

## Preface

**T**his book, an examination of industrial suburbanization and the making of industrial suburbs in Canada and the United States between 1850 and 1950, has three aims. The first is to assemble in one collection, for the first time, a selection of recent research on industrial suburbanization and industrial suburbs. Building on historiographic and theoretical overviews, case studies of various metropolitan areas in Canada (Toronto and Montreal) and the United States (Baltimore, Pittsburgh, Chicago, Detroit, Los Angeles, and San Francisco) highlight the place-based nature of the factory districts encircling the central city.

The second is to help refocus research on the suburbs. Until recently, most work favored middle-class residential suburbs. Along with other work that has been published in recent years, this book looks at industrial and working-class suburbs. The third aim is to show the significance of the dispersion of factories to the urban fringe for the making of metropolitan districts before the post–World War II bout of suburbanization. The book argues that manufacturing decentralization was a vital component of metropolitan development from as early as the mid-nineteenth century.

Some chapters are original papers specifically commissioned for the collection (Chapters 1, 4, 8, 10, and 11). The rest have appeared elsewhere. Chapters 2, 5, 6, 7, and 9 were originally published in a special issue of the *Journal of Historical Geography*, volume 27 (2001). Chapter 3, which is arguably the earliest academic examination of factory districts, and the model and

forerunner of most other research on metropolitan industrial districts, was first published in the *Geographical Review*, volume 26 (1979).

In one way or another many people have contributed to the making of this book. Various colleagues have provided intellectual support, but I would like to give special thanks to Sherry Olson, Richard Harris, Gunter Gad, Ted Muller, and Dick Walker. At the University of Toronto, Joe Desloges, chair of the Geography Department, provided financial and administrative support, while Byron Moldofsky, Jane Davie, and Mark Fram helped me through the nightmare of producing illustrations in the electronic era. A grant from the Social Science and Humanities Research Council of Canada and a fellowship from the Connaught Committee of the University of Toronto gave me the time to write part of the book and organize the rest. I have benefited from the wisdom of Peter Wissoker, a senior acquisitions editor at Temple University Press, who has guided the book through some treacherous shoals. Finally, the lights of my life, Lisa, Yonah, and Lev, have provided me with love and support, and I am deeply grateful.

---

## Industry and the Suburbs

**ROBERT LEWIS**

**T**he industrial origins of metropolitan Chicago's Pullman and South Chicago districts date back to the late 1860s, when Colonel James Brown and other prominent Chicagoans purchased a large tract of land and secured a charter for the Calumet and Chicago Canal and Dock Company. The building of the harbor and rail lines, the opening and grading of streets, and the provision of services helped attract the area's first industries, among them Northwestern Fertilizing (1867) and James Brown Iron and Steel (1875). The most singular events, however, the ones that would transform the somewhat sleepy suburban districts south of the city limits, were the building of the North Chicago Rolling Mills and the Pullman Palace Car Works in 1880. By 1882 the former consisted of four blast furnaces, a Bessemer steel department, and a steel rail mill, thus setting the foundation for the development of one of America's largest steel complexes. Pullman became the nation's largest railroad car producer and most notorious representative of the corporate industrial suburb. By the time the two districts, as well as an assortment of other suburban industrial communities on the south side, were annexed to Chicago in 1889, the foundation for tremendous economic and residential growth was in place: industry hugged the lake shore, the Calumet River, and the railroad lines, while working-class housing was sandwiched between industry, water, and rail.<sup>1</sup>

Whenever the subject of pre-1950 industrial suburbs, such as South Chicago and Pullman, comes up in discussion, the

almost inevitable response from urban history scholars is, “everyone knows about those.” Regardless of their core research interests, scholars have a strong sense that industrial suburbs have littered the metropolitan fringe for a long time. Those studying the late eighteenth and early nineteenth centuries point to the old textile suburbs of Philadelphia, the fringe districts where noxious, land-intensive or material-oriented enterprises such as tanneries, shipyards, and brick-making yards clustered, and to the nearby water-powered industrial villages and towns.<sup>2</sup> Those with research interests in the nineteenth and early twentieth centuries refer to the “satellite cities” of Chicago, Cincinnati, and St. Louis, and, of course, most commonly to the Chicago suburb of Pullman.<sup>3</sup> Scholars working on particular cities point to the industrial suburbs clinging to the urban fringe: interwar metropolitan Detroit was composed of Dearborn, Ecorse, Highland Park, Pontiac, River Rouge, and Wyandotte; Buffalo was surrounded by Lackawanna, North Tonawanda, and Tonawanda; early twentieth-century St. Louis was encircled by East St. Louis, National City, Granite City, and Alton; and Milwaukee was belted by Cudahy, South Milwaukee, Waukesha, and West Allis.<sup>4</sup>

Although it appears that we know a great deal about industrial suburbs before World War II, the places on the metropolitan fringe where men, women, and children worked in factories, workshops, mills, railroad shops, and warehouses have, until recently, been taken for granted or largely ignored. Despite the identification of a large number of manufacturing areas on the metropolitan fringe, few historical studies have focused on the industrial suburb or industrial decentralization. What we do know about the character of these nineteenth- and early twentieth-century places and the processes producing them comes from a handful of specialized studies or the occasional paragraph in an urban and industrial history. The ringing of the central city by industrial suburbs as a primary research focus has been of secondary interest to urban scholars.

One reason we know relatively little about the industrial suburb before the 1940s is that scholars working on the post-World War II metropolis have downplayed the few studies that have been done. Instead they have emphasized what they consider the tremendous rate and unique character of manufacturing and retailing decentralization after 1950. In this view, economic decentralization before the 1920s was negligible and amounted to only a trickle in the interwar period. For them, the real impact of manufacturing suburbanization and the development of working-class industrial suburbs lies in the postwar period.<sup>5</sup> We actually know less about the prewar industrial suburbs and industrial suburbanization than we think we know.

Another reason is that the tremendous advances in our knowledge of middle-class suburbs before 1950 have overshadowed research on other aspects of the metropolitan fringe. The place of industrial suburbs within the broader dynamics of urban growth has been lost in the historiography of the middle-class suburb. Scholars have paid much greater attention to the reasons for the development of the residential suburb and the processes driving residential suburbanization. This is nowhere more apparent than in the growing number of (mainly middle- and upper-class) residential suburban histories that have appeared since the publication of Sam Bass Warner's *Streetcar Suburbs* forty years ago. Since then, urban scholars have examined many aspects of the middle-class residential enclaves around the expanding metropolitan fringe after 1850.<sup>6</sup>

While this residential literature is extensive and has taken many different tacks, it is possible to identify several main themes. One major focus of research has been to identify the mechanisms of the suburban land development process, from the local alliances that converted farm to urban land to the origins and meaning of the new designs that developers constructed on the metropolitan fringe. Scholars have dissected the process by which the middle class sought an idyllic rural/urban world where they could escape the central city's congestion, noise, and working class, while having access to both central-city jobs and a suburban lifestyle. This, in turn, is related to studies tying the creation of this leafy suburban world to the formation of an increasingly segregated metropolitan community, where residential opportunities based on gender, class, and race became ever more exclusionary. Finally, many researchers have pointed to the importance of the commuter railroad, the streetcar, and the automobile in opening up the metropolitan fringe to developers and the middle class. In sum, our knowledge of the activities of the urban fringe has been greatly enriched by this work on the crabgrass frontiers of the bourgeois utopias and the streetcar suburbs.

## **The History of Research on the Industrial Suburb**

Although middle-class suburbs have been the focus of research, there is a long, though relatively meager, history of work on industrial suburbs and industrial suburbanization. One aspect of this work, dating from the 1930s, focuses on the compilation of the metropolitan geography of manufacturing employment. Using census-defined city-suburban boundaries, Glenn McLaughlin and Daniel Creamer pointed to the large number of factory workers in the suburbs and, in the process, laid the basis for the

appreciation of the larger metropolitan picture of industrial suburbanization.<sup>7</sup> Prompted by the noticeable bleeding of central-city jobs to the metropolitan fringe and the changing balance of central and suburban employment, these early studies demonstrated the degree to which these changes were taking place. In the early postwar period writers such as Coleman Woodbury and Frank Cliffe, building on the work conducted during the 1930s, pointed to the continued significance of industrial decentralization during and after the war.<sup>8</sup>

Another set of work examined individual industrial suburbs or the industrial suburbs of a few cities, using other types of evidence along with aggregate census data. The classic study is Graeme Taylor's 1915 description of the satellite cities surrounding Chicago, St. Louis, and Cincinnati. While polemical in style and selective in use of evidence, Taylor's book was nevertheless the first attempt to examine the character of the industrial fringe. What Taylor conclusively revealed, a generation before McLaughlin's and Creamer's more aggregated work, was the importance of manufacturing employment on the metropolitan fringe since the 1880s. At the same time, the Pittsburgh Survey's investigation of the metropolitan area's mill towns, and the Regional Plan of New York's examination of New York City's, established the importance of decentralization at the turn of the century.<sup>9</sup>

This early work was followed by a series of case studies and suburban histories. The existence of industrial activity and the concomitant development of working-class residential areas in the metropolitan suburbs that Taylor described was noted by Harlan Douglass in the mid 1920s.<sup>10</sup> This was followed in the postwar period by a spate of studies that discussed the making of industrial suburbs before 1950. Foremost among these were investigations of mid-nineteenth-century Baltimore's factory districts, the Chicago suburbs of Pullman, Cicero, and Skokie, the automobile suburbs of twentieth-century Detroit, and New York satellite towns such as Paterson-Passaic.<sup>11</sup> In addition to census data, these authors used an array of evidence, including insurance atlases, industrial directories, and firm histories, to explain the motivations of firms moving to the metropolitan fringe and to illustrate the relationship of industry to a growing working-class suburban population. This small number of early postwar studies, for the most part undertaken by geographers and historians and focusing on industrial activity as much as on social aspects of industrial suburbs, stood in direct contrast to the mostly sociological studies of working-class suburbs, which directed their attention to residential suburbs and were more

interested in the social ramifications of suburban life than in the industrial aspects of the suburbs.<sup>12</sup>

Finally, in the 1970s there appeared studies of the political economy of metropolitan growth, with particular stress on suburban development.<sup>13</sup> The intent of writers such as David Gordon and Richard Walker was not so much to describe and explain the lived-in world of industrial and working-class suburbs as it was to explain industrial suburbanization. This was achieved by working at a highly abstract Marxian level, in which concepts such as mode of production and capital-labor conflict shaped the interpretation of metropolitan development. Although each writer had his or her own particular position, the general argument was that the industrial metropolis was the creature of the capitalist mode of production, and that metropolitan spatial form was contingent upon capitalist accumulation. Changes to urban form and industrial and residential suburbanization were structured by class conflict and emerged as a solution to capitalism's internal contradictions. The corporate city, for example, was defined by the decentralization of industrial activity as capitalists sought factory sites away from worker unrest in the central city.

This analysis of metropolitan form paved the way for the development of a much-stripped-down version of Marxian theory, with the attempt by Allen Scott to merge political economy with transactional theory.<sup>14</sup> Using a basic division between large, stand-alone, vertically integrated firms (as in the chemical and steel industries) and small, face-to-face, horizontally integrated firms (as in the clothing and jewelry industries), Scott constructed a metropolitan fault line: large firms sought out the urban fringe, while small firms sought the face-to-face milieu of the city center. As is described in greater detail in Chapter 2, Scott, Walker, and the others working in the political economy vein sought to replace the traditional factors of locational analysis with a more incisive and class-based theory.

This long lineage of research has generated a body of work on the industrial suburb. The work of McLaughlin and others, even though couched at a highly aggregated level, demonstrates both the growing number of suburban manufacturing jobs and the changes to metropolitan America's geography of employment, both before and after World War II. The less census dependent, more qualitative studies of Muller, Groves, Taylor, Buder, and Kenyon took these points a step further by bringing out the strategies of the firms seeking suburban locations and emphasizing the tangible workplaces built beyond the city line from as early as the first half of the nineteenth century. The political economy of

the metropolitan growth perspective placed industrial suburbanization and the making of industrial suburbs within a broader context, by extending this earlier analysis of individual firm behavior with a theoretical focus on the class character of urban-industrial society. While not substantial compared to the comprehensive body of suburban social geographies and histories, these pre-1980s studies of the industrial suburb and industrial suburbanization have nevertheless proved to be an extremely valuable guide to the long and changing history of the metropolitan fringe. Regardless of the theoretical position, methodological approach, and choice of sources, these writers identified a powerful and distinct process of industrial suburbanization and the development of a ring of industrial suburbs on the metropolitan fringe.

Building on this literature, a new round of work following two major lines of thought has added to our knowledge of the metropolitan suburbs in the past twenty years. One line consists of studies that examine the working-class and African American suburban residential experience. The narrative of the middle-class suburb that has dominated postwar research on the expanding metropolitan fringe before 1950 has been complemented by examination of the lifeways, housing strategies, political choices, and work experience of white and black workers, both native-born and immigrant. From Toronto and Hamilton's owner-built suburbs to the black towns and working-class suburbs of Los Angeles, Philadelphia, Detroit, Knoxville, Birmingham, and Montreal, the notion that the suburbs are largely the home of middle-class commuters has been successfully challenged. The focus on the social features and experience of the working-class and industrial suburb has greatly advanced our understanding of the suburban mosaic.<sup>15</sup>

The second line of recent scholarship focuses first and foremost on suburban industrial activities and employment histories before 1950. Writers have drawn detailed studies of specific industrial suburbs, satellite cities, and industrial towns ringing the metropolitan central core. This has been done primarily by blending archival methods and extensive bodies of evidence with various theories about firm behavior and urban development.<sup>16</sup> While each researcher has pointed to the unique features of his or her subject, the focus has remained on some aspect of the origins and development of industry on the metropolitan fringe. From Montreal's industrial suburb of Maisonneuve, where a French Canadian bourgeoisie built factory spaces and working-class housing, to the oil suburbs of Los Angeles and the factories and blue-collar homes of suburban New York, the importance of the industrial suburb has been documented.



## Themes and Issues of the Volume

The result, as further witnessed by the collection of papers in this volume, is that scholars over the past twenty years have developed a large and coherent body of knowledge about the diverse social and economic character of the ever-changing North American urban fringe in the nineteenth century and the first half of the twentieth.<sup>17</sup> Building on earlier studies, this recent research has illuminated various features of the industrial suburb, notably the geography and scale of industrial suburbanization since the 1850s, the relevance and character of city-suburban boundaries, and the reasons why firms moved to the suburbs.

This concern with the relationship between the rise of the industrial suburb and capitalist industrialization has pointed to the definite increase, in both absolute and relative terms, in the number of metropolitan manufacturing jobs found in the suburbs. The rise of the industrial suburb after the middle of the nineteenth century is clear. The number of suburban jobs increased dramatically after 1850, and especially after 1880. In sixteen of America's largest metropolitan areas, the number of suburban jobs rose from 446,000 in 1879 to more than 1.6 million in the interwar period and almost 2.5 million by 1954. Suburban employment growth outpaced central-city growth in this period. In the second half of the nineteenth century, suburban manufacturing employment made up about a third of all metropolitan employment. As the number of suburban jobs grew faster than those in the central city after World War I, the suburban share reached almost half of all metropolitan jobs by 1954.<sup>18</sup>

Factories, mills, and warehouses clustered on the urban periphery from an early date. In some cases, industry huddled in suburbs where few other activities were to be found. In others, factories intermingled with workers' housing. In city after city, the surrounding fringe of the expanding metropolis was home not just to middle-class stockbrokers and clerks but also to machinists and unskilled steel workers. The historical geography of the suburbs was as much about the factory and the homes of workers as it was about the middle and upper classes. Of course, the character of industrial suburbanization differed from city to city: Pittsburgh was not Montreal; San Francisco was not Toronto. But regardless of the particularities of economic structure, ethnic composition, local growth machines, and transportation politics, industrial suburbanization patterns in Canadian and American cities had much in common.

The chapters in this volume bring out several important and common aspects of industrial suburbs and industrial suburbanization. The first has

to do with the relationship between the development of the suburb and urban building rhythms. New fringe development and industrial landscapes were created in waves of industrialization and building construction. After the 1890s depression, for example, investment, industrial growth, and city building were focused on San Francisco's metropolitan fringe (South San Francisco, Oakland, and Contra Costa) rather than on the city itself. In favoring the metropolitan periphery, industrial growth enabled the formation of an elaborate multinodal industrial geography encompassing a large territory that hugged the bay. Similarly, industrial development in Pittsburgh, Toronto, Detroit, Chicago, and Montreal created districts farther out from the city core in each burst of growth.<sup>19</sup>

In their search for new location sites, entrepreneurs of all stripes channeled capital investment away from existing districts, with their poor infrastructures, volatile labor forces, inadequate building structures, and congested housing districts, to greenfield sites on the metropolitan fringe. The notoriously lumpy, volatile, and imitative character of capital investment ensured that large amounts of capital would flow into newly established factory sites. In each building cycle, localities laid down fixed capital in plant and constructed the prerequisites for a viable industrial environment: infrastructures (sewers, electricity lines), transportation (streets, railroad lines, canals), and elements of social reproduction (housing, stores, churches).

Linked to the development of industrial suburbs was the sorting of the metropolitan area's social geography. Especially important here, as Richard Harris points out in Chapter 11, is the home-work linkage. The relationship between where people worked and where they lived is central to a better understanding of the suburbanization process and the social character of the suburbs. Factory districts themselves often became the home of workers employed in the suburb's factories, workshops, railroad yards, and mills. The steel mills, foundries, and metalworking shops of Montreal's West End pulled large numbers of skilled and semiskilled metal workers (such as puddlers, molders, and fitters) and an even larger body of unskilled laborers into the district. Pittsburgh's steel towns housed a largely captive labor force, while Detroit's automotive suburbs were home to a distinctive workforce. The rise of Chicago's Union Stock Yards and the associated meat-working plants from the 1860s led to the building of the Back of the Yards, a heavily populated multiethnic working-class area that housed the vast majority of the Packingtown's workers.

Factory districts also shaped the residential geography of the middle and upper classes. The development of new and the continued existence of

older fringe industrial districts, with their noisy, dirty factories, waterways, and railroad tracks, their cheap and densely packed housing, and their working-class and immigrant populations, forced white-collar professionals and the bourgeoisie to settle elsewhere. In the second half of the nineteenth century, class, racial, and income-based geographical sectors became increasingly important social dividers in places such as San Francisco, where the wealthy fled the older districts and settled on Nob Hill and places farther west. Once in place, these new residential patterns shaped the metropolitan social geography for generations to come.

Another issue examined in this volume is the importance of the organization of production for the development of the industrial suburb. Eschewing the polarized descriptions of industrial organization, with their emphasis on the difference between large, vertically integrated, multiunit, dynamic corporations and small, stagnant, labor-intensive firms, this study builds on an alternative model of industrial organization. Industries functioned in quite different ways and had a diversity of social, technological, market, and material properties. This produced an array of production strategies, which in turn produced a range of workplaces and organizational methods.<sup>20</sup> There were many industrial capitalist trajectories, from mid-nineteenth-century Baltimore, with its coexistence of commercial and industrial capitalist organizational forms, to the extremely varied industrial structures that developed in Montreal, San Francisco, Los Angeles, Pittsburgh, and Toronto.

The diverse production pathways that characterize metropolitan development produced quite different locational requirements. In each wave of industrial growth, the parameters of what constituted acceptable sites for production were restructured in response to the development of new production, process, and transportation technologies, the changing character of the labor force and inter-firm relations, and the growing scale of production and markets. Industrial restructuring created the need for new sites, many of them in the industrial suburbs and towns on the expanding metropolitan fringe before World War II. These areas provided large lots of cheap land where firms could implement new technologies and build new factories away from the congested central city, with its large and increasingly hostile labor force. Although large integrated firms typically initiated suburbanization, the development of suburban agglomeration economies attracted firms of all sizes from a range of industries and produced a diversity of productive strategies on the metropolitan fringe.

The development of production trajectories and production sites on the urban fringe was tightly bound up with the emergence of a territorially

bound set of functions that traversed the entire metropolitan district. Business and inter-firm networks operated at the metropolitan scale. In Pittsburgh, for example, steel manufacture depended on the ability of all types of business interests, ranging from financial institutions in central Pittsburgh to owners of coke ovens in the city's rural hinterlands, to coherently organize their interests. Each burst of industrial growth in Toronto and Chicago relied on the ability of property interests to collate land into a manageable commodity, subdivide the new commodity in a manner appropriate to industry, and connect the new sites with transportation systems and working-class housing. The development of locational assets in one part of the metropolis was connected to what went on in other parts. The functional linking of the strategies of urban elites and entrepreneurs was critical to the development of the industrial suburb.

Many of the contributors to this volume examine the impact on factory district formation and suburban development of events and processes occurring at various spatial scales. Metropolitan development and industrial suburban growth were shaped not only by local manufacturing entrepreneurs, financiers, property developers, politicians, and transportation interests. Also important were processes operating at the regional, national, and international levels. Baltimore's mid-nineteenth-century industrial geography, for example, was shaped by capitalist industrialization operating at other scales, including nonlocal technological change and labor transformations, expanding regional and national markets, the changing character of global (mostly Atlantic-based) networks, and the city's place in the nation's developing urban hierarchy.

Similarly, the rapid growth of an urban-industrial complex in Chicago, Pittsburgh, and San Francisco was deeply rooted in the exploitation of natural resources, particularly grain, lumber, meat, and minerals. From the California goldmines to the midwestern wheat fields and forests to southwestern Pennsylvania's clay, gas, and coal deposits, the distribution and exploitation of natural resources contributed to the character of metropolitan industrial development. As these far-flung networks of capital, technology, information, resources, and labor coalesced at the local scale and functioned within waves of investment, industry took shape in various locations—the central city, the adjacent suburban districts, and the more distant satellite towns.<sup>21</sup>

The chapters in this volume also touch upon the relevance of the boundaries separating city from suburb. There is no disputing the political and cultural importance of these boundaries. Suburban life, especially before the development of the metropolitan or regional administrative bodies

that oversee and coordinate many elements of urban life, often meant better access to educational and social facilities, a greater range of utilities and housing, and a more spacious and cleaner environment. It also allowed blue-collar homeowners to skirt what they considered onerous government regulation and expensive urban real estate. For the rest of the working class, living in the suburbs meant easy access to suburban and, if connected by streetcar, central-city jobs. It certainly provided the potential, regardless of class, ethnic, and racial background, to construct a suburban identity, one predicated on city-suburb differences.<sup>22</sup>

With few exceptions, however, most of these supposed suburban assets could be found within the city, especially in the newly developed areas outside the preexisting built-up core. This can be seen in Atherton Park, where an “alternating” process of suburbanization occurred within Flint’s city boundaries. New neighborhoods, housing people from all backgrounds, containing various kinds of industry, and differing little from suburban ones, could be and were constructed within the city boundaries. Ironically, to complicate matters, many factory and working-class developments within city boundaries were originally suburban. This was especially the case during the great annexation wave of 1850–1918, when large chunks of the metropolitan area’s outer ring were annexed by the central city. Not only did these annexed districts increase the population and number of jobs in the city, they also provided room for cities to grow and expand.<sup>23</sup>

Years of political wrangling notwithstanding, these areas were defined as suburban one day, urban the next. What this meant for the new industrial suburban dweller or firm varied, of course. For many firms and people, the difference must have been small. Certainly, in tandem with what was occurring in the suburbs ringing the city, there was great variation in the quality and volume of goods and services in this new city landscape. It can be argued that, with the exception of control over municipal government—admittedly no small feature, but nevertheless only one aspect of daily life, and for most residents probably only a small one—there was little to separate the newly constructed parts of the city from the new suburb.

If newness is one criterion for defining the suburb, then the city-suburb divide, once again, is problematic. There can be little doubt that there is a gradient leading out from the city’s central core, where the areas tend to be younger the farther they are from the center. This, of course, was the picture that Ernest Burgess drew with his concentric ring model in the 1920s, which has been re-created in a various guises by many other urban scholars, among them Leo Schnore and Sam Bass Warner.<sup>24</sup> Although

many writers tend to emphasize the newness of the suburb relative to the city, there is, as various chapters here demonstrate, little support for this view. Like the social gradient, the building history gradient has little basis in tangible metropolitan form.

As the contributors to this book also stress, the conversion of the urban fringe into industrial and working-class suburbs was not a process imposed on an empty slate. Fringe factory districts were frequently molded out of or made to conform to an area's natural habitat. Industrial, real estate, and political elites were extremely adroit at shaping the natural environment to their needs. For example, elements of Chicago's local bourgeoisie, with the support of state and national interests, were instrumental in making the Calumet and Chicago Rivers major industrial channels. Similarly, Pittsburgh's elite fashioned a particular steel-producing geography out of the valleys of the Monongahela and Allegheny Rivers. Elsewhere, the preexisting natural environment was converted to funnel investment in the form of raw materials, machinery, and factory structures into industrial complexes.

As many of the industrial suburbs examined in this volume show, industrial activity coalesced around preexisting commercial, market, and industrial satellite towns within twenty-five to forty miles from the city's central business district. Pullman, one of the major industrial areas of Chicago's Calumet district after 1880, formed around the antebellum development of Roseland. Baltimore's metropolitan fringe was littered with small, water-based mill towns such as Woodberry that became magnets for large-scale industrial development. The small Toronto manufacturing suburbs of Weston formed after World War I around a nineteenth-century rural service town.<sup>25</sup>

Indeed, many nineteenth- and twentieth-century industrial suburbs had longer histories than many areas within cities. The origins of Lachine, a working-class industrial suburb of Montreal, for example, can be traced back to the seventeenth century. It began as an entrepôt for the fur trade, connecting the northern reaches of present-day Canada to London and Paris, the imperial metropolises of the day. With the fur trade's declining importance from the late eighteenth century, Lachine's economic activity languished for nearly a century. Revival came in the 1880s with the influx of American and Canadian corporations that constructed large steel, metalworking, and glass factories. A focal point of metropolitan Montreal's western metalworking complex, Lachine remained an independent suburban entity until very recently and reached its zenith between the world wars, long before many areas of present-day Montreal were constructed.<sup>26</sup>

Similarly, the industrial city of Paterson, a New York satellite city, dates from the 1790s, when Alexander Hamilton's Society for Establishing Useful Manufactures decided to lay out a manufacturing town. Although the project collapsed, the New Jersey town grew, and by the early nineteenth century it had acquired an important industrial base centered on textiles and supplemented by machinery and locomotives. As the tentacles of metropolitan New York City reached farther out, Paterson, with its dependence on downtown New York's financial institutions, wholesale houses, and large markets, became absorbed into its ambit. Like Lachine and the southern suburbs of Chicago, it was one of the many older suburban areas built up long before many of the newer zones within the city were developed.<sup>27</sup> In other words, identifying the new with the suburb and the old with the city fails to capture the complexity of urban form and development.

As suggested by a small body of research over the past 100 years, and borne out by the papers collected in this volume, industrial suburbs were part and parcel of metropolitan development from as early as the mid-nineteenth century. Industrial suburbanization and the formation of industrial suburbs were not unusual or exceptional developments before World War II. While the authors of this volume extend this earlier work, several important areas still need to be examined. For one thing, we need a framework within which to understand industrial behavior, industrial suburbanization, and industrial suburbs in the broader context of metropolitan city building. This would involve taking stock of the qualitative studies of real and tangible industrial suburbs made by scholars over the past 100 years.

Such a framework needs to be embedded within a rigorous conceptual account. As suggested earlier in this chapter and also in the following one, even though the "political economy approach" of the 1970s took some false turns, and was weakened in particular by the absence of research on real places and its polarization of economic activity and metropolitan space, it continues to provide a powerful framework for explaining industrial suburbanization. While the following chapter's main aim is to show how industrial suburbanization has been theorized since the early 1900s, it does point to three elements—geographical industrialization, property development, and political control—critical to a reinterpretation of metropolitan/suburban theory.

Building on this last point, greater consideration needs to be given to the flow and fixity of industry, finance, property, and social capital within the metropolitan area. Industrial suburbs are constructions. They are places formed out of the decisions that manufacturers, bankers, developers, politicians, and others make about where to invest capital. We know



little about who made these decisions or about how and why they were made. The case studies in this volume provide some important leads, but much remains to be discovered about the extent and character of metropolitan manufacturing networks of capital, labor, information, and products. The metropolis was not divided into two realms—the city and the suburb—that operated separately. It was a functional economic entity held together by an extensive set of networks that crossed the boundaries of city and suburb. An examination of the processes driving industrial suburbanization and producing the suburban industrial base would help delineate the character of the metropolitan economy, untangle the differential impact of changing flows of capital investment and industrial restructuring on the urban periphery, and answer questions about the development of the multinucleated metropolitan district.

This is true also for the industrial structure of the metropolitan fringe. The studies in this volume of large metropolitan areas in California, the Manufacturing Belt, and central Canada provide insights into the suburban industrial base. A more systematic description of the types, scales, and production strategies of firms locating on the fringe, however, would furnish the basis for a more comparative understanding of the suburban economy. The studies here suggest that there are large differences between metropolitan districts in terms of the rate and character of industrial suburbanization. In Toronto, for example, the degree of manufacturing activity in independent suburbs appears to be much lower than in the other urban areas. We have some knowledge of why this may have been the case, but we need to know more.

Similarly, suburban economies vary quite dramatically. There can be little doubt that suburban manufacturing districts consisted not only of large, autonomous firms. They were also composed of firms from a variety of backgrounds that functioned within a complicated set of local, metropolitan, and regional networks. The timing of suburbanization also differed. Once again, as these essays show, we know that men, women, and children labored in large numbers in a variety of suburban workplaces long before the well-documented large-scale decentralization of manufacturing and retail jobs after World War II. But we need to answer other questions: what was the actual pull that suburban firms had for workers? And vice versa? What was the relationship between firms settling on the periphery?

Finally, the relationship between the industrial and the social character of the industrial suburbanization process needs to be better understood. Greater focus needs to be placed on the relationship of industrial subur-



banization and the journey to work, the ethnic structure of particular areas, the urban labor market, and the character of the housing market. This is particularly related to the role of the property industry in the formation of suburban manufacturing space and how this was linked to transportation corridors, land speculation, and local political alliances. More also needs to be known about the boundaries operating within metropolitan areas. Was the line between city and suburb a valid one? If so, to what extent and in what ways? Research suggests that the boundary's importance for understanding the metropolitan geography of manufacturing employment and how urban space has been used by economic functions has been overstated. But more research is necessary if we are going to have a strong grasp of the shifting character of urban boundaries and the effects this had on the social and economic life of the metropolis.