

COMMENTARY

NEGOTIATING TEK IN BC SALMON FARMING:

Learning from Each Other or Managing Tradition and Eliminating Contention?

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IN THE 1990S, THE AHOUSAHT, who are part of the Nuu-chah-nulth Nation, were openly concerned about the impact of salmon farms on their local environment at Clayoquot Sound, on the west coast of Vancouver Island. However, in September of 2002, the year the province lifted the moratorium on granting new tenures to the industry, the Ahousaht came to an agreement with the main fish farming company in the area. In this agreement, which was a matter of courtesy and a statement about how the informal relationship between the company, Pacific National Aquaculture, and the Ahousaht people was to develop, the Ahousaht accepted the presence of salmon farms in exchange for recognition of the existence of the hereditary chiefs (*ha'wiih*) and their territories (*haboulthee*). At the time, Deputy Chief Councillor Anne Atleo explained in an interview with a journalist: "It's not an ideal solution ... but knowing that the government was going to open things up anyway, one of the best things we could have done was to take control and have a positive influence."² The agreement was interpreted very differently by the fish farming industry: as a licence to become involved in producing what is often referred to as "Traditional Ecological Knowledge," or TEK. Kevin Onclin, the production manager for the company in question,

¹ The interviews cited in this article were conducted by Dorothee Schreiber for her doctoral research, which was supported by a University of British Columbia Graduate Fellowship as well as funds for travel from AquaNet (Canada's Research Network in Aquaculture). Dianne Newell wishes to thank the Peter Wall Institute for Advanced Studies at UBC for supporting her collaborative work with Dorothee Schreiber. The authors are grateful to the anonymous reviewers and to Susan Neylan, Sue Roy, Arthur Ray and Lawrence Rosen for their helpful suggestions. An earlier version was presented at the annual meeting of the Canadian Historical Association, University of Western Ontario, June 2005. That said, the authors alone are responsible for the views expressed here.

² See: "If You Can't Beat Them Reform Them," www.tidepool.org/dispatches/ahousaht.cfm, viewed 10 November 2005.

said that, under the new agreement, “the Ahousaht will teach us about their ecological knowledge, which may benefit the siting of farms and help protect resources.”³ And the BC Salmon Farmers Association, for its part, claimed that the Ahousaht, having formerly been an “ardent opponent” of fish farming, had “shifted [their] position and now work with the industry to exert a positive influence on industry practices.” “The Ahousaht First Nation,” the association went on to write, “shares its unique Northwest coast Aboriginal culture with salmon farmers by transferring their indigenous ecological knowledge of the hahoulthee (traditional territory). The Ahousaht believe that mutual respect and harmonization with the industry is the best way to ensure that resources and the environment are protected.”⁴

The main purpose of this article is to establish a distinction between “TEK,” as it is conceived by many resource managers and academics, and as it is understood from the perspective of First Nations communities in coastal British Columbia, using salmon farming in British Columbia – the dominant, and most environmentally controversial, aquaculture sector – as a case in point. We suggest that traditional ecological knowledge/TEK, a term that came into existence in the 1980s and was first studied systematically by anthropologists, is widely understood by resource managers and scientists as a kind of local indigenous knowledge, outside the realm of Western science, that can enhance existing resource management practices and be a way of establishing better relations (i.e., eliminating contention) with local First Nations in the pursuit of existing resource management goals.⁵ Carl Folke’s recent collection on traditional knowledge indicates the ways in which scholars in the field generally accept the idea of an unrealized potential for TEK in resource and environmental management without necessarily questioning the reasons why First Nations communities might view TEK, and the cooperative agreements and partnerships based on it, differently.⁶ To be sure, questions of power have entered into scholarly discussions of indigenous peoples’ knowledge, as have questions of how that knowledge might be used to alleviate the problems associated with state control over natural resources, as exemplified in the recent

³ Ibid.

⁴ See www.salmonfarmers.org/files/members3.html, viewed 10 November 2005.

⁵ See the review of TEK in Fikret Berkes, “Traditional Ecological Knowledge in Perspective,” in *Traditional Ecological Knowledge: Concepts and Cases*, ed. Julian T. Inglis (Ottawa: International Development Research Centre, 1993) 1–9.

⁶ Carl Folke, ed., “Traditional Knowledge in Social-Ecological Systems,” Special Issue, *Ecology and Society* 9, 3(7) (2004). Available online at <http://www.ecologyandsociety.org/vol9/iss3/art7>, viewed 7 June 2006.

special issue of *Anthropologica* devoted to the topic of co-management and indigenous communities.⁷ In spite of the topic, however, only a few of the articles questioned the tendency to equate successful knowledge integration with power-sharing or examined how attempts at defining and integrating Aboriginal knowledge further incorporate Aboriginal peoples into the procedures of state-sponsored management practice.⁸ Seen in this light, TEK, as it is commonly understood, cannot realistically accommodate a conception of traditional knowledge that is embedded in First Nations governance (i.e., laws and customs) and in the spiritual beliefs and forms of production that are part of their understandings of the environment, as the case of the salmon farming industry in British Columbia makes clear.

SALMON FARMING AND FIRST NATIONS

At present, there are approximately one hundred open net-cage salmon farms licensed on the coast of British Columbia. Salmon farming has drawn widespread concern and some support; however, in most cases, it has drawn resistance from Aboriginal communities and organizations who fear for the future of their (struggling) fisheries, their livelihoods, and their continued relationship with, and knowledge of, their ancestral territories. Arguably, the modern TEK that First Nations have developed over generations of interactions with industrial developments in their ancestral territories is both traditional (in that it is based on a unique, long standing and ongoing relationship with the land and the sea) and ecological (in that it is directly relevant to present-day concerns over environmental degradation and the future of the resources). Although Aboriginal peoples' reasons for opposing salmon farming are rooted in traditional knowledge, this knowledge is not a remnant of the past but, rather, a composite of traditional and modern knowledge – a modern tradition – that allows First Nations communities and individuals to recognize resource depletion and environmental damage and to understand how they came about. TEK, while it is both practical and contemporary, should not be considered as separate from either a precontact past, which provides the ancestral authority to speak for certain areas, or the early

⁷ Joseph Spaeder and Harvey Feit, eds. Theme issue: "Co-management and Indigenous Communities: Barriers and Bridges to Decentralized Resource Management," *Anthropologica* 47, 2 (2005).

⁸ See Stella Spak, "The Position of Indigenous Knowledge in Canadian Co-Management Organizations," *Anthropologica* 47, 2 (2005): 233-46; and Paul Nadasdy, "The Anti-Politics of TEK: The Institutionalization of Co-Management Discourse and Practice," *Anthropologica* 47, 2 (2005): 215-32.

colonial past, which provides evidence of how resource depletion and cultural assimilation worked hand-in-hand to marginalize Aboriginal cultural practices. Yet the salmon-farming industry tends to claim that salmon farmers and Aboriginal communities and individuals who exchange letters or attend meetings are “learning from one another,” thereby suggesting that conflicts over salmon farming in British Columbia are a matter of collecting and communicating discrete bits of practical information that can be simply transferred, without regard for the history, culture, or political context within which that knowledge arose.

The finfish farming industry is relatively new to British Columbia, and salmon, since the industry’s beginnings in the province in the 1970s as small family operations, has been the main “crop.” The industry grew rapidly between 1985 and 1990, and in 1995 the BC government implemented a moratorium on new tenures, which was then lifted in 2002. Today, in 2006, the industry is poised for another major spread; this time into the approach waters to the Skeena and Nass rivers. Salmon farms, which today are large chain farms owned by multinational conglomerates,⁹ are very heavily concentrated in the Broughton Archipelago’s sheltered bays and inlets, the traditional fishing grounds of several Kwakwaka’wakw tribes now residing primarily on the reserve at Alert Bay, just off northeastern Vancouver Island. At present, First Nations people living in Alert Bay can hardly depend on the rivers on their ancestral lands to supply them with enough salmon, even for a food fishery. Over the past century, even the large Fraser River stocks, which pass through Johnstone Strait, have, through state regulations, been conserved for the primarily non-Aboriginal industrial fishery. Since the Second World War, these fisheries have experienced progressive depletion through land-based habitat damage and over-fishing.¹⁰

Today the surviving wild salmon stocks face an additional threat: the transfer of sea lice (*Lepeophtheirus salmonis*) from farmed fish to wild juvenile pink salmon (*Oncorhynchus gorbuscha*) and chum salmon (*O. keta*) leaving the rivers and streams of the mainland coast. Sea lice, external parasites that feed on the skin and mucus of salmon, are found also in wild salmon, but fish farms and the surrounding waters can

⁹ See Stephen Hume, Alexandra Morton, Betty C. Kellor, Rosella M. Leslie, Otto Langer, and Don Staniford, *Stain upon the Sea: West Coast Salmon Farming* (Madeira Park, BC: Harbour Publishing, 2004).

¹⁰ A history of which is provided by Dianne Newell, *Tangled Webs of History: Indians and the Law in Canada’s Pacific Coast Fisheries* (Toronto: University of Toronto Press, 1993 [reprinted 1997]).

harbour lice densities greatly exceeding ambient levels.¹¹ Juvenile Pacific salmon, which pass by nearshore fish farms on their way out to sea, are particularly likely to succumb to sea lice infection because of their small body size. The collapse of the Broughton Archipelago's 2002 pink salmon run brought widespread attention to the area and to the debate over the role of sea lice transfer and infection in causing the collapse, especially with the moratorium on new tenures being lifted that year. At the time, the Pacific Fisheries Resource Conservation Council, an independent, government-sponsored advisory agency, announced it had identified sea lice escaping from open-net salmon farm pens as a probable cause.¹² In 2005, a study of the Broughton Archipelago by Alexandra Morton (an independent biologist) and Rick Routledge (a fisheries statistician at Simon Fraser University), funded in part by the National Research Council of Canada and published in the *Alaska Fisheries Bulletin*, claimed to offer the first direct evidence of high salmon mortality rates from sea lice infestations linked to salmon farms.¹³ The latest attention to the collapse of the Broughton's 2002 pink salmon run appears in the opposition of members of four First Nations – Wet'suwet'en, Gitksan, Gitanyow, and Allied Tsimshian Tribes of Lax Kw'alaams – in the summer of 2006 to the expansion of fish farms in the Skeena and Nass rivers area: "The Skeena watershed will not become the next Broughton and that means a ban on all fish farms in this region," declared a spokesperson for the Allied Tsimshian Tribes.¹⁴

Each fish farm is a cluster of net pens, in which salmon – since 1985 primarily Atlantic salmon (*Salmo salar*), imported as fish eggs – are reared from the time that they are ready to leave the freshwater hatchery and enter salt water. These saltwater net pens affect a wide radius of surrounding territory as they serve as a reservoir of disease from which migrating populations of fish can become infected. They also release

¹¹ Martin Krkosek, Mark A. Lewis, and John P. Volpe, "Transmission Dynamics of Parasitic Sea Lice from Farm to Wild Salmon," *Proceedings of the Royal Society Series B* 272 (2005): 689–96.

¹² Press Release: Gordon Young, Vancouver, 25 November 2002, Environment News Service, Report of the Pacific Fisheries Resource Conservation Council. Available online at <http://www.ens-newswire.com/ens/nov2002-11-25-01.asp>, viewed 6 June 2006.

¹³ Alexandra Morton and Rick Routledge, "Mortality Rates for Juvenile Pink *Orcorynchus gorbuscha* and Chum *O. keta* Salmon Infested with Sea Lice *Lepeophtheirus salmonis* in the Broughton Archipelago," *Alaska Fisheries Bulletin* 11, 2 (2005): 146–52. The controversy over the danger posed to salmon by sea lice and the link between sea lice infestation in wild salmon and fish farms is reviewed in a 9 March 2006 Media and Public Relations release from Simon Fraser University: *SFU News*, "Evidence Shows Sea Lice Kill Young Salmon."

¹⁴ "Natives Pledge to Fight Fish Farms," Mark Hume, *Globe and Mail*, 19 June 2006. For testimony presented at the hearings of the provincial Sustainable Aquaculture Committee regarding the expansion, see <http://www.legis.gov.bc.ca/cmt/38thparl/session-2/aquaculture/index.htm>, viewed 2 July 2006.

sewage containing fish feces, uneaten feed, pharmaceuticals, and other substances. Aboriginal clam diggers, for example, are finding that many clam beaches in regions where fish farms are operating have changed in appearance and species composition, and are yielding fouled, inedible clams.¹⁵ In addition, Atlantic salmon have escaped from the farms and have been found spawning in British Columbia streams,¹⁶ raising concerns about what competition from an exotic species would mean for already unstable Pacific salmon populations.

Salmon farms occupy sheltered areas close to shore – the same channels and inlets where wild salmon concentrate during their migrations into and out of nearby river and stream systems, and where productive and locally important clam beds and fishing grounds are found. The Musgamagw-Tsawataineuk Tribal Council, which represents the tribes of the Nimpkish River, Gilford Island, and Kingcome Inlet, has had a zero-tolerance policy towards fish farming since the inception of the industry, while the province and the federal government, especially since the lifting of the 1995 moratorium in 2002, have strongly promoted the salmon-farming industry.

The west coast of Vancouver Island, which in 2005 housed twenty-eight salmon farms,¹⁷ has, like the Kwakwaka'wakw territories on the other side of Vancouver Island, been devastated by successive waves of investment and resource extraction. The Nuu-chah-nulth in the area therefore knew as early as 1997, when the BC government's Salmon Aquaculture Review (1995-97) was conducted, what the outcome of salmon farming was likely to be. This was based on their earlier experiences with other resource industries: "Nuu-chah-nulth knew and warned what the effect of logging streams to the banks would be.

¹⁵ See, for example, the testimony of Mano Taylor, a Kwakwaka'wakw clam digger, speaking in Alert Bay at the Leggatt Inquiry on 4 October 2001. Stuart Leggatt, a retired judge, was hired by the David Suzuki Foundation to travel to communities affected by salmon farming – Alert Bay, Campbell River, Port Hardy, and Tofino – and hear the testimony of both Aboriginal and non-Aboriginal people. Copies of the verbatim transcript are available through the court reporting service, Allwest Reporting Ltd., 814 Richards Street, Vancouver, BC, v6b 3A7.

¹⁶ J.P. Volpe, E.B. Taylor, D.W. Rimmer, and B.W. Glickman, "Natural Reproduction of Aquaculture Escaped Atlantic Salmon (*Salmo salar*) in a Coastal British Columbia River," *Conservation Biology* 14 (2000): 899-903. Although the figures for (and, hence, magnitude of) escapement are hotly contested, Alexandra Morton and John Volpe, in "A Description of Escaped Farmed Atlantic Salmon *Salmo salar* Captures and Their Characteristics in One Pacific Fishery Area of British Columbia, Canada, in 2002" (*Alaska Fisheries Bulletin* 9, 2 [2002]: 102-110), claim that passive monitoring by the Department of Fisheries and Oceans may underestimate escapes in the Broughton Archipelago by as much as 40 percent.

¹⁷ British Columbia's Ministry of Agriculture and Lands lists salmon aquaculture licences at: http://www.agf.gov.bc.ca/fisheries/licences/MFF_Sites_Current.htm, viewed 12 June 2006. Not all farm licences are always active.

Nuu-chah-nulth knew and warned that the pilchard and then herring industrial reduction fisheries would wipe out these species. Nuuchahnulth know and understand the effect of salmon net cage culture on the sea resources.¹⁸ On the specific topic of herring abundance, First Nations fishers often say that local bays once teeming with spawning herring now do not yield enough fish even to fulfill food, social, and ceremonial requirements.¹⁹ The Nuuchahnulth suggestion that their people have experience with the localized and long-term consequences of the settler industries, and that this provides a firm basis from which to evaluate the impacts of salmon farms, illustrates that traditional ecological knowledge is more than information: it is a strategy for asserting an Aboriginal presence in the face of settler knowledge that redefines coastal habitat as an opportunity for progress and increased production.²⁰ Nuuchahnulth concerns about the effects of fish farm effluents on nearshore herring spawning grounds, salmon migration routes, clam beds, and seabirds²¹ do not agree with government or industry assessments of minimal impact. These concerns are directly tied in to the circumstances under which Aboriginal people participated in the industrial fisheries in the past and the ways in which they subsequently encountered, and continue to encounter, fish farming and other developments in their ocean territories.

All groups on the coast were heavily involved in the industrial salmon fishery as fishers, cannery workers, and labour recruiters; however, as the industry became more capital intensive, automated, and centralized following the Second World War, Aboriginal people's ability to gain access to this depleted fishery, and the cash that came from wage labour in that fishery, diminished rapidly. For the central mainland coastal community of Kitsoo, which was economically devastated by cannery closures on the coast (and, in particular, the closure of its local cannery in 1969), salmon farming has become an important economic

¹⁸ Environmental Assessment Office, *Salmon Aquaculture Review: Volume 2 – First Nations Perspectives* (Victoria, BC: Government of British Columbia, 1997), 46.

¹⁹ Interviews conducted by Dorothee Schreiber with members of the Ahousaht First Nation, various dates 2002. While the Department of Fisheries and Oceans (DFO) claims that Pacific herring stocks have recovered, a recent DFO report confirms that Pacific herring function as metapopulations, with largely independent dynamics at the local level. See D.M. Ware and C. Tovey, "Pacific Herring Spawn Disappearance and Recolonization Events," *Canadian Science Advisory Secretariat*, Research Document 2004/008 (Ottawa: Government of Canada, 2004).

²⁰ See minutes of the meeting of the Integrated Herring Harvest Planning Committee, 27–28 October 2005, Vancouver, BC, pp. 2 and 15. Available at http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/consultations/pelagics/default_e.htm, viewed 25 May 2006.

²¹ Interviews conducted by Dorothee Schreiber with members of the Ahousaht First Nation, various dates 2002.

activity. The Kitasoo/Xai'xais First Nation has turned to aquaculture to create jobs and "economic development." Marine Harvest Canada, the company that in 1998 provided an infusion of capital and technical expertise for the Kitasoo fish farming project, can point to its Kitasoo farm as evidence that Aboriginal people recognize the benefits of participating in an industry that agrees to "respect" traditional ecological knowledge. Percy Starr, the chief councillor and band manager of the Kitasoo/Xai'xais First Nation, feels that the Kitasoo have achieved a true partnership: "What really makes the relationship work is the respect that Marine Harvest gives to the Kitasoo First Nation. The success of the relationship is partly a result of the time and effort that the company and the First Nation have taken to learn about each other prior to signing a business agreement."²² Though not involved in a tribal business partnership, another elected leader who is optimistic about the future of fish farming is Moses Martin, elected chief of the Tla-o-qui-aht (a Nuu-chah-nulth tribe with territories adjacent to those of the Ahousaht in Clayoquot Sound). Echoing the experience of the Ahousaht leadership, Martin was in the past vehemently opposed to salmon farming, and, despite ongoing concerns over damage to the environment, he has opted to "work together with people [i.e., Creative Salmon, the local fish farming company] to minimize any impact."²³

WHAT COUNTS AS TRADITIONAL ECOLOGICAL KNOWLEDGE AND WHY IT MATTERS

While the Kitasoo and, more recently, the Kitkatla,²⁴ a Tsimshian community located north of the Kitasoo, appear to provide the only clear examples of outright Aboriginal community support for fish farming, several other groups, such as the Musgamagw-Tsawataineuk Tribal Council,²⁵ the Heiltsuk Nation,²⁶ and the Union of BC Indian

²² See http://www.nrcan.gc.ca/sd-dd/pubs/csr-rse/annex3_e.html, viewed 13 November 2005.

²³ Moses Martin, speaking in Tofino before the Legislative Assembly of British Columbia's Special Committee on Sustainable Aquaculture, 6 June 2006. Transcripts of the proceedings are available at <http://www.legis.gov.bc.ca/cmt/38thparl/session-2/aquaculture/index.htm>, viewed 12 June 2006.

²⁴ Hume, "Natives Pledge to Fight Fish Farms." *Globe and Mail*.

²⁵ See the Musgamagw-Tsawataineuk Tribal Council's statement: "Salmon Farming and First Nations," available at <http://www.mttc.ca/pdf/SalmonFarmingandFirstNations.PDF>, viewed 26 June 2006.

²⁶ Randy Carpenter, Guardian with the Heiltsuk Fisheries Program, in a personal communication to Dorothee Schreiber, 23 June 2006.

Chiefs,²⁷ maintain a zero-tolerance policy towards salmon farming. These stances are the outcome of ongoing negotiations and, in some cases, have resulted in divisions both within communities and between neighbouring villages and nations who may not agree on what fish farming means for the integrity of adjacent or shared waters.²⁸ In addition, the communications that take place on an almost daily basis between tribal fisheries administrations and fish farming companies or government bureaucracies deal both with mundane matters of fish farming practice and with still unfulfilled Aboriginal demands to resolve underlying questions about land and jurisdiction over resources. The policies of First Nations regarding fish farming, even when they are explicitly defined, are therefore the outcome of interactions and responses that cannot be categorized as simple acceptance (understood as forward-looking, or modern) or opposition (understood as clinging to the past, or traditional). Instead, the strategies employed by First Nations to deal with salmon farms operating in their fishing spots and in important fish rearing, feeding, or migration areas are attempts to resolve the tension between, on the one hand, wanting to influence decisions being made over fish farming and, on the other, standing by what First Nations people have always held to be their inalienable rights to build a future on their own terms. These rights are asserted even in the objectives of the nascent Aboriginal Aquaculture Association. Founded in 2003 by six unidentified First Nations leaders, the association in its website describes itself as a non-profit society whose purpose is “to promote and assist the development of First Nations aquaculture in BC that respects and supports First Nations communities, cultures, and values.”²⁹ In non-Aboriginal hands the concept of TEK exploits this tension, first by delimiting what counts as traditional knowledge – usually things relegated to the realm of “culture,” which can be seen to bring about industrial efficiencies – and then by integrating these into networks of production over which First Nations have little or no control. In this

²⁷ See “Fish Farms – Zero Tolerance: Indian Salmon Don’t Do Drugs,” available at <http://www.ubcic.bc.ca/Resources/fishfarmpaper.htm>, viewed 26 June 2006.

²⁸ For example, when the salmon farm installed by Kitasoo Aquaculture Ltd. at Arthur Island, an area the Heiltsuk also use, experienced a massive disease outbreak and the fish had to be culled, the Heiltsuk were outraged that the government had allowed the farm at that location and expressed concern over the impacts of the disease on resident and migratory fish. In addition, a land-based hatchery at Ocean Falls, an old Heiltsuk village site, is operated by Pan Fish and supplies fish for salmon farms on the central coast. The hatchery has aroused strong protest from the Heiltsuk Nation. See Heiltsuk Nation press releases of 18 February 2002, “Unauthorized Fish Farm Hosts Viral Epidemic”; and an 8 January 2003 open letter to Pan Fish. Available at www.heiltsuk.com, viewed 26 June 2006.

²⁹ See <http://www.aboriginalaquaculture.com/home.htm>, viewed 12 June 2006.

view, TEK can be understood as an outpost of tradition that needs to be understood and managed but that is generally irrelevant to creating a future different from the one already envisioned by salmon farming.

These practices skirt several important questions: How is it possible that the province is offering salmon farming licences to fish farming companies in foreshore and nearshore ocean territories that were never ceded by First Nations through treaties? Why are the benefits of fish farming to First Nations discussed by the industry in terms of the common good and the progress and prosperity supposedly shared by all Canadians, when First Nations have long been struggling to assert their identity *as* nations and not as dependent, domesticated entities? In light of these questions, the “traditional” in TEK is far too uncritical of what counts as traditional ecological knowledge.

Salmon farming, and how it affects its ocean and human environments, is therefore more appropriately considered a “matter of concern” rather than simply a matter of knowledge or “fact.”³⁰ Concerns about territory and rights are central to the intersections of biology and history through which salmon farming developed and is able to exist today, but these are not considered by farming interests to be appropriate topics of discussion when dealing with TEK. The industry may see TEK as what the First Nations communities will bring to the table, but that may not be how First Nations communities see it. As one Nuu-chah-nulth leader said regarding his tribe’s stance on salmon farming: “One of the movements that’s happening is traditional ecological knowledge and certainly we’re taking part in those discussions ... but there are also other values that have to be respected in terms of the hereditary chiefs, and how they play a major role in terms of the family, the transfer of chieftainship to the son, and the kind of display of resources that is shown and eaten at those kinds of things [feasts and potlatches].”³¹ Indeed, there are signs that a new generation of Aboriginal youth might consider taking back “traditional knowledge,” by putting it in the service of indigenous goals, and using its popularity with governments and industries to demand an entirely new kind of relationship. We hear this in the voice of one Haida youth, who recently wrote: “It is not good enough that it is now

³⁰ As Bruno Latour has written, “Matters of fact are not all that is given in experience. Matters of fact are only very partial and, I would argue, very polemical, very political renderings of matters of concern and only a subset of what could also be called *states of affairs*.” See Bruno Latour, “Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern,” *Critical Inquiry* 30 (2004): 232.

³¹ Interview (name withheld) conducted by Dorothee Schreiber, North Vancouver, 27 February 2002. This leader represents a Nuu-chah-nulth tribe that is not collaborating with the fish farming companies in its territory.

fashionable to recognize Indigenous or Traditional Knowledge; there must be proper recognition and reconciliation of past abuses as well.”³²

One of the ways the salmon-farming industry can avoid dealing with the historical circumstances under which it has ready access to ocean territories is through a kind of techno-utopianism in which existing problems with salmon farming can be remedied by “moving forward” and by incorporating “traditional knowledge” into existing production methods. The dichotomy between a supposedly primordial, premodern wisdom – TEK – and an industrial process of “modern” aquaculture that looks to TEK to promote efficiency and to appease Aboriginal groups is ultimately harmful to Aboriginal communities. Assuming a clear distinction between modern aquaculture and traditional knowledge³³ severely undercuts the ability of the First Nations who have decided to resist salmon farming to do so while asserting the *modern* relevance of their historically, geographically, and culturally specific knowledge. In addition, the industry’s suggestion that TEK can be made useful with regard to reconciliation (i.e., through salmon farmers’ collecting and using that knowledge) contains an underlying assumption that First Nations concerns and demands are tied up with a state of being – a “traditional” condition – in which Aboriginal perspectives, by their very nature, stand in opposition to modern aquaculture. By using their own “modern” material interests to guide the transformation of traditional knowledge into something accessible and ultimately more *usable*, fish farmers may in fact be working to eliminate the very coastal fish habitats, fish populations, and forms of tribal jurisdiction over the fisheries that First Nations peoples are trying to re-establish or preserve.

TEK: THEORY AND PRACTICE

TEK is not generally regarded as political; it is often presented by outsiders as respect for the earth and a feeling of oneness with all creation. The respected ethno-botanist Nancy Turner, in her article “The Earth’s Blanket: Traditional Aboriginal Attitudes towards Nature,” takes Aboriginal people’s traditional knowledge as evidence that they are the original ecologists:

Aboriginal Peoples need to use their environment, and the other living things in their ecosystems, for survival, just as all of us do. However,

³² “Jusquan,” “Traditional Knowledge,” *Redwire Magazine*, April 2005, 42.

³³ An example of this common, but problematic, distinction can be found in the title of a session – “The Interaction between Traditional Knowledge and Modern Aquaculture” – at the Aquaculture, Innovation, and Social Transformation Workshop, Montreal, 18–20 August 2004.

the attitude of respect, gratitude and honour, and the spiritual relationship humans have had with Nature in traditional cultures, is important in determining how they used their environment. Religious attitudes in traditional societies may be metaphorical guidelines for sustainable living. Prayers, stories and ceremonies abound in the Aboriginal societies of Canada and elsewhere that teach people the principles of sustainability.³⁴

This characterization, which focuses on respect and harmony and is often based directly on First Nations own narratives, makes it difficult for First Nations to simultaneously assert claims to territory and ancestral rights. Paul Nadasdy has identified this tension in the Yukon, where he found that Kluane conceptions of respect, though they are widely translated by non-Aboriginal people into simple admonitions against wasting meat or other natural substances, represent complex sets of social relations that are only understandable from within the social context of the local indigenous hunting economy.³⁵

The widespread focus – Aboriginal and non-Aboriginal – on respect in TEK reinforces the assumption that TEK is, in a sense, all tradition and no politics. This assumption is inconsistent with the ways in which Aboriginal knowledge of the fisheries in general has been a source of conflict with the settler society. When, a century ago, Aboriginal fishing began to conflict with the interest of canneries, the fishing practices of First Nations – their technologies and place-specific fishing techniques; their ways of allocating fishing spots and organizing the harvesting, processing, storage, and distribution, including trade, of the catch – were relatively well described by ethnographers. However, these practices were usually threatening to industrial interests and were labelled backward and primitive, wasteful, to be overcome by fisheries management methods that relegated Aboriginal involvement to wage labour and moved management of the resource to the state.³⁶ This

³⁴ Nancy Turner, “The Earth’s Blanket: Traditional Aboriginal Attitudes towards Nature,” *Canadian Biodiversity* 2 (1992): 6–7.

³⁵ Paul Nadasdy, *Hunters and Bureaucrats: Power, Knowledge, and Aboriginal–State Relations in the Southwest Yukon* (Vancouver: UBC Press, 2003), 80–3.

³⁶ Newell, *Tangled Webs of History*, 88–97; Douglas Harris, *Fish, Law, and Colonialism: The Legal Capture of Salmon in British Columbia* (Toronto: University of Toronto Press, 2001). And see also Bill Parenteau, “‘Care, Control, and Supervision’: Native People in the Canadian Atlantic Salmon Fishery, 1867–1900,” *Canadian Historical Review* 79, 1 (1998): 1–35; and J. Michael Thoms, “An Ojibwa Community, American Sportsmen, and the Ontario Government in the Early Management of the Nipigon River Fishery,” in *Fishing Places, Fishing People: Traditions and Issues in Canadian Small-Scale Fisheries*, ed. Dianne Newell and Rosemary E. Ommer (Toronto: University of Toronto Press, 1999) 170–92.

traditional knowledge, though it was available and apparently readily usable, did not, simply by being collected and integrated with scientific knowledge, provide positive outcomes for Aboriginal communities.

Debates over what constitutes that thing called TEK may bring to the foreground the conflicts of interest that are inevitably involved in attempting to reconcile Aboriginal and non-Aboriginal knowledge and the need for negotiation. Yet demands by First Nations people for their land and resource rights are usually considered to be outside the domain of TEK. TEK, as it tends to be understood by fish farming companies, consists of a set of representations that, through the exchange of words and the hybridization of meaning, can be integrated and reconciled with those of fish farmers. This, unfortunately, recasts concerns over salmon farming sites and practices as isolated instances of cultural incompatibility that do not require any far-reaching changes in material practices in order to be resolved.

These problems became evident in the exchange between Henry Scow, a hereditary chief of the Kwicksutaineuk tribe of Gilford Island, in Kwakwaka'wakw territory, and the BC Salmon Farmers Association in 2001. Scow wrote a letter on 18 February 2001 to the BC Salmon Farmers Association, categorically disallowing fish farms in his peoples' tribal territories: "We the Kwicksutaineuk Band would like to inform you people we will not allow any fish farms within the Kwicksutaineuk territories. Here are some documents to inform you people who we are. This map outlines our territory."

The documents Scow attached included a letter from his brother, Alfred Scow, advising the Department of Indian and Northern Affairs of Canada, the British Columbia government, businesses, and other parties of the fact that the hereditary chieftainship had been passed to Henry Scow; an obituary of his father, Bill Scow, entitled "Hereditary Chief Fought for Rights"; and a document entitled "The Sea Monster House in Gwayasdums (Gilford Island BC) Home of the Kwicksutaineuk Tribe." It is important to examine this last document because it conveys information that the BC Salmon Farmers Association considers to be outside the realm of TEK:

The Sea Monster House in Gwayasdums (Gilford Island BC) home of the Kwicksutaineuk Tribe.

Legend has it that a long time ago the sea monster Numkalagyu (NEWM-KALA-GYOO) emerged from the bottom of the sea in Blackfish Sound. It had a tremendous flat body, something like a giant halibut. A man stood on its back. He came to shore and helped found a group

of people called Nimkish. In order to portray what he had seen in his travels and the supernatural powers he obtained, this ancestor used the Sea Monster design on his house. Ever since that time, only people of the Nimkish Tribe and certain in-laws have had the privilege of using this design.

The Sea Monster Crest was given to Chief John Scow of the Kwicksutaineuk Tribe, when he married the daughter of Chief Klakwazi (Klah-Kwah-Zee) of the Nimkish Tribe. The pictured Sea Monster crest was painted on the front of chief John Scow's house in 1902.

The Chief and his extended family all resided inside the house, the Chief in the rear of the building, the others in the remaining corners. However, in the winter time when there were ceremonials in the house the extended family were temporarily displaced. Judge Alfred Scow, the eldest grandson of the Chief John Scow, recalls living there in his childhood.

Aboriginal rights as Kwicksutaineuk First Nation: Aboriginal rights is a birth right that stems from original inhabitation of the land. Aboriginal rights is passed down from generation to generation giving the descendants a right to control and manage lands and resources and governing authority for the existence and development of a cultural life style. The term "Aboriginal rights" encompasses lands, resources and governing authority (Land claims is included in this).

It is our inherent Aboriginal rights we are the original People of the territory and we the Kwicksutaineuk membership have the right to act on all internal and external matters relating to the continued well being and security of our band.³⁷

Henry Scow's understanding of Aboriginal rights as pre-existing but needing recognition, rather than as rights created by the Canadian state, is important because it rejects British Columbia's and Canada's anti-historic claim to sovereignty by contract,³⁸ under which Aboriginal people are forced to operate within the framework of privileges granted by the state. Instead, he grounds his opposition to fish farming in ancestral claims that stem from indigenous systems of governance and law and that are rooted in the specific tribal histories of the territory in question, for which he offers supporting documents. There are no vague notions of respect for the environment here, only specific indigenous

³⁷ This document, dated 28 May 1996, was included as an attachment with the 18 February 2001 letter by Henry Scow to the BC Salmon Farmers Association, BCSFA headquarters, Campbell River. We use this material with the permission of Henry Scow.

³⁸ See Taiaiake Alfred, *Peace, Power, Righteousness: An Indigenous Manifesto* (Don Mills, ON: Oxford University Press, 1999), 48.

narratives, such as “The Sea Monster House in Gwayasdums,” that deal with ancestry and links to particular places. This grounded, local approach challenges a writing of history, popular with advocates of salmon farming, in which past economic mistakes and cultural injustices can be overcome by completing the process of industrialization and nation building that began in an earlier colonial period.

In the Salmon Farmers Association’s response to Chief Henry Scow, questions about who has the right to speak for certain territories were channelled into discussions of balancing “values” with “economic futures.” This seems not only to assume that Henry Scow’s wish for his tribe to control its territory has no economic basis but also to ignore the long history of heavy Aboriginal involvement in the industrial fisheries as labourers and fishers. It appears from the response of the Salmon Farmers Association as though Aboriginal peoples were just now emerging from a precontact existence. It also appears as though current conditions of poverty on First Nations reserves have nothing to do with how the industrial fishery, despite its historic reliance on Aboriginal labour and expertise, has increasingly separated Aboriginal people from the wealth of their salmon rivers:

Dear Hereditary Chief Scow,

Thank you for taking the time to write me a letter expressing the position of your tribe with regards to the presence of fish farms in your traditional territory. I also appreciate the background information you sent to me on your tribe. The members of the BC Salmon Farmers Association (BCSFA) have clearly understood the feelings of frustration felt by the many First Nations communities who were not consulted when aquaculture sites first appeared in our coastal areas. We also realize that while we are not able to undo the mistakes of the past we can certainly do our best to ensure that history will not repeat itself. Over the past year and a half, the BCSFA has been holding communication meetings with First Nations in the various areas that have aquaculture operations. This has been an important step for the farmers to take to get to know more about the people in the communities within which they operate. The individual companies have also worked very hard to develop some mutually beneficial partnerships and ventures with significant numbers of coastal tribes.

I do realize that the continuation of finfish aquaculture is not the wish of your people. However, partnering with First Nations does add a strong element of responsible stewards to the continued improvement

of farm practices. Working together, the farm companies and various First Nations communities are setting important milestones in the development of how our resources should be used. We are learning so much from one another and there is optimism that together we can achieve the balance needed for respect of First Nations and environmental values while ensuring that we can provide the jobs needed for our economic future. Thank you again for your letter. I would look forward to having the opportunity to discuss with you potential solutions to the position of your tribe on finfish aquaculture.³⁹

This letter brilliantly succeeds in reframing the First Nation perspective in the language of contemporary managerialism. In the name of “our future” – which represents apparently common Aboriginal and non-Aboriginal interests – so-called “mutually beneficial partnerships and ventures” are proposed as a sort of intercultural exchange that promises “respect” and “learning.” By ignoring Scow’s territorial claims, the Kwicksutaineuk people’s authority to speak for the waters surrounding Gilford Island is rendered irrelevant as this letter recasts the conflict over fish farms as a problem of cross-cultural communication. Henry Scow’s statements are understood by the BC Salmon Farmers Association as interesting “background information” but not as the proper subject of knowledge. This is not surprising, given that finding out more about local cultures, and being able to effectively manage diversity, is quickly becoming a requirement for the expansion of global capital. Fish farming is a globalized industry, and many of the companies that operate in British Columbia also have farms in Chile and Norway. As Arif Dirlik has argued, global capital relations now have the power “to admit different cultures into the realm of capital (only to break them down and remake them in accordance with the requirements of production and consumption).”⁴⁰ Dean Bavington warns us that, as resource managers are waking up to the notion that nature is highly variable and uncontrollable, the managerial ethos has shifted towards controlling and managing people and knowledge:

Demands for control do not go away with the emergence of the ecological science of complexity rather they relocate themselves onto aspects of reality which appear most amenable to handling, direction, and stewardship – those which appear to be less uncertain and complex

³⁹ Letter from an official (name withheld) of the BC Salmon Farmers Association to Henry Scow, 26 February 2001, BCSFA headquarters, Campbell River.

⁴⁰ Arif Dirlik, “The Post-Colonial Aura: Third World Criticism in the Age of Global Capitalism,” *Critical Inquiry* 20 (1994): 351.

when viewed through the reductive lens of global capitalism and the demands of neo-liberal statecraft.⁴¹

The difficulties in managing nature have set up TEK as a new target for managerial control. The BC Salmon Farmers Association wants to communicate, but the object of its communication is the “position of [Henry Scow’s] tribe on finfish aquaculture”; it is the Kwicksutaineuk *position* that is deemed amenable to “communication” and “consultation.” Similarly, “learning so much from one another” does not reflect or overcome the history of oppression of First Nations that is associated with the management of Pacific fisheries, and it requires a kind of passivity on the part of those communities that would not be consistent with their long standing struggle to regain control over lands and resources. Seen in this context, it appears that the “learning” is going to be primarily in one direction: planning for the “economic future” becomes a sort of “White-man’s burden,” through which Aboriginal communities and individuals are normalized and assimilated into the economic mainstream.

Calls for communication and exchange of knowledge, in which differences in the interests of salmon farmers and Aboriginal people with regard to creating or preventing environmental problems are not acknowledged, do not reverse unequal relations of power: access to fish farm sites *continues* to be provided by a state that has yet to come to terms with the Aboriginal land question in British Columbia. Decisions about what were formerly Aboriginal fisheries (associated with particular lineages and tribes) and about the size and number of reserves (created on the assumption that Aboriginals would have access to their coastal and river fisheries),⁴² have for the past 140 years of industrial fisheries been interpreted by the state in ways that have severely restricted Aboriginal access to fisheries while preserving fish for non-Aboriginal interests. In this light, fish farming can be seen as representing a continuation of past colonial practices in new guises, and claims by the BC Salmon Farmers Association that, “while we are not able to undo the mistakes of the past we can certainly do our best to ensure that history will not repeat itself,” are unconvincing. The lived experience of Aboriginal communities and individuals resisting fish farming indicates the extent to which the colonial past is alive in the present day and why, as we have

⁴¹ Dean Bavington, “Managerial Ecology and Its Discontents: Exploring the Complexities of Control, Careful Use, and Coping in Environmental Management,” *Environments* 30, 3 (2002): 20.

⁴² Newell, *Tangled Webs of History*, 55–62.

written elsewhere, it is sometimes absolutely necessary to “dwell on the past.”⁴³ In this regard, moving forward with arrangements in which First Nations communities supply TEK before the Crown resolves underlying questions about Aboriginal title and jurisdiction may serve only to disguise power relationships and hide paths to the future envisioned by First Nations.

The focus on Aboriginal-industry “partnerships” and “joint ventures” in the BC Salmon Farmers Association’s letter is possible because salmon farming represents the height of managerialism, and salmon farmers are therefore able to link this industry to notions of social progress. Salmon farming integrates careful control over capital investments – feed, smolts, pharmaceuticals, and net pen installations – with ecological decisions about where to place net pens, when to medicate, how much to feed, and when to harvest and sell the fish. Because growth of the capital investment *is* growth in fish biomass – fish farmers speak of growing fish in kilograms per cubic meter of water – fish farming extends knowledge of fish yields and production costs in ways that would never be possible (or necessary) in the wild capture fisheries. As a process geared towards optimizing biomass production, fish farming can claim to have overcome the crisis of management of the wild Pacific salmon stocks in which returns are largely unpredictable and impossible to control, despite a century of industry- and government-led, science-based enhancement programs.

The consequence has been that every time new concerns are raised about the transfer of disease and sea lice to wild fish, the effects of fish farm effluent on nearshore and intertidal habitats, or the potential dangers posed by escapes of Atlantic salmon, fish farmers and their supporters in the provincial and federal governments call for further monitoring, data collection, and studies. These technological possibilities are inherent in the way salmon farms are set up as centres of calculation, in which fish farmers can control and manage currents, diseases, and other factors that would otherwise be distant, unpredictable, or hostile. Salmon farmers therefore see technological possibilities where attempts at managing the wild fisheries have failed. Ensuring “that history will not repeat itself,” to recall the words of the BC Salmon Farmers Association spokesperson to Chief Henry Scow, therefore takes on the double meaning of offering salmon farming as a postcolonial solution

⁴³ Dorothee Schreiber and Dianne Newell, “Why Spend a Lot of Time Dwelling on the Past? Understanding Resistance to Contemporary Salmon Farming in Kwakwaka’wakw Territory,” in *Pedagogies of the Global: Knowledge in the Human Interest*, ed. Arif Dirlik (Boulder, CO: Paradigm Press, 2006) 217–32.

not only to the problems associated with wild salmon fisheries but also to the colonial relations that went along with them. However, TEK is not integrated with capitalist forms of production in the same way as is the knowledge of fish farmers, and it is not clear how TEK can be used by fish farmers in a way that has emancipatory consequences for Aboriginal peoples, especially since management of investment has become equivalent to management of the resource. One salmon farmer explained it this way: “As a young biologist, I got pretty cynical about decisions made about management of resources ... I said to myself, I kind of like this idea where I’d come in as a private business and hey, if I screw it up, it’s my own fault.”⁴⁴

The vocabulary of salmon farming as a private business is one of numbers, expressed through concepts like optimal fish densities, food conversion ratios, growth curves, and disease loadings. The knowledge, through which these indicators, standards, and targets are put to use, is so integrated with the practice of fish farming and the ways in which it manages its investment of smolts, feed, labour, and infrastructure that it acts as the very *agent* of fish farmers’ interests. Arguably, the intense record-keeping and laboratory analysis that goes along with fish farming enables fish farmers to continue operating in the midst of opposition. The provincial Ministry of Agriculture, Food, and Fisheries has adopted “performance-based standards” that give fish farmers free reign over farming practices as long as the concentrations of certain chemicals remain below specified levels. In this way, the numbers are *representative* of the kind of environment maintained by fish farmers, but they are also *representatives* that can move easily across the landscape and provide ready justification for the spatial expansion of the industry.

Data collection has therefore become yet another form of production, and when Aboriginal communities and individuals partner, or collaborate, in this production, salmon farmers gain great credibility. This credibility may then be used to do away with the need to elicit TEK in the first place. Ulrich Beck, in *Ecological Politics in an Age of Risk*, has suggested that modern industrial production benefits from the kinds of numbers generated through attempts at environmental protection because those numbers reinforce and hide the logic of capital that has made them necessary.⁴⁵ In this view, records of fish farming, simply by being generated, will reinforce the capacity of salmon farming to come to terms with what it externalizes as “environmental impacts.” Coming

⁴⁴ Interview (name and location withheld) conducted by Dorothee Schreiber, 17 October 2002.

⁴⁵ Ulrich Beck, *Ecological Politics in an Age of Risk* (Cambridge, UK: Polity Press, 1995), 138.

to terms with environmental impacts requires modern scientific analysis, rendering fish farms into veritable laboratories, as one fish farming company's public relations official made clear: "Most people have no idea we have laboratories. Every farm has a microscope, for water and plankton analysis. They have no idea how sophisticated we are. They think we're just out there with snow shovels shoveling out feed. Every farm has a site log, everything gets noted down."⁴⁶

How then can traditional knowledge be "integrated" into this network of farmers, scientists, fish, feed, instruments, measuring techniques, and analyses in ways that do not at the same time serve the interests represented by this non-human and human "actor-network," as Michael Callon and Bruno Latour would think of it?⁴⁷ Why, one might ask, if the interests are mutual, are non-Aboriginal scientists and fish farmers not integrated into understandings of lineages, their origins and histories, and knowledge about what things were like when the earth was very young? Do fish farmers have any sense how *sophisticated* (to use the language of the public relations official quoted a few lines above) the First Nations of the coast are? Like the techno-science of fish farming, traditional knowledge cannot be reduced to bits of lore to be gleaned in consultation meetings designed to elicit knowledge. Would Aboriginal people be able to call fish farmers to a meeting, ask them for "scientific knowledge," and then close the meeting with assurances that their views would be integrated into a thorough traditional assessment of how salmon farming affects resource and territorial rights?⁴⁸ These questions force us to reconsider whether TEK, as it is used by the fish farmers and their allies, helps to resolve, rather than hide, the conflicts of interest that are present.

Framed within this context, it would seem that integrating TEK into farmed fish production is not so much about gaining knowledge as it is about neutralizing contention and assimilating difference. TEK discussed by the salmon-farming industry operates by means of a particular discourse – a discourse that is at odds with the TEK put forward by Aboriginal groups asserting the right to make a living from

⁴⁶ Interview (name and location withheld) conducted by Dorothee Schreiber, 19 February 2003.

⁴⁷ See Michel Callon, "Techno-Economic Networks and Irreversibility," in *A Sociology of Monsters: Essays on Power, Technology and Domination*, ed. John Law (London and New York: Routledge, 1991) 132–61; and Bruno Latour, *We Have Never Been Modern* (Cambridge, MA: Harvard University Press, 1993).

⁴⁸ Paul Nadasy makes a similar argument in *Hunters and Bureaucrats*, 142.

their fisheries resources and resisting the idea that their interests have been swept away by the tides of time and progress. To not distinguish between these two discourses, simply because they are constructed and competing, is politically unwise, and it risks supporting the state's long-term assimilationist efforts to erase the Aboriginal presence from the landscape of British Columbia. We have suggested that TEK represents for the industry a particular set of interests that sideline questions of Aboriginal land and fishing rights and relegates them to impoverished notions of "tradition" and "culture." Henry Scow and the other leaders in the traditional governance systems represent, and are the primary repositories of, the histories of the territories of the tribes and families that belong to the areas where fish farming takes place. If their claims are to be properly understood in the ongoing search for a sustainable aquaculture industry on the Pacific coast, then we must understand their stances within the context of these larger histories of how coastal First Nations lost access to and control over their resources. Aboriginal people's connection to the land and the sea remains a source of identity and political strength, but the material relationship communities and individuals have with their ancestral territories continues to be transformed through an ongoing relationship with the colonial state. Northwest Coast nations were once organized through movements across the landscape that occurred within a seasonal round and through the affirmations of prestige that took place at the potlatch. But access to and management of natural resources is now regulated by non-Aboriginal interests. This shift in the relationships that organize the content and distribution of oral, historical knowledge represents a shift in the political context of that knowledge, but it also reminds us that oral histories – just like science narratives – have always been socially situated. The notion of an undifferentiated and plain-on-its-face TEK, often adopted by government decision makers and industry representatives, misrepresents the historical nature and political relevance of that knowledge and, in so doing, renders it largely ineffectual.

The transfer of TEK, if unencumbered by history and political context, can therefore be used to legitimate the ongoing transfer of Aboriginal waters to fish farming companies without treaty and, in most cases, without mutually acceptable agreements between the salmon farmers and the First Nations communities involved. These practices are consistent with a view of reconciliation that threatens to seriously undermine the position of Aboriginal peoples as protected political entities under the Canadian Constitution. Chief Justice Lamer, writing for the ma-

majority of the Supreme Court of Canada in *R. v. Gladstone* [1996], wrote that Aboriginal rights can be infringed in the interest of “the broader community as a whole”⁴⁹ and in order to promote “objectives such as the pursuit of regional and economic fairness.”⁵⁰ This view of reconciliation, in effect, allows Aboriginal rights to be conveyed to private interests, who do not have constitutionally protected rights, in an attempt to achieve social harmony and societal peace. A we-are-all-in-this-together approach to dealing with Aboriginal–non-Aboriginal conflicts holds strong sway in a “multicultural” Canada, and Aboriginal peoples are increasingly finding that they must cooperate with the processes that have been laid out to manage their concerns.

For salmon farmers to embrace TEK is one way of managing these concerns, and it is compatible with the expected outcome of consultation meetings over fish farming and other industrial developments. In the case of *Blaney et al. v. British Columbia (The Minister of Agriculture, Food, and Fisheries)* [2005], concerns of the Homalco, who are Coast Salish, over the operation of a fish farm in their ocean territory of Bute Inlet without sufficient consultation were only taken seriously by the court because the First Nation “did not at any time assert that they were not prepared to change their position as the result of consultation.”⁵¹ Similarly, the Taku River Tlingit First Nation, in its attempt to stop the reopening of an old mine in its territory, was told that their claims to jurisdiction over territory could not be considered at the same time as their concerns over the environment and would have to be negotiated at a later date.⁵² These sorts of exchanges of knowledge between Aboriginal peoples and governments or industries recognize the existence of indigenous traditional ecological knowledge but do not, by extension, recognize the importance either of the still unresolved Aboriginal land question in British Columbia or the fact that lands and resources are being allocated to private interests while treaty talks appear to be stalled in most of the province.

In our view, in contemporary Canada, dealing with the claims of Aboriginal peoples to their ancestral lands by consulting them on their TEK ignores a continued history that is (and has been since contact) shared between First Nations and the newcomers. This impoverished approach with regard to negotiating TEK, combined with the history

⁴⁹ *R. v. Gladstone* [1996] 2 S.C.R. 723 (hereafter *Gladstone*).

⁵⁰ *Gladstone* at para. 75.

⁵¹ *Blaney et al. v. British Columbia (The Minister of Agriculture, Food, and Fisheries)* [2005] BCSC 283, at para. 106.

⁵² *Taku River Tlingit First Nation v. British Columbia* [2004] 36 B.C.L.R. 370 at para. 12.

of colonial attacks on these rights and the long standing conflict with non-Aboriginals over Aboriginal rights to land and resources,⁵³ has made a concerted effort at resistance (among all the different families, lineages, and tribes) exceedingly difficult. A major way forward for contemporary Aboriginal communities opposing salmon farming is, therefore, to reassert their hereditary rights to territories encroached upon by salmon farms; Henry Scow was one of the first people to challenge the presence of the salmon farmers in his territory when he served the fish farming industry a formal “eviction notice” in 2003.⁵⁴

In the end, consideration of the active role of history in shaping contemporary Aboriginal narratives about salmon farming is critical as it helps to erase the unhelpful distinction between indigenous culture and indigenous politics, which, in effect, places the former in the realm of the traditional (i.e., premodern) and the latter in the realm of the modern. The hereditary chiefs in places such as the Broughton Archipelago, where salmon farming is unwanted but where it threatens to expand, therefore have an important role to play in developing resistance in their homelands, perhaps even against the desires of elected leaders and other individuals. While hereditary chiefs might sometimes talk publicly about salmon farming using techno-scientific language, economic figures, or bureaucratic terminology, they do so in order to engage with the changes sweeping across their landscapes, in order to, among other things, demonstrate the nature of the modern traditions in which First Nations communities and individuals operate. At present there is no space in this dialogue for a discussion of the powers of the hereditary chiefs in controlling and directing these changes. This lack of control is being effectively challenged in the case of other resource industries. In northern British Columbia, for example, a group of Tahltan elders, the family representatives that make up their traditional governance system, recently declared a moratorium on mine development in their territories.⁵⁵ These elders, like many of those resisting fish farming on the coast, are not intimidated by modern industries, with their scientific labs and mobile microscopes. They feel they should have a place in ensuring their descendants’ livelihoods and long-term relationship with the land. However, TEK, if stripped of political and historical content, threatens to become an instrument of destruction that aids unwanted

⁵³ Charles R. Menzies, “Stories from Home: First Nations, Land Claims, and Euro-Canadians,” *American Ethnologist* 21, 4 (1992): 776-91.

⁵⁴ Henry Scow in a personal communication to Dorothee Schreiber, September 2004.

⁵⁵ Press release by the Tahltan elders, “Jerry Asp, You Are No Longer Chief of the Tahltan People,” 25 January 2005.

forms of industrial spatial expansion into tribal territories. Accordingly, in the case of salmon farming in British Columbia, so-called solutions based on joint ventures and partnerships – collaborations on the surface – that rely on producing TEK are, for many First Nations communities, anything but.