



CANADIAN ENVIRONMENTAL PHILOSOPHY





INTRODUCTION

Situating Environmental Philosophy in Canada

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In her seminal study of Canadian literature, *Survival*, Margaret Atwood says the following:

Canada is an unknown territory for the people who live in it, and I'm not talking about the fact that you may not have taken a trip to the Arctic or to Newfoundland, you may not have explored – as the travel folders have it – This Great Land of Ours. I'm talking about Canada as a state of mind, as the space you inhabit not just with your body but with your head. It's that kind of space in which we find ourselves lost. What a lost person needs is a map of the territory, with his own position marked on it so he can see where he is in relation to everything else ... We need such a map desperately, we need to know about here, because here is where we live. For the members of a country or a culture, shared knowledge of their place, their here, is not a luxury but a necessity. Without that knowledge we will not survive. (Atwood 1972, 26)

Although Canada has changed immensely since she wrote that passage over 40 years ago, Atwood's remarks remain strikingly relevant. Arguably, we Canadians are still in desperate need of a mental map of our country, even if the reasons for this need have shifted over time. To take just one obvious example of this shift, Canada is now a major global petro-power, to an extent that few of us even thought possible in the 1970s. This has brought economic temptations and

opportunities to us that have challenged our capacity or willingness to live sustainably on this land. Canada has, of course, always had a resource-based economy, but it was, we might say, comparatively easy to be an environmentalist at a time when so much of the nation's wealth did not derive from economic activities that directly threaten the environmental commons to the extent that crude bitumen extraction does. Being an environmentalist now is much more challenging than it was in the 1970s.

But we should not overstate the shift between then and now. Atwood's book appeared in 1972, the same year the now-famous report of the Club of Rome, *The Limits to Growth*, was published. As many will recall, this book argues that five key indicators – population, agricultural expansion, nonrenewable resource depletion, pollution, and industrial output – show that the Earth system is in overshoot and, as a result, we have good reasons to rethink our culture's preoccupation with the goal of endless material growth.

Much of Atwood's focus in *Survival* is on how Canadians have imagined the natural environment in our literature, and she asked this question at the dawn of modern environmentalism, as the world was slowly waking up to the environmental effects of unconstrained industrial expansion. Atwood was not writing about the environmental crisis per se in *Survival*, but an awareness of a potential environmental calamity was certainly in the air when the book came out (the first Earth Day was celebrated in April 1970). More important, it is significant that Atwood saw fit to ask questions of national identity – emphasizing the connection between making mental maps and flourishing or surviving *as a nationally defined group* – at precisely that cultural moment.

An analysis of *The Limits to Growth* is, if anything, even more relevant to the world today than it was in 1972. With anthropogenic phenomena like dangerous climate change and massive biodiversity loss, evidence is mounting that environmental degradation has reached a crisis point. Recent studies have shown that we are now breaching a number of key ecological boundaries that, jointly, make the Earth a viable environment for us and other species (Steffen et al. 2015; Rockström 2009). If such studies are correct, then we are fast approaching full-scale overshoot, and yet we clearly have not adjusted our political and economic institutions and values in a way that allows us to address such matters prudently or ethically. But while it is worthwhile to ask where we as an entire species are going, it is equally

important to ask Atwood's original question: how are we to understand the task of "survival" from the perspective of *this place*?

Despite the vast and varied work being done in the burgeoning discipline of environmental philosophy today, for the past two decades *Canadian Issues in Environmental Ethics* by Alex Wellington, Allan Greenbaum, and Wesley Cragg, has been one of the only resources to take up the Canadian perspective in environmental philosophy. However, as these authors acknowledge, theirs is not "a rigorous and comprehensive treatment of the theoretical issues." They add that although "[s]uch a book, with a Canadian focus, would be well worth producing ... it would be another book, a different book, and awaits someone to undertake it" (ix). This volume attempts to carry on the efforts of Wellington, Greenbaum, and Cragg, specifically to provide the more theoretical treatment of environmental issues they flag as missing in their volume. We offer a snapshot of environmental philosophy as it is being practised by Canadian philosophers today. We acknowledge, of course, that today's directions in Canadian environmental philosophy may differ from those of tomorrow, and we welcome and encourage future explorations of these topics as Canadian environmental philosophy continues to evolve and refine its identity.

Nevertheless, it might be helpful to say something about why a book like ours is so important at the moment. There are at least two reasons. First, regardless of how theoretical or abstract the approach, it is difficult to do environmental philosophy without examples and case studies. But it is still the case that the lion's share of philosophical literature in this area draws on examples and case studies from the American scene (with the occasional nod to the world outside the US).

Canadians tend to downplay, or miss altogether, the extent to which environmental issues are relevant to Canada. All too often, they do not fully recognize the extent to which environmental issues are playing out in their own backyard. This can encourage a kind of apathy, which is unfortunate, given the fact that these issues are of central importance to how we should view ourselves as citizens of this country. Moreover, a vast amount of research has been done in the science of ecology from a Canadian perspective over the last few years. Students in university environmental studies programs are reading superb texts like *Living in the Environment: First Canadian Edition* by G. Tyler Miller and Dave Hackett. We strongly believe that Canadian environmental philosophers need to catch up to the ecologists on the issue of *situating* our study of the environment.

The second reason – already hinted at in our remarks about Atwood, above – is that this is a watershed moment in the history of Canadian environmentalism and environmental thought more generally. In Canada, we have just emerged from a period in which our federal government sought to overturn many key aspects of environmental regulation. No matter one's political stripes, the policies of recent governments, both provincial and federal, have done profound damage to our reputation as good environmental stewards. For example, in its 2013 survey, the Washington-based Center for Global Development ranked Canada 13th out of 27 of the world's wealthiest countries on the "commitment to development index (CDI)." The CDI includes diverse criteria of assessment such as development of new technology, openness to trade, and so on. But on the single issue of environmental protection, Canada placed dead last on the list. According to the report, Canada

has the dubious honor of being the only CDI country with an environment score which has gone down since we first calculated the CDI [in 2003]. This reflects rising fossil fuel production and its withdrawal from the Kyoto Protocol, the world's only treaty governing the emissions of heat-trapping gases. Canada has dropped below the U.S. into bottom place on the environment component. (Quoted in Williston 2015, xiii–xiv)

We suspect this assessment might come as a surprise to many Canadians. It certainly indicates that we have a lot of work to do here, both to raise awareness of critical environmental issues and, of course, to bring pressure on our governments to address them robustly.

However, there is a good deal of hope in the air today. The new Canadian federal government appears to be prepared to take our environmental responsibilities much more seriously than the previous one did. Arguably, its progressive stance on emissions reductions at the COP 21 meetings in Paris in December 2015 is one example of this. Even so, we should not be blind to the recent actions of this government, which, for reasons of political expediency, has approved two new Canadian pipelines – Trans Mountain and Line 3 – that together will increase tar sands capacity by one million barrels a day. It has also welcomed the Trump administration's approval of the Keystone XL pipeline, which will transport our oil to Gulf refineries.

It seems to us, therefore, that at a general cultural level, Canada is now *emerging* into a state of increased awareness of its environmental responsibilities and challenges, and that a key aspect of this awareness is the ecological dangers posed by our resource-based economy. We are beginning to realize that we cannot take the environment for granted, as we have for much of our history, and that we need to remain vigilant in the face of political attempts to undermine the progress we *have* made in environmental protection. It is thus an ideal time for enhanced philosophical reflection on the meaning and significance of the environment to Canadians. As Atwood implies, it is no exaggeration to say that the very question of what it means to inhabit this country responsibly cannot any longer be separated from the way we relate to our environment as well as the way the latter shapes us as a geographically distinct (if culturally diverse) group of people.

So how, specifically, can environmental *philosophy* help us come to terms with all this complexity? In a recent report on the status of environmental ethics for the International Society for Environmental Ethics, we find the following characterization of the field in this country:

A recent sampling among Canadian environmental philosophers shows that even if there is no unique “Canadian” approach to environmental ethics or philosophy, three themes seem to be of particular concern as a result of Canada’s specific geographic and socio-political situation: ethical responsibilities for our contribution to climate change, environmental issues relating to First Nations, Inuit and Métis people, and the iconic role of “the wild” or “the northern wilderness” for Canadian identity. Further exploration of Canadian perspectives on environmental ethics and philosophy is presently under way. (ISEE 2016)

While these three themes do indeed appear repeatedly in the chapters of this volume, present scholarship in this area in Canada is much richer and more diverse than the characterization suggests, and our book reflects this fact.

The volume includes topics from political philosophy and normative ethics on the one hand to the philosophy of science and the philosophical underpinnings of water management policy on the other. It contains reflections on ecological nationalism, the legacy of Grey Owl,

the meaning of “outside” to Canadians, the paradigm shift from mechanism to ecology in our understanding of nature, the meaning of the concept of the Anthropocene, the importance of humans’ self-identifying as “earthlings,” the challenges of biodiversity protection and the status of cross-bred species in the age of climate change, how to ground the moral considerability of ecosystems, the collapse of the Newfoundland and Labrador cod fishery, and much more. It covers metaphysics, ontology, ethics, political philosophy, critical history, and environmental policy. The range of topics and frames is as diverse and challenging as the land itself.

There is a tension here. On the one hand we have endeavoured to present readers with an accurate representation of the themes being explored by Canadian environmental philosophers. On the other hand, because some of this work is not directly or essentially about Canada, it might be difficult to see how the volume as a whole can be accurately construed as a representation of *Canadian* environmental philosophy. But this presentation is unavoidable just insofar as we have tried to provide the more theoretical approach to the issues called for by Wellington, Greenbaum, and Cragg. Indeed, we consider it a mark of intellectual *maturity* among our philosophers, taken as a group, that some of them are advancing the field with relatively abstract work, on, for example, the metaphysics of ecology, the nature of our relations to future people, the general permissibility of selling water in bulk, and so on.

In other words, our volume aims to show that Canadian philosophers are doing exceptional work on many issues of contemporary significance in the discipline as a whole. We want to demonstrate the breadth of concerns Canadian philosophers have been addressing in their work, in answer to the ecological self-awareness of philosophers and society (both Canadian and otherwise) more generally. The more abstract work is an essential part of this totality, and we find it encouraging that some Canadian philosophers have trained their talents on it.

Environmental philosophy is a unique discipline in that it tackles issues on a wide spectrum from the abstract and metaphysical to the particular and policy-relevant. So the tension we have just mentioned is a key feature of the field itself. In this volume readers will thus discover both a representation of the discipline of environmental philosophy as a whole and a wealth of more particular analyses of Canadian environmental issues. For some this breadth of focus will

no doubt disappoint inasmuch as it dilutes the purely Canadian content, but we believe it is important for readers to get a grasp of the entire discipline. Put otherwise, we have sought to avoid both a parochial focus on exclusively Canadian issues and cases, and a rootless focus on the purely abstract. Neither focus would provide an accurate picture of the contributions of Canadian environmental philosophy to ecological self-understanding. The tension is thus really a balance, one that, we hope, enhances our readers' understanding of Canadian environmental philosophy.

The balance can also serve as a concrete example of our more general dual relation to the environment. On the one hand, we now live in the age of ecology, the age of Gaia or the Earth system. For the first time in its history, humanity is coming to realize that everything really is interconnected and, in many cases, also interdependent. We know that large-scale interference in the environment can have profound, largely unforeseen, and often adverse knock-on effects elsewhere in the biosphere as well as down the generations. This means that environmental philosophers as such *must* think about the whole, that a certain kind of environmentally sensitive metaphysics is inescapable.

On the other hand, our attachments to the environment are usually much more local than this. We are essentially embodied beings and our bodies are always situated and emplaced in particular bioregions. The bio-geophysical spaces carved out by our cultures, and often encoded in territorial designations, are also places that shape our identities. We have seemingly unavoidable and complexly affective connections to this or that *piece of the Earth*. As inhabitants of this country, we are, in short, both Earthlings and Canadians – citizens, if you like, of both the bio-cosmos and the polis – and it has never been more important for us to come to terms critically with this dual nature. It is our sincere hope that this volume will help with this task.

The volume is structured around the following four broad areas of inquiry: questions about the fundamentals or foundations of environmental philosophy; Anthropocene themes; investigations of Canadian identity as it relates to the environment; and, finally, issues about environmental policy in Canada. What follows in the remainder of this Introduction is a brief explanation of the chapters exploring these themes.

In chapter 1, “The End of Mechanism: The Machine Model of Nature, Technologies, and the Ecological Turn,” Philip Rose analyzes

the mechanistic concept of nature that arose in tandem with modern science. He uncovers the technological underpinnings of the modern, mechanistic conception of nature as grounded in the model of *the machine* and argues that while this metaphor has proved useful for scientific purposes, it remains a highly limiting and potentially distorting one. Rose argues that many of the mechanistic presuppositions inherited from the modernist machine-model need to be revised and, in some cases, replaced. Drawing on the work of philosophers such as Charles S. Peirce and Alfred North Whitehead, Rose outlines an alternative way of framing the concept of nature, one that assigns a greater place to a plurality of conditions, including a power of self-constitution as well as a real relation to the possible, but in a manner that preserves a sense of mechanism that is compatible with the way scientists fruitfully use the term.

In chapter 2, Allen Habib's "On the Possibility of a Planetary Entitlement" responds to what is perhaps the most fundamental question on the topic of intergenerational justice: how is it that any generation comes to have a right or entitlement to the Earth? Scholars have generally assumed that each and every generation has such an entitlement by appealing to a Lockean divine bequest view, but contemporary theorists have offered no suitable replacement for this antiquated position. In this chapter, Habib presents a new way of grounding intergenerational planetary entitlement, by appealing to our mutual co-construction with the Earth *as environment*, along the lines originally suggested by the American evolutionary biologist, Richard Lewontin.

Some environmental ethicists have argued that, unlike individual organisms, such as bald eagles and blue whales, ecological wholes, such as species, ecological communities, or ecosystems, cannot have a good of their own because ecosystems are not units of natural selection. While there may be a naturalistic and teleological story that explains the good of an eagle and the good of a whale, it is argued that there is no such story for an ecosystem. In chapter 3, "Can Autopoiesis Ground a Response to the Selectionist Critique of Ecocentrism?," Antoine Dussault discusses whether a specific notion of biological teleology – *autopoiesis* – combined with the recent application of the organizational theory of function to ecosystems is a promising way to construe ecosystems as having a good of their own. He identifies an important challenge faced by an autopoiesis-based

account of the good of ecosystems: the role of ecological disturbances within many ecosystems.

Finally, in the last chapter of this foundational section entitled “Sentience, Life, Richness,” Gregory Mikkelson rehabilitates the work of a long neglected Canadian environmental philosopher, Peter Miller. Mikkelson elaborates, refines, and defends Miller’s richness theory against J. Baird Callicott’s original critique of it. Mikkelson maintains that richness theory is uniquely equipped to support a range of human, animal, organismal, and ecosystemic values and, as a consequence, this neglected objective theory of value can actually serve as an improvement over competing theories of value.

The second section of this book examines the nature and grounding of Canadian environmental philosophy by considering Canadian places, people, and identity within a wider disciplinary context. It asks what it might mean to designate some environmental philosophy “Canadian.” The chapters address this question by considering the flourishing life from a Canadian perspective, the environmental philosophy of a historically significant figure in Canadian environmentalism (Grey Owl), and the Canadian experience of the built environment, rural areas, and the bush.

In chapter 5, “Diverse Environments, Diverse People,” Matthew Barker takes up issues in environmental virtue ethics against the context of his experiences as an environmental and cultural heritage educator in provincial and national parks in Canada. After showing how authors have claimed that character traits must be *necessary* components of the good life to count as virtues, he argues that environment-regarding traits, e.g., compassion for the environment and humility toward it, cannot meet this traditional standard to the chagrin of interpersonal extensionists, and other environmentalists, who have presumed otherwise. But, in their defence, Barker next argues that we needn’t accept the traditional standard. Drawing on his experiences of environmental and human diversity in Canadian parks, he shows that the most promising paths to some of the goods essential for human flourishing depend on diversity in character traits among the individuals in a society. Barker shows that environment-regarding traits, in particular, may be virtuous for some people partly because they help ensure that others can flourish without them. The argument advances our understanding of both environmental virtue ethics and normative ethics *simpliciter*.

In our next chapter, “The Environmental Philosophy of Grey Owl,” Frank Jankunis takes up the work of the now-infamous 1930s animal and environmental advocate Grey Owl. Grey Owl is now best known for having portrayed himself as partly Indigenous in his life and work when in fact he had no such ancestry, which has cast a long and, Jankunis argues, philosophically problematic shadow on his work. Instead of focusing on the issues of racial imposture and cultural appropriation, Jankunis presents an account of Grey Owl’s work for the environmental philosophy it presents, focusing on the animal and environmental ethics underlying Grey Owl’s advocacy. He concludes that, since the Canadian economy remains resource-based, Grey Owl’s work will continue to be significant to Canadian environmental philosophy.

In the last chapter in this section, “Going Outside,” Nathan Kowalsky takes up the notion of what it means to experience nature in this country. Kowalsky employs both objective and phenomenological data in investigating the issue, considering, in turn, constructed environments – both buildings and the spaces around them – rural areas, and the bush. These three areas are arranged as concentric circles – *from* the built environment *to* the bush – of possible experience and, importantly, Kowalsky characterizes the boundaries among the three as “porous.” Kowalsky concludes his essay with a reflection on how this perspective may evolve in the Anthropocene, leading us into a series of chapters that focus directly on the philosophical implications of this new epoch in the history of life on Earth.

The third section of the book is about our new geological epoch: the Anthropocene. It is now generally understood that human activity on Earth has reached the point at which no place on Earth is unaltered by the human enterprise. It has been argued that the changes are so sweeping that we have now transitioned to a new geological epoch: from the Holocene to the Anthropocene (Crutzen and Stoermer 2000; Crutzen 2002; Chakrabarty 2009, 2015). The advent of the Anthropocene raises significant scientific, political, and ethical issues. Our third set of essays touches on each kind of issue, demonstrating that Canadian environmental philosophy has much to add to our understanding of this dangerous and morally ambiguous new epoch in Earth history.

To begin, confronting the global and species-level challenges of the Anthropocene raises the potential for a progress in the political communities that define our understandings of what we owe one another

as fellow members or citizens. In chapter 8, “Ecological Nationalism: Canadian Politics in the Anthropocene,” Byron Williston argues for what he calls “ecological nationalism,” which, as a form of “rooted cosmopolitanism,” charts a middle course between nationalism and cosmopolitanism *simpliciter*. Ecological nationalism ties the belief that “the first business of national politics is to maintain the beauty, integrity and stability of the biosphere down the generations” to the specific ecological and political self-understandings of the “imagined community” to which Canadians belong. Among other things, this involves grappling more critically with the “myth of superabundance” that has defined so much of our history with “natural resources.” Williston then applied these thoughts to the case of Canada’s energy and climate policy, post-Paris 2015.

In chapter 9, “Virtue in the Anthropocene,” Kent Peacock identifies ingenuity and the capacity for heresy as forms of human excellence key to the survival of our species in the ecological crisis of the Anthropocene. Ingenuity, he argues, is exemplified by game-changing innovations that have been decisive to flourishing at earlier points in human evolutionary history. The related disposition to heresy enables innovation to take hold where it might otherwise be suppressed by orthodoxy or dissipated on minor variations within existing paradigms. “Going against the grain,” Peacock argues, creates opportunity for effective and elegant *revolutionary* innovation, and are our best hope for flourishing in the Anthropocene.

In chapter 10, “Wildlife Conservation in the Anthropocene: The Challenge of Hybridization,” Jennifer Welchman considers an emerging issue for wildlife conservation in the Anthropocene: extinction by hybridization. A typically neglected form of extinction, extinction by hybridization raises a number of theoretical and practical issues. One important issue is how conservation management should respond to it. Should conservation managers promote the preservation of wild types over hybrid types? As Welchman notes, hybrids are typically considered to be negative developments or ignored altogether. This suggests that hybrids should be culled or managed in some other way, so that wild types are not at risk of extinction. Yet, in the Anthropocene, where the evolutionary history of life on Earth is everywhere affected by human activity, Welchman argues against unreflectively protecting wild types over hybrid types, and insists instead on the importance of carefully reflecting on what values conservation managers seek to realize in managing hybrids.

The final section of the book consists of three chapters that focus on policy-related decisions that affect some part of the environment. In chapter 11, “Water Rights and Moral Limits to Water Markets,” C. Tyler DesRoches argues that the human right to water entails specific moral limits to commodifying water. While free-market economists have generally recognized no such limits, the famous Canadian environmental thinker Maude Barlow has claimed that the human right to water means not permitting any water markets. Using a Lockean conception of the human right to water, DesRoches shows that both of these views are mistaken. DesRoches argues that if markets prevent people from obtaining some minimal and proportional share of water by charging a prohibitively high price, or by some other means, they put the human right to water in jeopardy and, therefore, should be blocked.

Next, in “Geofunctions and Pluralism in Environmental Management,” Eric Desjardins, Jamie Shaw, Gillian Barker, and Justin Bzovy tackle the vexed history of the case of the Atlantic cod fishery. They argue that a pluralistic approach to research and policy decisions can significantly improve our understanding of the uncertainties of predicting complex social-ecological systems. This conclusion is illuminating, not least for traditional philosophers of science who have objected to pluralism on the grounds that it opens the door to views that are not deemed to be genuinely “scientific.” Through their case studies, Desjardins et al. show that by embracing a less constrained variety of pluralism, and by considering Earth systems as complex and functionally integrated, there is a philosophical and practical necessity to adopt what they describe as the geofunctions perspective. This should have far-reaching implications for policy decisions on important environmental issues.

Finally, in chapter 13, “Being Objective: How Mr Nowhere Threatens the Success of Co-management,” Jennifer Jill Fellows considers the peculiar problems that arise when managing the environment with diverse stakeholders. Fellows’s focus is the current co-management projects in the Canadian Arctic, where Indigenous knowledge is frequently questioned or dismissed as unscientific or lacking objectivity. Fellows argues that this treatment of Indigenous knowledge undermines the trust necessary to effectively co-manage the Arctic. While we ought to reject the specific concept of objectivity understood as knowledge gathered from a “view from nowhere,” we should embrace a concept of objectivity *from a particular perspective*.

Fellows argues that ultimately we need to rethink our concept of objectivity to facilitate effective co-management of the Arctic between Inuit communities and other stakeholders in the Arctic.

The idea for this volume emerged from the initial meeting of the newly-founded Canadian Society for Environmental Philosophy/Société Canadienne de philosophie environnementale (CSEP/SCPE). That was a meeting of discovery. As mentioned just above, until this point Canadian environmental philosophers had been working in relative isolation from one another. Now we have established a society with annual meetings and have become a network of researchers. It is a very heady time for Canadian environmental philosophy. We believe that the work currently being done by our philosophers is as good as anything being produced anywhere in the world.

Moreover, we think that because interest in environmental issues now extends across such a broad cultural swath, our book can illuminate new pathways of critical and creative investigation for just about anyone to follow. So the final word of this introduction is an invitation. We invite not just philosophers, but also artists, poets, novelists, filmmakers, sociologists, anthropologists (and others) to join the conversation about the many meanings this beautiful land has for us and the challenges we all face in protecting its unparalleled environmental riches.

