

Montreal, City of Water

An Environmental History

MICHÈLE DAGENAIS

TRANSLATED BY PETER FELDSTEIN



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FOREWORD

Water-Ville

Graeme Wynn

WITH THE PUBLICATION OF *Montréal et l'eau* in 2011, Michèle Dagenais broke the mould of historical scholarship in Quebec, and extended the parameters of scholarly practice in the field of urban environmental history more generally. It is therefore fitting that an updated, slightly revised version of her text appears under the title *Montreal, City of Water* as the first volume in the Nature | History | Society series to be translated from the original French and, thus, as an important bridge between the often discrete historical literatures produced in French and English Canada.

As presented by Ronald Rudin in his somewhat controversial 1997 book, *Making History in Twentieth-Century Quebec*, most French-language studies of the province's past written between the Second World War and the early 1990s were shaped by one or another of three schools of thought.¹ In the 1950s and 1960s, Quebec historians argued over the causes of the economic, political, and cultural backwardness of French Canadian society (compared with the rest of the country). The histories they wrote turned on the long struggle between English and French Canadians, which had, for centuries, seen power and influence fall disproportionately to the former. With Guy Frégault, Maurice Séguin, and Michel Brunet (professors in the history department of the Université de Montréal) to the fore, members of the Montreal school attributed the disparities to the British Conquest, arguing that the colonial structure of society after 1763 marginalized French Canadians from positions of wealth and power. Their views were challenged by Fernand Ouellet, Marcel Trudel, and Jean Hamelin, members of the Laval school (named after the university at which they began their careers).

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This group found reasons for the perceived differences between French and English Canadian societies among French Canadians themselves, arguing that the Roman Catholic Church, in particular, had thwarted the development of secular education and thus deprived its followers of the skills required to be competitive in modernizing North American society. Less interested in political and ideological than economic and social questions, members of the Laval group saw the traditional cultural preoccupations of conservative, educated, professional French Canadians (who expressed nostalgic support for the peasantry and disdained the commercial opportunities of urban society) as a drag on the capacity of ordinary French Canadians to modernize and remake their society. Verbal battles between the two schools were often heated: those who wrote under the banner of the Montreal school were criticized for their militant neo-nationalism; those who took the Laval line were dismissed as anti-nationalist, and characterized by their critics as *vendus* who had “sold-out” to the English colonial oppressors.² Yet even as they argued over the causes of Quebec’s contemporary circumstances, members of both groups echoed something of the romantic nationalism promulgated by early-twentieth-century scholars to promote social cohesion and cognizance of a distinct identity among French Canadians.

Late in the 1960s, these differences began to lose their edge. Following the lead of historians Jean-Pierre Wallot and Louise Dechêne, who challenged some of the assumptions of their predecessors, a new group of scholars rejected older views of a traditional, rural French Canadian society largely beyond the reach of a (weak) state, under the sway of Church doctrine, and marginalized by English power. Characterized as “revisionists” by Rudin, members of this group (among whom historians Paul-André Linteau, Jean-Claude Robert, Jacques Rouillard, and Normand Séguin, as well as geographer Serge Courville, were prominent) began to portray the citizens of late-nineteenth and twentieth-century Quebec (and especially its francophone majority) as little different from those in neighbouring societies.³

Born in the 1940s and educated in the 1960s and early 1970s, the first revisionist scholars came of age as a new generation of French Canadian entrepreneurs, businesspeople, and bureaucrats entered the corridors of power, and the secularization, urbanization, and modernization of Quebec society (known as the Quiet Revolution) gathered momentum. Shaped by these circumstances, by the influence of the *Annales* school in France, and by new approaches being pioneered in economic, social, labour,

ethnic, and women's history in English-speaking countries, revisionist scholarship sought to understand the past in economic and structural terms.⁴ Rather than emphasizing the distinctiveness of French Canadians and/or Quebec in Canada and North America as earlier nationalist historians had done, revisionists described Quebec as a relatively heterogeneous society in which class divisions were more significant than ethnic, linguistic, and religious differences. A relatively late but remarkable, widely praised, and revealing example of such work was a 1996 study of the Saguenay region, by the prominent historian and sociologist Gérard Bouchard. Extending an idea developed in literary studies and used to characterize aspects of American cultural influence on Quebec, Bouchard advanced what he called "a framework of 'américanité'" to portray the people of the Saguenay as quintessential North Americans. Early in the book, Bouchard notes that although he "set out to study French Canadian society ... it was North America that ... [he] actually met."⁵

In revisionist histories, the people of Quebec reacted rationally and effectively to the challenges produced by rapid economic and technological change. The implications of earlier studies – that French Canadians were cultural dopes (conforming to the internalized norms promulgated by the Church) or passive victims of circumstances, and that Quebec was a distinct society – were swept aside. But the argument that provincial citizens were active agents who responded competently to the transformative forces of industrial capitalism to shape *une société comme les autres* reframed rather than banished nationalist sentiment. For Fernand Ouellet, who had his differences with the revisionists, their accounts were thinly veiled separatist propaganda. Identifying the successes of early French-speaking businessmen only encouraged late-twentieth-century Quebecers to believe that they too could stand alone.

According to Rudin and other scholars, including Ouellet, revisionists often misrepresented the past in their drive to identify Quebec as a "normal" society.⁶ Typically, they overlooked those things – such as language and strong religious adherence – that made the history of Quebec distinct, or glossed evidence to minimize its importance. In a 1992 reflection on such practices, Rudin reminded readers of the need to weigh interpretations carefully: "To say that there was poverty in all groups," he wrote, "cannot wash away the fact that English-speakers had certain advantages that structural factors cannot entirely explain."⁷ Nor, he continued, should the observation that "the church was unable to achieve its aspirations" be taken to mean that it failed to exercise significant influence. In Rudin's

view (and felicitous phrasing), the revisionists' concerted efforts to assert the "normalcy" of Quebec society created a need for "balance between the older historiography, which tended to ignore the realities of this world, and the revisionist view, which often ignored the world of values." It was time, he thought a quarter century ago, for the development of "a post-revisionist school of thought capable of melding the traditional and revisionist points of view."⁸

Work along these lines has indeed emerged, though its diversity leaves room for debate over whether it constitutes a school. Early in the new millennium, Stéphane Kelly noted that approaches to the Quebec past and the role of history in Quebec society had changed in several ways since the early 1990s. Scholars were turning to address themes long neglected by their predecessors, particularly political, religious, cultural, and intellectual history.⁹ New journals disseminated their work, among them *Cahiers d'histoire du Québec au XX^e siècle*, *Bulletin d'histoire politique*, *Argument*, and *MENS*. The gap between scholarly and public discourses was being bridged by the mass media's new-found interest in popularizing historical knowledge. Similar developments were evident elsewhere, but in Quebec, where revisionist approaches had dominated the field for a quarter century, all of this amounted, in Kelly's judgment, to a new – albeit diverse – historical sensibility ("*la nouvelle sensibilité*").¹⁰

Even as his work on the Saguenay appeared, Bouchard had begun to wonder whether the emphasis on similarities had obscured the specifics that differentiate societies one from another. With Yvan Lamonde, he probed the distinctiveness of French Canadian vis-à-vis American experience by investigating the role of Roman Catholicism in shaping the responses of Quebecers to urbanization and industrial capitalism.¹¹ Then he initiated research on the comparative histories of new societies (focused on the formation of national identities and cultures in the Americas, Australasia, and parts of Africa). This yielded an extended essay in comparative macro-history (one of the few pieces of Bouchard's large oeuvre translated into English) interrogating the "collective imaginary" (or, loosely, sense of identity) of Quebec.¹² Flawed as some of its interpretations of politics beyond North America are, and controversial though Bouchard's effort has been both for ignoring the province's English minority and for its argument that Quebec's historic destiny is national independence, this book's focus on the discursive strategies by which communities imagined themselves exposes the disjunction between arguments for exceptionalism (or difference) and the base realities of settler colonialism and industrial capitalist development.¹³

Influenced by the postmodern turn in scholarship, younger historians also sought to move beyond the revisionist perspective. In Jocelyn Létourneau's view, historians who came of age in the 1960s took their cue from the Quiet Revolution's embrace of the "discourse of modernity" and "the principles of technocratic rationality," and tended to discount any activities for which there were no obvious "rational" explanations. Focused on establishing the normalcy of Quebec and unwilling to recognize "reality beyond ... material forces," they ignored large parts of human experience.¹⁴ In a similar vein, Létourneau's colleague Jean-Marie Fecteau lamented that the revisionists' commitment to the study of structures had left historians with "nothing to say about matters that cannot easily be quantified" and rendered them mute in the public arena.¹⁵ Surely, Létourneau insisted, historians need to look beyond economic and social structures to study "the individual in all of his dimensions, including the existential and the spiritual." Responding, at the turn of the millennium, to both the implications of the *américanité* framework and the sense that three decades of scholarship portraying Canada as an evolving "mosaic of peoples, ethnic groups, and social movements" had done more to advance understanding of Canadians than of the Canadian historical experience, Létourneau used the pages of the *Canadian Historical Review* to advance a powerful case for the study of *canadianité* – "the *way of being together* that has developed within the space of social and political interrelations called Canada." This was a call to move beyond pluralistic histories, and their multiplicity of "specific truths," to develop a narrative that gives "the past a meaning that will be useful in the building of the future" and to tell the story of Canada, not as "the fulfillment of unity in diversity," but as "the irreducible expression of an asymmetrical tension between centripetal and centrifugal forces." Fully realized, a history of Canadianness would "describe the complexity and multidimensionality" of the past while salving its wounds and exploiting its possibilities.¹⁶

Environmental history offered another new and distinctive approach to the past. After the first overt stirrings of research in this genre, the field grew rapidly south of the border, but few Quebec scholars characterized their work this way until relatively recently. As Stéphane Castonguay, one of Canada's leading environmental historians, pointed out a decade or so ago, in Quebec, historical geographers claimed a fair part of the field for their own in the last two decades of the twentieth century by publishing a wide range of studies treating the human transformation of the landscapes of the St. Lawrence Valley.¹⁷ More than this, most of them associated with the revisionist school. In 1993, members of Université Laval's Laboratoire

de géographie historique joined researchers from the Université du Québec à Trois-Rivières and elsewhere in the Centre interuniversitaire d'études québécoises (CIEQ) to reveal the historical and geographical contexts of the evolution of Quebec society.¹⁸ In this multidisciplinary unit, dedicated to investigating the continuities and ruptures that shaped contemporary Quebec, Serge Courville, his colleagues and students associated with Jean-Claude Robert, Normand Séguin, and others produced the multivolume *Atlas historique du Québec*. Focused primarily on settlement, agriculture, and forest exploitation along the Laurentian axis (the St. Lawrence between Montreal and Quebec City), this work charted the growing commercial integration of local societies.¹⁹ Other historically inclined scholars whose work focused on the development of Quebec's natural resources resisted environmental history's claims to provide fresh insight, though their studies were firmly in the traditions of economic and social history, focused on business activities and workers, and paying scant regard to nature.²⁰ Remarkably, thought Castonguay, relatively newly appointed to a Canada Research Chair at the Université du Québec à Trois-Rivières, associated with CIEQ, and leading the early-twenty-first-century charge to encourage environmental historical scholarship in Quebec, even the substantial literature on farming in Quebec provided little information on the relations between society and nature in the province; "ridiculous as it might seem," he wrote, "cows are simply absent from the history of the dairy industry."²¹

Reviewing the environmental-historical literature on Quebec cities at much the same time as Castonguay took stock of the larger scene, Claire Poitras was more sanguine about the robustness of her subfield.²² Following the lead of American environmental historian Martin Melosi in defining urban environmental history as the analysis of interrelations among social, built, and natural spaces, Poitras sorted urban work that engaged environmental issues into four categories: sanitation and the industrial city; natural resource exploitation and urban development; incorporation of nature in city and suburbs; and environmental movements and their political influence. This survey included important pieces of scholarship, and Poitras's identification of themes and trends in the literature was useful, but none of the assemblages was extensive, and all reflected the broad encompassing parameters of her overview. Indeed, many of these studies simply bolted nature onto fairly orthodox historical accounts. Poitras recognized that much remained to be done, and she helpfully identified three thematic possibilities for further inquiry – environmental impacts of major public

works; deindustrialization and its environmental legacies; and environmental impacts of suburbanization and urban sprawl – but none of these precludes the possibility that nature will simply be added to the list of narrative ingredients to spice well-worn topics (public works, deindustrialization, suburbanization).

Montreal has been the crucible of Quebec's capitalist development. As the leading city of Canada before 1960, a major pivot of trade along the St. Lawrence River, an important financial centre, the hub of provincial manufacturing in the nineteenth and early twentieth centuries, and the destination that drew most of the province's immigrants, it has attracted the interest of generations of historians, including several of the revisionist school. When members of the latter, Jean-Paul Bernard, Michel Grenon, and Paul-André Linteau of the Université du Québec à Montréal, formed the Groupe de recherche sur la société montréalaise early in the 1970s, one of their first tasks was to develop a preliminary bibliography; it soon counted over a thousand entries for the nineteenth century.²³ Subsequent work derived from this initiative did much to reveal the contours of transformation in the city. Typically, work by Bernard, Linteau, and Robert demonstrated the importance of an influential French-speaking commercial and industrial bourgeoisie in nineteenth-century Montreal, members of which parlayed dominance of the city real estate market into considerable power over the francophone proletariat.²⁴ Other researchers affiliated with the Montreal Business History Project (which evolved in 1989 into the Montreal History Group) based at McGill University also made nineteenth-century Montreal's transition to capitalism their central problematique, and compared change in that city with developments elsewhere. So, for example, Bettina Bradbury's accomplished study *Working Families: Age, Gender, and Daily Survival in Industrializing Montreal* describes people "modifying old traditions and responding pragmatically to the new realities" they faced, to the extent that "the independent influence of ethnicity" on family circumstances declined in Montreal in much the same way as it did in Hamilton, Ontario.²⁵

Montreal, City of Water offers a radically different view of the city. As its title indicates, this is an environmental history. It details the ways in which "urbanization transformed Montreal's hydrology and waterfront environments, and, conversely, how its waterways and their modifications contributed to urban development." In a broad sense, at least, there is nothing unique about the story thus unfolded: the names of other major metropolitan centres might be substituted for that of Montreal without

confounding the meaning of these sentences. But the delight as well as the devil of history is in the details. There is neither ideological intent nor political purpose in the hint that Montreal is a city like others. Indeed, Dagenais, who came to Montreal with an undergraduate degree in European history from France, embarked on this work after earlier research focused on gender, municipal administration, and parks in Montreal. Her attention to these urban questions steered her around the earlier intense debates over the plight of people in Quebec, and an interest in public recreation led her to water and newly important environmental questions. This book is intended both to explicate the specific, intricate, entangled relations among citizens, city form, and water, and to remind us that the cities and towns, villages, and landscapes – the various places – in which we live and work and take our leisure are hybrid spaces produced by both natural and social processes.²⁶

With this focus paramount, Dagenais finds the interpretive arc of her study not in twentieth-century historiographic debates about the Quebec past but in the ways in which commentators perceived, considered, and represented the island city of Montreal over two centuries. Before 1850, topographers waxed eloquent in describing the landscape, waterways, and natural features of the Montreal archipelago. By 1900, boosters were celebrating the “water works” that had carried the city to commercial greatness: the introduction of a water supply system; the development of the port; the canalization of surrounding waters to improve navigation; and, above all, the great river itself, seemingly created (some thought) to bring trade and wealth to the city. Between the great wars of the twentieth century, writers celebrated the much expanded port, the bridges that carried the influence of the city beyond Montreal Island, and the titanic achievements of the engineers who made greatness possible. In the 1960s, the opening of the St. Lawrence Seaway focused attention on the role of the port in the economy of the city, but the rise of the automobile, and the spread of concrete and asphalt across the urban fabric, reduced the everyday significance of the river, water, and nature in the lives of Montrealers. Public concern languished until pollution and environmental degradation refocused attention on the natural world late in the twentieth century.²⁷

By transcending most of the categories of urban-environmental analysis identified by Claire Poitras, and making nature – or at least that fundamental element, water – an integral part of her story about the shaping of Montreal through the last two hundred years, Dagenais offers a strikingly original portrayal of the city and expands the parameters and potential of urban environmental history. This is not a book about cleansing, draining,

and sanitizing Montreal (to adapt the title of an earlier article by Dagenais and Caroline Durand), or about the effects of urban growth on downstream water quality.²⁸ Nor is it a study of the economic and leisure-related benefits that flow from access to rivers and lakes, though all of these concerns certainly figure in these pages. Here, water and water-related infrastructure become central to the production of urban form. For Dagenais, the waters that surround and run through Montreal are both tangible physical elements that have been transformed by the development of the city and sociocultural phenomena produced and reproduced by a wide range of human influences. Water, she writes, “is not a single object but ... [borrowing a phrase from the English geographer Matthew Gandy] ‘an intersecting set of processes, practices, and meanings.’”²⁹ The great achievement of this book, then, lies in its compelling and convincing treatment of the co-construction of the city and its waters.

To elucidate this point, it is helpful to begin near the end of Dagenais’s story. In recent years, civic politicians and others in Montreal have made much of efforts to recover and “reappropriate” the waters flowing past the city by building beaches and places for people to meet and socialize along the waterfront; Montrealers, averred their mayor in 2015, have forgotten that they live on an island. There is much to commend in these initiatives to “green” the city and promote social equity. But the language of recovery and reappropriation and the “forgotten island” trope are – as Dagenais’s book reminds us – only the latest in a long line of rhetorical gambits that have shaped residents’ conceptions of, and relations with, the aquatic environment of their city. New public beaches and riverside recreation sites do not signal a river regained so much as they constitute the latest chapter in a centuries-long saga of the transformation of Montreal’s waters by human actions. The most basic message of these pages is that Montreal and its people have never been separated from water – although the ways in which water existed in Montreal and the ways in which people thought about its presence there were in constant flux. Now as then, debates over water are not about water alone. All discussions of and actions involving the environment are deeply and inextricably embedded in their social, political, technological, intellectual, and economic contexts.

Offering an insightful interpretation of the development of Canada’s second city, *Montreal, City of Water* skilfully extends our knowledge of the ways in which this and other metropolitan areas took shape, while realizing the great promise of environmental history: to understand the world from a new point of view. Leaving the long-standing nationalist preoccupations of Quebec historical scholarship aside, Michèle Dagenais

conjures a productive dialogue between the material realities of water and the ever-changing discourses that framed and directed people's relations with it. In the process, she illuminates important facets of the reciprocal adaptations of humans and nature over time, reminds us that our links with the natural world remain close and complex, even in urban settings, and demonstrates the continuing relevance of the past to understanding the present. In doing this she makes an important contribution to better understanding, at several scales, our human place in the world.

Introduction

Where is my river, the St. Lawrence? It is here. You can't hear it. It's like the horse that awaits you in the stable. You don't see it. But I can feel that it's there, that it flows while it pretends not to flow, that it embraces the city.

– Réjean Ducharme, *Le nez qui voque* (1967)

WATER – WHETHER FOR drinking, as a medium for disposal of human and industrial waste, as part of natural habitat, or as a setting for leisure – is a topical issue in today's world and a special concern for Montrealers. Water access for recreational purposes, development or protection of the riverfront, and infrastructure aging are issues that regularly make the news. They all attest to the importance that environmental problems have taken on, and the interest shown by the public in the preservation of environmental quality and the rehabilitation of natural habitat. They also attest to the public's attraction to fresh water, which is easy to understand in the case of a city like Montreal, which sits at the heart of a rich and varied basin between the St. Lawrence and the Rivière des Prairies.

This attraction to water is nourished by an idealized conception of the past, of a time when urbanites allegedly lived in harmony, if not in symbiosis, with the water around them. Lobbying of governments since the 1960s to decontaminate rivers and lakes and to give the public new windows onto the St. Lawrence has contributed to the building of this representation, and has transformed the desire for water access into a political issue and a question of rights. These developments led to the idea that Montreal's waterways represent a precious urban heritage that must be protected and reaffirmed. In short, for issues of public health and water supply on the one hand, and of ecological rehabilitation and reappropriation of rivers and the riverfront on the other, water holds a central position in Montrealers' lives.

These concerns are all the more acute in that the birth of Montreal is closely tied to water, as historians and geographers have shown under different circumstances since the origins of the city. What roles did water play in the urbanization of Montreal? How have Montrealers' relationships to water evolved over the last two centuries? To date there has been no in-depth study of these matters, yet they have inarguably had a strong influence on the city's configuration and on the present-day relationship between Montrealers and water.

It is the aim of this book to show the centrality of water and water-related infrastructure in the production of new urban forms since the early nineteenth century. Montreal's history is discussed with reference to water as a constitutive dimension of its development. Such an approach calls for conceiving of this history as the outcome of close interaction with nature, and I will therefore elucidate the mutual transformations of the city and its hydrology over more than two centuries. More than a space of culture, Montreal is viewed here as a hybrid space growing out of both natural and social processes.¹

Until now, works dealing with the place of water in Montreal's history have taken account of only certain dimensions. They have tended to look at the subject in a fragmentary fashion, focusing on infrastructure and human consumption,² on hydrology, or on particular watercourses. When the topic of water arises, one's attention is inevitably drawn to the St. Lawrence – to the port and the activities taking place there. More uncommonly, a work may focus on the Rivière des Prairies or on these two rivers simultaneously. In another approach, geographers ranging from Joseph Bouchette (1815) to Jean-Claude Robert (1994) and from Raymond Tanghe (1928) to Raoul Blanchard (1953) have placed the focus on Montreal's hydrological riches as a whole.³ Still another angle has been to instrumentalize water by focusing on the economic, health-related, and leisure activities it has made possible. Little attempt is generally made to elucidate the reciprocal processes of adaptation that have occurred between the urban and natural environments over the centuries.

This book's focus on the evolving relationship between the city and its water arises out of numerous studies published in recent years in the fields of environmental and urban history, geography, urban studies, and urban planning. Studies focusing on waterways such as the Rhine, the Bow, or the Columbia have brought to light the natural and social dynamics pivotal to these rivers' transformation over time.⁴ Other studies of urban rivers have demonstrated the role played by their trajectories in organizing urban space and configuring water infrastructure.⁵ But to grasp this role, it is

important to consider them as living entities, changing from season to season and as a function of climatic change, as well as in response to anthropogenic modification.⁶

These works have thus shed light on the centrality of water in the organization of cities and in the structuring of the relationship between people and land.⁷ Although the modalities determining water access and supply result in part from constraints specific to the biophysical environment, they derive equally well from the configuration of social and power relations, hence the importance of considering the issue from this angle as well. Put another way, there is nothing fated or definitive about quotidian interactions with water, even though the infrastructure giving access to it influences to a significant extent how it will be used. In any given instance, people's relationships with water and the specific ways in which they use it are a consequence of policies, technical decisions, and environmental transformations, with each of these shaping and fashioning the others. In short, the changing forms in which water manifests itself at different times are constantly produced and reproduced through socio-political processes that need to be elucidated.⁸

On the heels of these recent works, I sought to reconstruct the ways in which water and its uses have intertwined with the city of Montreal throughout its history. But which water? How is it defined? In this book, I discuss the water of Montreal as a whole and in its various manifestations, including the waterways ringing the island and those that run underground through the city. I conceive of this water, in its tangible dimensions, as a physical element that has been transformed by the development of Montreal even as it has contributed to that development. But it is also a sociocultural phenomenon, a crucial component of the production and transformation of the urban space of the city. Water cannot be studied without taking account of these material and social dimensions, which are themselves interrelated.

The book goes on to attempt a reconstruction of the dynamics governing the conception, definition, and lived experience of the collective relationship with water. Such dynamics are always multifaceted. They elicit contradictory sentiments, as is the case with people's relationship to nature generally. To paraphrase Ari Kelman, we might say that the city (its inhabitants included) has always had "a strained relationship with its environs, which seemed at once to guarantee and to cloud its future."⁹ Since European colonization, the abundance of water around Montreal has presented itself as both an asset and a problem. At times prized as navigable connections between the city and the continent, and from there to

the rest of the world, the island's waterways have also been considered obstacles, as when the metropolitan region began to develop and it became necessary to build bridges to get across them. These rivers have constituted a magnificent resource for human consumption while simultaneously being used as garbage dumps and waste receptacles, ultimately coming to pose a threat to human health. The lure of the riverfront, too, has always generated its share of simultaneous enjoyment and anxiety. As we shall see, public awareness of water has quite often emerged, and the water-community relationship has been constructed, as an outgrowth of these threats. I will, in short, discuss the human-water relationship in the Montreal context, starting in the early nineteenth century, as an often antagonistic relationship in which water is considered alternately useful or threatening, a source of pleasure or a source of danger.

One of the perpetual issues – perhaps even the paramount one – shaping this relationship has been that of access. How access to water is defined and regulated is a function of power relations and has been the subject of public debates whose terms vary from one era to another. The same can be said of the technical arrangements put in place to distribute water and model its uses. Close attention to these debates can help to identify the actors (politicians, officials, scientists, activists) who influence choices and define the vocabulary used to articulate this relationship. To this end, it is necessary to conceive of water as a historical object – at once a reality and a concept – that needs to be denaturalized, or in other words, historicized.¹⁰

Water as a construct coalesces out of the multiple gazes upon it, as well as out of the changing forms that it takes. It is not a single object but rather “an intersecting set of processes, practices, and meanings.”¹¹ How exactly did this construct evolve? What are the processes and practices that transform water into “an object of knowledge, management, discourse”?¹² I have opted to use the term “perspectives” as a way of getting at the ambient knowledge, theories, representations, and values that determine the human-water relationship. Chapter 1 presents the principal works written about Montreal in the nineteenth and twentieth centuries; the rest of the book is structured around the various perspectives from which water was viewed and represented, the forms in which it manifests itself, and the modalities surrounding its transformation, development, and uses. I have identified four perspectives influencing and accompanying the construction of the city-water relationship for two centuries. In Chapter 2, the fact of water is discussed in relation to concerns about circulation of goods and people

alike. The chapter starts with the demolition of the walls around Montreal in 1801, when the city lost its character as an old city. The contemporaneous beginnings of the development process involved attempts to regulate the presence and uses of water in the urban space and on the waterfront. An initial series of structures was built, involving the channelling or covering of certain watercourses and the concomitant demolition of the small bridges across them. The early work on the harbour, too, partakes of this thrust to bring Montreal out of its geographical isolation and inscribe it within a wider space of circulation.

A new period commenced in the mid-nineteenth century, one characterized by the increasing use of technology to transform natural and built habitat. The adoption of the so-called sanitary ideal ushered in a change of perspective, in which running water came to be viewed as the means with which to cleanse and govern the industrializing city. This change, covered in Chapter 3, is inscribed within a dual process of transformation. On a political level, the advent of local institutions marked the onset of a period of municipalization of Montreal's territory, which was effected through the intermediary of the water departments. On an ecological level, water was drawn from the river and put into circulation in the urban environment by means of conduits and pipes. But the formation of frazil ice at the entrance to the city's main water supply canal, along with flooding of low-lying areas in Point-Saint-Charles and sludge buildup in the harbour, illustrate how the work to adapt natural environments, themselves undergoing transformation, required constant maintenance and adjustment.

Thanks to its water and wastewater systems, Montreal cleaned up and became increasingly salubrious. But to accomplish this it was necessary to dispose of waste outside its borders, in neighbouring waterways and on the territory of adjacent cities. From the closing decades of the nineteenth century on, Montreal's sanitation practices provoked tensions – in the redesigned harbour, among the municipalities in the St. Pierre River watershed, and on the north slope of the island along the Rivière des Prairies. These tensions are discussed in Chapter 4. In a context of intense urbanization, the simultaneous use of the rivers as sources of water for human consumption and wastewater receptacles reached a limit. The fact that water was running no longer sufficed to guarantee its potability. Advances in bacteriology demonstrated that it would now have to be treated in order to remove contaminants. These discoveries signalled a change of perspective whose adoption had not only environmental but also social repercussions.

The advent of water treatment technology allowed the Montreal authorities to extend their hold over an ever-larger part of the island. From the moment the city began to supply drinking water to adjacent municipalities, the possibility arose for it to dump wastewater into the rivers without bearing the consequences. This was also true of the wealthy municipalities upstream of Montreal. The effect of all this was to transform the island's hydrology through the integration of secondary watercourses, along with a portion of the St. Lawrence and the Rivière des Prairies, into Montreal's drainage plan, and to engender environmental inequalities.

This was particularly true on the Rivière des Prairies side, then in the process of incorporation into the city of Montreal, discussed in Chapter 5. The central section of the river became the receptacle for raw sewage from the north slope of the island and was increasingly regarded as little more than a sewer main. The construction of a dam and a hydroelectric power plant at Sault-au-Récollet in the late 1920s further contributed to the river's urbanization. The commissioning of the dam aggravated the water-pollution problem at this location, since the resulting alteration of the river's flow trapped the ever-increasing quantities of discharged wastewater close to the bank. But the dam had another impact, this one positive: it slowed the rapids, creating conditions for swimming. The area became a favourite site for local vacationers and Sunday visitors. Here, as elsewhere along the St. Lawrence, are traces of aquatic recreation whose practise would, however, become fraught with difficulty in the latter half of the twentieth century.

The postwar era, and the 1950s more generally, ushered in a new period in the development of Montreal and its region, characterized by a resumption of galloping urbanization and major construction work on the St. Lawrence. The river and the region's other bodies of water were subjected to further dredging, encroachment, and waste dumping. The situation induced worried hunters, fishers, and other outdoor sports enthusiasts to undertake field research and spearhead awareness campaigns aimed at putting pressure on the authorities. The discovery that water quality in the St. Lawrence was deteriorating fed into growing criticism of how Montreal had been developed and managed in the postwar years. This context saw the emergence of a new conception of the city-water relationship, which I associate with an ecological perspective. At first targeting the pollution of Montreal's watershed, debate evolved toward an agenda of democratizing water access, which in turn led to a desire to reappropriate the waterfront. Natural habitat and its protection became the cardinal value; the environment had been mistreated by an urban society ipso facto guilty of

its deterioration. This discourse, however, failed to consider the environment in historical depth and as a hybrid phenomenon arising out of interactions between natural and social factors.

The final two chapters discuss the transformations in the city and its region that have occurred since then; they present the main projects rolled out with the aim of solving the above-mentioned problems. The question of pollution, compounded by that of flooding in the wake of shoreline development, led to a new definition of Montreal in which city and island are increasingly seen as constituent parts of an archipelago. Although some of the resulting river management initiatives did not bear fruit, they did contribute to a new vision of Montreal in which water occupies a central place. Water-quality improvement, river habitat rehabilitation, and collective reappropriation of the banks and the water for recreational purposes constitute the central issues of Montreal's recent history.

Each chapter of the book thus considers some of the principal developments affecting water over the last two centuries, seeking to situate it in the context of the development and overall transformation of the city. I have deliberately avoided a rigid definition of Montreal's city limits. The history of the city, its watercourses, and the relationship between them is structured in relation to a nesting of geographical scales, from the city to the archipelago. This perspective follows from the project of addressing the history of Montreal in its relationship with the natural elements, water foremost among them. In short, it is the changing configurations of this relationship that constitute the narrative line of this book.