

Dean Bavington, *Managed Annihilation: an Unnatural History of the Newfoundland Cod Collapse* (Vancouver: UBC Press, 2010). 224 pages + Bibliography and Index. ISBN # 978-0774817486. Hardcover \$94.00

Mark Leeming, *Dalhousie University*

85

The field of science studies, as described by one of its foremost proponents, Bruno Latour, is an exercise in retying the Gordian knot once cut by modernity, which had put on the one side “knowledge of things,” and on the other “power and human politics.”¹ Neither the social constructivism of the cultural historian nor the intransigent nature of the environmental historian adequately sums up the imbrication of knowledge and power, science and politics. “In the eyes of our critics,” wrote Latour, “the ozone hole above our heads, the moral law in our hearts, the autonomous text, each may be of interest, but only separately. That a delicate shuttle should have woven together the heavens, industry, texts, souls, and moral law - this remains uncanny, unthinkable, unseemly.”²

It is not hard to imagine what Latour's critics would have to say about a book that asks, what are the environmental consequences of the modern insistence on speaking of science as something apart, as a source of truth, to be used well or misused perhaps, but never to share the moral or political precepts of its society. *Managed Annihilation* answers: crisis is the result, followed by an attempt to reassert the science/politics divide.

The crisis in Canada's North Atlantic cod fishery up to and after the collapse and moratorium of 1992 provides the subject matter for Dean Bavington's historical application of science studies' thinking to managerial ecology. The central argument Bavington offers is that the collapse of the cod fishery was caused not by poor management, but by the very idea of management; the paradigm of knowledge and control of nature failed, as it had to fail. Nature, as Frank Egler said, is not only

1 Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, Mass.: Harvard University Press, 1993), 3.

2 Latour, *We Have Never Been Modern*, 5.

more complex than we think, it is more complex than we can think.

The history of managerialism's golden age, as applied to fisheries, is covered quickly but thoroughly in the first two chapters of *Managed Annihilation*. Key to the remainder of the book is the combination of the 19th century's managerial ideology (“a universal solution to a world defined as a series of technical problems”) with 20th century industrialization (p. 7). The earliest objections came from fishermen themselves, who complained that the new industrial fishing technologies, trawlers and fish-finders and factory-freezer ships, threatened the ecological balance of the existing fishery. They were not heard. For the sake of regularity, and thus for the sake of capitalist investment, in an industry based on an annually variable fish population, fish and fishermen had to become manageable. Through the application of biological and economic abstraction, they did become manageable, and only in 1992 did the managers finally admit that nature would not abide by the model. They had little choice: the boats that went out that year found almost nothing to catch.

86

Having dispensed with the cod collapse by the end of his second chapter, Bavington describes in the following five the reaction to it by the fisheries establishment. The reason for the emphasis is an incongruous reality: despite its obvious failure, fisheries management lost little or none of its prestige in Canada after 1992. Partly this was on account of politics. The neoliberal economic orthodoxy of the 1990s dictated an increased commitment to private ownership of resources. Technology and managerial ecology simply followed the leadership of the economic imperative, as they had in the earlier 20th century. But the absent paradigm shift was also due to fisheries managers' ability to repackage management as “ecosystem-based” and responsive to “local ecological knowledge,” without abandoning faith in their ability to understand nature and fit its management to economic criteria.

One of the major transformations after 1992 was a turn to managing people as much as fish. This too accorded with neoliberal orthodoxy, presenting an opportunity for further centralization and professionalization of the industry, with more wealth concentrated in the hands of fewer license-holders. In chapter 6, Bavington presents cod

farming as the epitome of ecological and economic control, in which even the genetic material of the fish is controlled and no barriers are erected to concentrated ownership. Had he written the book in 2012, there would likely be a similar discussion of the present government's attempt to remove all restrictions on corporate concentration in the ocean fishery as well, proof that the trends Bavington describes in the 1990s and early 2000s are ongoing. And all of it rests on the foundation of a persistent managerialism: the idea that the fish/fisherman relationship is knowable and controllable in economic terms.

87

In summation, Bavington is not content to only describe the problem as rooted in capitalist-industrial modernity. He also offers some prescriptions for a relationship between humans and the ocean that might survive the industrial age. He suggests abandoning the faith in managerialism in favour of an awareness that in attempting to model natural systems we are always going to be in error, prioritizing local food fisheries over capitalist fisheries, and finally admitting the effects of technological choices (rather than insisting, as managers always have, that the type of technology is irrelevant if it is well managed).

Managed Annihilation is a gloriously subversive book that ought to influence a generation of environmental or resource studies, historical and contemporary. Its prescriptions may seem ambitious, but Bavington looks to the future, even more than the authors who share his theme in the studies of forest and agricultural management. Managerialism inevitably produces its own crises, as it did in Canada in 1992. By superficially reinventing their craft, fisheries managers survived the cod collapse. This book looks to the next time.