

## **Dean Bavington: *Cod Jiggers and the End of Fishing***

Throughout the world today fishing is primarily a small-scale subsistence activity, subjected to the rhythms of season and tide, subservient to the nature of fish, and of the ability of fishermen. Even as industrial fishing fleets harvest the last fish in the world's seas, artisanal fishermen continue to outnumber workers on those fleets by a factor of sixty to one. They receive a fifth of the public subsidies given to the industrial fleets and yet catch as much fish. They produce none of the pollution routinely generated by industrial fishing that relies on fossil fuel to harvest biomass. Artisanal fishing avoids harming spawning fish and habitat, and wastes none of the catch. Oriented primarily toward fishing for food instead of for profit, the wide array of artisanal fisheries do not mistake fish for a commodity, fishermen for workers, or fishing as employment.

For most of the 500 year history of the Newfoundland and Labrador cod fishery, fishing was done in the artisanal mode using a baited hook on a single line dropped over the side of a small row boat called a dory. Though larger boats were used seasonally to reach the offshore fishing banks, fishing required cod to be hungry to go for the bait which limited the fishing season to the roughly 6-8 week period when cod followed their main food source—capelin—in from the offshore Grand Banks. Once cod gorged themselves on capelin they would stop biting at the baited hooks and the cod fishery would come to an end.

Merchants who loaned money as capital to fishermen in Newfoundland and Labrador, usually indexed the repayments to the sale of dried and salted codfish. Accordingly, the customary practice was for loans and interest to be repaid during the fishing season. As the scale of the merchant's operations grew, the mismatch between the abstract, numerically driven loan repayment schedules and the comings and goings of the codfish became unprofitable for the merchant. Not only was the length of the fishing season variable, but more crucially, the quantity of the catch in a given season would also naturally fluctuate. The customary practice of carrying forward loans or forgiving debts on account of unexpected changes in catch thus became a problem for finance capital. Merchants wanted a more reliable flow of codfish to match the constancy of mathematically induced loan repayments. The fishermen could do little to change the natural rhythms of codfish, attuned to seasons, temperature, and other imponderables. However, they were tempted and encouraged to the solution of increasing the catch. Specifically, in response to the demand for increasing the annual catch, many fishermen began to experiment with and adopt more intensive technologies for fishing. The cod jigger was the first of these tools.

### **Jiggers Dictate Eco-Social Relations**

In *Energy and Equity*, Ivan Illich notes that the first step toward addressing environmental issues like the loss of codfish and fishermen, is to recognize that there are thresholds “beyond which technical processes begin to dictate social relations.” Just as with calories, fishing is both “biologically and socially healthy only as long as they stay within the narrow range that separates enough from too much.”<sup>1</sup> Determining what

sufficiency, or enough might mean in world fisheries runs counter to scientific fisheries management that is oriented toward sustaining the technocratic dream of maximum annual fish landings.

In order to uncover what “enough” might mean in the cod fisheries of Newfoundland and Labrador, Canada I have explored debates that emerged during the 1850s (and which continue today) surrounding the appropriateness of baited-hooks-and-hand-lines verses cod jiggers and other fishing technologies. I believe that the jigger marks the transgression of a natural threshold related to codfish, cod fishermen and cod fishing. Baited hooks and hand lines have an unmatched ability to stay within crucial biological and social thresholds associated with the nature of codfish, fishermen and the practice of fishing in Newfoundland and Labrador. Fishing people have persistently recognized the importance of thresholds related to fishing and have consistently demanded laws to ban fishing practices they deemed to have violated the thresholds. Those in charge of fisheries (scientists, governors, managers, investors and industrialists), however, have consistently failed to respond to the charges of fishermen, they often cannot recognize even the existence of thresholds favoring representations of fish as calculable and controllable single species populations.

The jigger inaugurates the transformation of cod fishing from an agonal hunting of fleshy wild cod to a harvesting of cod understood as biomass, a natural resource, standing reserve, industrial input, and swimming inventory. The documented resistance of fishing people in Newfoundland and Labrador to the jigger, from the moment it appears, illustrates their sophisticated understanding of the consequences of threshold crossing on the nature of cod and the character of the fisherman and the fishing community. The resistance of cod fishermen to the jigger and other novel fishing gears continues to be dismissed by fisheries scientists and managers because the biological and social consequences perceived by fishermen often fail to manifest themselves in ways detectable to fisheries science.

The arguments of fishermen against fishing gear deemed to violate crucial thresholds are fundamentally different in kind from scientific management that focuses on identifying underlying problems amenable to technological solutions. Baited hooks and hand lines embed cod fishermen in thick and interconnected biological and social contexts. When cod fishing occurs with a baited hook and line, in the hands of an experienced fisherman, the human senses become engaged with the ocean and its creatures. The baited hook and line does augment the powers of the fisherman beyond what he can do with a spear or with his bare hands. Yet it does not magnify his powers to a point beyond his physical capacities as do industrial technologies. Nor does it diminish the powers of the codfish as do jiggers. The baited hook and line gives the codfish its due, respecting its migratory patterns, rhythms of eating and sleeping, and cycles of reproduction. When limited by the baited hook and line, the cod-fisheries end when the fish leave the shorelines, the codfish can be hunted only when they are hungry, and Mother fish are not killed especially when spawning. Fisheries science requires no engagement with fish as living beings. Instead, codfish is an economic resource whose harvest quantity is determined through statistical sampling and population modeling to determine a harvestable biomass.

---

In *Energy and Equity* Illich explains what causes such a time lag between the recognition of transgressed thresholds by fishermen, and the appearance of fishery problems that call out for solutions delivered by scientists and managers. In the case of energy use, Illich (1973:3) shows that “the threshold of social disintegration by high energy quanta is independent from the threshold at which energy conservation produces physical destruction.”<sup>2</sup> He argues that social and cultural thresholds are more sensitive than biophysical ones, occurring much earlier in human history and at lower levels of energy exploitation. Protests against jiggers in the 1850s prefigure, by over one hundred years, the emergence of fisheries science and management and precede by 150 years the commercial and biological collapse of cod stocks and the social collapse of cod fishing as a way of life.<sup>3</sup>

---

<sup>1</sup> See Ivan Illich, 1973. *Energy and Equity*. Accessed online on November 1<sup>st</sup>, 2011 at: <http://reactor-core.org/energy-and-equity.html> pg.4

<sup>2</sup> *Ibid*, pg.3

<sup>3</sup> For a list of the many attempts by fishing people to protest the introduction of threshold breaching fishing gears see Callum Robert's, 2007, *The Unnatural History of the Sea* especially chapter ten. For examples specific to the cod fisheries of Newfoundland and Labrador see the magisterial Harold Innis, 1954, *The Cod Fisheries: The History of an International Economy*. University of Toronto Press: Toronto & Cadigan, S. 1995. *Hope and Deception in Conception Bay: Merchant-settler relations in Newfoundland, 1785-1855*. University Of Toronto Press: Toronto; The Moral Economy of the Commons: Ecology and Equity in the Newfoundland Cod Fishery, 1815-1855. *Labour/Le Travail*. 43(Spring):9-42; Failed Proposals for Fisheries Management and Conservation in Newfoundland, 1855-1880. In *Fishing Places, Fishing People*. Eds. D. Newell and R. Ommer. University of Toronto Press: Toronto; 2003, The Moral Economy of Retrenchment and Regeneration in the History of Rural Newfoundland. In *Retrenchment and Regeneration in Rural Newfoundland*. Ed. R. Byron. University of Toronto Press: Toronto; and 2010, *Managed Annihilation: An unnatural history of the Newfoundland cod collapse*. UBC Press: Vancouver.