# Editor's Column: Sea Trash, Dark Pools, and the Tragedy of the Commons

OW LIQUID ARE WE? THE METAPHORS DEFINING CONTEMPORARY world systems can be thrillingly fluid. *Dark pools* is the mysterious term financial traders use to describe outsize transactions hidden from ordinary investors. *Liquid modernity* describes a post-Fordist world where the site-intensive factory machinery and fixed capital of "heavy modernity" dissolve into outsourcing, batch production, and hypermobile capital (Bauman 1–90). Arjun Appadurai defines global "flows" as forces of transglobal acculturation and communication that exceed the boundaries of localities and states: a metaphor that supersedes the core-periphery model (which imagines sharp cultural differences between haves and have-nots). *Global flows* invites scholars to reconceptualize far-flung geographies as multiply connected via techno-, media-, idea-, ethno-, and finance-scapes (6–7).

This rush of aqueous metaphors lends materiality to a world that becomes more ethereal every day, to a discourse that has taken to the air, that treats iPhones like oxygen spas, as if our very lungs and sinews could be extruded into cyberspace. But our era's airborne imaginary should not mask the real materiality on which late capitalism is based: Earth's commerce still depends on oceans. Ninety percent of the world's goods (most of what we eat or type on or wear) still travels in container ships. The extraordinary bulk and materiality of this commerce connect us to the earliest tribulations of Western Europe's sea trade. In *Europe between the Oceans: Themes and Variations, 9000 BC– AD 1000*, Barry Cunliffe explains that long-distance sea travel became commonplace as early as the fifth millennium BC, when obsidian from four western Mediterranean sources—Sardinia, Lipari, Pantelleria, and Palmarola—"was being traded over considerable distances" (114).

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Around the same time, the goods archaeologists call the "Neolithic package" (cattle, goats, sheep, seed corn, and pigs) traveled by boat from England to Ireland and the Scottish isles. Between 2800 and 1300 BC, Europe's oceanic trade routes solidified, enabling individual mobility and cultural exchange on an unprecedented scale. Bound together by maritime exchange networks, oceanic interfaces supported "distinct cultural zones" sharing technologies,

goods, and ideas (181; fig. 1). Even today points

connected by water (say, southern India and

Indonesia) often share more cultural and eco-

nomic history than points connected by land

FIG. 1

European cultural zones supported by oceanic interfaces, 2800–1300 BC. The arrows show crosspeninsular axes of communication (Cunliffe 181).

(say, northern and southern India). The premise of the oceanic turn in literary studies is this: we have grown myopic about the role that seas and oceans play in creating ordinary histories and cultures. Although the sea has been an exciting, deadly catalyst for trade and exploration for millennia, by the nineteenth century, as Margaret Cohen argues in this issue, oceanic travel and ideas had become routine. It is the business of oceanic studies to disturb this routine, and so in the following pages *PMLA* has collected a Theories and Methodologies section on oceanic literatures and histories.

How liquid are we? While human bodies seem substantial and geocentric and while many creation myths insist that our fundament is clay or earth, we are mostly made out of water: not geo- but aquacentric. Science explains that we emerged from the sea—our blood a tide of oceanic ions. The chemical formula for blood is very like the formula for seawater. Since cells evolved in oceans, when



animals clambered out of the sea evolutionary processes took the simplest route—ensuring that the material outside cell walls resembled this early creaturely environment.

And yet our general obliviousness to the gigantic bodies of water surrounding islands and continents is astonishing. For landlubbers the sea is a metaphor or an alluring surface; it may induce ecstasy but seems otherwise featureless, as in Emily Dickinson's poem:

> Exultation is the going Of an inland soul to sea,— Past the houses—past the headlands— Into deep Eternity—

Bred as we, among the mountains, Can the sailor understand The divine intoxication Of the first league out from land?

The gift of Dickinson's opening gerund, the rhymes *sea-eternity-we-the*, and the velocity of the staccato words *of*, *out*, and *from* in the last line make me euphoric; her poem also creates a savvy contrast between nature lovers' and nature workers' points of view.<sup>1</sup> Dickinson asks if mariners, liberated from an instrumental calculus, could intuit what's intoxicating about the ocean.

Oceans should serve the interests of everyone since their currents help control Earth's climate and their fish provision entire economies, but modern legislation concerning the ocean still hews to the maritime industry's financial interests. The legions of fish caught in African waters do not feed the hungry in Senegal or Mauritania because Europe's fish scarf them up: West African fish provide protein for the European Union's industrial salmon. As Charles Clover explains in *The End of the Line*: How Overfishing Is Changing the World and What We Eat, "Through . . . more informed buying habits, European voters and consumers could exercise important pressure for the conservation of fish stocks, but the European Commission listens only to vested interests and talks of good governance while bribing Africans to persist with unsustainable practices and to allow the pillaging of their waters by the EU vessels" (53). Although we may wish to regard the oceans and seas as a commons, a collectively owned space serving interlocking sets of national and international interests, ordinary folks have little say about maritime preservation or management. "[F]ishing, the most destructive thing going on in [the ocean], is nearly everywhere the responsibility of the most junior politician in the cabinet-the fisheries minister. In some countries he or she is not even in the cabinet. Everywhere in the world the fisheries minister is there just to perform the traditional role of keeping the fishing industry happy" (218-19).

Garrett Hardin invented the phrase tragedy of the commons to explain why publicly shared environments can atrophy quickly. He traces the course of environmental degradation in lush communal pasturelands where each herdsman, seeking to maximize individual profit, keeps adding one more ruminant to his herd, an act rational and ruinous. A herdsman who adds a sheep acts rationally since everyone using the commons shares in the bad effects of overgrazing but only the calculating herdsman pockets the extra animal's worth of profit. While this individual's wealth may grow, the resources of the commons stagnate. "Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit—in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all" (264).<sup>2</sup>

Perhaps you are accustomed to thinking about the tragedy of the commons in deciding what to order at a sushi bar or fish counter (Is this rockfish legally caught, or should it have been left to reproduce? Is this wildcaught salmon sustainable?), but how often do we think about shared environments when reading literature? How do we deal with the oceanic metaphors in Ezra Pound's "Portrait d'une Femme," which begins "Your mind and you are our Sargasso Sea"? How do we think about the ocean as commons when reading about Holocaust survivors in David Grossman's novel See under: Love, in which a murdered Jew turns into a fish that creates a new language of "ning" to communicate with other sea creatures flashing around in bright, metamorphic schools? What about José Saramago's The Stone Raft, where the Iberian Peninsula breaks off from Europe and sails into the Atlantic? Is the tragedy of the commons relevant in Adrienne Rich's "Diving into the Wreck," where the ocean becomes a metaphor for the psyche, or in John Banville's The Sea, where the ocean is a roaring backdrop for character development? Finally, how do we think about

the tragedy of the commons in all its metaphoric and symbolic intensity without transforming literature into ecology?

A preliminary answer would be to invent a more nuanced ecopoetics, work already begun in Donna Haraway's "compoundings." Starting with phenomenology and ending with a punch line, Haraway investigates the thicknesses and infoldings of weird techno-animals:

> Worldly embodiment is always a verb. Always in formation, it is ongoing, dynamic, situated, and historical; its infoldings of the flesh are comprised of heterogeneous partners. That is, the infolding of others to each other is what makes up the knots we call beings or, perhaps better, following Bruno Latour, "things." Things are material, specific, non-selfidentical, and semiotically active. In the realm of the living, critter is another name for thing. (119)

Haraway's thingly critters turn out to be whales and turtles that swim through the sea with remora-like cameras on their backs. Attached by humans who aim to learn more about the creaturely world, the cameras bind animals to the human world but also bind humans to animal agency. Haraway describes the crittercam-captured sea as thickness, littering, oscillation, and omnipresent physicality. She asks about these camera-carrying animals' "semiotic agency," their "hermeneutic labor" assisted by the "fleshy entanglement" of creature and camera (123). The ocean emerges as a techno-organic realm.

We can take this concept of the technoocean in two directions. First, an oceanic ecopoetics will have to start with the recognition that our relation to the sea is always al-



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ready technological. Even Homer's wine-dark sea finds its motive for metaphor in a technique for preserving grapes. In Derek Walcott's "Tarpon" the poet and his son watch a fish being bludgeoned to death at Cedros, its body "like silk . . . altered to lead." This makes the child sad, and yet the poet insists that "examined in detail, / A tarpon's bulk grows beautiful":

Bronze, with a brass-green mould, the scales age like a corselet of coins, a net of tarnished silver joins the back's deep-sea blue to the tail's wedged, tapering Y. Set in stone, triangular skull, ringing with gold, the open eye is simply, tiringly there. A shape so simple, like a cross, a child could draw it in the air. A tarpon's scale, its skin's flake washed at the sea's edge and held against the light, looks just like what the grinning fishermen said it would: dense as frost glass but delicate, etched by a diamond, it showed a child's drawing of the ship, the sail's twin triangles, a mast.

The tarpon cannot be known outside a techne: a list of materials and techniques that mediate its "bulk, terror, and fury" as blazon.

Second, we have to amend our definition of ecosystems to acknowledge that latecapitalist seas are becoming more techno than ocean. The Pacific gyres are dense amalgams of thrown-away plastic that form an aggregate twice the size of Texas (fig. 2).<sup>3</sup>

FIG. 2

Ocean currents can carry trash thousands of miles ("Pacific Garbage Patch").



# Fig. 3

Stomach contents of a Laysan albatross, Green Island, Kure Atoll, 13 July 2004. After the bird was found dead, a necropsy was performed (left). The stomach contained 12.2 ounces of plastic and other indigestible material (right), which the bird's parents had mistaken for food, including disposable cigarette lighters, bottle caps, an aerosol pump top, a piece of a shotgun shell, broken clothespins, and toys. The bird had died from malnutrition and dehydration. Photos: left, David Liittschwager; right, Susan Middleton.

As these vast depots of land scurf grow larger each day, they dispense plastic resins to creatures worldwide. Atlantic plastic is more dispersed but equally pernicious. "Humanity's plastic footprint is probably more dangerous than its carbon footprint," says Charles Moore, an ocean researcher. A team mapping Atlantic pollution encountered a triggerfish swimming in a manufactured prison, "trapped alive inside a plastic bucket" (Melia). In the vasty deeps, in fishes' bellies, in the craws of dead albatrosses, plastic keeps cropping up (fig. 3). It is impossible to find a seabird without a little product inside or a square foot of ocean without debris.

Industrialized fishing fleets have made the seas into transparent hunting grounds. "The only ones frightened by our technology are the fish," says a brochure promoting *Piscatus 3D*, seabed-mapping software that allows navigators to see deep into the North Atlantic, Indian, or Pacific Ocean and to negotiate complex mountains and valleys that previously were too challenging to fish. In an endorsement of the product, the captain of the trawler *Fils de la Mer* explains, "[I]t's

as if the water had been drained away and I can look right down and see exactly what the seabed looks like. In the beginning I only got a fairly approximate view of the Channel floor. But now . . . it's fantastic . . . we can fish areas we used to avoid, whatever there might be down there, even the most treacherous shelves or rock formations." This software marks the end of the ocean's "dark pools." As the captain of the Fils de la Mer adds, "[W]e always know exactly where we are-to within a meter. This is a great new tool which soon pays for itself because there aren't many others fishing where we go, so we can be sure of hauling in much bigger catches" (Clover 82).

Since the techno-ocean is so omnivorous, since sea trash is as ordinary as plankton, we might begin to understand literature as an echo chamber for the tragedy of the oceanic commons by supplementing ecocriticism (with its commitment to nature writing and emphasis on the natural environment) with something more awkward and technologysavvy: for the moment, let's call it technoecopoetics. As Bruno Latour comments in *Politics of Nature*:



[T]he concern for the environment begins at the moment when there is *no more environment*, no zone of reality in which we could casually rid ourselves of the consequence of human political, industrial, and economic life. The historical importance of ecological crises stems not from a new concern with nature but, on the contrary, from the impossibility of continuing to imagine politics on the one side and, on the other, a nature that would serve politics simultaneously as a standard, a foil, a reserve, a resource, and a public dumping ground. (58)

In the singular, *nature* becomes a speech impediment or stumbling block. Even natures, multiply defined as ideal or norm, as the outside or the nonhuman, as a space for preserving what we've already destroyed, as a raw material for industry, and as a public middens, requires redescription as something weirder. Latour's term is "multinaturalism" (211). Similarly, although ecocriticism supports many debates, it is so contaminated with nature as perfection or with a quest for organic truth that operating in its name is hard. Latour's strategy is to add asterisks to words that have become impediments to thought: hence, constitution\*, collective\*, reliable witness\*. Does ecocriticism\* work? This starry term seems too astral, too pure. Since techno-ecopoetics is also unwieldy, I want to coin *ecocriticism*\$ to remind us that the ocean as *oikos* or home rolls under, beneath, and inside the edicts of state and free market capitalism. We've left the possibility of wilderness or pastoral for the roller coaster of capital. On a recent safari in Kenya I sat in a Land Rover watching cheetah cubs frolic on the savannah. The photographer who'd organized the trip sang out, "This is real wilderness!" but as I looked to the right and left I saw rows of rapt Land Rovers stretching into the distance. We were voyeurs in wilderness\* or even wilderness\$; as Latour suggests, our "speech prostheses" need to be visible, "involved in entirely explicit controversies" (75). *Ecocriticism*\$ is a prosthetic term that insists on the imbroglio of markets and nature.

### **Unnatural Histories**

Oceanic ecocriticism\$ draws on narratives about the ocean in a state of emergency, a crisis that demands unnatural histories written by unnaturalists who limn the fleshy entanglement of sea creatures, sea trash, and machines. These histories try to motivate readers with their own brand of personification. In Clover's The End of the Line we learn that North Sea industrial sole fishing has tragic effects for every species. "The weighted trawl and its chains, designed to beat flatfish out of the sheltering mud, smashes everything it does not catch, particularly the burrowing animals in the sediment. . . . EU scientists have calculated that up to 16 pounds of marine animals are killed by beam trawls to produce 1 pound of marketable sole" (67; fig. 4). The trawl as quasi-object or near persona attacks sea creatures in their tiny mud villages. In Cod: A Biography of the Fish That Changed the World Mark Kurlansky tells a similar tale. In 1989, as cod catches rose, Canadian courts refused to uphold an injunction against bottom dragging. "In reality, catches were increasing not from an abundance of fish but because the efficiency of a modern trawler fleet made it possible to locate the sectors with remaining cod populations and systematically clean them out." The marine biologist Ralph Mayo warns, "You see some cod and assume this is the tip of the iceberg. But it could be the whole iceberg" (Kurlansky 185). In the techno-ocean infrastructure advances so fast that neither governments nor citizens can keep up, much less make laws anticipating the annihilation of fish stocks. Nor have we anticipated the ways overfishing adds to the surfeit of sea trash. Clover's and Kurlansky's books, as well as Callum Roberts's The Unnatural History of the Sea, enumerate the fate of by-

## Fig. 4

Bycatch from trawling on the Dogger Bank, in the North Sea. Photo: © Greenpeace / Philip Reynaers.

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catch or discards (wildlife thrown overboard because it is immature or inedible or exceeds quotas). Off Senegal Spanish ships averaging 44 pounds of shrimp and 110 pounds of marketable fish an hour might expect to catch lots of "undersized shrimp, juvenile fish, and inedible species . . . which would be dumped over the side. . . . [K]nown as 'trash fish' by the industry, including juveniles of all the most locally important fish species, . . . [these are] the stocks in the worst trouble." Industrial trawlers steal "Senegal's future. The shrimp they fish for are declining, as are the trash fish they catch in the same nets" (Clover 48–49).

The techno-ocean subtracts sea creatures and adds trash; it is a humanized technoscape that places new demands on our eating and disposal habits and also on our relation to literature. Dickinson's description of the sea as "deep Eternity" may once have been spiritually apt, suggesting the grandeur of oceanic scale, since the seas take up seventy percent of the earth's surface and are deeper than the earth's mountains are high. But in the technoocean the myth of oceanic magnanimity turns toxic and has led to feckless oil drilling and overfishing. What is the real cost of this myth? Since "fish such as cod . . . can produce upward of 7 million eggs," their spawn should be boundless, even when just a small fraction survive. For years experts argued that "there would always be enough adult fish to produce the usual number of young, and the main influence on the numbers of juvenile fish were environmental factors, such as temperature and predation." This argument justified higher catches (Clover 108). The myth of the fecund, endless sea posits ongoing cycles of death and abundance: "Full fathom five thy father lies; / Of his bones are coral made; / Those are pearls that were his eyes." But scientists have discovered that some depleted populations have difficulty rebounding; a small school of cod is less likely to reproduce than a large school, resulting in greater depopulation, an effect known as depensation, or the Allee effect (the ecologist W. C. Allee discovered its operations in insects during the

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1930s [Clover 109]). To produce seven million roe, cod need to know that conditions for the growth of their young are propitious; depleted stocks send the opposite message. As bottom trawlers and the Allee effect worked together to destroy the once massive population of northern cod on Newfoundland's Grand Banks, fishing crews began hauling in small, not-yet-ready-to-spawn fish, while "Canada's scientists continued to think they were setting annual catch limits at 16% of the fish which in theory would allow stocks to increase rapidly. Later analysis would show that fishermen were catching more like 60% of the adult fish each year" (113). Looking into this abyss, can we see anything resembling "deep Eternity"?

By coupling Dickinson's marriage of sea and eternity with the work of corporate mariners, I am pushing her conceit past its limits. This is what ecocriticism\$ does. We cannot ask Dickinson's poetry to anticipate the twenty-first century's depleting world, but her images are part of a network or meshwork of ordinary ideas that echo throughout the oceanic commons with real economic effects. As Walcott reminds us in "The Star-Apple Kingdom," almost everything in the sea has become finite and is now up for sale:

One morning the Caribbean was cut up by seven prime ministers who bought the sea in bolts—

one million yards of lime-coloured silk, one mile of violet, leagues of cerulean satin who sold it at a markup to the conglomerates, the same conglomerates who had rented the

waterspouts

for ninety-nine years in exchange for fifty ships

who retailed it in turn to the ministers with only one bank account, who then resold it in ads for the Caribbean Economic

Community,



FIG. 5 Menhaden. Photo: Gene Helfman.

one thousand miles of aquamarine with lace trimmings,

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till everyone owned a little piece of the sea, from which some made saris, some made bandannas;

the rest was offered on trays to white cruise ships

taller than the post office; then the dogfights began in the cabinets as to who had first sold the archipelago for this chain store of islands. (390–91)

The hierarchies created in the retail ocean put downward pressure on wages and on the prices of ocean goods and exacerbate the sea's segmentation. The illogic of the segmented ocean also challenges United States policy makers. Jane Lubchenco, administrator of the National Oceanic and Atmospheric Administration (NOAA), reports that humans typically manage ocean and coastal activity "sector by sector, issue by issue. One agency regulates water quality, another regulates fishing, another regulates energy extraction, and another regulates shipping. We need a cohesive national policy" to integrate activities across all these branches of government. We also need a better oceanic imaginary, one that includes exultation and predatory capital.

#### The Ocean as Input; or, Ecocriticism\$

The foot-long menhaden, a smelly, big-headed member of the herring family (fig. 5), is quickly disappearing as its primary predator, Omega Protein of Houston, converts its proteins and lipids into lipstick and chicken feed (fig. 6):

Fig. 6

Claes Oldenburg, Lipsticks in Piccadilly Circus, London, 1966. Mixed media on board, 10.5 × 14.0 cm. Photo: Tate, London / Art Resource, NY.



The muddy brown color of the Long Island Sound and the growing dead zones in the Chesapeake Bay are the direct result of inadequate water filtration—a job that was once carried out by menhaden. An adult menhaden can rid four to six gallons of water of algae in a minute. Imagine then the water-cleaning capacity of the half-billion menhaden we "reduce" into oil every year. (Greenberg)

We throw sophisticated junk into the sea and eviscerate its cleaning crew: creatures that diminish primal ooze. This leaves an ecosystem made out of algae and plastic debris, for once the menhaden goes, its predator fish will also disappear.

The oceans may provide boundless metaphors for eternity or lawlessness, but they are also mired in capitalism's profit making, its systems for externalizing costs. According to Immanuel Wallerstein a producer can use the physical world to externalize costs and increase profits in three distinct ways. First, "he purchases inputs at the cost of their being made available to him but without paying for the cost of their being replenished." Second, the capitalist can "dispose of unprocessed waste outside of his property without paying anyone to process it." Third, "he utilizes infrastructure built at collective expense" (228).

Wallerstein describes the environmental preconditions that allow capitalism to flourish. If the linchpin of this system is the relation between production and consumption (that is, the relation among those who own, those who produce, and those who consume), then oceanic resources, sea trash, and infrastructure like ports, ships, and oil rigs have become preconditions for a more entrenched capitalist system. The sea is just another site where human relations take shape and connect through low-cost hardware and the freedom of an unregulated environment. How does literature speak to a watery realm where exploitation and overconsumption are so deeply threaded? Wallerstein's description of capital's tech-



## FIG. 7 The central trophic role of herring. Illustration: Northwest Atlantic Marine Alliance.

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niques for externalizing costs provides one frame for analysis. We can approach the cyborg ocean and the tragedy of ocean wasting by thinking about the imaginary of corporate profiteering, in which oceans are places for stealing resources, dumping trash, and making money through shipping, oil drilling, and so on. Examining literary constellations of sea trash, vanished fish, and the techne of capitalist extraction offers a perverse set of terms for an ecocriticism\$.

Fish poems and stories provide one route into the working ocean. Elizabeth Bishop's "At the Fishhouses" offers a hard-nosed lesson in material history, another site for contemplating the tragedy of the oceanic commons. Although "the air smells so strong of codfish / it makes one's nose run and one's eyes water," Bishop's verse also romanticizes the fishermen's world: rows of fish tubs are "completely lined / with layers of beautiful herring scales," which adorn the poem like cast-off syllables. Everything is plastered "with creamy iridescent coats of mail" and crawling with "small iridescent flies":

All is silver: the heavy surface of the sea, swelling slowly as if considering spilling over, is opaque, but the silver of the benches, the lobster pots, and masts, scattered among the wild jagged rocks, is of an apparent translucence. . . . (64) Herring scales shine like the sea because they deflect light in multitudinous directions, making herring difficult for pelagic predators to locate. But the flashy scales are all too visible to human predators; camouflage that saves a single fish dooms fish en masse. And so in Bishop's fishhouses herring, or forage fish, lie quietly with their enemy cod, or predator fish, one silver shading into the other.

Scientists call the herring a keystone species because it eats zooplankton (drifters like krill and copepods), unlocking carbon and nitrogen not only for cod but also for whales, dolphin, tuna, and seabirds (fig. 7). "All is silver": this keystone species also unlocks currency for companies fishing on the Grand Banks. In the 1960s, according to the Herring Alliance, a fishery group committed to protecting herring from overharvesting, "the abundance of herring and other fish in the Gulf of Maine appeared so vast that the possibility of jeopardizing fisheries, or the ecosystem, seemed remote." Since then Maine's sardine, or young herring, factories have vanished. The commercial herring harvest of nearly a half million tons in 1968 dropped by more than ninety percent two decades later (Out 5). These populations have partially recovered, but since the food chain in the Gulf of Maine depends on herring's sustained flourishing, the Herring Alliance remains politically active. According to Craig Pendleton, a groundfisherman from Camp Ellis, Maine:

What's left of our groundfish fleet will face further restrictions while midwater trawl vessels fishing for herring will still be allowed to fish in the most precious areas we have set aside to enhance recovery. One of these vessels will legally be able to land more haddock in one day than most of us will catch in an entire year. One of these vessels has the potential to have more interaction with juvenile groundfish than a great number of us put together. This must come to an end. (*Out* 3)

Pendleton speaks out decades after Bishop wrote "At the Fishhouses," a poem included in *A Cold Spring* in 1955, a few years before large-scale industrial fishing took over and depleted keystone and predator fish alike. And yet the poem captures the exhaustion of a local fishing economy that seems close to extinction:

The old man accepts a Lucky Strike. He was a friend of my grandfather. We talk of the decline in the population and of codfish and herring while he waits for a herring boat to come in. There are sequins on his vest and on his thumb. He has scraped the scales, the principal beauty,

from unnumbered fish with that black old knife

the blade of which is almost worn away.

(64–65)

This is a poem about poetry: the worn, polished shuttle of the net mender and his "black old knife" become figures for writing; the sequins are like syllables; the man is an avatar of Wordsworth's Leech Gatherer or Yeats holding Sato's sword. But "At the Fishhouses" also records a moment in history when one mode of production is passing into another. In the 1960s industrial trawlers came to Canada's Grand Banks and began the quick depletion of cod and herring stocks. Although the narrator argues that "I have seen it over and over, the same sea," she produces a poem about a world slipping away from "the same" and on the brink of overharvesting.

> Back, behind us, the dignified tall firs begin. Bluish, associating with their shadows, a million Christmas trees stand waiting for Christmas. (65)

This is a landscape vulnerable to capital, a world that is already becoming an input or echo chamber for externalized costs.

If examining the environment as input offers one strategy for framing oceanic literature, texts about sea trash are loopier than fishing stories and offer a second way to capture the aesthetics of externalized costs. We find meditative beach scavengers in Bishop's "The Sea and Its Shore," Mary Oliver's "At Herring Cove," Virginia Woolf's "Solid Objects," and Mark Doty's Atlantis. The toxic sea is a source of quick evolution in J. G. Ballard's "Dream Cargoes," where a Caribbean garbage dump abandoned by GIs after World War II grows ever more foul, clotted by swill from a chemical-waste carrier. Weird plants and animals morph out of "nameless organic byproducts," and "an eerie spectrum of phosphorescent blues and indigos" wash into the zoology of the island's lagoon (383). The result is a deranged horticulture of quick-to-grow and quick-to-die exotics. Sea trash creates strange legends: Gabriel García Márquez's "A Very Old Man with Enormous Wings" describes a trash-covered angel sailor with tatty wings who pines in a chicken coop and becomes part of a sideshow. In The Stone Raft Saramago propels the Iberian Peninsula into the Atlantic Ocean, where it becomes a spectral threat to Americans, who view the wandering peninsula as so much debris. We need to invite all these texts to the table. Each considers the economic and metaphysical

costs of sea trash, refusing to see the ocean as a mere surface into which anything dumped will disappear and from which anything excavated is free of cost.

Finally, we know that oceanic infrastructure creates magic for capital. In "Haiti: A Creditor, Not a Debtor" Naomi Klein describes the flotilla of French warships that stationed themselves off the coast of Haiti in 1825 and threatened to reenslave the young nation unless it paid Charles X nineteen million gold francs: ten times Haiti's annual revenue. Although France had already profited "from three centuries of stolen labor," its government deployed infrastructure in the form of battleships to enforce a debt that required 122 years to pay off. The tragic impact of oceanic infrastructure cycles through Walcott's Middle Passage poems, Toni Morrison's Beloved, Kara Walker's After the Deluge,<sup>4</sup> Paul Gilroy's The Black Atlantic, and Ian Baucom's Specters of the Atlantic, as well as the second season of The Wire. And as I write, viscous oil from Deepwater Horizon spatters the pages of the New York Times and wends its way toward the Atlantic.

#### The Plastic Ocean; or, Echocriticism

Embracing these ideas, I feel anxious. How do I interest you, reader, in the many ways in which literature lights up the financial fate of oceans? My first strategy is zoophilic; I've thrown around fish facts to amplify a shared sense of the ocean in crisis. Second, I've deployed a new vocabulary, asking techno-ocean and ecocriticism\$ to call forth a world where the BP oil spill is minor and transient: even its plumes of invisible oil offer a minimal example of the harm that comes when we accelerate the transformation of oceans into capital. Third, I've suggested that an analysis of inputs or externalized costs creates subterranean entrances into the retail ocean. Now I want to supplement ecocriticism\$ with echocriticism as a deliberate prosthetic device or strategy for reading anachronistically. In this section lanternfish will light the way, taking us past the shoals of surface reading into the depths of Ezra Pound's Sargasso Sea.

In Great Waters: An Atlantic Passage Deborah Cramer describes a scientific voyage from the North to the South Atlantic and the discovery of the curious fate of the Sargasso Sea's lanternfish. Remarkable for their vast numbers and their photophores (lightproducing organs that fill entire ocean layers with bioluminescent gleams), lanternfish represent sixty-five percent of deep-sea fish biomass and may be the most widely distributed and diverse of all the vertebrates (Hulley, Paxton, and Eschmeyer 127-28; fig. 8). But scientists have startling news: lanternfish can't distinguish between zooplankton and plastic. "[W]e use a number of science watches to inspect the stomachs of tiny lantern fish, hoping to discern their feeding preferences. The lantern fish are tiny, stomachs tinier, and the animals they ingest minute. Only a high-powered microscope brings this world into focus. Magnification unexpectedly reveals that our waste, invisible to the naked eye, permeates this sea. Lantern fish dine on copepods and slivers of plastic." The technoocean giveth; the techno-ocean taketh away: "we have laced the food of deep-dwelling animals with our waste" (Cramer 187).

The sea functions in literature and culture as a trope instead of a biotic world or swarm of agencies. But even shadowy or unnatural tropes have real-world consequences. Figures of the boundless sea or the oceanic sublime encourage humans to treat it as an inexhaustible storehouse of goods. Oceanic ecocriticism\$ invites us to examine the way ordinary figures of speech persist or echo forward in time; they continue to resound, regardless of their truth-value, working over and through us like a nightmare ideology. For example, Pound's "Portrait d'une Femme" is not, by any stretch of the imagination, an ecological poem, nor does it lend itself to the

#### Fig. 8

Photophores (luminous organs) on the bluntsnout lanternfish (*Myctophum obtusirostre*). Photo: US Dept. of Commerce, Natl. Oceanic and Atmospheric Administration, Natl. Marine Fisheries Service, Southeast Fisheries Science Center, Pascagoula Laboratory; collection of Brandi Noble.



environmental turn. Instead, it plays with the nefarious or notorious, with an avid portrait of woman as cheap pastiche: an intriguing midden for the male poet's debris:

Your mind and you are our Sargasso Sea, London has swept about you this score years And bright ships left you this or that in fee: Ideas, old gossip, oddments of all things, Strange spars of knowledge and dimmed wares of price.

Great minds have sought you—lacking someone else.

You have been second always. Tragical? No. You preferred it to the usual thing. . . .

This bluestocking's body resembles a sea surface; she's been well trafficked by London's bohemians. Still, as a reservoir for the strange and dim, for tropical tchotchkes, she remains a cool destination:

Oh, you are patient, I have seen you sit Hours, where something might have floated up. And now you pay one. Yes, you richly pay. You are a person of some interest, one comes to you

And takes strange gain away:

Trophies fished up; some curious suggestion; Fact that leads nowhere; and a tale or two....

As a source of poisoned stories and useless sea wraiths ("Pregnant with mandrakes, or with something else / That might prove useful and yet never proves"), the lady's mind yields nothing like an aesthetic. Tenor to the Sargasso's vehicle, she is a great unnatural resource where rich and trashy things coalesce:

Idols and ambergris and rare inlays, These are your riches, your great store; and yet For all this sea-hoard of deciduous things, Strange woods half sodden, and new brighter stuff:

In the slow float of differing light and deep, No! there is nothing! In the whole and all, Nothing that's quite your own.

Yet this is you.

"Deciduous" suggests her impermanence (so unlike the poet's verse legacy), but the poem also captures the way her mind-like the Sargasso—is "light and deep." This drawing together of sea and lady has consequences. "You have been second always." Whether one sees nature as woman or woman as nature, they remain base or marginal. Should women have the right to vote? Should oceans have standing? Pound's poem does not ask these questions, but the answers echo in every line. The Sargasso Sea and the deciduous lady are secondary; they lack self-ownership. As a denaturalized resource for poets, "bright ships," and other rovers, the lady possesses "Nothing that's quite your own. / Yet this is you."

Reading this poem under the sign of the ocean means questioning the poet's ease in naming lady and sea as means, not ends. According to Latour:

The ecological crisis . . . presents itself above all as a generalized revolt of means. Nothing and no one is willing any longer to agree to serve as a simple means to the exercise of any will whatsoever taken as an ultimate end. The tiniest maggot, the smallest rodent, the scantest river, the farthest star, the most humble of automatic machines-each demands to be taken also as an end, by the same right as the beggar Lazarus at the door of the selfish rich man. At first glance, this proliferation of ends appears untenable: modernism stiffens against it. Then, once the modernist parenthesis is closed, a question that several centuries had left in suspense, unresolved, arises: Under what auspices must we unite, now that there is no more nature to do the work in our place, under the table, apart from representative assemblies? (216 - 17)

In the world of representative assemblies Latour imagines, each party comes to the diplomatic table where human and nonhuman collectives might have a chance to describe their "war aims" (217). The war aims of an articulate Sargasso Sea could begin with an outcry against its secondary status. As a sea in the middle of an ocean, a place dominated by Editor's Column

doldrums, where everything from ambergris to half-sodden wood collects in a space that wells three feet above the rest of the Atlantic, the Sargasso offers an ideal sink for plastic. In *Great Waters* Cramer fishes up vats of debris and discards them so she can analyze the biotic contents of the Sargasso's "gelatinous clumps of scum." Like Latour, she imagines this biota as a small swirl of diplomats:

With the aid of the microscope, we identify the first one hundred organisms, the delegation from the minute, hidden world of the surface. . . . [I]n the Sargasso, life is scarce, the catch meager, the counts low. I don't expect to find many animals in this sea, where nutrients are few, but I am surprised to find my petri dish covered with tiny shards of plastic, invisible to the naked eye, hard and sharp to the touch. These shards were once part of larger, recognizable objects, tossed overboard or washed out to sea long ago. Single pieces disintegrated into many, large broke up into small, but nothing ever really disappears. (200–01)

Michael Branch and Scott Slovic define ecocriticism as scholarship concerned with the implications of literary texts for the environment, the "more-than-human" world (xv). How do we define "more than human"? Ocean plastic (a quasi-object once filled with human agency that exceeds this agency in its afterlife) fits this category. So does the waste oil swirling through the Gulf of Mexico. If "bright ships" and exploding oil rigs are always leaving "this or that in fee," we have to recognize literary artifacts' complicity in such acts of sabotage and embrace ecocriticism\$ as a tactic for recognizing that sea trash also flows from novels and poetry.

The modern Sargasso is not just a sink for debris but a source of cheap livestock feed. Commercial boats harvest massive quantities of sargassum—the sea holly that surrounded Columbus's wind-seeking fleet. Nongovernmental organizations protest this random harvesting, since sea holly's upper layers provide a nursery for sea turtles and for the river eels that migrate from faraway continents to spawn. Sargassum bits filter down to the sea's lower layers, providing food in a nutritive desert. I want these images of livestock feed and plastic shards to bob around in "Portrait d'une Femme" and for readers to recognize the way the present has evolved from the past. Ecocriticism\$ devolves into echocriticism, a practice of anachronistic reading inviting stories, novels, and other imaginative works about the sea to provide echo chambers, sites of wild or sober echolalia, for the most pressing questions about the ocean's and oceanic creatures' survival. Pound describes a sea that no longer exists—or that never existed. And yet this and other poems mean in and through the resources that oceans provide, and we need to understand how these resources have changed. We've reconstituted the physical ocean in a mere fifty years-an easier task since, as Pound reminds us, "in the slow float of differing light and deep," the Sargasso lacks legal standing and, like the deciduous lady, self-ownership: "No! there is nothing! In the whole and all, / Nothing that's quite your own. / Yet this is you." Secondariness is another stereotype that condemns oceanic commons to a shadow life, along with the sea as eternity, boundlessness, and lawlessness. As the ocean's address changes, the poem's destination and address must change as well.

## The Ocean as Polity; or, Should Oceans Have Standing?

To think ecocritically\$ is to facilitate an environment-based analysis that refuses to essentialize nature. This work is well begun by Lawrence Buell, SueEllen Campbell, Jonathan Elder, Tim Morton, Jonathan Skinner, and many others, but attaching a prosthetic dollar sign to this literary practice emphasizes the marriage of ocean and capital. Ecocriticism\$ explores the economic and symbolic logic that pushed us into this tragedy; it registers our imaginative techniques for handling the ocean's supposed permanence, vastness, and incomprehensibility.

In Matthew Arnold's "Dover Beach," for example, oceanic vastness is a metaphor for the Sea of Doubt that washes over the skeptical Victorian world. Ensconced in the metrical darkness of Arnold's poem, I want to critique his allegorical sea: an act awkward and ungracious. Doesn't the poem's ability to leap past the felt presence of the sea, to substitute the allegory of lost faith for a seaworthy material world, represent a habit of mind—a tendency to make the ocean sublime and thus available for sublimation? When fish were more plentiful and sea trash grew thickest in ports, rivers, and shipcrowded seas, this critique was irrelevant-and even now it seems irreverent. But living on the edge of hypertechnologized oceans, we need to throw our mythologies wide open. What is the loss of faith compared with the loss of the living ocean? How do we feel (or even breathe) when the ocean becomes ocean\$?

Bishop's early poem "The Map" glosses the oceans' secondary status. Describing the priority geographers give to the land, Bishop asks, when we look at earth and sea, which becomes figure, which ground? Does land cling to water, to the ocean's "shadowed green"? Or does Earth dominate and anchor the sea, leaning "down to lift the sea from under, / drawing it unperturbed around itself?" In land-based maps, the sea becomes "more quiet than the land is," as continents luxuriate in their hothouse power to "stroke these lovely bays, / under a glass as if they were expected to blossom" while consumer peninsulas "take the water between thumb and finger / like women feeling for the smoothness of yardgoods." The challenge of oceanic studies is to put the ocean's agitation and historicity back onto our mental maps and into the study of literature. The challenge of ecocriticism\$ is to think through the literary and cultural implications of the complex ends for which seas are deployed. These include the following: (1) A

just-in-time, novelty-seeking economy needs oceans for quick, frictionless travel. (2) The developed world exhausts its own marine life and then plunders the sea life of developing nations so its own fish reserves can reproduce and prosper. (3) We know that developed economies extract from the sea oil and other minerals that can never be returned. This produces an excess in capital that can be plunged into the ocean once again-as infrastructure. In this way surplus capital avoids devaluation and can be released slowly (over the working life of oil rigs, ports, and fishing vessels operating as fixed capital). (4) Producers in the West have made a compact with labor: you work for us, and we will extend the benefits of consumerism to you. Fresh fish (not to mention fish oil and fish sticks) has become one of those staple benefits, promising sushi for all. (5) Discoveries about the hard-to-access biology and geology of the ocean involve high capital investment, whether by universities or by businesses. (6) Tourism relies on the recreational sea; the industry cleans up some tourist hot spots and degrades others. (7) While the calamities of mineral extraction lead to continual degradation, the oceans also promise a range of beneficial technologies, including the production of energy from offshore wind turbines and from current differentials.

Given these habits of use and predation, shouldn't oceans have standing? Yes. To bestow personified rights on the ocean would match our gift to corporations. Corporations possess legal standing and recently acquired the right to free speech. Though a legal fiction, such personification is an operative entity that can persist after the deaths of the corporation's officers and shareholders. According to Laurie Shannon, "Corporate perpetuity for the ocean should be legally cognizable. We can choose to cognize it. It is a matter of will." That is, we can imagine a global protectorate for oceans with the power to address problems ignored by nation-states and redress environmental injustices left adrift in the ownerless sea.

If we gave oceans legal standing, what would they say to us, and how would we conjure their spokespeople? In Grossman's *See under: Love* the ocean morphs into an enormous blue mollusk with an infinitesimal soul and a face "upturned like a giant sunflower." She is a mighty inventor and a "cheap little slut" who is mad for the Jewish writer Bruno Schulz (109). After he leaps into her currents to escape from pursuing Nazis, she frets that he will leave her, just as Odysseus, Marco Polo, and Francis Drake left "without a word of gratitude" (110). Her speech is delightful, but it is more erratic than politic:

And I said, Hell, I said, what's the sense of living if I have to be hemmed in and choked by continents and coasts and isthmuses, when all I know about the world is what the rivers tell me with their cloying tongues, or what the gulls shriek at each other overhead, or what the silly little raindrops get so flustered about, and what's the sense of living if I can't get a little loving and a heartache once in a while, yes that's right, a heartache.... (113)

This personified ocean—even with its chatty waves and seabirds in attendance-is not complex enough to represent maritime multitudes. In Vibrant Matter Jane Bennett defines world biota as "assemblages of agencies" or "agential swarms." Instead of positing human subjects as the only agents, Bennett describes humans as quirky confederations of microbes, tools, minerals, and alien materialities: nonhumanhuman assemblages whose bacteria- and machine-driven bodies belie the strong, autonomous agency that Augustine and Kant propose as a human quintessence. To intuit distributive agency as "a swarm of vitalities at play" (32), Bennett asks us to identify the contours of the swarm-the relations among its bits-and to abjure the romance of human purposiveness by thinking outside systems of instrumentality. What happens when we imagine human-ocean interfaces as fractal, Ping-Pong circuits in which every origin is

multiple, outside intentionality, suspenseful, and heterogeneous? And how do we do this without returning to an image of the sea as wild, lawless, eternal, and quasi-infinite?

BP ads try to diminish our sense of these vital swarms by stressing land's priority over sea. In a full-page ad in the 7 June 2010 *New York Times* Big Oil focuses on the shore:

Thirty teams of specialists are combing the shore along with US Fish and Wildlife, NOAA and Louisiana Wildlife and Fisheries. If wildlife is affected, rescue stations have been set up to take care of them. Experts have been flown in from around the country. And BP has dedicated \$500 million to watch over the longterm impact on marine life and shoreline.

We will honor all legitimate claims. We will continue working as long as it takes. And our efforts will not come at any cost to taxpayers.

What is a "cost"? What is a "legitimate claim"? Cramer suggests that "muddy, seemingly monotonous" continental slopes (which extend into the Gulf of Mexico) may house "the greatest diversity of life on Earth. Long considered barren, the continental slope may be as rich in species as rain forests or coral reefs. Scientists have sampled little of the slope, but where they have, they have found an unimagined opulence. The wealth is in worms" (82). Are these worms, in their species richness, agential creatures? If so, should they have standing too? "We will honor all legitimate claims." If worms are, in fact, "small agencies," Darwin's term for entities that make things happen, why can't "worms be considered members of a public," with legal standing (Bennett 94)? Darwin's worms created the British Isles, masticating organic matter and creating vegetable mold that nourished seedlings, goats, cottagers, and prime ministers. Do the ocean's worms also make history? "Living amidst the particles of mud, in the tiny interstices between grains of silt, are hundreds of species of tiny worms. More than half the worms found in a few cores

from the slope off the United States, between New England and South Carolina, were previously unidentified. . . . Our catalogue of the sea is mostly blank" (Cramer 82).

The call for ecocriticism\$ comes from a recognition that although capitalist technology created the tragedy of the oceanic commons, concerned collectives seeking a solution will have to work with this technology. For fish to be protected, for cleanup to begin on a large-enough scale, government and business will have to take part. Shouldn't poets, novelists, students, and literary critics take part as well? In James Merrill's "The Pier: Under Pisces" Bennett's agential swarms come to life. The shallows around a fishing pier are "[w]etter than water": coated with kerosene so viscous that it obliterates fingerprints and makes the oily sea sparkle with extra suns. Underneath live

These floozy fish—

Ceramic-lipped in filmy Peekaboo blouses, Fluorescent body Stockings, hot stripes....

Merrill's Technicolor fish live for the Latinflavored music that throbs from a radio on the pier:

Swayed by the hypnotic ebb and flow Of supermarket Muzak, Bolero beat the undertow's Pebble-filled gourds repeat.

As jailbait, these floozy fish risk encounters with tempting fishermen who dangle little sandwiches made out of brother and sister fish: "Hints dropped from on high / In gobbets none / Eschews as minced kin." Hauled to an awful death, each fish gasps:

The torn mouth Stifled by newsprint, working still. If . . . if . . . The little scales Grow stiff. (ellipses in orig.) After witnessing this scene and sculling away past sharkskin-suited predators, a boy—the speaker at a younger age—comes home:

A boy sits. He'll be eight, We've drunk our milk, we've eaten our stringbeans, But left untasted on the plate

The fish. An eye, a broiled pearl, meeting mine,I lift his fork . . .The bite. The tug of fate.(ellipses in orig.)

At first the collective "we" represents the grown poet and his child avatar, but by the poem's end it encompasses boy and fish. The delight of fishing and its quick tug of conscience lead the boy to worry about eating his pearly kin and then sharing their fate. The fish, another "consumer," is a broiled family member—not quite nature, not quite boy. As Latour says, "[I]f we take nature away, we have no more 'others,' no more 'us.' The poison of exoticism suddenly dissipates," and we are left with the banality of "multiple associations" and points of connection. (46)

Bennett also tries to counter narratives of human exceptionalism: the tendency to negate "the degree to which people, animals, artifacts, technologies, and elemental forces share powers and operate in dissident conjunction with each other" (34). She suggests that we attend to confederations of many bodies that form alliances and "enter assemblages" (22); these swarms of agencies create a rich resource for democratization. For Bennett and her muse Spinoza, the more affiliating bodies the better: "as the body is more capable of being affected in many ways and of affecting external bodies ... so the mind is more capable of thinking." This adoration of huge heterogeneities becomes an argument for a vital materialism in which bodies-animal, vegetable, mechanical, mineral—"enhance their power in or as a heterogeneous assemblage" (23). Bennett argues that vital materialism-the elevation of all objects' shared materiality-could create a self 541

capable of witnessing its bacterial and mineral dependencies as a catalyst for self-interest in a realm of action where "democratization can be broadened to acknowledge more nonhumans" (109). Instead of endowing "the" ocean with standing, we would imagine oceans as distributed agencies, bevies of entities crawling, swimming, cantilevering together, a multitude of rights. "We need not only to invent or reinvoke concepts like conatus, actant, assemblage, small agency, operator, disruption and the like, but also to devise new procedures, technologies and regimes of perception that enable us to consult nonhumans more closely, or to listen and respond more carefully to their outbreaks, objects, testimonies, and propositions. For those offerings are profoundly important to the health of the political ecologies to which we belong" (108).

Oceans should have standing, but the ethical standards for creating their spokespeople and hierarchies will be hard to determine. Science and law will be crucial in this process, but literary know-how could also matter. In *"Should Trees Have Standing?"* Christopher D. Stone explains that a rightsbased discourse for nonhumans will depend on the creative brandishing of new personifications, mythologies, and speech acts (43, 41, 53). As my essay suggests, I'm partial to fish poetry as one place to start. In Mark Doty's "A Display of Mackerel" fish ready for the shopping cart, lying in neat little rows,

> don't care they're dead and nearly frozen, just as, presumably, they didn't care that they were living.

The poet conjures whole schools of insensate fish that feel no pain and lack desire, except to be part of the "rainbowed school." Even in death these mackerel look as if they're bolting about, "flashing participants" in their own marketing. But Doty also captures a sense of what it might be like to join another agential swarm, to distribute agency so that one might choose plural iridescence over solitary being: "How happy they seem, / even on ice, to be together, selfless, / which is the price of gleaming." Ecocriticism\$ must sail to the supermarket as well as the sea to examine humanity's trophic cascades.

In See under: Love Grossman imagines a wilder universe where nonhuman humans and nonfish fish hang together and where the agential swarm means everything. The ocean falls in love with Bruno Schulz, and Bruno falls in with a large school of salmon; he's developing gills and feels happy to swim along. As he reverberates with salmon-speak, Bruno follows the river-questing course of the salmon. The narrator addresses both Bruno and the ocean as "you," as the ocean melds with the salmon to share his fishy fling:

And ever so slowly they fell in line from head to tail and for the first time you recognized the ning, the string extending from the back of your neck to the bottom of your soul, and you listened in wonder to the steady hum as on and on it drew you lonely in the crowd of the lonely and the silent and you were filled with strange sudden joy you flipped over on your back then Bruno sweetly wafted this way and that on the whispering on the chattering rim of the waves you were buoyed up and you smiled down at the abyss with the twin folds behind your knees and the gulls cried out in wonder at the sight of your white belly and your right armpit became a green jungle till it freed itself and drifted away a silky tangle of seaweed the water has the smell and you smell it and not the smell a man on the beach or river bank would notice the water has a smell that is unlike any other as the sounds in the sea are unlike any other as the colors as the thoughts are stolen by nimble higglers . . . you too come to know that all the others floating about you have not a quibble or doubt that the thread of smell is sprayed by a river current far away whence they hatched into the world so long ago (119)

What are the political capacities of these river-bent salmon, and how can we find rep-

resentative voices for their echoing, for the call, the cradle, the conatus of their *ning*?

And what are our political responsibilities to the estuaries of the Niger Delta-another oceanic nursery where oil spills have destroyed fresh water and marine habitat for five dirty decades? As this column goes to press, President Obama has sequestered twenty billion dollars from BP as reparation for the oil spill in the Gulf of Mexico. But in Nigeria the rate of oil pipeline failure is astronomical: larger than it is at any other world drilling site. Stuck in their barren fishing sites in the Gulf of Guinea, using "oil-blackened nets," local fishermen catch nothing (Nossiter A1). "On the beach at Ibeno, the few fishermen were glum. Far out to sea oil had spilled for weeks from the Exxon Mobil pipe. 'We can't see where to fish; oil is in the sea,' Patrick Okoni said. 'We don't have an international media to cover us, so nobody cares about it,' said [Emman] Mbong, in nearby Eket. 'Whatever cry we cry is not heard outside of here" (A18).

Patricia Yaeger

# Notes

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1. Carolyn Dekker suggested this poem and several ideas about Dickinson.

2. Elinor Ostrom, the first woman to receive the Nobel Prize in Economics (2009), contests Hardin's term. Her work shows that diverse social systems use social controls other than property rights to manage public commons. Ostrom's intervention is crucial because governments and business interests supporting privatization apply Hardin's theories to argue for private ownership of lands, infrastructure, and natural resources. Ostrom demurs, arguing that we must revise Hardin's concepts and substitute "problem of the commons" for "tragedy of the commons." She demonstrates that many communities sharing small- to medium-sized resources have solved the problem of depleted commons by making rules or punishing abusers. Ostrom acknowledges that commons like oceans and fisheries are tougher to manage and that abuse of them is rampant. For this reason I use Hardin's term to describe the oceanic commons.

3. The Ocean Conservancy explains that the "Pacific Garbage Patch" should not be imagined as "a big island of floating trash": "No vast island or blanket of garbage is visible in the North Pacific in aerial photographs or satellite images; the accumulation of trash here is like a chunky soup rather than a solid island of garbage you could walk across. Varying concentrations of debris occur in different places at different times; there are at least three separate spots in the North Pacific where currents cause large accumulations of trash. While rubber rain boots, toothbrushes, and food containers can be seen, much of the debris has been broken down by wind, sun, and wave action into tiny pieces that are harder to see, many of them plastic. Scientists skimming the water with fine mesh nets have discovered that in some parts of the Garbage Patch, while tiny marine life called plankton is still more abundant than plastic fragments in terms of numbers, plastic outweighs plankton six to one" ("Pacific Garbage Patch").

4. Walker's close-ups of Africans thrown from slave vessels, inspired by J. M. W. Turner's *Slave Ship (Slavers Throwing Overboard the Dead and Dying. Typhoon Coming On)*, remind us of the continuities between victims of the slave trade and the dead left in New Orleans in the wake of Hurricane Katrina. Walker suggests that the tragedy wrought by failed infrastructure in contemporary New Orleans is part of a historical habit.

# WORKS CITED

- Appadurai, Arjun. "Disjuncture and Difference in the Global Cultural Economy." *Public Culture* 2.2 (1990): 1–23. Print.
- Arnold, Matthew. "Dover Beach." *The Columbia Anthology* of British Poetry. Ed. Carl Woodring and James Shapiro. New York: Columbia UP, 1995. 620–21. Print.
- Ballard, J. G. "Dream Cargoes." *The Oxford Book of English Short Stories*. Ed. A. S. Byatt. Oxford: Oxford UP, 2009. 381–95. Print.
- Bauman, Zygmunt. *Liquid Modernity*. Oxford: Wiley, 2000. Print.
- Bennett, Jane. Vibrant Matter: A Political Ecology of Things. Durham: Duke UP, 2010. Print.
- Bishop, Elizabeth. "At the Fishhouses." The Complete Poems, 1927–1979. New York: Farrar, 1984. 64–66. Print.
  —. "The Map." The Complete Poems, 1927–1979. New York: Farrar, 1984. 3. Print.
- BP. Advertisement. New York Times 7 June 2010: A22. Print.
- Branch, Michael P., and Scott Slovic. "Surveying the Emergence of Ecocriticism." *The ISLE Reader: Eco*-

*criticism, 1993–2003.* Ed. Branch and Slovic. Athens: U of Georgia P, 2003. xiv–xv. Print.

- Clover, Charles. *The End of the Line: How Overfishing Is Changing the World and What We Eat.* Berkeley: U of California P, 2008. Print.
- Cramer, Deborah. Great Waters: An Atlantic Passage. New York: Norton, 2002. Print.
- Cunliffe, Barry. Europe between the Oceans: Themes and Variations, 9000 BC-AD 1000. New Haven: Yale UP, 2008. Print.
- Dickinson, Emily. "Exultation is the going." The Complete Poems of Emily Dickinson. Ed. Thomas H. Johnson. New York: Little, 1960. 39–40. Print.
- Doty, Mark. "A Display of Mackerel." *Atlantis*. New York: Harper, 1995. 14–15. Print.
- García Márquez, Gabriel. "A Very Old Man with Enormous Wings." *Collected Stories*. Trans. Gregory Rabassa and J. S. Bernstein. New York: Perennial-Harper, 1984. 217–25. Print.
- Greenberg, Paul. "A Fish Oil Story." *The New York Times*. New York Times, 16 Dec. 2009. Web. 27 Apr. 2010.
- Grossman, David. See under: Love. Trans. Betsy Rosenberg. New York: Macmillan, 2001. Print.
- Haraway, Donna J. "Crittercam: Compounding Eyes in NatureCultures." *Postphenomenology*. Ed. Evan Selinger. Albany: State U of New York P, 2006. 119– 24. Print.
- Hardin, Garrett. "From 'The Tragedy of the Commons." The Oxford Book of Modern Science Writing. Ed. Richard Dawkins. New York: Oxford UP, 2008. 263–66. Print.
- Hulley, P. Alexander, J. R. Paxton, and W. N. Eschmeyer, eds. *Encyclopedia of Fishes*. San Diego: Academic, 1998. Print.
- Klein, Naomi. "Haiti: A Creditor, Not a Debtor." *Nation* 1 Mar. 2010: 9. Print.
- Kurlansky, Mark. Cod: A Biography of the Fish That Changed the World. New York: Random, 1998. Print.
- Latour, Bruno. Politics of Nature: How to Bring the Sciences into Democracy. Trans. Catherine Porter. Cambridge: Harvard UP, 2004. Print.
- Lubchenco, Jane. "Q&A Interview with Jane Lubchenco." Smithsonian Apr. 2010: 25. Print.
- Melia, Mike. "Atlantic Garbage Patch: Pacific Gyre Is Not Alone." *The Huffington Post*. HuffingtonPost.com, 15 Apr. 2010. Web. 25 May 2010.
- Merrill, James. "The Pier: Under Pisces." Selected Poems. Ed. J. D. McClatchy and Stephen Yenser. New York: Knopf, 2008. 185–86. Print.
- Nossiter, Adam. "Half a World from the Gulf, a Spill Scourge Five Decades Old." *New York Times* 17 June 2010: A1+. Print.
- Ostrom, Elinor. "A Conversation with the 2009 Nobel Prize Winner in Economics." By Jennifer Schonberger. *The Motley Fool*. Motley Fool, 28 Oct. 2009. Web. 25 May 2010.

- Out of Balance: Industrial Fishing and the Threat to Our Ocean. Herring Alliance. Herring Alliance, n.d. Web. 5 May 2010.
- "The Pacific Garbage Patch: Myths and Realities." Ocean Conservancy: Start a Sea Change. Ocean Conservancy, 2010. Web. 5 May 2010.
- Pound, Ezra. "Portrait d'une Femme." *Selected Poems*. New York: New Directions, 1957. 16–17. Print.
- Saramago, José. *The Stone Raft*. Trans. Giovanni Pontiero. New York: Harcourt, 1996. Print.
- Shannon, Laurie. Conversation with the author. Winter 2010.

- Stone, Christopher D. "Should Trees Have Standing?" and Other Essays on Law, Morals, and the Environment. New York: Oceana, 1996. Print.
- Walcott, Derek. "The Star-Apple Kingdom." *Collected Poems*, 1948–1984. New York: Farrar, 1986. 383–95. Print.
- ------. "Tarpon." *Collected Poems*, 1948–1984. New York: Farrar, 1986. 61–62. Print.
- Walker, Kara. *After the Deluge*. New York: Rizzoli, 2007. Print.
- Wallerstein, Immanuel. *The Decline of American Power: The* U.S. in a Chaotic World. New York: New, 2003. Print.



The oceans and seas of the world, along with the principal gulfs and bays. The designations of some bodies are disputed. The membership of the International Hydrographic Organization voted in 2000 to call the waters around Antarctica the Southern Ocean. but Australia objects that the name should refer to the area south of Australia. North Korea and South Korea argue that the body commonly known internationally as the Sea of Japan should be called the East Sea. Many Arab countries use the Arabian Gulf instead of the Persian Gulf.

