

## COMMENTARY

### GLACIERS LISTEN:

#### *A Review Essay and Response to Cole Harris*

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**D**O GLACIERS LISTEN? Cole Harris (*BC Studies* 148) believes not – at least not really. Although he admires Julie Cruikshank’s marvellous book, *Do Glaciers Listen?: Local Knowledge, Colonial Encounters, and Social Imagination*, for bringing to life the intricate social histories of glaciers, he cannot quite bring himself to accept the explanations of the three indigenous women featured in the book – Angela Sidney, Kitty Smith, and Annie Ned – for why glaciers advance and retreat. Certainly, Cruikshank’s stories of glaciers and colonial encounters in coastal Alaska challenge the settler imagination. In her recordings of indigenous stories, glaciers are sentient beings and social actors who can smell, hear, and make life-or-death decisions. For example, the stories describe glaciers giving off intense heat and light or surging in response to inappropriate and disrespectful behaviour. Travellers displaying hubris by cooking with grease on glaciers can cause glaciers to crack; a boy making fun of a shaman can bring about an ice dam and flooding; a girl speaking carelessly to a glacier can cause it to advance violently, killing her entire village.

All of this Harris sees as evidence of “a deeply attractive morality” that emphasizes the connectedness between nature and culture, of which we “Westernized moderns” need to be reminded from time to time. Particularly in the context of what he calls “our abstracting, normalizing, and compartmentalizing modern culture,” he argues, the indigenous stories recorded in the book stand out as a contrast to rigid scientific understandings.<sup>1</sup> I get the feeling that he would like to believe these stories, especially if the moral lessons contained within them could be teased apart from the notion of sentient glaciers. In the end, however, he consults a colleague, “an expert on snow,” to find out why glaciers surge: “he spoke of ground water, friction, and the laws of physics.” Harris tends to agree: “La Perouse [the explorer] did not

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<sup>1</sup> Cole Harris, “Do Glaciers Really Listen?” *BC Studies* 148 (2005/06): 105, 106.

think glaciers listen, and nor, except as figures of speech, do we.” After all, Harris writes, these indigenous stories are “situated in lifeworlds that were built around understandings that, for the most part, are no longer credible.” Physics, on the other hand, contains what he calls “basic understandings” that are both “placeless” and robust.<sup>2</sup>

I suggest that Harris’s analysis stems from a widespread misunderstanding of what is often termed “traditional ecological knowledge” and how it stands in relation to Western science. Indigenous stories of glaciers are incompatible with those of non-indigenous people not because indigenous minds organize thought differently – “always in Native accounts, people and glaciers are beings mixed up with one another” is how Harris puts it – but, rather, because of how knowledge is embedded in practical objectives and interests.<sup>3</sup> The physical laws that Harris suggests passively reflect reality are the same laws that allowed explorers, and a settler society in Canada today, to privilege time over place and the global over the local. For example, when the geologist Frederick Schwatka travelled across glaciers in the Yukon in 1891, he attributed certain matters of locality, such as prohibitions against frying with grease on glaciers, to “superstition,” thereby removing knowledge from its local context and integrating it into global, temporal hierarchies of primitive and civilized. Such transformations made it easy for explorers to move across the landscape, naming, censusing, and mapping. Dismissing their guides’ precautions as irrational fears, these men saw themselves as prophets from another time, who knew about fundamental, undeniable physical laws that were independent of any particular peoples or places. As Schwatka wrote about a particularly harrowing glacier crossing: “before crossing, they all ‘made medicine,’ and no doubt it saved many valuable lives. Their fear of glacial ice is too pronounced and manifest to be based on any general physical reasons, and must be accounted for wholly by superstition.”<sup>4</sup>

Kitty Smith interrupts one of her glacier narratives to remind the listener: “This is a story, you know, not a ‘story.’ It’s a true story.”<sup>5</sup> Her comment seems to speak to explorer accounts and anticipates Cole Harris’s critique. It also forces us to consider why stories have to be true in order for us to understand their meaning. To suggest that Kitty Smith’s stories are myths is to establish divisions of truth and falsehood,

<sup>2</sup> Ibid., 106.

<sup>3</sup> Ibid., 103.

<sup>4</sup> Julie Cruikshank, *Do Glaciers Listen?: Local Knowledge, Colonial Encounters, and Social Imagination* (Vancouver: UBC Press, 2005), 19.

<sup>5</sup> Ibid., 88.

culture and nature, science and traditional knowledge that can only arise from within our (settler) experience, and that experience is one of ongoing colonialism. Cruikshank demonstrates that such divisions were integral to the “usual formalities” by means of which early explorers made indigenous peoples the subject of knowledge that would later serve to classify and administer them. Examples of this knowledge included mapping, surveying, and claiming mountains as national possessions as well as collecting “abandoned” artifacts, taking detailed inventories of natural resources, and charting trade routes.<sup>6</sup> Today, hunting grounds, fishing spots, and other places are punctuated by sites of archaeology, geology, and climate science, and are organized through the boundaries and administrative units of province, state, territory, park, reserve, game sanctuary, and a UNESCO World Heritage Site. These differentiated and categorized places exist not just in the cognitive realm of Western minds but also as tools in the assimilation of indigenous people into American and Canadian nation-building projects.

If indigenous glacier stories, like science stories, are continuous with human activity, then “listen[ing] for different stories,” as Annie Ned suggests, is not a matter of having Western science “knocked off its pedestal” (as Harris fears) but, rather, of shifting relations between indigenous peoples and a settler society.<sup>7</sup> The potential of stories to serve as instruments of decolonization is evident in a new generation of Kluane First Nation youth travelling along the old trails and making use of oral traditions as a way of reacquainting themselves with the land.<sup>8</sup> Once explorers had been guided by knowledgeable indigenous guides (possibly the ancestors of these Kluane youth) across what was for Europeans impenetrable terrain, they gained access to glaciers as discoveries and as field sites, and began the process of separating local communities from their ancestral homeland. As the result of repeated exploration and sustained record keeping, these places were transformed into sites of science: field sites through which vast resource areas and continent-wide geological processes could be understood. Like all field sites, glaciers were peripheral, interchangeable, and constructed with reference to distant centres, where local findings were made accessible, combinable, and transportable.<sup>9</sup> Explorers Jean-Francois de La Perouse,

<sup>6</sup> Ibid., 135, 176.

<sup>7</sup> Harris, “Do Glaciers Really Listen?” 106.

<sup>8</sup> Cruikshank, *Do Glaciers Listen?* 254.

<sup>9</sup> These distant centres are what Bruno Latour refers to as “centres of calculation.” See Bruno Latour, *Science in Action: How to Follow Scientists and Engineers through Society* (Cambridge, MA: Harvard University Press, 1987), 215-57.

John Muir, Edward Glave, and the surveyors of the International Boundary Commission constructed their field sites within networks of statistics, categories, measurements, and writings that were well established elsewhere and that made it possible to investigate, inventory, and map the natural resources of the north Pacific coast and its interior. The perceived remoteness of the region further anchored and defined glacial landscapes and allowed for arguments about how the wild and hostile state of nature closely mirrored the level of civilization of the indigenous inhabitants.<sup>10</sup>

Stories of glaciers as alive, as dens for giant animals, or as key players in clan histories are difficult for us (newcomers) to believe for precisely the same reason that stories of glaciers as objects of science seem so compelling: from our location at the colonial centre, we authorize official observations and categories as scientific, while marginalizing indigenous stories as superstitious, primitive, or outdated. If stories are to have transformative potential for Native-settler relations, then indigenous knowledge should be understood as being continuous with the courses of action through which people built successful lives in their traditional territories and into which we might assimilate ourselves as newcomers. For example, maintaining flourishing runs of salmon was a major accomplishment of Northwest Coast peoples. As La Perouse reported when he sailed into Lituya Bay in 1786, the salmon were “so abundant’ that, in addition to eating their fill of fresh fish while in the area, ‘each ship salted two casks.’”<sup>11</sup> That the local Tlingit were able to sustain these runs despite low ocean temperatures and highly efficient mass harvesting technologies points to their careful and successful resource management techniques.<sup>12</sup> Ecological knowledge therefore allowed people to guard against, and cope with, the very real and constant danger that the abundance of fish, and access to fishing sites and trade routes, would be disrupted, if not by overharvesting, then by ocean or riverine conditions or shifting ice. Cruikshank writes of Deikinaak’w, an early twentieth-century Tlingit man who spoke of the careful attention paid to protocols when people had to cross over ice bridges.<sup>13</sup> Anthropologist Catherine McClellan recorded a similar story of travel under the Taku glacier as well as the successful crossing back

<sup>10</sup> Cruikshank, *Do Glaciers Listen?* 139, 244.

<sup>11</sup> Steve J. Langdon, “Tidal Pulse Fishing: Selective Traditional Tlingit Salmon Fishing Techniques on the West Coast of the Prince of Wales Archipelago,” in *Traditional Ecological Knowledge and Natural Resource Management*, ed. Charles R. Menzies (Lincoln: University of Nebraska Press, 2006), 22.

<sup>12</sup> *Ibid.*, 21-46.

<sup>13</sup> Cruikshank, *Do Glaciers Listen?* 40.

over that glacier to report the news: “then everyone walked across the glacier, collected fish, and returned on foot. The following year, people say, the glacier dam broke and salmon returned upriver.”<sup>14</sup> But there was always a danger of resource failure or inhospitable weather: when migrating Athapaskans made the mistake of laughing at the eulachon at Yakutat Bay, “they excited fierce south winds that drowned one and left the others stranded for weeks.”<sup>15</sup>

The Nuhmuh ecologist Raymond Pierotti has argued that “Indigenous Americans probably were aware of the true nature of population and environmental fluctuations because they kept constant track of the changeable non-equilibrium conditions that predominate in the real world.”<sup>16</sup> This kind of careful attention to a changing environment is also evident in the stories of Annie Ned, Kitty Smith, and Angela Sidney, and indigenous scholars have long argued that, across North America, societies developed sophisticated understandings of ecological relationships. Vine Deloria has pointed out that relatedness between humans and the rest of existence is a fact for indigenous peoples: the understanding that “we are all relatives” is at the core of all Native American philosophies.<sup>17</sup> These commonalities move individual indigenous stories out of the realm of the local and into the realm of continent-wide (if not global) indigenous experience.

Ecological relatedness is not a romanticized cliché and cannot be reduced to an interesting ethnographic fact. Nor is it captured by the notion of sentience, which Edward Glave and John Muir used to evoke the awe-inspiring glaciers they encountered in their travels through indigenous lands. For Glave, the Alsek river was an “angry torrent,” and icefields let out “sullen growl[s]”; Muir described glaciers as “traveling animals that make their own tracks.”<sup>18</sup> Yet, as Cruikshank points out, both men ignored the local social conventions associated with glaciers and acted recklessly in these precarious social landscapes. In other words, what these explorers failed to grasp is that non-human persons, which include animals, plants, and landforms, are part of the social and moral communities of indigenous peoples. This relatedness has profound implications. For example, when canoes carrying Tlingit traders of the L’uknax.ádi clan capsized in Lituya Bay, either because Tsalsaan (Mount

<sup>14</sup> Ibid., 41.

<sup>15</sup> Ibid., 35.

<sup>16</sup> Raymond Pierotti, in press, *The World Wolf Made* (Lincoln: University of Nebraska Press).

<sup>17</sup> Vine Deloria, “Relativity, Relatedness and Reality,” in *Spirit and Reason: The Vine Deloria, Jr., Reader*, ed. Barbara Deloria, Kristen Foehner, and Sam Scinta (Golden, Co: Fulcrum Press, 1999), 32–39.

<sup>18</sup> Cruikshank, *Do Glaciers Listen?* 158, 207.

Fairweather) did not give a sign or because the travellers did not heed the mountain's warnings, the clan adopted Tsalxaan as a crest, which they had paid for with the lives of their ancestors. While they dispersed to other villages, the narratives associated with this event are crucial to L'uknax.ádi history.<sup>19</sup> Similarly, a glacial advance triggered by a woman's inappropriately calling out to a glacier, thus forcing the village to flee and resulting in the burial of one of its members, is today evidence of the Chookaneidí clan's title to Glacier Bay.<sup>20</sup> Such stories of disaster and rebuilding are examples of how "TEK [traditional ecological knowledge] defines politics and ethics as existing in the realm of the ecosystems, and would argue that it makes no sense to limit the notion of politics and ethics only to human beings."<sup>21</sup> In other words, the inclusion of non-humans in human communities leads to "an ethical system that requires proper treatment of the non-human."<sup>22</sup>

Not only does the concept of kinship with the world encapsulate the central importance of understanding and maintaining relationships – including those between humans and non-humans – but it is also what Deloria calls "a practical methodological tool for investigating the natural world and drawing conclusions about it that can serve as guides for understanding nature and living comfortably within it."<sup>23</sup> Similarly, Eldon Yellowhorn reminds us that, "for tribal people, amassing knowledge about the natural world is not randomly collecting trivia; instead, knowledge is derived through systematic analysis of natural phenomena that requires a particular thought process."<sup>24</sup> Julie Cruikshank found this to be the case as well: "while these stories [of glaciers] may seem distant from the business of daily life, they do specific kinds of practical work in a profoundly material world."<sup>25</sup> In the context of rapidly shifting glaciers, Cruikshank argues, this work included helping people to learn to watch for, and respond carefully to, environmental change, while maintaining trading and kin relations across great distances. The stories of Annie Ned, Kitty Smith, and Angela Sidney demonstrate that indigenous ways of knowing are empirical, systematic, comparative, and theoretical. But they are also grounded

<sup>19</sup> Ibid., 133.

<sup>20</sup> Ibid., 39, 159–60.

<sup>21</sup> Raymond Pierotti and Daniel Wilcat, "Traditional Ecological Knowledge: The Third Alternative," *Ecological Applications* 10, 5 (2000): 1336.

<sup>22</sup> Ibid., 1337.

<sup>23</sup> Deloria, "Relativity, Relatedness, and Reality," 34.

<sup>24</sup> Eldon Yellowhorn, "Strangely Estranged: Native Studies and the Problem of Science," *Native Studies Review* 13, 1 (2000): 72.

<sup>25</sup> Cruikshank, *Do Glaciers Listen?* 220.

in the idea that experience is unified, and this served people well with regard to seeking accommodation from unpredictable and potentially deadly glaciers and weather events. This orientation, which is mirrored in other indigenous traditions, stands in stark contrast to the metaphors of “balance of nature” and “equilibrium” that, until very recently, have dominated Western ecological science.<sup>26</sup>

When two of La Perouse’s boats vanished in dangerous waters while taking some final soundings of Lituya Bay, Western science was temporarily but dramatically thrown into question. In the days before disaster struck, La Perouse, Cruikshank writes, “took comfort in the technology he transported to measure nature’s dimensions, tame its uncertainties, and ascertain its physical attributes.”<sup>27</sup> In contrast, the local Tlingit expressed great interest and concern over the astronomical observatory La Perouse had erected, and they proceeded to take the record book being kept there.<sup>28</sup> Decades later, Alejandro Malaspina’s observatory had to be quickly dismantled when Tlingit “showed too spirited an interest.”<sup>29</sup> Similarly, when Muir arrived at Lynn Canal a century later, he was “vigorously questioned” about what an American scientist had been doing “on a mountain-top back of the village with many strange things looking at the sun.”<sup>30</sup> Edward Glave described a lengthy delay at Neskataheen, where “the confounded dogs’ . . . had stolen a notebook containing sextant observations, barometer readings, camera notes, and part of his diary.”<sup>31</sup> Indigenous peoples clearly understood the long-term implications of scientific data for their lands and sovereignty. To them, Western science was not a matter of fact but, rather, as Bruno Latour would put it, a “matter of concern”: “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.’”<sup>32</sup> Measurements allowed newcomers to return and eventually gain a kind of mastery over the land through navigation, geography, and related geological, botanical, and anthropological investigations. Scientific records were recognized by indigenous peoples as dangerous facts with far-reaching implications. As matters of concern and states of affairs, such science could not be neutralized by reference to physical

<sup>26</sup> Pierotti, *World Wolf Made*, 64–67.

<sup>27</sup> Cruikshank, *Do Glaciers Listen?* 243.

<sup>28</sup> *Ibid.*, 136.

<sup>29</sup> *Ibid.*, 233.

<sup>30</sup> *Ibid.*, 215.

<sup>31</sup> *Ibid.*, 194.

<sup>32</sup> Bruno Latour, “Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern,” *Critical Inquiry* 30 (2004): 232.

laws or by reducing it to the instruments and techniques by which it was carried out.

Whereas Western science – which Harris sees as singularly robust, rational thought – uncritically accepts how the boundaries around glaciers and glacial environments should be drawn, Cruikshank’s narrative adds reality to scientific exploration of indigenous lands by demonstrating that glaciers are also about encounters with and at glaciers – encounters that continue to resonate today and that continue the work of transforming Native-settler relations. She is careful to note that the newcomers’ science does not inevitably yield coercive or oppressive results. For example, after the loss of many of his men in riptides at the mouth of Lituya Bay, La Perouse ignored official instructions to collect human remains, and his crewmembers replaced the skulls they had uncovered “with scrupulous exactness, adding presents of iron instruments and beads.”<sup>33</sup> Early in his travels, Edward Glave insisted on learning Tlingit place names and using them in his maps and reports.<sup>34</sup> And, in 1999, when the nearly six-hundred-year-old remains of a glacier traveller were discovered in the Saint Elias Icefields, coastal Tlingit and the Champagne-Aishihik First Nation allowed the materials to travel for scientific analysis, while planning for the man’s funeral potlatch, cremation, and return to the glacier.<sup>35</sup> These convergences of Western and indigenous ways of knowing suggest that it is no longer adequate to appeal to scientific laws, or the constraints of “culture,” to explain why “we come at these [Native] stories differently ... the taken-for-granted background of the stories is not ours.”<sup>36</sup> To do so would be to reject the possibility of a middle ground that is rooted in understanding rather than control and manipulation, local histories rather than global generalities and unilinear narratives of “progress,” and intercultural exchange rather than marginalization and exploitation.

Stories can open a space for a type of encounter that Cruikshank demonstrates was well established by the time eighteenth- and nineteenth-century explorers arrived on the scene. Athapaskan and Tlingit populations met each other on the coast in encounters that saw newcomers incorporating their own traditions into the local, existing forms of social organization and governance. When Athapaskans from the Copper River region arrived at Yakutat Bay, they integrated themselves into the diplomatic protocols of the people already living there and adopted

<sup>33</sup> Cruikshank, *Do Glaciers Listen?* 147.

<sup>34</sup> *Ibid.*, 182.

<sup>35</sup> *Ibid.*, 247.

<sup>36</sup> Harris, “Do Glaciers Really Listen?” 106.



Tlingit-style clans in order to function better as trading partners, kin, and neighbours.<sup>37</sup> In such encounters, stories did the practical work of tying the fates of people to particular places. They were not cultural baggage, and people understood why they were told. Indigenous people, Cruikshank reports, were, and are still today, interested in learning our stories as part of an equal exchange. This requires that we pay close attention to how and why glaciers listen as well as to the ways in which Western science is riddled with colonial practices.

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<sup>37</sup> Cruikshank, *Do Glaciers Listen?* 35, 142.