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The “Flying Dutchmen”: Ships’ Tales of Toxic Waste in a Globalized World

Ships materialize the flows of globalization. Traversing the world’s oceans, they carry the containers filled with goods and people within global networks that sustain our global economy. Not on every voyage, though, is the cargo meant for global circulation, for exchange, or for re-entering social and economic networks at its node of destination. Social, political, or economic considerations at the sending or receiving port—or both—can send these ships on voyages of no return and so end the material flows of globalization.

Maritime space, covering 70 percent of our planet, offers great locations where objects—including goods as well as people—can be disposed of or put outside of the territorial jurisdiction more generally. At sea, unwanted shipments as well as the problems attached to them can easily be brought out of sight, at least temporarily. In the early modern era, for instance, the leper ships were one solution to a community’s epidemic health problems. As ghost ships, like the famous *Flying Dutchman* from seventeenth-century nautical folklore, these ships were destined to roam the world’s oceans and to never return to port again. In 1633, the Japanese emperor sent a ship full of lepers to Spanish missionaries in the Philippines with strict instructions for the captain to let them drown rather than allowing them to return (Wheeler 1913). Indeed, for centuries, the world’s oceans have been the ultimate receptacle for things unwanted by society: objects were dumped at sea, burned at sea, or simply set on a voyage of no return.

Starting in the post-World War II era, the world saw a resurgence of these “Flying Dutchmen” on the oceans in vast numbers. This time, however, these ghost and leper ships were not carrying the externalities of a social community ridding itself of outcasts scarred by a lethal disease, but the externalities of an economic system ridding itself of the non-recyclables of production: toxic waste. The ships’ tales were one of the industrial world’s most toxic by-products, such as PCBs or outdated chemical weapons from the wars in Korea and Vietnam, which were first dumped and later on burned at sea. In the end, these ghost ships transported toxic remnants of industrial production in the Global North along former colonial shipping routes to “disposal” sites in countries of the Global South. With increasing territorialization of ocean space by means of environmen-

tal regulation, however, the “Flying Dutchmen,” whose toxic cargo was doomed to sail forever without a proper destination, returned into sight ever more persistently. It was no longer possible for toxic waste to be out of sight as the “Dutchmen” loomed fiercely on the horizon. By the 1980s, the world had arrived at a global toxic waste crisis.

One of the twentieth century’s first “ghost ships” was a US military freighter loaded with outdated chemical weapons from the war in Vietnam. The *LeBaron Russell Briggs* last set sail on a voyage of no return into the Atlantic in the summer of 1969, just prior to the environmental turn of the 1970s. It was already late afternoon when the *LeBaron Russell Briggs* finally sank. For almost six hours the men aboard *USS Hartley* had watched the aging Liberty ship and its 418 coffins of lethal nerve gas slowly making its way nearly 5 kilometers deep into a watery grave. Their mission, CHASE 13, was the last of a series of ocean disposal programs by the US Army between 1964 and 1970. With these missions, the US military got rid of unwanted material, primarily outdated chemical munitions, on old ships which it then scuttled at sea. Its acronym CHASE stood for “Cut Holes and Sink ‘Em” (Ross and Amter 2010).

While previous missions had remained relatively under the radar, CHASE 13 received enormous political and media attention in the summer of 1969. It spurred wild protests among conservationist and radical student groups in the US that were engaged in anti-Vietnam activities more generally. For US environmentalism, operation CHASE 13 represented an important landmark. The military operation marked the end of a period in US environmental history that had seen the shift from conservationism to environmentalism, the growth of grassroots activism, and a general rising awareness of topics on pollution and environmental protection. Spurred on by Rachel Carson’s best-selling publication *Silent Spring* in 1962 and framed by the Santa Barbara Oil Spill in 1969, Americans increasingly voiced their concerns about their environment (Matthew 2013). After CHASE 13, they also had a term for their discourse on toxic materiality: hazardous waste. A problem that had been “unnamed” beforehand had received its own terminology with operation CHASE 13 (Rome 2003).

Operation CHASE 13 also “environmentalized” maritime space with regards to toxic waste. Succumbing to public and political pressures, the Nixon administration passed the Marine Protection, Research, and Sanctuaries Act, commonly known as the “Ocean Dumping Act,” in October 1972. This put an end not only to the military’s but also the US

industry's practice of dumping millions of tons of chemical waste. In 1973, the London Ocean Dumping Convention internationalized the American approach. It mandated all contracting parties to "prevent dumping in the ocean which would endanger human health, harm marine life, infringe upon the uses of the oceans for pleasure, or interfere with other legitimate uses thereof." The oceans no longer functioned as the world's ultimate receptacle for toxic waste.

Shortly after the London Convention came another chapter in the story of the modern "Flying Dutchmen." In December 1974 a "strange-looking ship" was tied up at the port of Houston, Texas: the *Vulcanus*. Named after the Roman god of fire, the freighter was painted in "a garish yellow with large black smokestacks aft." With a "good deal of German efficiency," according to the *Philadelphia Inquirer*, the German-designed ship was to solve one of the Gulf of Mexico's most pressing environmental and economic issues: toxic waste disposal. For years, the petrochemical industry that ringed the gulf had indiscriminately, and "with little public attention and only a minimum of government control," dumped million tons of chemical waste into the Gulf (Chriss 1974). With the Ocean Dumping Act, however, this cheap opportunity to bring toxic materiality out of sight had passed. Instead of disposing their externalities from production cheaply in the Atlantic Ocean, the industries of the Gulf now began accumulating their "most noxious wastes" on land, posing a major pollution problem for the Gulf area.

The *Vulcanus* had been re-fitted as a waste incinerator ship in 1972. Although the ship was registered in Singapore, it was operated by the Dutch firm, Ocean Combustion Services, which was a subsidiary of the German shipping company Hansa. In 1972, it contained two incinerators, which according to joint studies by the Environmental Protection Agency (EPA) and Shell could destroy 99.35 percent of the dangerous waste material. The ship took on the waste in liquid form. The liquid was then placed in holding tanks and fed at sea into the incinerators, which burned the waste at 1,400 degrees Celsius (Chriss 1974). At the time, the *Vulcanus* operated primarily in the North Sea out of the Rotterdam ship yard, but it also served chemical waste disposal globally. Aside from its European jobs conducted in the North Sea and Shell's chemical waste in the Gulf of Mexico, the ship also took on jobs in the South Pacific. In 1977, it burned eight million liters of Agent Orange that were "left over" from the Vietnam War (Zeit 1984).

While the *Vulcanus* operated clearly “out of sight” from most land inhabitants, protests surrounding Shell and the EPA’s experiments with ocean incineration settled on the fact that the toxic waste ship was still too close to shore. Ocean incineration ships were to operate 170 miles (274 km) from shore; for the concerned US public, this was not far enough away. In the mid-1980s, opposition was fierce against ocean incineration. The attorney generals of the states of Texas, Louisiana, and Alabama threatened to sue the EPA if it were to go ahead with its plans of ocean incineration in the Gulf of Mexico. While American proponents of ocean incineration of toxic waste claimed that it was “environmentally sound,” its critics doubted scientific evidence and questioned whether an accident at sea could in fact be cleaned up. “If it’s so safe,” argued Texas governor Mark White at a US Senate hearing, “why do they want to go 170 miles out to sea to incinerate?” (Mathewson 1985). In the end, ocean incineration did not stand a chance against opposition in the US.

Like Shell and the EPA, the city of Philadelphia also experimented with ocean incineration as an alternative to ocean dumping in the 1980s. But similarly, it failed to establish this as a permanent practice by the city’s toxic waste management. Seemingly lacking other options in the face of empty pockets and a “Mount Everest of ash” that had risen behind the gates of its waste treatment facilities, in the summer of 1985 the municipality asked waste traders Paolino and Sons to load another ship named the *Khian Sea* with toxic cargo. The ship left Philadelphia in September 1986 loaded with 14,000 tons of toxic ash from Philadelphia’s waste incinerators. Its initial destinations were the Bahamas and then Panama, where the ash was to be used for a road-building project along Panama’s fragile wetland areas. In the end, it was a report of the US EPA which caused both governments to have second thoughts. Worried about importing an environmental time bomb, both withdrew their landing rights for the *Khian Sea* (Moyers 1990).

This withdrawal was the starting point of the ship’s fateful voyage: for 27 months it roamed the world’s oceans in an unsuccessful attempt to find an (il)legal dumping ground for its cargo: traveling from the Bahamas to Panama and finally to Haiti, where the ship dumped 4,000 tons of Philadelphia’s toxic ash as “fertilizer.” After leaving Haiti, the *Khian Sea* continued its search for a dumping ground for the remaining cargo on to the Dominican Republic, Honduras, Guinea-Bissau, the Netherland Antilles, and Sri

Lanka. After more than two years at sea, the ship reappeared as *Pelicano* in Singapore in November 1988—without its cargo. Its captain stated that the trash had been unloaded, but refused to say where. Greenpeace asserted that the toxic material had been dumped in the Indian Ocean. Moreover, facing a whole fleet of “Flying Dutchmen,” environmental action groups and concerned media outlets saw an era of “garbage imperialism” looming large on the horizon, when industrial nations would send their waste to disposal sites in “third-world” countries (Morris 1987).

The public outcry following media reports on the *Khian Sea*, the *Mobro*, the *Karen B* and other toxic waste ships of the time led environmental NGOs and developing countries to rally behind the cause of regulating the export of toxic waste. In early 1994, their alliance was successful in bringing about a ban on the waste trade between industrial and less-industrialized countries within the context of the Basel Convention on the Transboundary Movement of Hazardous Waste and Its Disposal (Clapp 1994). After the ban of ocean dumping and the failure to introduce ocean incineration as a common practice, the Basel Convention added another facet to regulating ocean space environmentally. Ocean space where nations were “free” to dump their toxic externalities had become increasingly limited by the 1990s. Ironically, it was these regulations aimed at “greening” ocean space that made the problem of toxic waste disposal ever more pressing and ever more visible.

In the late 1980s, the *Khian Sea*'s fateful voyage had come to represent many other ships populating the world's oceans on their voyages of no return. But it was the equally hapless voyages of the *LeBaron Russell Briggs* in 1969 and the *Vulcanus* in 1974 which had laid the foundation. All three waste barges symbolized the world's growing crisis with toxic waste after the 1970s. Just like the phantom *Flying Dutchman* signified the shadowy other, reminiscent of death and decay to early modern mariners, those toxic waste ships represented the ephemeral other of an economic system based on growth and profit maximization. And so concerned contemporaries saw the *Khian Sea*, like its mythical predecessor, as a portent of doom: the world was to drown in its toxic waste.

Today, the media relegates a different cargo to the “Flying Dutchmen”—people. Instead of lepers, now they are men and women of African descent attempting to cross the

Mediterranean to find refuge in the safe haven of Europe. But as their captain and crew jumped ship, they are, just like the toxic waste barges of the 1990s, doomed to roam the oceans forever. While the problems require very different solutions, they point out the same human mechanism of dealing with unwelcome objects: out of sight, out of mind. The only difficulty is that some things keep on reappearing.

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