inextricably entwined (see also Hughes 2019; Mintz 1986).

One can push these critical insights further. "The idea of the plantation," writes McKittrick (2013, 3) in her account of plantation futures, "is migratory." If the plantation's historical origins were manifold, so are its contemporary appearances. Indeed, it can be tracked and traced toward the prison, the city, shopping malls, biometric technologies, as much as modern instances of intensive monocrop agriculture or hydrocarbons extraction (Benjamin 2019; Browne 2015; Wolford 2021). Such instantiations of the plantation do not replicate it wholesale. They carry on its moralizing mechanics and rhetorical commitments, its modes of racialized violence, or its physical reordering of nature to facilitate capital accumulation.

From this perspective, the licensed blocks that constitute offshore extraction's spatialized aesthetics mimic the plantation's simplifying grid of spatial enclosure. Platforms, floating production storage and offloading vessels, supply ships, and pipes channel intensive types of capital investment at a distance. They facilitate the extraction of fossil capitalism's prime commodity, intended mostly for foreign export, rarely for local consumption. The industry's distinctive modularity (Appel 2019), too, mirrors the plantation's attempt to be "both fixed and flexible, located in a set of specific places and globalized placelessness" (Wolford 2021, 1626). The organization of life on and off the rig revolves around protected, often militarized, enclaves that, while rooted in the specificities of local colonial plantations, are also undergirded by deeply exploitative and racialized labor hierarchies subservient to this transnational industry (Appel 2019; Ferguson 2005). Hydrocarbon installations, however, do not just reformat and subdue the possibilities of life in extractive locales, they unravel them. Their toxic fallouts, from chemical seepages to oil spills, have turned living ecologies into unliveable space. By extension, climate change perpetuates and deepens the "distributional injustices we've inherited from history" (Táíwò 2022, 171; see also Whyte 2016). Meanwhile, the extractive, techno-economic apparatus moves on.

McKittrick's notion of plantation futures as a disassembly<sup>ii</sup> and reassembly of logics, parts, and relations suggests that these entanglements will not cease with fossil energy's gradual undoing. Decommissioning may put a stop to hydrocarbon production in specific sites but not to the ruination inherent in its installations, by stealth and by design (Howe et al. 2016; Stoler 2008).

Ownership of late-life assets is blurred by handovers, subcontracting, mergers and acquisitions, and increasingly disclaimed. In post-boom oil regions such as Alberta, the growing number and circulation of unwanted legacy assets indexes a "larger petrocapitalist system failure" (Wood 2019, 72). Asset care in the form of plugging, abandonment, and remediation is routinely deferred under the cloak of bankruptcy, or in a tight balancing act aimed at maintaining returns on

investment (Wood 2019). This leaves local communities stranded with toxic residues "beyond the grave" (CIEL 2021), which replicate the unequal forms of exposure these assets caused already during their lifetime (e.g., Sawyer 2015). The Plantationocene, here, helps hold in view "a residual field of embodied inequality" (Bond 2021, 387) that troubles scholarly characterizations of the contemporary condition as one of generalized toxic contamination (see also Liboiron 2021).

In a similar vein, shifting approaches to offshore decommissioning problematically inscribe the impossibility of separating nature and anthropogenic waste as *fait accompli* (Bond 2021; Dahlgren 2022). Experiments with so-called Rigs-to-Reefs practices—for example, in the United States, Thailand, and Malaysia—now seek to convert disused production infrastructures into artificial reefs and ocean habitats (Ounaian et al. 2020). Decades-old structures, it is claimed, have become embedded in marine ecologies to such a degree that their removal itself would be damaging. Conversely, leaving them in place (at a much-reduced cost to corporations) is purported to reduce both the risk of pollution and the carbon-intensity of decommissioning. In addition, the repurposing and reuse of infrastructures promises to sculpt new paths for value creation as a matter of "techno-speculative deferral" (Dahlgren 2022, 540). Former oil pipelines are re-visioned to transport hydrogen, oil and gas wells might find new purpose for geothermal energy production, and exhausted reservoirs turned carbon sequestration units are deemed to allow the industry to "play its part" in the Net Zero transition (OGA 2021). The result is a field of epistemic contestation where business sense and bottom-line jostle for prominence with models of a circular economy, carbon-neutrality, and restored oceanic lifeworlds.

There is concern that such efforts at value rehabilitation fail to stretch to the workers that enabled those same installations' productivity (OCI 2019). What of the technical operators whose expertise has become obsolescent alongside the outdated platform they help decommission? Ethnographies of deindustrialized settings provide plenty of evidence that a "just" transition will need to widen its scope beyond job replacement and technical re-skilling to fully capture the affective ambivalences of industrial loss and ensure survival in energy twilight zones (e.g., Dahlgren 2022; Khatchadourian 2022). But equally, accounts of oil and gas decommissioning must chart both the resource-metabolic and the labor relations underpinning this new type of waste capitalism whose reliance on cheap, racialized workforces and toxic side-effects have often gone unnoticed (Alexander and Reno 2012).

Decommissioning, then, unsettles the material, moral, and temporal boundaries between asset and hazard, value and waste, care and spoliation. It perturbs an industry that thrives on conjuring productive potential, not its imminent demise (Weszkalnys 2015). The Plantationocene orients us to the uneven disassembly and reassembly of geological, infrastructural, and political logics, parts, and relations that constitute this nonlinear process and the more-than-financial liabilities of reshaping energy worlds.

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## References

Appel, Hannah. 2019. *The Licit Life of Capitalism: U.S. Oil in Equatorial Guinea*. Durham, N.C.: Duke University Press.

Alexander, Catherine, and Joshua Reno. 2012. "Introduction." In *Economies of Recycling: The Global Transformation of Materials, Values and Social Relations*. C. Alexander and J. Reno, eds. Pp. 1-32. London and New York: Zed Books.

Benjamin, Ruha, ed. 2019. *Captivating Technology: Race, Carceral Technoscience, and Liberatory Imagination in Everyday Life*. Durham, N.C.: Duke University Press.

Bond, David. 2021. "<u>Contamination in Theory and Protest.</u>" *American Ethnologist* 48, no. 4: 386–403. Bridge, Gavin. 2018. "<u>The Map is Not the Territory: A Sympathetic Critique of Energy Research's Spatial</u> Turn." *Energy Research & Social Science* 36: 11–20.

Browne, Simone. 2015. *Dark Matters: On the Surveillance of Blackness*. Durham, N.C.: Duke University Press.

Carbon Tracker. 2020. It's Closing Time: The Huge Bill to Abandon Oilfields Comes Early. Report.

Center for International Environmental Law (CIEL). 2021. <u>Toxic Assets: Making Polluters Pay When Wells</u> <u>Run Dry and the Bill Comes Due.</u> Report.

Dahlgren, Kari. 2022. "<u>The Final Voids: The Ambiguity of Emptiness in Australian Coal Mine</u> <u>Rehabilitation.</u>" JRAI 28, no. 2: 537–555.

Davis, Janae, Alex A. Mouldon, Levi Van Sant, and Brian Williams. 2019. "<u>Anthropocene, Capitalocene,</u> . . . Plantationocene?: A Manifesto for Ecological Justice in an Age of Global Crises." *Geography Compass* 13, no. 5. Dewan, Camelia. 2020. "Living with Toxic Development: Shipbreaking in the Industrializing Zone of Sitakunda, Bangladesh." Anthropology Today 36, no. 6: 9–12.

Ferguson, James. 2005. "Seeing Like an Oil Company: Space, Security, and Global Capital in Neoliberal Africa." *American Anthropologist* 107, no. 3: 377–382.

Howe, Cymene, Jessica Lockrem, Hannah Appel, et al. 2016. "<u>Paradoxical Infrastructures: Ruins,</u> <u>Retrofit, and Risk.</u>" *Science, Technology, & Human Values* 41, no. 3: 547–565.

Hughes, David McDermott. 2017. *Energy without Conscience: Oil, Climate Change, and Complicity.* Durham, N.C.: Duke University Press.

Jobson, Ryan Cecil. 2021. "Dead Labor: On Racial Capital and Fossil Capital." In *Histories of Racial Capitalism*, edited Justin Leroy and Destin Jenkins, 215–230. New York: Columbia University Press.

Khatchadourian, Lori. 2022. "<u>Life Extempore: Trials of Ruination in the Twilight Zone of Soviet Industry.</u>" *Cultural Anthropology* 37, no. 2: 317–348.

Liboiron, Max. 2021. Pollution is Colonialism. Durham, N.C.: Duke University Press.

McKittrick, Katherine. 2013. "Plantation Futures." Small Axe 17, no. 3 (42): 1–15.

Mintz, Sidney W. 1985. *Sweetness and Power: The Place of Sugar in Modern History*. New York: Penguin. Offshore Energies UK (OEUK). 2022. *Decommissioning Insight 2022*. Report. London.

Oil & Gas Authority (OGA). 2021. *Decommissioning Strategy*. Report. London.

Ounaian, Kristen, Jan P.M. van Tatenhove, and Pauline Ramírez-Monsalve. 2020. "<u>Midnight at the</u> <u>Oasis: Does Restoration Change the Rigs-to-Reefs Debate in the North Sea?</u>" *Journal of Environmental Policy and Planning* 22, no. 2: 211–225.

Oil Change International (OCI) Platform and Friends of the Earth Scotland. 2019. <u>Sea Change: Climate</u> Emergency, Jobs, and Managing the Phase-Out of UK Oil and Gas Extraction. Report.

Sawyer, Suzana. 2015. "Crude Contamination: Law, Science, and Indeterminacy in Ecuador and Beyond." In *Subterranean Estates: Life Worlds of Oil and Gas*, edited by Hannah Appel, Arthur Mason, and Michael Watts, 126–146. Ithaca: Cornell University Press.

Táíwò, Olúfémi O. 2022. *Reconsidering Reparations*. Oxford: Oxford University Press.

Vidal, Priscila da Cunha Jácome, et al. 2022. "<u>Decommissioning of Offshore Oil and Gas Platforms: A</u> <u>Systematic Literature Review of Factors Involved in the Process.</u>" Ocean Engineering 255: 111428.

Weszkalnys, Gisa. 2015. "<u>Geology, Potentiality, Speculation: On the Indeterminacy of 'First Oil.</u>" *Cultural Anthropology* 30, no. 4: 611–639.

Whyte, Kyle Powys. 2016. "Is It Colonial Déjà Vu? Indigenous Peoples and Climate Injustice." In *Humanities for the Environment: Integrating Knowledge, Forging New Constellations of Practice*, edited by Joni Adamson and Michael Davis. London: Routledge.

Wolford, Wendy. 2021. "<u>The Plantationocene: A Lusotropical Contribution to the Theory.</u>" Annals of the American Association of Geographers 111, no. 6: 1622–1639
Wood, Caura. 2019. "<u>Orphaned Wells, Oil Assets, and Debt: The Competing Ethics of Value Creation</u> and Care within Petrocapitalist Projects of Return." JRAI 25, S1: 67–90.

<sup>i</sup> For a more detailed breakdown of these numbers see OGA (2021) and OEUK (2022). Offshore installations on the United Kingdom's North Sea Continental Shelf alone comprise approximately 320 platforms, 250 subsea systems, 20,000 km of pipelines and around 7,800 wells (OGA 2021: 5). This is only a fraction of the global volume and cost of oil and gas decommissioning, onshore and offshore. <sup>ii</sup> I adapt the term from Bridge (2018).