

## Introduction

Stéphane Castonguay and Michèle Dagenais

In its efforts to understand the city as an ecological setting, urban environmental history has revealed the naturalness of urban places. In that respect, the term “metropolitan natures” refers to the water that circulates within and throughout the city, animals that invade its territory and crowd its buildings, and trees that shade properties and public spaces, providing wealth and health to neighborhoods.<sup>1</sup> It also evokes the soil that has been cultivated to feed the city, the land expropriated to expand its limits, and the rural and riverine landscapes transformed to respond to the needs of urban populations.<sup>2</sup> These elements participate in a web of relationships, be they spatial, economic, or political, that sometimes reinforce or reproduce the social order and at other times ignite disputes between antagonistic actors, within the city and without. When one considers these and other discrete instances of the urban environment, one is left with the arduous task of specifying what is meant by the word “environment.” For one thing, it is not an object extracted from the material world or a fact to be accepted at face value but an aggregate in need of exploration and explanation.<sup>3</sup> It is a plural process that lends itself to a multiplicity of meanings and forms, all of which point to the need to historicize relationships to environment and to unveil the social and ecological facets of that word. Investigated across different time periods and natural settings, its intricacies lend additional meaning to an understanding of urban phenomena. *Metropol-*

*itan Natures* seeks to generate and investigate these different meanings of the urban environment in and around one of the oldest North American urban settings: the city of Montreal.

## The City and the Metropolis

Montreal, the city and the metropolis, is also the name of an island, an urban agglomeration—the Greater Montreal area—and a plain that surrounds the archipelago of that island. One needs to acknowledge this plurality of spatial frames to grasp the history of Montreal over a long time period, one that spans more than four centuries. In its more basic definition, Montreal is generally understood as a city situated on an island, and one of its most distinctive elements, located at its core, is Mount Royal. Another characteristic is its geographical location, at the confluence of the St. Lawrence and Ottawa rivers. The southern part of the island is washed in the St. Lawrence River, which approaches the city of Montreal through Lake St. Louis before entering the strait of the Lachine Rapids, where it meets the city. To the north, the Ottawa River enters the Lake of Two Mountains and reappears in two smaller rivers, the Rivière des Prairies and the Mille-Îles River, flowing on either side of the island known as Île Jésus. These rivers run for more than thirty miles before joining the St. Lawrence River at the northeast end of the island.

The very term *metropolis* embraces various realities in terms of time, space, and environment. In part because it sits at the confluence of two large waterways, Montreal became, even before the end of the eighteenth century, the hub for trade in natural resources extracted first from the backcountry and later the Great Lakes and the western areas of the continent. All the merchandise—first furs, then wood and wheat—had to be unloaded from boats and transported to Montreal by road to bypass the Lachine Rapids. It was then transferred onto ships destined for foreign markets. The same held for European goods headed for the Northwest and the interior of the continent. According to classic Canadian historiography, staple extraction and export activities would be a fundamental driving force in the country's economic development, allowing Montreal, with its position in the continental trade networks, to acquire and flex its economic muscle. With the founding of Canada in 1867, Montreal's metropolitan role would be strengthened first by the integration of the various colonies thenceforth united and later by the settling of the West.<sup>4</sup>

A product of its geography, the city's function as a hub also emerged out of large infrastructure projects undertaken to consolidate Montreal's role. From 1820 to 1850, British political authorities built a series of canals to facilitate

land development in northern North America at a time when the Americans were completing the construction of the Erie Canal. From that time on, the business elite worked to make Montreal a great metropolis and orchestrated the development of the Lachine Canal, on the southwestern part of the island, to bypass the rapids. Having thereby eliminated one of the major obstacles to transcontinental navigation, they then invested in maritime and rail transport. The creation of a transcontinental railway and the economic activity that it supported accelerated Montreal's industrialization, founded in part on heavy industry related to transportation and in part on light industry (textiles, garments, footwear, food, brewing). By the turn of the twentieth century, 55 percent of the goods manufactured in Quebec were being produced in the Montreal area.<sup>5</sup>

Industrialization amplified Montreal's territorial expansion along the lines of an inverted T, a form that the city adopted after the disappearance of the fortifications at the beginning of the nineteenth century. New industry spread out along the river on either side of the central axis of St. Lawrence Street going north. The businesses of the nascent industrial revolution helped urbanize the shores of the river and the Lachine Canal, with the first working-class districts growing up nearby. The Montreal photographers of the nineteenth century, who captured the rapid transformations of the Montreal landscape, depicted the lower city covered by thick clouds of gray smoke. While businesses and working-class districts spilled out along the banks from the central core, trade and craft activities extended northward. By the end of the nineteenth century, they had reached the slopes of Mount Royal, which until then was the domain of the Montreal elite.

At the end of the nineteenth century, Montreal's territory began to explode. The phenomenon was less the result of overpopulation within the city itself than spatial development in response to various processes. Industrial suburbs like St. Henry or Maisonneuve sprouted up as entrepreneurs sought more expansive spaces and territories, often with less stringent regulations than in the city, where they could set up ever-larger enterprises.<sup>6</sup> The elite's desire to group themselves together was also at the root of the creation of a series of bourgeois suburbs around Montreal, among them Westmount and Outremont. At that time, the development of public transit (tramways and trains) greatly facilitated the expansion of the inhabited area around Montreal, both on and off the island.

The city of Montreal itself grew through a process of annexing surrounding municipalities, many of which, in appearance mere extensions of Montreal's territory, had a very short lifespan. Between 1905 and 1914, the city annexed

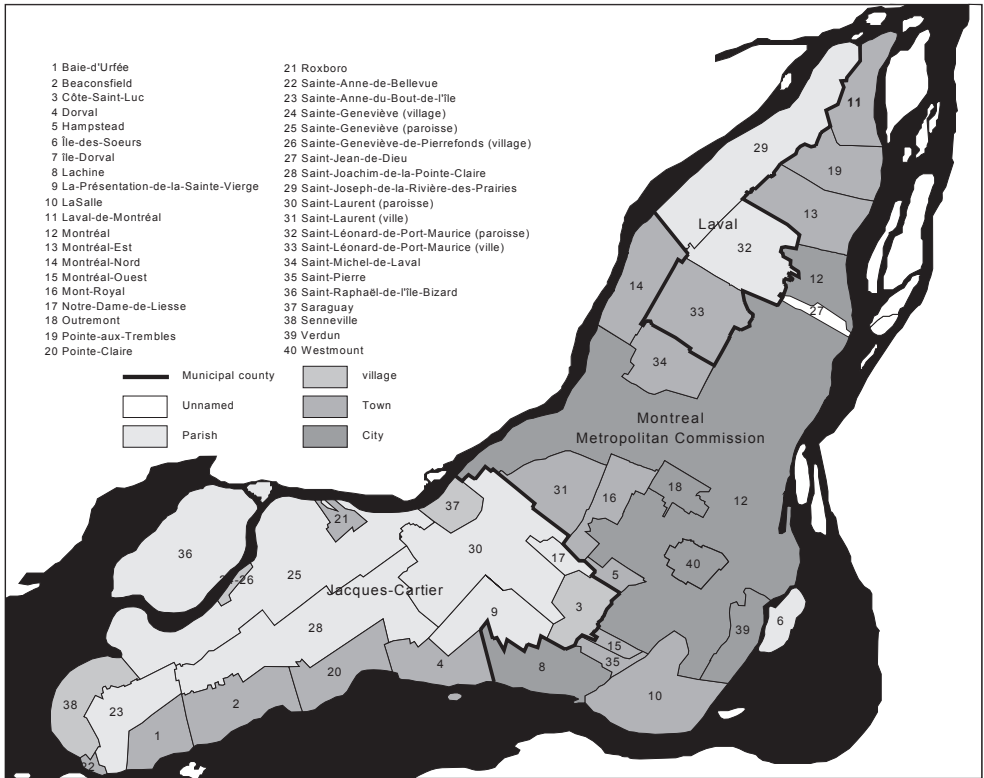


Fig. 0.1. Borders and legal status of municipalities on the Island of Montreal in 1921. Courtesy Jean-Pierre Collin and Michèle Dagenais, Cartographie INRS-Urbanisation, 1995. CIEQ, 2010.

twenty-six territories, making sixteen separate municipalities.<sup>7</sup> With the exception of three new municipalities added between 1916 and 1918, Montreal's territory would not expand further until the 1960s.<sup>8</sup>

At the dawn of the twentieth century, Montreal projected the image of a city in constant growth. It was the unchallenged metropolis of Canada. Its industries attracted rural dwellers as well as immigrants of international origin, all of whom formed a large pool of cheap labor. In the space of thirty years, the city's population exploded, growing from 325,000 in 1900 to nearly 820,000 inhabitants in 1930. By that time, 1 million people lived on the Island of Montreal. The resulting intermingling of people occurred in an urban setting that had not yet adjusted. This circumstance caused living conditions to deteriorate, with particular places having high death rates, crowded and unsanitary dwellings, and squalor in neighborhoods polluted by industrial activities. There is no dearth of accounts depicting these situations in dramatic

terms and the dangers, real or imagined, associated with them. The alarmist tone and apocalyptic images used to describe Montreal and its difficult living conditions attest to the scope of the upheavals caused by the developing urban, industrial society.<sup>9</sup>

The accelerated growth of the city and the sprouting of suburbs obliged the municipalities to create or overhaul a whole range of infrastructure.<sup>10</sup> The hookup of waterworks and sewage systems and the expansion of the gas, electricity, telephone, and urban transit networks were the subject of intense discussion and political maneuvering in the wake of which urban promoters, public service contractors, and politicians sought to benefit from this unique growth phase. In 1921, the government decided to create the Montreal Metropolitan Commission, made up of some fifteen island municipalities, with a mandate of controlling borrowing by suburban municipalities. The commission also tended to serve as a springboard for metropolitan-scale initiatives such as the construction of a highway spanning the island from east to west (Metropolitan Boulevard), undertaken in the 1950s.

At the time, the displacement of the center of gravity of the North American economy westward, which escalated after World War II, led to the gradual loss of Montreal's role as the Canadian metropolis. The opening of the St. Lawrence Seaway in the mid-1950s allowed deep-sea vessels to reach the Great Lakes, freeing them from the need to transship goods at the Port of Montreal. The displacement of the economic center of gravity also entailed the dismantling of the railway industry, up until then largely concentrated in Montreal. While the prosperity of the 1950s and 1960s may have allowed the economy of Greater Montreal to maintain a reasonable level of activity, the recession that began with the oil crisis of the 1970s unveiled its problems for all to see.<sup>11</sup> The two decades that followed were marked by the need to restructure industrial activities. The aging structure that had underpinned the growth of Montreal's economy since the mid-nineteenth century was crumbling. International competition hit both heavy and light industry full force, causing many sectors to decline, among them the footwear, textile, and garment industries. In this, Montreal's history is closely aligned with the structural transformations that took place elsewhere on the continent where a deindustrialization process coincided with a shift toward the knowledge economy.<sup>12</sup>

Montreal's situation changed in another significant way after World War II. Until the mid-twentieth century, the city drew the inhabitants of its hinterland like a magnet. During these decades, the city was conceived of and laid out as a clearly delineated physical entity onto which the suburban towns sprouting up on the Island of Montreal latched. After 1945, however, the city

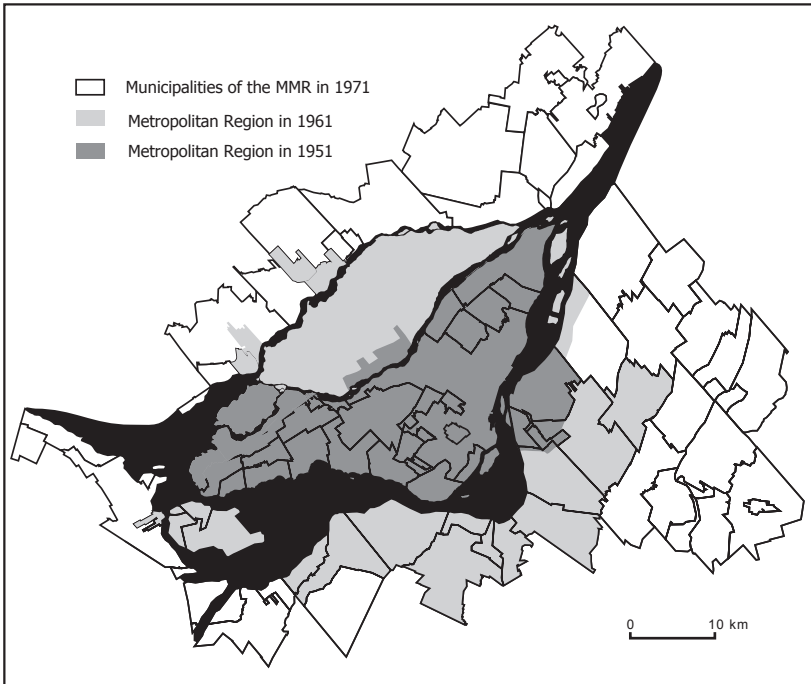


Fig. 0.2. Evolution of the Montreal metropolitan region. Courtesy Cartographie INRS-Urbanisation, 1998. CIEQ, 2010.

began to fracture and extend beyond the island. It tended to take a back seat to the peripheral space, which exerted considerable drawing power. Thus, between 1941 and 1981, the population of the Island of Montreal grew from 1.11 million inhabitants to more than 1.76 million, but the population of the metropolitan census area jumped even more dramatically, from 1.14 million inhabitants in 1941 to 2.8 million in 1981. By 2000, the Island of Montreal had 1.8 million inhabitants while the metropolitan area contained 3.5 million.<sup>13</sup>

This population growth, along with the full urbanization of still-unoccupied land on the Island of Montreal, was behind the second wave of suburbanization that began in 1945. The migration of families as well as many industries and businesses to the suburbs was also due to the fact that land and housing were less costly than in the city. The suburbanization wave began on the Island of Montreal and later spread to Île Jésus on the north shore, and then to the south shore, starting with the district of Chambly. At the end of the 1950s, there was an explosion in the number of links to the mainland. In less than a decade, eleven bridges were built around the two islands, along with six major road axes and multiple junctions. Having grown by 13 square kilo-

meters (5 square miles) from 1932 to 1944, the urbanized area around Montreal expanded by 62 square kilometers (24 square miles) from 1944 to 1952 and by another 337 square kilometers (130 square miles) from 1961 to 1971.<sup>14</sup>

Like elsewhere on the continent, the many issues associated with this type of development were increasingly the subject of debate. Beginning in the 1960s, the context gave rise to commissions of inquiry into intermunicipal problems on the Island of Montreal as well as in the region. In 1970, the Montreal Urban Community was created to coordinate police protection, public transit, and sewage treatment on the Island of Montreal. While the new organization allowed certain problems to be addressed, its action remained limited in geographical terms because it had jurisdiction over only half the agglomeration's population, and little was accomplished in the hundreds of small municipalities of the region.

Montreal therefore became a metropolitan space in the form of a collection of ill-defined territories with residential and industrial suburbs and agricultural space all mixed in. In this, too, Montreal resembled other North American metropolises grappling with issues of urban sprawl and land management. In sum, Montreal became a metropolis in the sense of an agglomeration whose ever-changing contours were defined and redefined with each new era, according to the flow of people, goods, resources, and representations that traveled through these spaces.

## **Exploring Urban Environments of Montreal**

Much in the way that Montreal must be grasped through the permanent redefinition of its spatial-temporal frames, it is important to highlight the historicity of its urban environments by revealing the distinctions between the natural and the cultural, which are themselves also in constant flux. In addressing these processes, this book presents histories of Montreal environments, rather than an environmental history of Montreal, to explain how urban environments are created, constructed, and modified, most notably through its distinctive landscapes and geographical features but also through the processes of colonization, urbanization, and industrialization that took place there and shaped the territory. Montreal was formed and transformed by elements specific to its location and by social, cultural, and technological changes that characterized its history. The fourteen chapters of the book seek to reconstruct the ecological and spatial dynamics underlying such formations and illuminate their different relationships to the environment since the seventeenth century at the scale of the city and the metropolis. Each of them pro-

poses a reading of an environmental dimension of Montreal's history, around one of the three themes that form the organizational basis of this book: urban cultures and representations, socio-technical systems and urban infrastructures, and city-country relationships and the production of hinterlands by urban centers.

## Representations

After urban historians embraced the “cultural turn” at the end of the 1980s, considerable work was done on the various ways in which cities, as well as urban populations, have been portrayed.<sup>15</sup> Taking into account the cultures and subcultures of the various social groups and how they are inscribed in the urban space has led to a deeper understanding of the urbanization process. However, the focus on the representations and meanings of urban experiences has sometimes been to the detriment of the study of the physical reality of the city. In addition to studying the representations constructed in relation to urban environments, we must attend to how these same environments were shaped and how they in turn helped shape social relations and urban experiences.<sup>16</sup> Conceiving the city through the senses is one way to understand it as a discursive as well as a material object, a focus central to recent works on urban history.<sup>17</sup> An entity both real and imagined, the city is grasped through the senses and through entering into contact with it, through the use of places. In Montreal, the significance of places and their intelligibility have been formed by perceptions of the natural elements, whose realities and representations are constantly worked and reworked in connection with the transformations of the settings and landscapes.

From the outset, Colin Coates shows that in the seventeenth and eighteenth centuries, perceptions of Montreal and its environment were closely linked to plans to settle the entire region. From the palette of colors used by painters of that era emerges a city construed as one of the pedestals of the colonizing enterprise and a place to establish new values. The author presents certain maps and paintings by analyzing the way in which the natural elements and the built environment were represented and how they thus participated in the construction of the first characters of Montreal urbanity. These works show a frontier town that transformed itself by pushing back beyond its perimeter elements of the landscape that did not fit with the colonial idea of urbanity, such as primeval forest and indigenous wildlife. Paintings of both French and English origin generally depict Montreal seen from afar, from Île Sainte-Hélène or the flanks of Mount Royal. In all cases, such representations of the city imbue it with a distinctly European personality. Here, Montreal's



urban environment is defined by the distancing of an indigenous milieu like the forest, and the introduction of a better, European nature composed of domestic plants and animals as they are portrayed in landscape reproductions.

Veritable icons, the mountain and river were always particularly prized sites from which the urban fabric of Montreal took shape and developed. Many an illustration, travel account, political treatise, and report on living conditions has come down from the heights of Mount Royal. The banks of the St. Lawrence, which anchor the urban core, and the river itself, are also omnipresent in the discourse. Victoria Dickenson reconsiders these emblematic sites in light of the accounts of various Montreal explorers and inhabitants written since the seventeenth century. She seeks to relive the experiences of her predecessors and attempts to reconstruct the processes by which they became acquainted with the Montreal environment. The author shows how, when combined with accounts found in the textual and iconographic archives, her active experience of these sites provides the best possible understanding of the relationship between her predecessors and the elements of these natural surroundings. The permanence of these elements—of both their physical reality and their manifestation—thus overrides the social and environmental transformations that have occurred over the several hundred years since their first imprints on the Euro-American experience.

The desire to be able to embrace the city in its entirety by observing it from on high or in contrast to Mount Royal is also at the heart of the representations of the Montreal elite at the dawn of the twentieth century. In that era of high industrial growth, their attitude toward the city helped drive the ambition to establish Montreal as the metropolis of Canada. Through his study of the discourse of the economic, political, and intellectual elite, Nicolas Kenny reconstitutes the various ways that their perceptions of the environment developed. He unveils the processes adopted to depict a city in its full glory, the projects planned for it, and the daily physical experiences that it promised. The body holds a central place in these processes, as both agent and subject through which the work of organizing the metropolis was furthered. The body is therefore a participant in the co-construction of natural and built environments in the industrial city. Thus, the sensory experience, particularly sight and hearing, is mobilized in this process through which the elites celebrate their ability to mold the urban environment, a product of the overlap of elements of the natural milieu—including the human body—and the industrial landscape. In sum, it is nature and the body transformed and adapted to the industrial context that are celebrated.

The viewpoint changed when the perils engendered by the industrial city were evoked. We then entered Montreal more resolutely by strolling through

its industrial areas, both working class and commercial, populated by manufacturing plants and bustling with human activity. The stench, dust, and filth evoked or condemned traced the contours of a new urban geography at a time when the Spanish flu epidemic was exploding, at the end of the 1910s. In fact, Magda Fahrni explains, the crisis caused by the flu sharpened sensual perceptions and made the public and the Montreal authorities more aware of environmental factors, first and foremost climate and air quality. The desire to discipline natural elements such as the river and its rapids, which was omnipresent in earlier decades, gave way to the drive to control human nature and Montrealers' ways of life. The notions of population density, promiscuity, and hygiene became central. New landscapes were developed in this context, whose intelligibility emerged through attempts to sanitize the urban space and structure activities and flow. Even as a growing populace and its pressures on the built environment formed an ideal substrate for spreading germs and generating an epidemic, the environment would become physically and discursively a lever for members of the medical corps and the urban elite seeking to manage social organization and individual behavior.

## Infrastructure

The city also developed and grew through the building of public works, which gave rise to an array of reciprocal adaptations between the urbanized and natural environments. Understanding the process of establishing a network of urban services presumes consideration of efforts to transform the natural elements harnessed, their urbanization, and the manner in which they reacted to the changes imposed on them. In urban history, the networking of resources was first studied on a technical level, in relation to their strong impact on the transformation of the urban form, from compact city to networked city.<sup>18</sup> Less frequently, scholars have attempted to assess how the natural characteristics of a setting weigh on the configuration of the technical network. These interrelations are the quarry of the chapters grouped around this second theme, at the crossroads of urban and environmental history. The goal is to analyze the processes surrounding the deployment of various infrastructures in two ways: to reveal first to what extent the configurations taken by the technical networks formed at the junction of the natural elements of the urban environment and second, the political and technical choices made. Thus conceived, the study of urban infrastructure can clarify the hybrid dimension of the urban setting and the concurrent production of social inequalities by human and natural elements.

Four chapters of the volume examine the relations that grew over time be-

tween city and water, from the very first reflections on how to manage the problem of surface water at the dawn of the industrial era. Dany Fougères recalls the extent to which this water was omnipresent in the lives of Montrealers until the first decades of the nineteenth century. From then on, however, its presence was perceived in different terms. While it had been associated with an unavoidable natural phenomenon since Montreal was first founded, this water was increasingly considered a nuisance once colonial authorities planned to strengthen commercial activities and facilitate movement through the city. Dany Fougères describes the work public officials undertook to control it, thus revealing how Montreal's territory was reconfigured by the leveling of streets and channeling of waterways. The water and the channels that it carved as it flowed through the city and the soil with its constraints and possibilities, as well as municipal management of the infrastructure and human circulation, combined to shape the urban environment.

The status assigned to water depended on the form in which it declared its presence. It was considered a nuisance when it stagnated and accumulated on road surfaces. It became useful once again when it was transformed into a good by being captured upstream from the Lachine Rapids and redistributed throughout the city. According to Michèle Dagenais, this more useful form of the water present in the area resulted from a dual process of transformation, both on the political and the technical front. In her chapter, the author shows how the networking of first drinking water and then waste water contributed to the organization of the urban territory and structuring of political relations at the municipal level. However, it would be decades before Montreal officials succeeded in hooking all areas of the city to potable and wastewater systems, due partly to technical considerations and partly to political factors. The debates and problems that accompanied the commissioning of these technical networks reveal the degree to which their existence was shaped by power relations and depended on the transformation of the natural and built environment and liberal ideology. The infrastructure and the water that it carried, both drinking and waste, contributed to the extension and consolidation of the urban space and a new mode of governance.

Susan Ross handles a particular aspect of this overlapping of the natural and built environments in her study on the fate of reservoirs constructed on Mount Royal to facilitate the conveyance of drinking water throughout the territory of Montreal. She shows how, despite the generalized introduction of waterworks in cities of the Western Hemisphere, the modalities of their development were a function of specific local circumstances. In Montreal, the waterworks were designed to make use of the topography to channel water to the different areas of the city. The eight reservoirs built on Mount Royal

beginning in 1853 transformed part of the mountain into a component of the waterworks, thenceforth considered by municipal officials as a kind of water tower. The author ponders how to reinstate this role of the mountain, which, like the biogeophysical features of the urban ecosystem in which the reservoirs were built, continues despite having disappeared from view when the reservoirs were covered.

Each of the three last chapters of the section on urban infrastructure raises the question of environmental inequalities at work when policy choices were made to derive a profit from the natural elements or to shape Montreal's territory. They examine how these elements were organized within the territory of Montreal and linked to social relations of economic and environmental domination and impoverishment. This is the spirit of Christopher Boone's discussion on the solutions adopted to address flooding problems at the end of the nineteenth century. A recurring feature of Montreal's history, winter and spring flooding acquired a catastrophic character from the moment the shores and riverbanks were urbanized. This was the case for the particularly vulnerable working-class districts that grew up on the lowlands of Point St. Charles, in the vicinity of the Lachine Canal. While municipal authorities discussed the matter each time the St. Lawrence overflowed, they acted to correct the situation only after the Grand Trunk Railway facilities were flooded. Boone maintains that it was merely coincidental that the dam built also benefited the inhabitants of the area, who would otherwise certainly have continued to be at the mercy of the river. Urban development and its socioeconomic stratification, industrial imperatives, and municipal governance, as well as the river and its hydrology, combined to form a hazardous landscape prone to the occurrence and regulation of spring flooding.

The study of the roadways that crisscross Montreal, both streets and highways, sheds additional light on the history of how the costs and benefits of improvements to the city were apportioned. The last two contributions to this section show how technical infrastructure and social structure won out over the elements of the natural milieu, making roadways, meaning streets and highways, a subject of environmental history. The reconstitution of the overlapping at play between biophysical and socio-technical processes first raises the question of the appropriation of public space. This is the angle that Sherry Olson takes to recreate the pathway and components of certain Montreal territory roadways. Her study demonstrates the importance of grasping the fact of the city's verticality by reflecting on various above-ground/below-ground interactions. The construction of urban infrastructure leaves its mark as much on the surface of the ground as below it. In the nineteenth century, when the city was rapidly becoming urbanized, landscaping of the urban territory

reshaped the city's topography, seeking to level and drain streets and cover streams.

In contrast, in the middle of the twentieth century, when the city was increasingly crisscrossed by a dense network of streets, rock was excavated to make way for the construction of a highway in the heart of a Montreal inner-city neighborhood. Claire Poitras analyzes the debate surrounding the development of a trenched highway in the 1960s. The excavated highway split the social and physical environment of the neighborhood, which has never fully recovered from this deep scar that continues to spew forth dust, noise, and carbon dioxide. To be sure, earlier studies on water networks have shed light on the importance of considering the underground area when reconstituting the environmental adaptation work arising from urban growth. But, by considering the social and spatial dimensions of different types of "public" infrastructure, these chapters provide an analysis of how inequalities became inscribed in the urban environment.

## Hinterlands

The chapters of the last section deal with the production of the hinterland, a classic topic of urban geographical and historical research that recent works by environmental historians have cast in a different guise. In his study of city-country relations, William Cronon has masterfully demonstrated how natural resources enabled the urban pole of Chicago to spatially expand the reach of its power to the backcountry, modifying the land use and landscape of the hinterland through its circuits of trade, be they virtual (through the stock exchange) or material (most notably through infrastructure such as roads and highways, or sewers and aqueducts, that steadily expanded the reach of the urban environment).<sup>19</sup> More recent works have discussed the flow of matter and energy from the countryside to the city, only to be cast back, albeit transformed.<sup>20</sup> The urban metabolism—as it is often called—also generates differentiated types of land use and distinct relationships between society and the environment. As the city leaves its ecological imprint outside its immediate boundaries, be it in the countryside, in the backcountry, or across the planet, these remote areas become entrenched in urban processes where resources circulate, expanding the very limits that bound the urban environment.

Difficulties in distinguishing these spaces appear clearly in the study of agricultural production in and around the Island of Montreal over a one-hundred-year period. Looking at the dynamics and scale of agricultural transformations on the Montreal Plain enables Stéphane Castonguay to perceive how the city and the country have coexisted there. When the urban center

encroached on the immediate rural territory, agricultural activities were redefined and adopted an “urban lifestyle” rather than simply being bulldozed beneath suburban housing and obliterated from the landscape. In this analysis, the changing scale of the alterations reveals the modalities of land use transformations in urban, peri-urban, and suburban territories whose boundaries shifted repeatedly as the city grew and ecological and economic conditions of agricultural production changed. This analysis in turn reveals how agricultural and urban environments redefined each other.

The relationships that bind a city to its hinterland do not rest solely on the extraction and circulation of natural resources and the redefinition of space. Environmental uses and transformations in the hinterland exhibit power relationships exercised at a distance, notably through cultural hegemony. In his chapter on foxhunting on the Island of Montreal, Darcy Ingram illustrates how the urban elite extended their reach from the boardroom to the dirt, co-opting farmers in their desire to reproduce the cultural supremacy of their British origins. He proposes another way of looking at the urban environment, not only in how it shaped the countryside to sustain the hegemony of city dwellers but also in how animals were instrumentalized (or mobilized) to define the relationships between humans and the land. Social inequalities appear as a product of the power structure that members of the urban elite extended outside the perimeter of the city and embedded in the social relationships to the environment that *habitants* experienced in the rural areas of Montreal. What the study of the transformation of agricultural environments on the Island of Montreal shows for land and soil use, the study on the hunt demonstrates for urban and rural societies.

The power that the city exerts on its hinterland rests on different scalar production, as partners beyond the city reshape the ecological and social dynamics of the urban environment. Experts mobilized from afar modify the relationships a population enjoys with its territory by encapsulating that experience within the conundrum of urban life. This is clearly exemplified by Daniel Rueck in his chapter on Kahnawake, a Mohawk territory on the south bank of the St. Lawrence River across from Montreal. That territory was transformed during the events surrounding the arrival of the Canadian Pacific Railway when it built a bridge to Kahnawake in 1887. Besides the usual tale of Aboriginal dispossession, these events bring to our attention the fact that the hinterland rests on layers of culture and nature, each possessing its own history of conflict and husbandry. The cultural dimensions of the skewed power relations surrounding access to resources are also racial and result from the confrontation between hybrid landscapes and societies that are distinct, particularly in their relationship to the land. This confrontation takes place on a

territory that is outside the island perimeter but nevertheless integrated into the city and thus participates in the production of the Montreal environment.

Another instance of a community whose lifestyle and landscape have been subverted by the arrival of urban industry and modernity is that of farmers located a few miles north of Kahnawake, close to the U.S. border. In the last chapter, Louis-Raphaël Pelletier explores how a subtle resource—hydroelectric energy—was extracted with not-so-subtle ecological and cultural effects. During the interwar years, the inhabitants of the county of Beauharnois saw large tracts of their land—among the most fertile of the St. Lawrence Lowlands—inundated to serve the energy needs, less immediate than prospective, of the industrializing and expanding city of Montreal. These needs were also those of the private utility that supplied the city, the Montreal Light, Heat, and Power Company, whose engineers designed the environmental transformations—and provoked the cultural upheaval of an area that had been settled for hundreds of years. Again, questions of inequality resulting from environmental changes that supported the expansion of Montreal are addressed, although the spatial encroachment of the burgeoning city occurred at a distance. A territory not contiguous with the island supplied power to nurture urban growth, and Beauharnois's inhabitants derived virtually no benefit from the power generation despite its negative impact on their environment and lifestyle.

From the St. Lawrence River to the waterworks and sewage networks, from the sensual experiences of Montrealers, both colonial and modern, to the reproduction of social inequalities, from the mountain in the heart of the city to the Kahnawake Amerindian territory, from the germs and dust of the working-class districts to the hydropower of Beauharnois County, and from the island's underground areas to the farms of Montreal's agricultural plain, the concept of urban environment contained in this book spans a broad range of realities and milieus. Such a broad-based approach implies that we acknowledge the shifting boundaries and false dichotomies used to differentiate built spaces and natural elements, or to distinguish between city and nature or city and countryside, to understand social relationships to the environment in an urban setting. It also raises the need to think about the ways in which human beings have constructed the urban environment, as well as about the processes through which the urban environment has constructed human experiences and informed social relations. Finally, it exposes the various scales, both within the city and without, upon which the urban environment unfolds.

The book's stance in favor of such a broad approach is deliberate. It seemed to be the best way of shattering the notion of environment in the urban setting too commonly associated with the fallout of the industrial city or the deterior-

ration of living conditions. The very polysemy of the name Montreal, not just city and metropolis, but island, plain, and region, as well as its long history, at least in North American terms, urged us on in this direction. Many urban-environment links are examined here, from the seventeenth century to the end of the twentieth century, in contexts with multiple relations to time and space, as is illustrated by the example of the Mohawk community or that of farmers coping with the encroachment of the Montreal elite onto their land in the late nineteenth century.

Ultimately, this approach explains the place occupied by space and landscapes in the examination of different Montreal environments. Many of the investigations in these chapters are founded on spatialized objects. Such is the case for the colonial urban core, the history of which is gleaned from old maps and paintings that give it life and form. It is also true for Montreal agriculture, which is examined using a set of maps and tables that reveal urban/rural intergrowth patterns. The accounts of the Montreal elite, like the reports of the explorers and letters of municipal medical authorities, also construct the reality of the milieu that they described while drawing on their representations of landscapes and the territorial organization of urban activities. Space is equally central to the study of urban infrastructure in terms of the circulation of humans and materials. The multiplicity of sources and methods mobilized to scrutinize these phenomena echoes the desire to call attention to the various configurations arising from the encounter of natural and built environments, viewed through approaches that borrow from urban history and geography as well as environmental and social history. These are the methodological choices underlying the chapter authors' efforts to unveil the historicity of the ways in which Montreal and its environments intersect.