

or not. Conversely, by defining something as unnatural, we label it rejectable. (Hence the enormous arguments over the biological origins of homosexuality.) By artificially separating nature from culture, we close off discussion. All things “natural” are excluded from political analysis. Truly, we should know better. After all, not so long ago, we rejected miscegenation as unnatural; today we reject that rejection as racism.

Moreover, Latour raises at least one point that strikes this reader as exactly right: that to make ecological discussions meaningful, nonhumans have to be considered equally

with humans. We must extend Kant’s categorical imperative—to treat humans as ends, rather than means—to the nonhuman world as well. This means taking seriously the interests, needs, and even desires of nonhumans. Although this might seem daft at first—how can we know the desires of trees?—Latour points out that scientists routinely speak about non-humans (for example, neutrinos, viruses, crustal plates, frogs), often as if speaking for them. Who hasn’t heard scientists talk about the crust wanting to move, viruses needing to replicate, and trees striving to reach the forest canopy? So it is not so

great a stretch to consciously consider the interests of plants and animals, of the oceans and atmosphere, as well as (not incidentally) the interests of future generations of humans. Indeed, this may well be the only way to counter the ubiquitous tendency of currently living humans to act as if only they existed, or in any case as if only they mattered.

References and Notes

1. Originally published as *Politiques de la nature. Comment faire entrer les sciences en démocratie* (La Découverte, Paris, 1999).
2. B. Latour, *We Have Never Been Modern* (Harvard Univ. Press, Cambridge, MA, 1993).

NOTA BENE: OCEANS

A Desktop View of Overfishing

Moored alongside the piles of discounted titles in British bookstores this summer is Redmond O’Hanlon’s log of two weeks spent on a Scottish trawler. O’Hanlon is best known for his stories of careering journeys around various tropical forests, his aim being to understand the psychology of travel under extreme conditions. A journey at sea becomes a logical extension of this goal. His choice of vehicle is the trawler *Norlantean*, and the reader is sent to steam across the open ocean feeling as seasick as the writer while the 70-year-old engines struggle with a force-12 storm. After a curious sequence of naming of parts, the ship is re-equipped with the collective personality of its occupants in this peculiarly indoor tale. This is not a conventional travel adventure, despite the physical extremes. All the action occurs in restricted spaces, not least the net that confines the fish, but also O’Hanlon’s claustrophobic bunk, the cramped galley, the fish gutting room, and the icy hold.

The main stars are the fish and the fisheries scientist who studies them. In *Trawler* we learn fragments about the life histories of rattails, hagfish, squid, angler fish, lumpsuckers, Greenland halibut, and the trawler’s main prey, redfish. Indeed, only fragments are

known about the biology of many of these species. We also discover that the nets have to be shot a kilometer deep or more to catch anything. The skipper of the *Norlantean* is in debt to the tune of £2 million, hence his urgency to set sail whatever the sea conditions. Nevertheless, the waste is pitiful: even trawlermen will eat fish, especially a fat haddock, but they cannot consume all the nonquota fish they catch and these (dead on arrival at the surface) are flung to the kittiwakes and gannets. Further, on landing in Shetland, the catch will be exported because the British

prefer cod and haddock, for which this skipper has no quota, and which in turn now have to be imported from remote fisheries.

To survive economically, each time he goes to sea *Norlantean*’s skipper has to net in excess of 70,000 pounds of fish. To hunt successfully, he must wield considerable interdisciplinary expertise. His many tasks include integrating data on distributions of fish species in three dimensions, population sizes, seasonality, diversity, average weight, gender and reproductive condition as well as direct-

ing the engineer, navigating the trawler, manipulating banks of electronic gear, and being chief psychiatrist for the crew. By contrast, the author is profoundly apologetic about his own stupidity and ignorance. As a result, *Trawler* is not a technical account—the extreme conditions of the journey probably rendered the landlubber author incapable of taking detailed notes or interviewing the crew in depth. But the reader nevertheless receives a sense of the sheer gut-wrenching

endurance needed to work on a trawler and gains considerable sympathy for the sleepless, and consequently somewhat deranged, trawlermen.

Given the huge financial debts, the unnervingly high risk of drowning, and the evident lack of romantic glamour despite the dangerous nature of the work, one might wonder why people are still attracted to this terrible job. The answer seems to be that industrial fishing still offers employment, when little else in many remote coastal communities does. But at what cost?

As we continue industrial scale operations, many fisheries around the world are at the brink of collapse. It is paradoxical that fishing still pays, as Daniel Pauly noted in his recent talk at the Royal Society (21 July). That it does is due to huge national subsidies (e.g., approximately \$2.5 billion for North Atlantic operations). Consequently, many global fisheries overshot their economic threshold some time past, but the subsidies have allowed fishing to continue until the ecological threshold has now also been exceeded. Hence, the lack of recovery of cod on the Grand Banks. Another consequence of the subsidies is that energy efficiency is plummeting—on average, for every metric ton of fuel consumed, only 1.5 metric tons of fish are harvested. Some fisheries are orders of magnitude worse; for example, catching a metric ton of shrimp may cost 100 metric tons of fuel. The worst offenders in the current devastation of the oceans, and those most resistant to reform, are members of the European Union. The EU “flagship” is the 14,000-metric-ton Irish factory trawler *Atlantic Dawn* (see figure), now helping to clear West African seas of fish. Not far behind are fleets from Japan and the former Soviet Union. More optimistically, Pauly suggests that the looming energy crisis will bring some sanity into this spiral of inefficiency.

That the world’s fisheries are hanging on the brink of the abyss is not one of O’Hanlon’s crazy hallucinations—and before fish become a culinary hallucination, the wealthy nations of the world need to act urgently to conserve what remains.

—CAROLINE ASH



Trawler

A Journey Through
the North Atlantic
by Redmond O’Hanlon

Hamish Hamilton, London, 2003. 352 pp. £20. ISBN 0-241-14014-5. Paper, Penguin, London, 2004. £7.99. ISBN 0-140-27668-8. Forthcoming from Knopf, New York. ISBN 1-4000-4275-5.