POL 473 — Exam II

Milan Ilnyckyj

2013-11-02

1 | How is IQ a form of resistance? What does this imply for species at risk policy in Canada?

The Inuktitut phrase Inuit Qaujimajatuqangit (IQ) refers to the traditional knowledge of the Inuit people, a concept parallel to traditional ecological knowledge (TEK) and indigenous knowledge (IK) more generally. Frank Tester and Peter Irniq argue that the creation of the government of Nunavut in 1999 was "accompanied by an emphasis" on IQ, and explain some of the ways in which it has subsequently been incorporated into legislation and governance.[1] Used in some ways, IQ need not represent 'resistance' to cultural or epistemological impositions from outside Inuit culture. Some practitioners of western science seek to incorporate empirical claims from IQ into their existing framework of understanding, excluding cultural and cosmological aspects that challenge it more fundamentally.[2][3] Applied in other ways, however, the use of IQ "can be seen as resisting both the logic and totalizing agenda of colonial state power."[4] In this view, "[a]dvocating IQ can be a political act, advancing a social and cultural agenda that attempts to counter, or at least buffer, the totalizing agenda of a colonizing culture."[5] The application of IQ can have implications for species at risk policy, insofar as it represents a shift away from outside experts imposing their understanding on the Inuit, and toward according Inuit knowledge importance and respect that feeds through into policy development. This could affect species at risk policy positively if Inuit knowledge is effectively incorporated into management regimes, or if philosophical insights about humanity's dependence on nature are accepted by policy-makers and integrated into decision-making practices.

Andrea Olive identifies some of the ways in which TEK and IK have found their way into Canadian legislation.[6] The 1993 *U.N. Convention on Biological Diversity* provides that: "Each

[1] Tester and Irniq, "Inuit Qaujimajatuqangit: Social History, Politics and the Practice of Resistance", p. 48–61.

[2] For an example, see: Young and Matthews, *The Aquaculture Controversy in Canada: Activism, Policy, and Contested Science*, p. 143.

[3] For an example of a case where this approach was arguably fruitful, see: Hay and Members of the Inuit Bowhead Knowledge Study Committee, *Final Report of the Inuit Bowhead Knowledge Study*.

[4] Tester and Irniq, "Inuit Qaujimajatuqangit: Social History, Politics and the Practice of Resistance", p. 50.

[5] Ibid., p. 51.

[6] Olive, "Does Canada's Species at Risk Act live up to Article 8?", p. 173–189.

Contracting Party shall... respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity."[7] This obligation has been implemented in Canada's 2002 *Species at Risk Act*, in part through the Aboriginal Traditional Knowledge Subcommittee on Species at Risk under the Committee on the Status of Endangered Wildlife in Canada.[8] More philosophically, IQ challenges underlying assumptions common among western scientists, such as the fundamental separateness of human beings and non-human nature.[9] While this perspective is generally under assault as ecology, biology, and genetics highlight the interconnectedness and interdependence of all life, IQ may give these insights political salience and importance in the Canadian context, given the increased ability of aboriginal groups to be active players in political processes. Given the severity of current global environmental problems, such a change in perspective could be a necessary cultural shift which serves in part to help protect species at risk.[10]

Assessing the nature and role of IQ today requires historical context, particularly regarding the assimilationist policies maintained by the Canadian government for many years. The legacy of residential schools and ongoing reality of the *Indian Act* are arguably manifestations of Canadian colonialism and cultural imposition.[11][12] Remarkably, until 1951 Canadian federal law prohibited indigenous groups from self-organizing to advance land claims and protect other rights.[13] IQ requires 'rediscovery' and 'rearticulation' after these experiences. Historical attempts to suppress indigenous identity and languages mean asserting the importance or even primacy of IQ runs counter to the historical thrust of relations between aboriginals and the Canadian government. There is an ongoing risk that IQ will be used superficially to legitimate *status quo* decision-making. If so, at-

[7] Tester and Irniq, "Inuit Qaujimajatuqangit: Social History, Politics and the Practice of Resistance", p. 54.

[8] For a detailed history, see: Amos, Harrison, and Hoberg, "In Search of a Minimum Winning Coalition: The Politics of Species-at-Risk Legislation in Canada", p. 137–163.

[9] Tester and Irniq, "Inuit Qaujimajatuqangit: Social History, Politics and the Practice of Resistance", p. 57–8.

[10] See also: Beazley, "Why Should We Protect Endangered Species? Philosophical and Ecological Rationale".

[11] A short summary of Canada's political and legal history with aboriginals can be found in: Young and Matthews, *The Aquaculture Controversy in Canada: Activism, Policy, and Contested Science*, p. 55–72.

[12] An account of forced assimilation through residential schools, backed with threats from the RCMP, can also be found in: Tester and Irniq, "Inuit Qaujimajatuqangit: Social History, Politics and the Practice of Resistance", p. 53.

[13] Young and Matthews, *The Aquaculture Controversy in Canada: Activism, Policy, and Contested Science*, p. 56.

tempts to assert a more substantive and meaningful interpretation could constitute an ongoing form of resistance to assimilation.

Arguably, one form of IQ as resistance can be seen in responses to domestic and foreign opposition to harp and hooded seal hunting.[14] For some supporters of the hunt, this is another classic example of ill-informed distant urbanites believing that they have a better understanding of arctic ecosystems than those who have been living in them for a vast span of time. This picture is complicated, however, by how climate change is producing highly disproportionate effects in polar regions. As the climate continues to change, traditional knowledge may become less applicable, and species that would not be threatened by hunting may be imperilled by its combination with rapid climatic change. The very problematic history of past attempts to regulate Inuit hunting have likely contributed to a culture where a lack of trust may create problems going forward.[15]

Even in Nunavut, where IQ has been incorporated into legislation, its application remains contested. At one level, there is ongoing debate about whether IQ is just a source of data that can be fed into scientific models and approaches to management of biological resources, or whether implementing IQ also means implementing a worldview and modes of decision-making that more fundamentally challenge the governance *status quo*. The "social dimension" of IQ, which includes local decision-making, establishes it as a governance philosophy which is less easily hybridized with conventional territorial and municipal approaches. The final results of these developments for species at risk remain unclear. It is possible that incorporating data from IQ can improve scientific management, just as incorporating philosophical insights might improve the mindset of those seeking to manage resources. At the same time, as Tester and Irniq identify, IQ traditions face challenges from modern problems and social pressures. Whether IQ can effectively bolster the protection of endangered species under such conditions remains to be seen.

[14] Tester and Irniq, "Inuit Qaujimajatuqangit: Social History, Politics and the Practice of Resistance", p. 52–3.
[15] See: ibid., p. 53–4.

2 | What challenges and opportunities does federalism present for species at risk legislation in Canada? Do the challenges outweigh the opportunities?

Canada's federal structure and constitutionally-established separation of powers affect both processes and outcomes related to species at risk. While scholars of Canadian politics are obsessed with federalism as an explanatory variable — and it is clearly the case that it has some impacts on species at risk policy — it may well be the case that its overall importance as an explanation is secondary. Given the choice between effectively protecting threatened species or maintaining economic growth, governments at all levels consistently favour the latter. While federalism shapes modes of policy-making and has some demonstrable effects on outcomes, the limited political will for species protection probably does more to explain the overall character of Canadian policy in this area. The impact of federalism is probably most significant in terms of how it can reduce policy coordination, weakening protection for species at risk.

Species at risk may be an especially challenging area of regulation, legislation, and policy under a federal system. Some species migrate across vast areas, or otherwise depend on large ecosystems which may span provincial and territorial boundaries. While federal authority over migratory birds is a partial recognition of these special requirements, those protections do not apply to land and marine species, and it remains the case that migratory birds will often pass through several jurisdictions whose policies are likely to impact them. Furthermore, the impact of global environmental issues including ozone depletion, persistent organic pollutants, and climate change must be considered. Global environmental problems represent a novel challenge to federalism which could not have been anticipated by the drafters of the *British North America Act* or by leaders at the time of confederation. These novel problems involve phenomena that have only recently been well-understood scientifically and which require more cross-jurisdictional cooperation than local environmental issues like most kinds of air pollution and land use policies. Different provinces may also face very different costs for complying with new environmental obligations, complicating the process of instituting and enforcing them.

Canada's fragmented regulatory landscape increases the difficulty of effectively managing such problems, and makes it harder for Canada to integrate effectively with international efforts to control them. While the federal government speaks for Canada in the area of diplomacy, much of the actual implementation of environmental policy falls to provincial and local authorities.[16] The policy fragmentation associated with Canadian federalism is both geographic and issue-based. Different levels of government share constitutional authority and have access to 'levers' through which positive outcomes can be encouraged.[17][18][19] Competition between jurisdictions also carries the danger of a 'race to the bottom,' as analyzed by Kathryn Harrison and others.[20] If Harrison's claim that public opinion on environmental issues is highly cyclical, with attention falling away rapidly after peaks as economic issues become more salient, Canada's multi-jurisdictional structure may be a further impediment in that 'policy windows' may not be open at all levels simultaneously.[21] Similarly, having governments from different parties and with different ideological affiliations at different levels could be an impediment to successful species at risk management since they may block each other rather than cooperate.

At its best, federalism could benefit species at risk in two ways: allowing effective matching of policies with local conditions, and establishing the provinces and territories as 'policy laboratories' where innovative approaches can be tried. In some cases, the devolution of authority that defines federalism has contributed to the emergence of regionally-appropriate species at risk policies, notably in the case of Nunavut making special provisions in legislation and governance for aboriginal knowledge and concerns. Successes in one jurisdiction can be emulated by others, al-

[16] See: Amos, Harrison, and Hoberg, "In Search of a Minimum Winning Coalition: The Politics of Species-at-Risk Legislation in Canada", p. 152–6.

[17] Canada's constitutional division of powers is embodied in Section 92A of the *Constitution Act*, and was established before many of today's major environmental issues were known.

[18] See also: Young and Matthews, *The Aquaculture Controversy in Canada: Activism, Policy, and Contested Science*, p. 228.

[19] Amos, Harrison, and Hoberg, "In Search of a Minimum Winning Coalition: The Politics of Species-at-Risk Legislation in Canada", p. 153–4.

[20] See: Harrison, "Federal-Provincial Relations and the Environment: Unilateralism, Collaboration, and Rationalization".

[21] See: Amos, Harrison, and Hoberg, "In Search of a Minimum Winning Coalition: The Politics of Species-at-Risk Legislation in Canada", p. 144.

lowing good ideas to spread and containing the amount of damage from bad ones. Federalism may also sometimes accidentally lead to stronger environmental protection, as in cases where jurisdictional conflicts between provinces, territories, and the federal government delay or prevent the approval of projects that threaten endangered species, such as the proposed Northern Gateway pipeline from Alberta's oil sands to the ecologically diverse and sensitive coastline of B.C. Such outcomes may be especially likely when there is a "risk-benefit" separation between the province that will benefit most financially from a project and the province that will bear the majority of its ecological risks.[22]

In sum, the main cost of federalism is the risk of policy incoherence or 'buck-passing' between different levels of government that wish to avoid taking action. The main potential benefit is the possibility of policy experimentation, in which effective governance regimes developed in one place can eventually be adopted elsewhere. Arguably, there aren't many huge mysteries when it comes to how to protect species at risk. Most often, it is a matter of protecting critical habitat, as well as the other species upon which they rely.[23] If the methods of species preservation are reasonably well known, there may be less of a role for policy laboratories, except perhaps in areas like working out how to win over stakeholders to supporting good management practices. While the benefits of federalism in this area may be more theoretical, the costs are arguably more concrete. Canada's species at risk are not aware of jurisdictional boundaries, but they are nonetheless impacted by differing standards and by the consequences of disagreements between governments. As such, it is plausible to suggest that overall Canada's federal structure creates more obstacles than it removes for protecting species at risk, though the main cause of mediocre outcomes in this area may be lack of political will, and emphasis of economic growth over ecological integrity, rather than Canada's constitutional structure.

[22] See: Amos, Harrison, and Hoberg, "In Search of a Minimum Winning Coalition: The Politics of Species-at-Risk Legislation in Canada".

[23] Beazley, "Why Should We Protect Endangered Species? Philosophical and Ecological Rationale", p. 21–2.

3 | What role does the media play in the aquaculture *controversy* in Canada?

In a chapter co-authored by Mary Liston, Nathan Young and Ralph Matthews identify a number of distinct roles played by the media in Canada's ongoing controversy about aquaculture. These include agenda-setting; serving as an intermediary for providing scientific information to the general public; and investigative, communicative, and narrative roles.[24] The power of the media, at least in the short term, is demonstrated by the incident in 2004 when an article about PCB contamination in farmed salmon prompted a sudden 70% drop in sales in the subsequent days.[25][26] As the authors identify, the "knowledge battlefield" on controversial health and environmental issues is "as much about trust and emotion as it is about fact," giving the media a powerful ability to affect public perception.[27]

The agenda-setting role may be especially important, as the media is empowered to shape what various actors talk about in public, including government and industry representatives, university scientists, and aquaculture critics.[28] Without the media to provide information, issues like fish escapes, PCB contamination, or sea lice would have a very difficult time gaining public salience. The media are therefore "an important bridge between experts and the public."[29] The media also shapes the discussion that occurs between advocates on both sides, for instance by perpetuating a pattern in which critics bring forward objections about aquaculture that industry proponents then seek to rebut. Having more "debates staged" about risks than about benefits produces a pattern where critics are aggressive and able to set the terms of the debate, while proponents are reactive and defensive, possibly weakening their ability to cultivate public support.[30]

Awareness of the influence of the media on public perception and the thinking of decision-makers has prompted both advocates and critics of the aquaculture industry to behave strategically

[24] Young and Matthews, *The Aquaculture Controversy in Canada: Activism, Policy, and Contested Science*, p. 158–9.
[25] Ibid., p. 109.
[26] Hites et al., "Global Assessment of Organic Contaminants in Farmed Salmon".
[27] Young and Matthews, *The Aquaculture Controversy in Canada: Activism, Policy, and Contested Science*, p. 112.
[28] Ibid., p. 158.
[29] Ibid., p. 141.
[30] Ibid., p. 187, 256.

— cultivating relationships with individuals in the media, and working to promote information supportive of their interests in ways likely to be picked up by media outlets.[31] The authors also explain how both aquaculture critics and proponents have been willing to manipulate survey questions in order to get skewed public opinion data supportive of their positions.[32] Communication strategies are identified as an especially important form of strategic interaction with the media, with the authors arguing that aquaculture critics have generally been more successful in setting the terms of discussion and getting their own positive points into public discussion.[33] The authors describe some interesting ways in which these strategies play out in the narrative of articles, such as how themes of ecological risk and economic benefit are most common, but rarely appear in the same piece.[34] They also identify interesting regional disparities, with economic arguments both for and against aquaculture much more prominent in Atlantic Canada than on the Pacific coast.[35]

Young and Matthews discuss the perceptions held about the media by various actors at considerable length, producing some significant results. For instance, all experts surveyed have negative perceptions of the media, though the degree of their opposition varies.[36] Matthews and Young relate this to the "hostile media effect" and to expert perceptions that members of the public are poorly informed and easily misled.[37] They argue convincingly, with support from an experiment by Gunther and Schmitt, that expert criticism of the media may reflect their poor opinion of the general public, rather than objections to specific media practices or behaviours.[38]

While the media perceives an important public advocacy 'watchdog' role for itself, Liston, Young, and Matthews point out that Canada's news media is an "overwhelmingly for-profit endeavour."[39] The desire to attract and maintain paying audiences and advertisers may well shape

[31] Young and Matthews, *The Aquaculture Controversy in Canada: Activism, Policy, and Contested Science*, p. 182, 190.
[32] Ibid., p. 98.
[33] Ibid., p. 100, 104, 109, 112.
[34] Ibid., p. 171, 175, 179, 180, 191.
[35] Ibid., p. 189.
[36] Ibid., p. 146-7.
[37] Ibid., p. 148-9.
[38] Gunther and Schmitt, "Mapping Boundaries of the Hostile Media Effect".
[39] Young and Matthews, *The Aquaculture Controversy in Canada: Activism, Policy, and Contested Science*, p. 158.

media behaviour — for instance, encouraging an emphasis on controversy and the expression of worst-case scenarios. "Journalists," the authors suggest, "often press [experts] for statements of conjecture regarding worst-case scenarios that are then reproduced in the media as potential or even likely outcomes."[40] Such behaviour likely fuels the critical attitudes of many experts who object to the poor management of scientific nuance and uncertainty in publications for mass audiences.

While it's difficult to imagine Canadian society without the media, it's likely that the aquaculture controversy would be a much more local and limited phenomenon in such a world. Local, national, and international coalitions of environmental advocates skeptical about aquaculture would not be able to collaborate and spread their messages as effectively to individual consumers, nor able to pressure retailers with similar effectiveness. Aquaculture firms and proponents would also face less pressure to respond to the criticisms of outsiders. The media provides the forum in which the controversy plays out, while also shaping the strategic behaviour of various actors. As a non-neutral party with interests of its own, the media also shapes the discussion in ways that reflect the pursuit of those interests.

Young and Matthew's methodology of focusing on the controversy itself, rather than the truthfulness of the claims being made by actors on either side, may exclude some alternative explanations for the phenomena they observe. For instance, it may be that relevant new information about issues like PCBs or sea lice really is emerging, and in turn driving media coverage and public perceptions of the industry. By not actually evaluating the truth claims being made by proponents and critics, Matthews and Young lose the ability to identify such causes, falling back instead on the back-and-forth public narrative about harms, risks, benefits, and opportunities. The authors may also buy too much into the notion that journalistic fairness consists in giving equal attention to groups that disagree — a strategy that risks being exploited by dedicated contrarians devoted to maintaining the perception of controversy when it is largely unjustified. Without evaluating the truth claims on either side, it's not possible to know to what degree this is happening.

[40] Young and Matthews, *The Aquaculture Controversy in Canada: Activism, Policy, and Contested Science*, p. 160.

4 | Young and Matthews survey the "knowledge elite" in Canada and conclude that experts disagree about aquaculture. Is their methodology sound? Are you convinced by their study?

Young and Matthews devote a chapter of their book to studying "Knowledge Warriors? Experts and the Aquaculture Controversy", using a survey (n=300) as their principal method.[41] Generally speaking, their methodology seems sound and thoughtful and the authors are willing to openly acknowledge and discuss specific limitations where they arise. On the basic claim that 'experts disagree about aquaculture,' it seems impossible to contradict the position that they do, particularly in terms of the industry's impact on the environment and human health.[42] Variations in opinion exist about the degree of ecological risk and harm posed by aquaculture, the existence and magnitude of human health effects, and the economic and community impacts of the industry. The methodology adopted by Young and Matthews certainly seems adequate to establish the basic fact of disagreement, as well as to provide a basic breakdown its structure. Generally speaking, the methodology is cautious and open, which suggests that a degree of confidence can be maintained in their results.

As with their subsequent survey of all businesses in Port Hardy, B.C., Matthews and Young attempt to undertake a survey that will include "*all persons in Canada* with a claim to some form of science-based expertise or authoritative knowledge with respect to aquaculture."[43] This approach could potentially reduce sample bias, though it persists in terms of which experts the authors were able to identify (whether systematically different answers would have been given by experts who they could not is necessarily unknowable). Survey recipients all have either directly involvement in aquaculture research or its communication, as well as a formal educational background in the natural or social sciences.[44] This definition doesn't cover all defensible meanings of the term 'expert,' but is probably suitable for identifying a broad group of individuals with experience and expertise

[41] Young and Matthews, *The Aquaculture Controversy in Canada: Activism, Policy, and Contested Science*, p. 113–157.
[42] Ibid., p. 132.
[43] Ibid., p. 115, 219, 221.
[44] Ibid., p. 115.

in which questions about disagreement can be assessed. The authors also consider the timing of their survey, acknowledging that it provides a "snapshot" at a "very intense moment in the aquaculture controversy" and that it may therefore not reflect expert opinion at other times.[45] The survey was conducted through the internet, allowing for a relatively large number of open-ended questions to be posed, allowing for a richer analysis of the motivations behind the quantitative responses.[46]

Matthews and Young explain that their survey was pre-tested, before being sent out to subjects, to assess whether the questions were clear and suitable to the research objectives.[47] One item in their 'stance scale,' however, does appear to be ambiguous. The claims are meant to be pairs of opposing statements, but the idea that "[a]quaculture constitutes a threat to wild fish stocks" does not contradict the idea that "[a]quaculture serves to reduce the pressure on wild fish stocks."[48] There is good reason to think it could do both simultaneously, through lice and disease on one hand and alternative satisfaction of demand for fish on the other. In several places, the authors usefully acknowledge potential controversies about methodological choices and justify their decisions.[49] In other cases, the authors acknowledge issues with small sample sizes, at one point adding aboriginal responses to the 'other' category because they would otherwise be too few to analyze statistically, and sometimes excluding environmental NGOs from their analysis for a similar reason.[50] While some of these choices are noteworthy — and is is laudable that the authors specifically pointed them out — none seem to seriously undermine the validity of the research undertaken. At various points, the authors also employ statistical tests for guidance on whether their research design is appropriate for answering the questions they raise.

While most of Young and Matthews' conclusions are derived from their survey results, they acknowledge the use of a secondary methodology of "many informal conversation with aquaculture

[45] Young and Matthews, *The Aquaculture Controversy in Canada: Activism, Policy, and Contested Science*, p. 116.
[46] Ibid., p. 260.
[47] Ibid., p. 117.
[48] Ibid., p. 118.
[49] Ibid., p. 142, 147.
[50] Ibid., p. 124.

experts on all sides of the controversy."[51] On one hand, this approach arguably helps to confirm the survey findings, in that they did not encounter highly divergent accounts of the industry in these conversations. The familiarity with the issues provided by these discussions may also have contributed to good survey design. On the other hand, this secondary methodology could have created a confirmation bias problem for the authors — setting them up to interpret their survey data in particular ways.

Generally speaking, the methodology employed by Matthews and Young seems thoughtful and well-justified, capable of convincingly supporting their claim that experts disagree about aquaculture and providing a useful breakdown of where the main areas of disagreement are. Not only does the Matthews and Young approach convincingly demonstrate the existence of disagreement, it further establishes the degree of distrust that exists between experts with opposing views on aquaculture.[52][53] As the authors identify, this creates problems for the scientific method, in which various researchers must have confidence in the integrity of one another's work in order to be able to build on it. Not only is expert disagreement a key feature in the aquaculture controversy, but the mistrust that accompanies it may operate as a barrier to synthesis and resolution.

[51] Young and Matthews, *The Aquaculture Controversy in Canada: Activism, Policy, and Contested Science*, p. 132.
[52] Ibid., p. 134.
[53] Interestingly, this doesn't fully extend to mistrust of university-based scientists, who are seen by both industry and environmental group experts as part of institutions that are more credible than their own. ibid., p. 136.

References

Amos, William, Kathryn Harrison, and George Hoberg. "In Search of a Minimum Winning Coalition: The Politics of Species-at-Risk Legislation in Canada". In: *Politics of the Wild*. Ed. by Karen Beazley and Robert Boardman. Oxford: Oxford University Press, 2002.

Beazley, Karen. "Why Should We Protect Endangered Species? Philosophical and Ecological Rationale". In: *Politics of the Wild*. Ed. by Karen Beazley and Robert Boardman. Oxford: Oxford University Press, 2002.

Gunther, Albert C. and Kathleen Schmitt. "Mapping Boundaries of the Hostile Media Effect". In: *Journal of Communication* 54.1 (2004), pp. 55–70. ISSN: 1460-2466. DOI: 10.1111/j.1460-2466.2004.tb02613.x. URL: http://dx.doi.org/10.1111/j.1460-2466.2004.tb02613.x.

Harrison, Kathryn. "Federal-Provincial Relations and the Environment: Unilateralism, Collaboration, and Rationalization". In: *Canadian Environmental Policy: Context and Cases*. Ed. by Debora VanNijnatten and Robert Boardman. Oxford: Oxford University Press, 2002.

Hay, Keith and Members of the Inuit Bowhead Knowledge Study Committee. *Final Report of the Inuit Bowhead Knowledge Study*. 2000. URL: http://www.nwmb.com/index.php?option=com_docman&task=doc_download&gid=1819&Itemid=95&lang=en.

Hites, Ronald A. et al. "Global Assessment of Organic Contaminants in Farmed Salmon". In: *Science* 303.5655 (2004), pp. 226–229. DOI: 10.1126/science.1091447. eprint: http://www.sciencemag.org/content/303/5655/226.full.pdf. URL: http://www.sciencemag.org/content/303/5655/226.abstract.

Olive, Andrea. "Does Canada's Species at Risk Act live up to Article 8?" In: *Canadian Journal of Native Studies* XXXII.1 ().

Tester, Frank James and Peter Irniq. "Inuit Qaujimajatuqangit: Social History, Politics and the Practice of Resistance". In: *Arctic* 61.5 (2008). URL: http://arctic.synergiesprairies.ca/arctic/index.php/arctic/article/view/101.

Young, Nathan and Ralph Matthews. *The Aquaculture Controversy in Canada: Activism, Policy, and Contested Science*. Vancouver: University of British Columbia Press, 2010.