5. Asbestos: The Fallout of Shipbreaking in the Global South

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Asbestos is a naturally occurring mineral known for its insulating and fireproofing qualities afforded by its fibrous texture. Throughout its heyday in the twentieth century, it was used to create several composite materials, including asbestos cement, asbestos plaster, and fireproofing foams used in construction. Ropes, firefighter suits, gloves, theater curtains, ovens, and even cigarette filters also contained asbestos. Paradoxically, the qualities that made asbestos a trademark of safety also endangered the lives of those who worked with it. Inhalation of its microscopic fibrils lodged within each of its fibers can cause lung cancer, mesothelioma, and asbestosis—three of the most common asbestos-induced diseases—the symptoms of which may not appear until two or three decades after exposure. While many countries have banned the mining, use, and import of asbestos, detecting and removing it from buildings remains a major concern.

Lesser known is that asbestos was used extensively in shipbuilding as an insulating material for pipes, ducts, boilers, and machinery, as well as for guns and ammunition on warships. Shipyard workers have long been suffering the lethal consequences of their exposure to asbestos. Although the International Convention for the Safety of Life at Sea prohibits the installation of asbestos-containing materials on ships built after July 1, 2002,[1] this regulation does not pertain to vessels built before that date. Once older vessels reach the end of their service period, typically after three or four decades, they are sent to dismantling yards. Most of these yards are in the Global South, where hazardous materials can be recycled at a significantly lower cost than in the Global North. This essay probes the theoretical and ethical implications that thinking of (and with) asbestos as a material of culture entails in relation to shipbreaking.

1 https://www.imo.org/en/OurWork/Safety/Pages/Asbestos.aspx.

Ships That Matter

Recent scholarship has used the figure of the ship as a conceptual tool to reflect on European modernity in relation to colonial expansion and the Atlantic slave trade (Gilroy 4–40), the refugee crisis (Mannik), and global capitalism and containerized trade (Khalili; Martin). These approaches construe the ship as an object that facilitates the movement of people, goods, and commodities, providing the means of trade and negotiating and projecting national or imperial power. There is, however, an alternative way of looking at ships; rather than perceiving them as finished objects, it focuses on the materials from which the ships are made. Such a shift of perspective from form to materials is analogous to a transformation from an object into a thing, as per Bill Brown's distinction (4). When perceived as a thing, the boundaries that define the ship as an object are rendered porous, making the ship "leak," to apply Tim Ingold's favored term in an uncannily fitting context (7). From such a materials-based perspective, the ship breaks down into an assemblage of materials laden with their own histories, which requires that we attend to "the before and after of the object," which Brown describes as the temporality of "thingness" (4).

Karen Barad's notion of material-discursive practices helps further conceptualize the implications of a materials-based perspective on ships. In material-discursive practices, Barad maintains, "[t]he relationship between the material and the discursive is one of mutual entailment. Neither is articulated/articulable in the absence of the other; matter and meaning are mutually articulated" (Barad, "Posthumanist Performativity" 822). Following asbestos in material-discursive terms thus requires that we account for the differential and co-constitutive dynamics of its materialization as an effect of discourse and, vice versa, its discursive production as a material. For instance, when its ubiquity and low price are considered preconditions for the large-scale construction of passenger, cargo, and navy ships throughout the twentieth century, one should also consider colonialism as the geopolitical discursive condition that supplied asbestos for Royal Navy ships in both world wars. Most of the asbestos built into these warships was mined in the former British colonies of South Africa, Botswana, Zimbabwe, and Malawi (Hedley-Whyte and Milamed 191–92). While ships tend to be portrayed as the means that enabled colonial expansion and exploitation in the first place, this example illustrates their entanglement with these processes at the level of materials and the discourses that enabled their flow. This perspective also brings to the fore the materiality of human bodies that were in touch with asbestos in mining and the construction and dismantling of ships. Major shipyards in the Global North that are opening up about their illegal use of asbestos after its ban from shipbuilding are currently facing lawsuits by affected workers and their families (Munz; Strand). However, lawsuits concerning working conditions are not an option for workers in the shipbreaking yards in the Global South. Even if they are protected by law on paper, these laws are rarely

enforced and often evaded by local authorities and owners of shipbreaking yards (Karim 125–26).

The Slow Violence of Toxic Colonialism

To navigate the assemblage of bodies, materials, economic interests, and political dependencies, it is necessary to consider the events that led to the concentration of the world's largest shipbreaking yards in three countries of the Global South: Pakistan, India, and Bangladesh. Here, almost ninety percent of the world's merchant ships are scrapped every year (Sawyer 555). One of the events that triggered this practice was the environmental catastrophe caused by the oil tanker *Exxon Valdez*, which ran aground near Alaska on March 24, 1989 (544). The oil spill that this caused resulted in the decision to replace all single-hulled oil tankers with double-hulled ones. As a result, many single-hulled vessels became redundant, forcing their owners to find cheap ways of disposing of them.

As stipulated by the Basel Convention of 1989,[2] each country is responsible for internalizing the disposal costs of its hazardous waste in its own territory. To circumvent this regulation and avoid the expense of having their ships dismantled in the Global North, shipowners often register their vessels in countries other than their own. More than half of the world's merchant fleet is registered under such "flags of convenience" provided by, among others, Panama, Honduras, Liberia, Malta, and the Marshall Islands, where low taxes and loopholes in the law allow shipowners to evade labor and environmental regulations (DeSombre 71). Once their service period ends, these ships are sold to cash buyers, who then resell them to the dismantling yards, usually under new names. Using cash buyers as intermediaries is one of the most common ways shipowners evade the responsibility for exporting toxic waste (NGO Shipbreaking Platform). The largest of these yards are located at Alang in India, Chittagong in Bangladesh, and Gadani in Pakistan. The gentle slopes of the shorelines in all three locations are ideal for running obsolete vessels to the beach at high tide and, once the water recedes, having them scrapped from bow to stern by tens of thousands of migrant workers using nothing more than blowtorches and their bare hands.

Since the *Exxon Valdez* oil spill, thousands of such vessels have been dismantled on these beaches. The redundancy of freighters in the wake of the financial crisis of 2008 and 2009, as well as the redundancy of cruise ships due to the COVID-19 pandemic, have added an extra boost to the shipbreaking industry in these countries. The cynical logic that sustains this cycle is that it creates a win-win scenario for the

2 http://www.basel.int/

shipping companies that want to make a profit by disposing of their ships that contain hazardous waste at a low cost. In addition, the shipbreaking yards in the Global South provide not only an unquenchable supply of high-quality steel to be melted down and reused but also a livelihood for at least one million people in India alone (Sawyer 547). The industry also supplies businesses along the coast that recycle and sell everything the ships contain. Such an interrelation of economic pressures inflicted on developing nations sustained by an imperial exercise of power disguised as mutually beneficial business relations is what Laura A. Pratt describes as "toxic waste colonialism," an inverse colonial dynamic predicated on the disposal of waste from the Global North in the peripheries of globalization.

Risking their lives every day for an equivalent of ninety euros per month, workers in this pervasive colonial dynamic are exposed to asbestos in combination with various hazardous materials. These include mercury, PCB (polychlorinated biphenyl), lead, arsenic, and oil residue, all of which take a heavy toll on human health and the environment. Most of these workers lack knowledge of the long-term consequences of their exposure to these materials, but even if they are aware of the risks, the work is often the best option they have to provide for their families. Latching onto the opportunities yielded by economic, legal, and political cracks and loopholes that often find their roots in earlier forms of colonial rule in the Global South, toxic waste colonialism operates by what Rob Nixon calls "slow violence:" a form of protracted and sustained damage inflicted through the "leaking" of such materials into human bodies and their environment.

Toward an Ethics of Intra-Action

Over the past two decades, the plight of workers in the shipbreaking yards of developing countries has been a subject of photography projects, most notably by Sebastião Salgado, Sean Smith, and Edward Burtynsky, as well as several documentaries such as *Shipbreakers* (2004) and *Toxic Tankers for Bangladesh* (2014). Work by such activist groups as the NGO Shipbreaking Platform, a coalition of environmental, human, and labor rights organizations, has been instrumental in raising awareness of the problem. While the ethical import of such efforts is crucial, the images circulating on the Internet tend to capture life in the yards in aestheticizing and exoticizing terms, inviting viewers to be shocked by the working conditions and simultaneously awestruck by the colossal size and skeletal forms of half-dismantled vessels. This draws on, as Mike Crang argues about Burtynsky's work, the aesthetic conventions of representing ruins and shipwrecks as sublime spectacles (24–26).

It is precisely the legacy of this western gaze to which Ann Stoler's notion of ruination provides an ethical alternative. Shifting the emphasis from "ruin" as a noun to "ruination" as a verb, she provides a conceptual tool to think of the ruins of colo-

nial empires not as vestiges of a distant past but as "durabilities" that persist in the present under different disguises. "To think with ruins of empire as ruination is to emphasize less the artifacts of empire as dead matter or remnants of a defunct regime than to attend to their reappropriations, strategic neglect, and active positioning within the politics of the present" (350). Perceiving the global network of economic relations that vindicate the ways in which the shipbreaking industry is run in the Global South underlines the persistence of imperial formations and the exercise of slow violence under the disguise of business interests.

Reading Stoler through the lens of Barad's agential realism invites an ethical stance that asks us to contemplate ruination even if we are as far away from these locations as I am in the moment of writing. While corporations, shipowners, and governments should be held liable, Barad's understanding of agency as distributed among and emerging from the intra-action of different components of a phenomenon compels me to reconsider responsibility in this context. Thinking in the terms of quantum physics, Barad contends that "[q]uantum entanglements are not the intertwining of two (or more) states/entities/events, but the calling into question of the very nature of two-ness, and ultimately of one-ness as well. . . . Quantum entanglements require/inspire a new sense of a-count-ability, a new arithmetic, a new calculus of response-ability" (251). Where an approach predicated on the interaction of different actants attaches responsibility to one or another actant, in Barad's new calculus, responsibility "is an iterative (re)opening up to, an enabling of responsiveness" (265).

In this sense, even if we do not interact with asbestos (as a result of the safety measures and the bans on asbestos implemented in the Global North) and are not directly responsible for its disposal in the Global South, we nonetheless intra-act with asbestos as part of an assemblage that encompasses bodies, materials, and discourses in their entangled and differential becoming. One ramification of this understanding is that the ways in which we acquire the commodities that we use on a daily basis are entangled in economic and political networks sustained by ocean-going cargo vessels bound to be dismantled in the shipbreaking yards of the Global South. Rather than being "harbored" by its individual components, agency flows through these practices and constitutes the conditions of their possibility. Inasmuch as we are beneficiaries of these material flows as customers, consumers, or simply as bystanders, we are implicated (even if not complicit), to use Michael Rothberg's term. Confronting our implication in these processes, Rothberg insists, is an urgent political task and the condition of what he calls "long-distance solidarity" (10–12). If such solidarity is possible, we must acquire material literacy not only to know what materials things are made from but also to become response-able for their disposal and afterlife.

Acknowledgment

I want to thank Anneke Smelik and Liedeke Plate for their continued support of my work and growth as a scholar.

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