The Nature of the Liberal Order: State Formation, Conservation, and the Government of Non-Humans in Canada

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In its attention to the processes of subjectification of the liberal ideology, Ian McKay's liberal order framework focuses the historians' gaze upon the human individual.¹ On the peripheries of that discerning view is the bio-geophysical environment, along with the biotic and abiotic elements that populate it, posed as seemingly indiscernible components of a static backdrop before which the constitution of the liberal subject has unfolded. This ontological posture eschews the findings in the humanities and social sciences that recognize the participation of non-humans in the construction of cultural and artifactual sets of human societies.²

Environmental history has been at the forefront of that venture, focusing its attention on the interactions between ecological processes, human actions, social changes, and power relations.³ Like the liberal order framework, it seeks richer and more pertinent histories beyond those provided by narratives entrenched in the specificities of their case studies, or traditional accounts extolling a message of progress as a series of necessary steps towards predetermined goals of individual achievement. It also participates in the reinvigoration of political history by taking into account recent scholarship concerning ideology, state formation, and law and order. Environmental historians have analysed the marginalization of settlers, farmers, labourers, women, and Aboriginal peoples and the various ways in which they have resisted and subverted the omnipresent machinery of domination and, to a lesser extent, how the latter have co-opted them.⁴ By exploring specifically the role of nature in the construction and representation of the Canadian nation and in the modernization of Canadian society, they have also contributed to our understanding of 'Canada as a project.'⁵

There remain, however, important differences in the two approaches.
Seemingly left out of the liberal order framework is any recognition of the social relationships with nature, let alone of the agency of non-human actors, that constitute the central tenets of environmental history. Where the focus of the liberal order framework leaves the environment to an indiscernible periphery of social changes, environmental historians see the dynamic interplay of nature and society. Thus, we need ask, Can there be an environmental history of the liberal order?

This chapter explores potential answers to that question, particularly through the employ of current scholarship on state formation and governmentality, in order to better understand the ways in which non-human elements have become objects and means of power relations supporting the production and reproduction of the liberal order. Our purpose in examining the role of non-humans in the process of state formation, and with specific reference to the development of the administrative capacities of the state during a period of nascent conservationism in Quebec at the turn of the twentieth century, is to demonstrate how the environment should be considered an active and instrumental part of the liberal order. Far from being passive and neutral objects, non-human actors have participated in a process of acculturation of behaviours and values that were deliberately and systematically introduced by human actors of the liberal order. Our goal here is not to stress the polysemy of the liberal project, nor to identify those responsible for its production and reproduction, and even less to underline its contradictions. Nor do we wish to address the Gramscian agenda of the liberal order framework. Other contributions to this volume speak to these issues. Simply, our purpose is to direct the attention of proponents and critics of the hegemonic capabilities of the liberal order framework towards the contingencies of non-human actions in resisting its production or incapacitating its rejection. Like humans non-human actors can be equally capable of subverting, contingently or purposefully, the liberal order.

Environmental History and the Reconnaissance of the Liberal Order in Canada

The heuristic value of the liberal order framework lies in its will to liberate the voices of dissent and to seriously consider the perspectives of those who rejected, voluntarily or not, the liberal construction of Canada. But in granting such precedence to the individuals who articulated, internalized, resisted, or refashioned liberal values, the liberal
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order framework has relieved non-human entities of any historical role. This is, perhaps, merely an unintended consequence of the rejection of the traditional national narrative that reduced Canada to a collection of natural elements, such as the St Lawrence or the Canadian Shield. While not named directly, one is led to believe that cod, beaver, grain, and other staples are a part of the elements of triumphal environmentalism responsible for the 'neo-Wagnerian myth-symbol complex Canadian nationalists have woven around the St Lawrence Valley. In that regard, it is understandable that in his framework McKay wishes to distance himself from narratives that have been construed as struggles against nature, be they celebration of pioneers who conquered the rugged land of the Canadian Shield, the Prairies, and the North, or exploration of the economic consequences of fisheries, fur trade, agriculture as well as timber, and mineral exploitation on the fashioning of the socio-economic system in Canada.

Environmental historians also reject such blatant environmental determinism. They do not merely look to understand the role played by staples and their influence upon modes of economic and social development, nor do they regard the land and its products as simple commodities to extract and consume, to buy and sell. Rather, they reflect upon ecological transformations and interrelationships between the changing elements of society and the bio-geophysical context to reveal, among other things, how nature, construed and idealized by human beings, contributes to shaping social structures and cultural changes. Over the past thirty years, environmental history has sought to fully acknowledge the developments of scientific ecology and cease to treat human actors as if they were extricated from their environment. In so doing, this field of historical research has succeeded in blazing new trails that lead to a better understanding of the interactions between social and ecological changes.

It is that environmental history perspective which reveals the anthropocentric bias of the liberal order framework, one that recognizes only the individual subject in which has been invested the right to property, equality, and freedom. Such is not surprising, as this liberal individual is precisely the product of the European Enlightenment – a movement that took such great pains to disassociate nature from culture so that man, endowed with reason and master of his own destiny, could better control the elements of his environment. After all, human freedom became possible only when human beings envisioned ending all subjugation to natural forces and other external constraints.
We need only reference the heated debates that took place during the eighteenth and nineteenth centuries concerning the relationship between man and animal to see how the liberal individual emerged from the evanescence of nature. The European Enlightenment studied the natural world to master its function, to better manage it, and to guide it into the service of man. Reason, alone, permitted the conquest of nature, the ultimate condition for the emergence of civilization. But this conquest was also intensely individualized, because the liberal subject had to struggle to resist his most basic instincts, which associated him with the animals from which he sought to distinguish himself. Those individuals incapable of controlling their natural impulses were debased for having transgressed the boundaries separating man and animal. As the anthropologist Mary Douglas notes, 'The contrast between man and not-man provides an analogy for the contrast between the member of the human community and the outsider.' Therefore, the essential otherness of the liberal subject finds one of its strongest foundations in the negative portrayal of non-humans, which, by the contrast it provoked, reflected all that was particular and admirable in mankind. In that regard, non-humans were as much a part of the groups of those excluded from the liberal order as women, Natives, workers, and ethnic groups whose voices have since been recovered by social and cultural historians.

Silenced by the liberal paradigm, non-human actors have, we suggest, their own history to rehabilitate, like those human beings whose exclusion was, as Adele Perry aptly describes it in this volume, intrinsically constitutive of the liberal order. Indeed, environmental historians have started the process of integrating and speaking for those biotic and abiotic inhabitants without a readily recognizable voice – everything from insects, worms, and fish to water and soil. Similarly, they have shown how the appropriation and modification of landscapes formed a process that accompanied the subjugation of local populations, who found themselves muzzled because they did not comply with the values of progress and improvement as they manifested themselves in the transformation of the environment. Exemplary of the new dialogue is the environmental historians' reinterpretation of the resettlement of the Americas. No longer an event marked solely by conquest by Europeans of indigenous peoples, but a larger process of biotic invasions including germs, plants, and animals, all of which acted in concert to suppress, control, and overcome parts of the indigenous flora and fauna. That one wonders about the consciousness and
will behind these acts of domination only reveals the supremacy accorded to human reason and a naive belief in its mighty power, while neglecting the fact that social changes may well result from the unintended actions of humans and non-humans alike. It remains to be seen if, as objects and means of the liberal order, non-human actors did not also possess their own potential for subversion and resistance.

State Formation and the Government of Non-Human Actors: Towards the Bio-politics of Natural Elements

What a reconnaissance of the liberal order needs to recognize is that the construction of Canadian nature and the construction of liberal culture are part of the same ideological order. The domination and exclusion of human and non-human actors are both constitutive of the liberal order and materialize in landscapes and social structures. Social relationships with nature participate in a liberal order that, itself, instituted even more specific relationships with nature, notably by using elements of the environment to diffuse and inculcate liberal values of, say, property, equality, and freedom. Nature here refers both to discourses and representations – be they scientific, political, religious – and the bio-geophysical basis of environmental changes, whether they result from human actions or ecological dynamics.

The challenge for us, then, is how best to integrate non-human actors in the liberal order framework. One place to start is to consider the consequences of Crown land ownership on the definition and regulation of access to resources at a time when efforts were directed at implementing a rational and efficient exploitation of natural resources. Because the state thus appears to be a central actor in fashioning new social relationships to nature, it seems appropriate to articulate our reflection around the extension of its administrative capacities, provided that one does not treat the state as the sole actor and that one emphasizes the constructed character of the State. In that regard, a state formation approach seems appropriate, especially since it forms, along with ideology as well as law and order, one of the three recent strands of the renewal of Canadian political history upon which McKay builds his liberal order framework. Not that liberal ideology, or law and order, are irrelevant to our purpose of clarifying the role of nature in the liberal order. Quite the contrary. As our case studies will demonstrate, regulations under the liberal state and diffusion of the liberal ideology of improvement both played a role in defining social relationships to
nature and turning nature into property. Yet, a state formation approach has more to offer for the integration of environmental history and the liberal order framework. It provides us with analytical tools to attend to the production of a liberal order as an on-going process that rests on power relations best understood not simply as acts of domination exercised by one social group over another (or others), but as a dispositif. Since the latter refers to a cluster of relations composed of 'man and things' that the modern form of liberal government seeks to improve, it enables us to acknowledge the role of non-human actors in the productive relations of the liberal order. Furthermore, as discussed by Bruce Curtis and Michèle Dagenais in this volume, a study of liberal governmentality highlights the process through which domination and self-governance of individuals and populations were made possible by their being abstracted and formatted into objects of knowledge and power. Since that process of knowledge formation equally applies to human and non-human objects, a state formation approach informed by governmentality studies appears key for a renaissance of the nature of the liberal order.

Two aspects of the process of state formation, in particular, are of interest to analyze the administration of nature and social relationships to the environment as the project of rules accompanied the production of the liberal order: the state as an agent of articulation and inculation of values projected by the liberal order and the support of science in extending the liberal administrative capacities of the state. Far from limiting itself to the growth of government institutions, state formation engaged in the diffusion and inculation of a system of norms and values. This process would be accomplished not just by the force of the government institutions that would promote it, but also through the internalization of these norms and values by targeted populations. The cultural revolution that accompanied the transformation of government during the eighteenth century rested precisely on the norms and values of the elite liberal, who would use the state as a vehicle to generalize the adhesion to abstract forms of property and individualism as well as all other behavior appropriate to the embourgeoisement of society.

Building on this approach, historians have drawn upon the work of Michel Foucault to show how the modern liberal state became an agent of moral regulation through the extension of its administrative capacities. This extension was made possible in part due to the scientific knowledge that the state generated and mobilized from the end of the eighteenth century in order to resolve the dilemmas posed by liberal-
ism, such as how to govern less, following liberal principles, but control more, all in accordance with the principles of security and sovereignty.\textsuperscript{24} Practices of governmentality provided solutions to the dilemma, first through the discipline of the human body, and then through the government of populations.\textsuperscript{25} Herein, the bio-power exercised over individuals succeeded a bio-politics, a 'manner ... of rationalizing the problems posed to the practice of government by phenomena belonging to a population: health, hygiene, birth, longevity, and race.\textsuperscript{26} Statistics, public health, psychiatry, education were domains wherein the state science formulated tools to define and master the behavior of individuals, and to govern the conduct of populations in a manner coherent with liberal principles. As it shaped human beings into populations for their government, abstractly and concretely, science equipped the state with tools to formulate social programs and policies. These also enabled a liberal government of populations by leaving the individual a margin of freedom and the values attendant to the exercise of liberty. State science thus contributed to the establishment of the liberal order as it informed state activities and mechanisms used to imprint norms and values and teach individuals how to govern themselves.

Yet, not unlike the liberal order framework, studies of the rise of liberal governmentality have also tended to limit our understanding of state science by focusing on instruments applied to the government of human conduct and a bio-politic exclusively concerned with human populations.\textsuperscript{27} While these studies privilege common domains of governmental activities such as education and health, the extension of administrative capacities also targeted non-human actors to imprint moral progress in areas other than those taken up by social policies.\textsuperscript{28}

The British and French movements for the prevention of the cruelty towards animals at the beginning of the nineteenth century provide a revealing illustration. This movement sought foremost to avoid the debasement of man by cruel and degrading acts towards sentient beings and constituted above all, a form of social instruction, 'a problem relating to humanity, and not to nature.'\textsuperscript{29} The prohibition of cruel treatment towards animals was directed generally only towards domesticated animals, those closest to man, and it reprimanded only displays of cruelty in public that could corrupt the sensibility of man. Here, animals became a tool to inculcate liberal behavior in the population and prevent degrading spectacles that could encourage similar reprehensible acts towards other humans.\textsuperscript{30}

The government of conduct and the process of state formation also
rested on state science that expanded the notion of population to include humans and non-humans, consequently co-producing natural and social orders. Scientific forestry as developed in Prussia and Saxony at the end of the eighteenth century illustrates how state science equally fashioned the environment and the function of the latter — manipulated, tamed, and framed — in the government of individuals and populations. Originally developed within the realm of cameralism, forestry sought to provide constant revenue for the public treasury; operations of selective cuts maintaining a balance with the natural regeneration of the forest ensured a constant production of commercial wood and prevented the premature exhaustion of timber resources. Prussian state forestry based the commercial exploitation of the forest on the manipulation of the forest environment that was composed of communities of animals, plants, and humans. Protecting the forest also meant expropriating rural landholders, eliminating pasturage, or banishing peasants from forestry resources they counted on for food, building, and energy. The forest scientifically managed by the state foresters began giving access to its resources to multiple users who would adopt a new code of conduct for the use of the forest. Thus, trappers, hunters, and gleaners who did not adopt the new modes of operation in the scientifically managed forest became poachers and illegal interlopers. Through the simplification of the forest habitat, forestry as state science aimed at regulating not only the economic exploitation of a natural resource — the trees — but also those human and non-human inhabitants that lived in and constituted it.

As a state science, Prussian forestry intervened simultaneously in the environment and in society by designing the forest as an entity equally composed of humans and non-humans and acting upon it accordingly. Such intervention was not simply limited to defining and enclosing space in order to establish a new social and natural order. As a technology of power, the scientific activities of the government enabled the state to manipulate the environment and enlist non-human actors for the expressed purpose of inculcating into its human subjects moral values, attitudes, and behaviours. But, as James Scott reminds us, a century after the implementation of the scientific forest, Germany had unwittingly created a 'dead forest.' Provoked in large part by the simplification of the forest environment into an intensive monoculture, the disruption of ecological processes involving the nutrient cycle and interactions between plants, animals and fungi caused a production loss and a drop in timber quality, thereby defeating the purpose of scientific forestry.
These experiences of liberal governance in early-nineteenth-century Europe highlight processes wherein state science and populations of human and non-human actors intermingled to produce a landscape of self-government. The next sections briefly present two case studies of the conservationist movement in Quebec at the turn of the twentieth century whereby forests and aquatic landscapes – partly produced by the state, partly by the self-governed populations of humans and non-humans that inhabited them – bore the imprint of liberal values. Species were introduced and reproduced to shape human relationships to society and nature over publicly owned but privately leased territories. The liberal order materialized in a landscape transformed for the self-government of human and non-human actors, notably through their participation in subsistence and commercial activities.

Seeding Liberal Values in the Forests of Quebec

Often identified as the precursor of contemporary environmentalism, the conservation movement of the late-nineteenth and early-twentieth centuries found its purpose in the encouragement of wise use of natural resources (timber, fish, wildlife, soil, water, and minerals) so as to avoid their exhaustion, while at the same time attempting to assure an equitable access among different interests and from one generation to the next. The historiography of the North American conservation movement has sufficiently demonstrated how these objectives were attained through a process of state appropriation of resources and a gradual integration of a coordinated policy of management guided by scientists under the employ of the state. More recently, it has shown also how humans subverted the domination of the ideal of a conservationist elite.

In Quebec, as elsewhere in North America, the conservation movement grew out of a debate over the best method of addressing the exploitation of forestry resources in the late nineteenth century. Rapid growth and construction, along with the diffusion of the railroad, provided favourable conditions for the steady decline of forest reserves in the United States. This decline was accompanied by enormous anxiety among those who feared a shortage of the basic materials needed to assure unchecked prosperity and brought about correspondingly diverse solutions to the problems of forest exploitation. Some recommended restricting forestry development to special reserves, while others supported restricted access to the forest itself.
Basic to these two seemingly divergent approaches were issues of property and of improvement of land and woodlots, with conservationists at the same time putting forward the need for applying the principles of a scientific forestry with a corresponding program of managed reforestation. By basing itself on a whole collection of social and cultural realities, the idea of reforestation would ultimately go far beyond the technical and ecological realms. It was not so much the forest resources that were to be regenerated, as it was the actual seeding and cultivation of new attitudes among the rural population, especially the one in charge of settling new territories. Reforestation initiatives and publications by individuals and government scientists served to educate rural populations and, consequently, stressed small-scale projects such as the cultivation of woodlands on farms.

During the late nineteenth century, as settlement efforts were undertaken to populate the western and northern areas of Quebec, conservationists adapted the reforestation movement by speaking of it not only as a solution to deforestation of large tracks of forest by the timber industry, but as a method of reconstructing a landscape stripped by rapid and careless settlement and by destructive land clearing, voluntary or not, of the wooded areas around farms. The ardent reforestation propagandist Henri-Gustave Joly de Lotbinière denounced the kind of clearing formerly undertaken in the parishes and called for farmers to plant trees on their land in order to avoid a shortage of firewood and disturbance of agro-climatic conditions.\footnote{Preoccupied by the disappearance of the forests in the older parishes, he founded the \textit{Société pour le reboisement de la Province de Québec} in 1872, with the goal of sensitizing the population, especially farmers, about the necessity of conservation and the means to 'somehow restore our ruined forests.'} Another proponent of reforestation and member of that association, Jean-Charles Chapais, spoke out against the voracious appetite for new land by settlers and called for them to temper their destructive clearing practices. In his \textit{Guide illustré du sylviculteur canadien}, he called upon the settler, so often blamed for the felling of the forest, whether by negligence in his use of fire or by blind land clearing, to cease his injurious practices of deforestation, and instead engage himself in beneficial reforestation.\footnote{Chapais counselled the settler to think of his children and throw himself immediately into the makeup and development of a woodlot on their farm. Not only would that woodlot provide the settler and his family with firewood and construction material, its surplus could also be sold to supplement his family income.}
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Here was the model of liberal conduct that the settler should adopt. Rather than engaging in ruinous and unprofitable cutting of the forest, the liberal French Canadian settler was encouraged to maintain his woodlot and generate a stable income, and thereby give his family security against unforeseen events. While remaining safe from misfortune, the settler and his family could devote themselves to further improvement of their land. This wise cultivation would bring an end to the constant search for food and other basic necessities thereby permitting activities that could be channelled into the elevation of the spirit and of individual tastes. More basically, the settler would cease subsistence practices to participate in the market economy by selling the products of his land.

Founded on the idea that the eventual disappearance of the forest should be prevented, the rhetoric surrounding reforestation and the overall protection of the forest gave value to one type of relationship, wherein nature was cast as property. The settler-farmer was to improve the land on his property and the landscape in his county, not just for himself, but for those who would inherit it; otherwise he risked entering into a pitiful cycle of misery and poverty. And, of course, the upkeep of his woodland would teach him to better respect the property of others as well. The cultivation of the reforestation ideal among the settlers, with its common ideals of respect for trees and property, brought another issue to the forefront—the reservation of forestry concessions to the timber industry.

In the aftermath of the Second American Forestry Congress held in Montreal in 1882, the commissioner of Crown lands of the Province of Quebec, William Lynch, created a vast forest reserve near the tributaries of the Outaouais River to guarantee timber merchants a constant supply of pine. At the same time, he sought to exclude from these territories the settler—whom he regarded as little more than an agent of destruction and waste and, most significantly, the main cause of fire. For conservationists, the issue of fire was a convenient one. Rather than having to account for popular revolt ignited by the exclusion of settlers from the timber reserve, they used the issue to denounce the irresponsible character of settlers whose neglect often caused brush fires and destroyed the resources on a territory privately leased to timber interests.

Facing limitations on their public access to timber resources by a system of private control of public forest territory, settlers simply cut wood illegally, sometimes engaging in setting fires out of resentment. Despite the abolition of the forest reserves in 1888, antagonism between
the settlers and timber merchants continued. If settlers and timbers were to form a landscape coherent with the policy and interests of the provincial government and supporting industry, they would have to do so outside a territory of licensed timber cutters. They were encouraged to participate in economic activities based on forest exploitation, but on agricultural lands classified for their exclusive use. At issue here was the separation of agricultural and forestry lands to enable the timber industry to re-conquer forests lost to settlement.

Scientific forestry acted as a lever to classify Crown lands and to extend control over the landscape to the Department of Land and Forests. Between 1905 and 1907 the Department created large forest reserves in Gaspésie, Rimouski, Saguenay, Labrador, Saint-Maurice and, Chaudière, solely for the future use of timber companies. In 1911 it set aside smaller reserves for the exclusive use of settlers. Under the supervision of forest wardens, these township reserves were intended to ensure wood for heating and construction. The ministry hoped to stimulate the interest of the settlers protecting the forest by their gaining a direct knowledge of forestry and to promote an understanding of the forest as property, albeit a common one. The Department of Lands and Forests also engaged in a reforestation program in these townships, to ensure a steady supply of trees for settlers, although the tree species it selected for that purpose – the white spruce – was specifically meant for growing a pulp forest.

These new forest reserves ultimately succeeded in ending the opposition between timber interests and the settlement movement. A new discourse described the nascent pulp and paper industry as ‘the natural auxiliary’ of settlement because ‘it gave to the settler the means to make money with the waste timber that he would have otherwise been obliged to burn in order to clean up his land.’ Thus, scientific activities of the Department of Lands and Forests altered the relationship between settlers and the forest. It also shaped the values and the attitudes of the settlers towards the forest, perceived as a productive landscape and a model of common property. At the same time, reforestation ceased being only a responsibility for settlers – who had been propagated into maintaining their own woodlot – and now became the responsibility of the state. In that regard, the reforestation of township reserves called for the specific material construction of the landscape, essentially composed of white spruce, which enabled settlers to participate actively in commercial transactions with the pulp and paper industry, and to respect the integrity of the vast domains leased to the lumber industry.
Improving Aquatic Habitats and Their Users

The efforts of conservationists and the provincial government to promote good stewardship over Crown lands manifested themselves not only in the cultural and ecological changes of the forests of Quebec. Agents of civil society and state authorities also sought to bring order and value to aquatic ecosystems. They assembled freshwater lakes, rivers, and streams into a new cultural space called a sport fishery and generated valuable and iconic mythologies of landscape that spread out from the province's wilderness into the drawing rooms of London, Boston, New York, and Philadelphia. As in the case of forestry, conservation of the aquatic wilderness became a process by which the liberal order redefined the boundaries between nature and culture, as well as those between humans and non-humans, for the common good.

Pivotal to these changes were the fish and game clubs that had besieged the aquatic wilderness well before the provincial government. Pressed to protect fish resources over a vast territory but lacking the necessary means to do so, the provincial government leased large tracts of well-watered lands to anglers for their fishing pursuits. This placed vast territorial holdings under leasehold tenure in the hands of fish and game clubs that acted as 'wise stewards' for the improvement of natural resources situated on Crown lands. Between 1870 and 1914, more than five hundred of these clubs were created. Wealthy and influential clubs like the Roberval and the Triton clubs came to exercise great control over large tracts of land, and spent vast sums of money in Quebec's wilderness areas, sometimes for the enjoyment of a mere few hundred people, thereby turning fish and game resources into the property of an urban elite. Furthermore, through their activities and investments these clubs enticed cultural changes in far-reaching communities where they created work and injected currency into local economies, seeking to emancipate residents from their subsistence practices rather than seeing them implicated in unsustainable activities.

Starting with the adoption of the Act for the Protection of Fisheries in Lower Canada in 1855, the provincial government legislated for the protection of fishery resources. Guardians and wardens of clubs became deputized agents of state authority in implementing laws and regulations that, conservation advocates argued, aimed at ensuring an equal access to fish, during their own time and for future generations. State agents and private wardens employed by clubs used all methods
of coercion to tackle poaching, including public humiliation, fines, and jail time.\footnote{57} Compared to the angler, an essentially good agent of ‘fair play,’ who came and angled, taking fish one at a time with rod and line during the spring, those who continued to catch fish in freshwater environments through the use of such outlawed methods as nets, harpoons, weirs, and traps were cast as poachers who flaunted state authority by continuing to harvest fish in large quantities.\footnote{58} For conservation advocates, poaching amounted to a social ill that illustrated rural ignorance and a lack of individual self-control and demonstrated wastefulness. The poacher was a person who selfishly acted against his own better interest and the good of his community by ‘destroying’ fish in all seasons, even taking them through the ice in winter.\footnote{59} This irresponsible behaviour also infringed on the leisure and liberty of those who adhered to club rules and regulations and paid their dues to extol nature’s bounty.

For Aboriginals and rural populations, however, the liberal policy encouraging the development of a sport fishery and the improvement of the aquatic landscape by anglers led to the increasing marginalization of common people vis-à-vis freshwater fisheries. Some turned to the courts for redress or delivered petitions to parliament, but to little avail.\footnote{60} Mostly, common people simply ignored the laws – setting up systems to avoid wardens or threatening them into submission. Consequently, some proponents of conservation opted for a permissive approach to accommodate local subsistence practices, which they considered to have a less detrimental impact on the resources.\footnote{61}

By the end of the nineteenth century, Aboriginal people and rural populations had abandoned many of their own fishing traditions in order to mimic the habits of the elite anglers. By doing so they facilitated the transformation of the ubiquitous fly rod and creel from symbols of the elite into a necessary and accessible tool for a broader element of society that participated in the production of the liberal order.\footnote{62} Governmental promotion of the fishery, in conjunction with the opening up of new areas by the railroad, the broader availability of cheaper angling equipment, and the publication of popular angling literature that promoted more readily accessible species like perch, wall-eye, and bass, supported these changes. In exchange, these new participants in the conservation of fish resources obtained nearly created public fishing reserves ‘in which the residents of such township may freely fish for their subsistence and that of their family.’\footnote{63} Much like the forest reserves in the townships, the fishing reserves were cre-
ated to address the issue of a growing dissatisfaction by local anglers who, having increasingly been deprived of access to fishing, opposed the system of privately controlled fishing leases and its attendant elite privileges. These reserves, however, were few and of little consequence for the existing system of protection.

The legal marginalization of individuals who did not respect the property rights of tenure holders—who persevered in adopting malevolent attitudes toward the replenishing capacity of fishing resources—and the co-optation of those who did had an ecological parallel. With a new understanding as to the exhaustibility of resources, proponents of conservation and state agents engaged in pisciculture—the cultivation of fish through the science of artificial fecundation. By 1889 the federal Department of Marine and Fisheries had twelve hatcheries in various provinces, all largely intended for the conservation of salmon. In 1915 it transferred its six federal hatcheries in Quebec to provincial control in a federal handover of jurisdiction concerning inland waters. Almost immediately, the provincial government adapted the new hatchery system to the amelioration of its sport fishery by importing species popular with anglers from around the world, such as rainbow trout from the watersheds west of the Rocky Mountains, and brown trout from Europe.

In much the same way that elite anglers and nineteenth-century agents of the liberal order had deeply modified human cultures engaged in fishing activities, the plan to improve the aquatic landscape brought along a new cultural space that comprised communities of fish and sportsmen, some deemed desirable and others not. Fish and game clubs and the provincial Department of Lands and Forests expended great scientific energy in efforts to propagate and broadly distribute the valuable salmon and trout. As Aboriginal and rural people confronted a system that conservation advocates believed was in their own best interest, fish that had been so culturally important for them, such as sturgeon and eel, became classified as less valuable.

The sport fishery may have been built around anglers whose interactions with the natural world were based upon codes of conduct among a coterie of a two-hundred-year-old elitist tradition, but these activities were also taking place within dynamic ecosystems where fish species, possessing their own codes—albeit genetic—resulting from hundreds of millions of years of evolution lived and adapted, independent of human influence. Despite consistent efforts, the use of hatcheries, the development of protective laws, and the privileging of anglers, Atlantic
salmon runs continued to decline and even disappear. Furthermore, the use of ladders intended to give migratory salmon a sporting chance to negotiate industrial dams were completely useless to other migratory species whose habitat overlapped the salmon’s, like eel and sturgeon, which had no biological ability to leap and, thus, could neither benefit from them nor adapt themselves quickly enough. As a result, populations of these fish dropped dramatically during the twentieth century. At the same time, many of the non-indigenous fish like rainbow and brown trout, thrived and fashioned ecological systems that reinforced the cultural orders of the elite anglers.

Conclusion

The history of conservation efforts in late-nineteenth-century Quebec has illustrated how the co-construction of nature and society can characterize the production of a liberal order. Whether fashioned directly by state science or indirectly, through the carefully guided actions of its citizens via accepted codes of conduct, the environment bore the imprint of a dominant culture in which non-human and human actors alike participated. Inculcated with a set of liberal values aimed at the protection of habitats as well as the stewardship and regeneration of biotic and abiotic elements they considered valuable economic resources, populations have governed themselves according to these values.

By exploring scientific discourses and practices that produced social relationships to nature as well as hybrid populations, environmental history can bring to light the mechanisms of subjectification of a liberal order taking shape in the landscape itself. Furthermore, by giving a role to non-human actors – however they were eventually manipulated by human beings and subsequently humanized – it can reveal the moral frame that has nourished the representations of nature and interventions upon it. By doing so, environmental history provides an interpretation of the processes of state formation and social regulation distinct from current socio-political historical studies, as state science enacted upon a broader terrain than that inhabited by humans alone. If the fashioning of a social reality was a product of state formation, with the social sciences participating, the latter did so in conjunction with natural sciences that moulded a natural reality, part human artefact and part ecological fact.

Still, it remained that non-humans raised specific problems and issues for the art of liberal governance. For one thing, the variability
and diversity of life made non-humans difficult to handle for the state seeking, above all, to make them pliable enough to fit into its schemes of sovereignty and security. Moreover, changes in the regime of scientific knowledge further perturbed ancient natural orders upon which novel social orders were being constructed. Trees uprooted from accompanying ecosystems and transplanted into ordered landscapes either became subject to disease, refused to grow, or formed new habitats. Exotic game fishes seeded into foreign aquatic habitats failed to replicate, devastated indigenous species, or became acclimatized. In these, and many other ways, non-humans rendered the production of a liberal order in constant need of being thought anew.

If environmental history can broaden our understanding of the production of the liberal order, the application of the latter to environmental history has equally useful implications. The liberal order framework offers environmental historians working on the nineteenth century a greater understanding of governments and members of civil society, whether in Canada, Great Britain, or the United States, that manipulated the environment and the culture that shaped the landscape. Moreover, the liberal order framework shows that there was a great, common moral imperative to be found among modern liberal states. For too long environmental historians have worked within the isolation of their own national identities, searching to identify specific causes for particular interactions with the environment that the liberal order framework has revealed to be common to a Western ideology. Perhaps, most interestingly, the liberal order framework offers environmental historians a better way to understand the paradox of the conservation movement: a paradox because so-called conservation practices often went beyond conserving, and became improving — whether through the creation of new habitats, the acculturation of human populations, the acclimatization of non-humans, or even creation of new forms of life itself — all of which remain firmly rooted in liberal principles.

NOTES

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5 McKay, 'Liberal Order Framework,' 621 for the citation. See also Suzanne Zeller, Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation (Toronto: University of Toronto Press, 1987); Stéphane Castonguay, 'Naturalizing Federalism: Insect Outbreaks and the Centralization of
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6 McKay, 'Liberal Order Framework,' 620–1.
7 Ibid., 624.
8 Ibid., 624n11.
9 Wynn and D. Evenden, ""54:40 or Fight."
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19 McKay, 'Liberal Order Framework,' 621.
22 Philip Abrams, 'Notes on the Difficulty of Studying the State,' Journal of Historical Sociology 1 (1998): 58–89; Philip Corrigan and Derek Sawyer, The Great Arch: English State Formation as Cultural Revolution (Oxford: Blackwell, 1991). The connection between the process described here and the liberal order is remarkable, even if these authors are curiously absent from the works cited in McKay's article.
24 That question, central to the later thought of Michel Foucault, should encourage us to properly assess the relevance of the works of the French philosopher for the reconnaissance of the liberal order. See his Sécurité, territoire, population (Paris: Seuil Gallimard, 2004).
25 Among others, by Foucault, 'Gouvernementalité' in Dits et Écrits, vol. 3.
26 Michel Foucault, 'Naissance de la biopolitique' (Paris: École des hautes études en sciences sociales, 2004), 323.
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33 A description of this process can be found in Scott, Seeing Like a State, 20–1.

34 Ibid., 20.


36 Karl Jacoby, Crimes against Nature: Squatters, Poachers, and the Hidden History
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43 Statuts de la province de Québec, 46 Vic. (1883) cc. 9 & 10, 'Acte pour amender de nouveau le chapitre 23 des statuts refondus du Canada concernant la vente et l'administration des bois croissant sur les terres publiques' and 'Acte pour pourvoir d'une manière plus efficace aux moyens de prévenir les feux de forêts.'

44 Statuts de la province de Québec, 51–52 Vic. (1895) c. 15, 'Acte relatif à la vente et l'administration des terres publiques, aux bois et aux mines, ainsi qu'au défrichement des terres et à la protection des forêts.' On the creation of reserves for wildlife protection, see Paul-Louis Martin, La chasse au Québec, new enlarged ed. (Montreal: Boréal, 1990), 135–9; Statuts de la province de
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45 On the opposition between forestry interests and the colonization movement, see Bruce W. Hodgins, Jamie Benidickson, and Peter Gillis, 'The Ontario and Quebec Experiment in Forest Reserves 1883–1930,' Journal of Forest History 26 (1982): 20–33.

46 L'administration libérale. Discours prononcé par l'hon. M. Lomer Gouin, ministre de la colonisation et des travaux publics, à l'Assemblée législative de Québec le 24 mars 1904 (N.P., 1904), 83.

47 Castonguay, 'Forsterie scientifique et reforestation.'

48 'The Forest Reserves of the Province of Quebec,' Canadian Forestry Journal 3 (1907): 68; Statuts de la province de Québec, 6 Ed. VII (1906) cc. 17, 'Loi établissant une réserve de forêt, de chasse et de pêche dans la Gaspésie.'

49 Statuts de la province de Québec, Geo. V (2e session) (1911), c. 17, 'Loi amendant les Statuts refondus, 1909, relativement à la création des réserves forestières cantonales.' In 1913 Quebec had fifteen reserves, mainly situated in the region of Lac Saint-Jean and on the South Shore of the St Lawrence: 'Québec Forestry Notes,' Canadian Forestry Journal 9 (1913): 138.

50 'Forestry in Quebec,' Canadian Forestry Journal 9 (1913): 167.

51 Castonguay, 'Forsterie scientifique et reforestation.'

52 Rapport de la Commission de la colonisation de la province de Québec (Quebec: Charles Pageau, 1904), 85.


55 The Fish and Game Clubs of the Province of Quebec. What they Mean to the Province. What Privileges they Enjoy (Quebec: Minister of Colonization, Mines and Fisheries, 1914). For a detailed discussion of the rise of the club movement see Martin, La chasse au Québec.


57 Parenteau, 'A "Very Determined Opposition to the Law."'
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58 This juxtaposition between the good ‘angler’ and the ‘evil’ poacher is well
enunciated in Richard Nettie, The Salmon Fisheries of the St. Lawrence and its
Tributaries (Montreal: Printed by John Lovell, St Nicolas Street, 1857).

59 For a study of the conservation elite’s viewpoint of poachers, see Jacoby,
 Crimes against Nature. In some cases residents were matter of fact about
their ‘illegal’ activities, even speaking to journalists about them. See ‘Two
Winter Harvests: How the Ice-Crop and Fishing Out of Season Enable the
Hardy Countryman to Increase His Income During the Dull Season,’ Cana-
dian Life and Resources 6, 3 (1908): 16–17.

60 See, for example, the petition sent by the Montagnais at Moisie in 1861 to
Ottawa quoted in Brian Stewart, A Life on the Line: Commander Pierre-Étienne
Fortin and His Times (Ottawa: Carleton University Press, 1997), 143.

61 The different philosophies are readily seen in the reports of Hector Caron,
who took over as superintendent of hunting and fisheries after the death of
Louis-Zéphirin Joncas in 1903. Caron would write a long argument against
what he saw as the extremist position of many conservationists on pages
161–3 in the Rapport Général du Ministre de la Colonisation, des Mines et des
Pêcheries de la province de Québec, in 1914: ‘Je viens de parler de préservation,
permettez-moi, Monsieur le Ministre, de vous dire qu’un grand nombre de
gens, je dirai même de sportmen, se font illusion sur ces termes, protection
ou conservation de notre gibier et de notre poisson, et ils s’imaginent ren-
dre un bien grand service en prêchant qu’il faut, sans merci, punir un pau-
vre colon qui aura tué soit un chevreuil ou un lièvre en temps prohibé, ou
encore, pour avoir pris quelques dorés ou achigans n’ayant pas tout fait la
longueur exigée.’

62 On this struggle between hard-line conservationists and those with a more
realistic outlook, see chap. 9, ‘Our Rivers Taken from Us,’ in Stewart, A Life
on the Line.

63 ‘An Act to amend and consolidate the laws relating to fisheries,’ Statutes of
Quebec, 1888, 51–52 Vic. c. 17, s. 4.

64 For a discussion of the development of pisciculture in general, see Kinsey,
‘Seeding the Water as the Earth.’

65 On the development of Canadian pisciculture, see William Knight, ‘Samuel
Wilmot, Fish Culture, and Recreational Fisheries in Late-19th-Century

66 For information on Canadian hatchery operations see the Forty-Ninth
Annual Report of the Fisheries Branch, Department of the Naval Service, 1915–
16 (Ottawa, 1916), esp. app. 16, ‘Report on Fish Breeding by J.A. Rodd,
Superintendent of Fish Culture’; Rapport Général du Ministre de la Colonisa-
tion, des Mines, et des Pêcheries de la province de Québec, 1916, Documents de la
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Session, no. 7, 130. Quebec already had some control over its inland fisheries since 1882, but this was limited to riparian rights and the right to control fishing licenses. See the Supreme Court Digest of Cases, 1875–1903, articles 'Riparian Rights' and 'Fishery Licenses,' 1260. The superintendent of fisheries and game, Hector Caron, stated: 'Il convient de noter que les alevinieres sont plutôt une charge pour notre budget, puisque tout avantageuses qu'elles puissent être à un autre point de vue, elles ne rapportent que relativement peu au Trésor.' It should be noted that there had been a visible disinterest in conservation work since the beginning of Caron's tenure in 1905. When Caron finally came to realize there was a problem with species degradation in Quebec, he came to the conclusion that conservation could better be achieved through economic pressure than public sentiment.

67 Kinsey, 'Fashioning a Freshwater Eden.'


70 The creation of laws that benefited some species over others could be seen as a form of 'speciesism' in the sense coined by British psychologist Richard D. Ryder. See the influential text to which Ryder made important contributions: Stanley Godlovitch, Roslind Godlovitch, and John Harris, eds., Animals, Men and Morals: An Inquiry into the Maltreatment of Non-Humans (New York: Taplinger Publishing Co., 1971).


72 On hybrid landscapes, see Matthew Booker, 'Real Estate and Refuge: An Environmental History of San Francisco Bay's Tidal Wetlands, 1846–1972' (PhD diss., Stanford University, 2005).