

MONTREAL, A CITY BUILT BY SMALL BUILDERS, 1867-1880.

David B. Hanna

Department of Geography

McGill University, Montréal

March, 1986

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

© David B. Hanna, 1986

ABSTRACT

The production of housing underwent significant change in Canada's metropolis during the nineteenth century. Montreal's building permit records of one building cycle (1866-1880) constitute the basic source of data. An architectural history of the essentially British origins of Montreal's duplex housing (superposed flats) leads to a new typology of multi-family housing which dominated construction by 1880. The spatial patterns of a dichotomous market, of single-family houses versus flats, are examined. The participation in housing development by French-Canadian and secondarily by British-Canadian builders, and the absence of the Irish, is highlighted. Building activity was extremely small scale although some large-scale and corporate developers were active. Building trade artisans and entrepreneurs, local shopkeepers and skilled workmen, elements of traditional petit-bourgeois, artisanal and working-class society, were the chief builders. Through Notarial records and Government Statutes, the methods of mortgage financing and the role of building societies and individual lenders are exposed.

RESUME

Au cours du siècle dernier, la construction domiciliaire à Montréal subit une transformation remarquable, comme en font foi les permis de construction émis entre 1866 et 1880, source fondamentale de nos données. L'histoire de l'architecture montréalaise témoigne d'une évolution pendant cette période du quadruplex aux origines britanniques vers une nouvelle typologie domiciliaire de logements superposés qui en vint à dominer le marché vers 1880. Le présent travail examine les caractéristiques spatiales de ce marché à deux pendants, où la maison unifamiliale s'oppose au duplex et au triplex. Il souligne la prépondérance des constructeurs Canadiens français, le rôle secondaire des Canadiens britanniques et l'absence des Irlandais. La construction domiciliaire se poursuivit à une échelle très modeste en dépit de l'activité déployée par certains promoteurs d'envergure, car les entrepreneurs se recrutaient principalement dans la petite bourgeoisie traditionnelle, chez les artisans et boutiquiers, et même dans la classe ouvrière. Le rôle des sociétés de construction, les sources du capital hypothécaire et l'intervention des prêteurs privés sont mis à jour, grâce au dépouillement d'actes notariaux et de statuts gouvernementaux.

TABLE OF CONTENTS

CHAPTER FIVE: THE SOCIAL ORIGINS OF BUILDERS	
The Builder - Invisible Yet Distinctive	141
The Non-Speculative House Builder	144
The Builder's Scale of Operations	150
A Working Definition of Occupation and Class	158
The Large-Scale Profit-Oriented Builder	167
The Small-Scale Profit-Oriented Builder	176
Small-Scale Builder Partnerships	181
Working Class Builders	184
Ethnicity Patterns Among Builders	186
Institutional and Corporate Developers	190
Footnotes	198
CHAPTER SIX: FINANCING NEW HOUSING	
The Market for Mortgage Money	201
Marginal Forms of Institutional Mortgage Financing	205
Building Societies and Mortgage Loan Companies	211
Co-operative Mortgage-Lending Institutions	215
Commercial Mortgage-Lending Institutions	223
Sources of Funds for House Construction	233
Financing Working Class Housing Construction - A Case Study	238
Housing Construction for Other Segments of the Market	251
Comparison of House Prices	261
The Shaky Financial Scaffolding Around House Construction	265
Footnotes	268
CHAPTER SEVEN: CONCLUSION	
Joiners, Flats and Financial Jeopardy	276
Footnotes	288
APPENDIX	290
BIBLIOGRAPHY	294

LIST OF TABLES

	Page
2.1 Sample of Building Permit Abstracts	26
3.1 Major Factories Established 1842-55	79
4.1 Building Materials in Housing Construction	105
4.2 Roof Types in New Housing	108
4.3 Basements in Housing Construction	110
4.4 Percentages of Houses by Type	113
5.1 Non-Speculative Single-Family Housing	148
5.2 Profit-Oriented Builders, Scale of Operation	154
5.3 Scale of Development	155
5.4 Occupation and Class, Profit-Oriented Builders	169
5.5 Ethnicity, Profit-Oriented Builders	189
6.1 Residential Bldgs. Owned by Financial Institutions	207
6.2 Co-operative Mortgage-Lending Institutions	217
6.3 Commercial Mortgage-Lending Institutions	225
6.4 Cost of Housing in Montreal	263

LIST OF FIGURES

	Page
1.1 Synchronous Building Cycles	9
1.2 Permits Issued 1866-1880	15
3.1 Montreal House Types	56
3.2 Terraced Sixplexes	61
3.3 Native Quebec Duplexes	66
3.4 Sebastopol Row	71
3.5 Population Growth 1821-1871	80
3.6 Small Single-Family House	82
3.7 Mount Royal Terrace	87
3.8 Terraced Fourplexes	88
3.9 Large Duplexes	90
4.1 Plankwall Construction	104
4.2 Map: Median Household rents	115
4.3 Map: Single-Family Houses	118
4.4 Map: Duplex Houses	123
4.5 Map: Factories 1881	126
4.6 Map: Triplex Houses	135
6.1 Ethnic Identity, Co-operative Mortgage Institutions	218
6.2 Ethnic Identity, Commercial Mortgage Institutions	226
6.3 Fourplex on Wolfe Street	241
6.4 Single-Family Houses, Drolet Street	253
6.5 Single-Family Houses, Sherbrooke Street	260

ACKNOWLEDGEMENTS

The true meaning of "personal sacrifice" and "human support systems" became very real during the long period it took to produce this doctoral dissertation. The sacrifice is obvious, given the years of long-haul struggle to put together a thesis while other pressures both personal and professional tugged constantly at me in the battle for time. The support system that pulled together to help me through those years, on the other hand, was a wonderful revelation.

My deepest admiration and gratitude go to the two people who were most prominent in this support system - Diane Hanna, my wife, and Sherry Olson, my thesis director. Diane not only lived with this project, often covering for me on the home front, she also put in a huge effort during the two final years to push the thesis through when it risked not meeting the deadline. The interminable morass of record matching was greatly helped along when she was able to work alongside me. In the final scramble to pull everything together she ploughed through the editing and proofing work with great efficiency and dedication.

Sherry Olson, professor of Geography at McGill University, directed this thesis from the initial encouragement provided during the comprehensive examination

stage to the tremendous editing work done at the thesis submission stage. We have shared many of the same research concerns and her intellectual influence is reflected in this work. She was always available during the many reformulations of the basic topic with stimulating new ideas. Toward the end, she put all aside in order to give the thesis critical readings which served to bring much greater clarity to the final work.

The ramifications of the support system extended deep into the academic world. John Bradbury, professor of Geography, Louise Dechêne, professor of History, Ruth Fincher, professor of Geography, and Jeanne Wolfe, professor of Urban Planning, all of McGill University, contributed ideas, guidance and encouragement during the early stages of the thesis. Tom Naylor, professor of economics at McGill, and Robert Sweeny, lecturer of History, provided some solid leads in the world of mortgage financing. Robert Morris, professor of Economic History at the University of Edinburgh, gave me help in sorting out the terraced flats and flatted villas (duplex housing) of Newcastle and Edinburgh. Gregory Levine, while on post-doctoral work at McGill, provided much guidance in sorting out the practical limitations of social class theory.

I also wish to thank Carol Marley, librarian at McGill University, who sustained me throughout the research period with professional help concerning map resources and reference

material. Rosemary Ommer, professor of History at Memorial University, Newfoundland, graciously gave the manuscript a valuable critical reading. Finally, my thanks go to Stephen Hertzog, Robert Lewis and Thuy Thach, all fellow graduate students in Geography, whose collaboration on a research project and whose respective theses provided the bases for many fruitful ideas and discussions.

Another aspect of the support system was the provision of adequate facilities for long-haul research. Five Montreal institutions gave me a decent working environment, professional help and a good measure of freedom in utilizing the source materials. Jean-Marc Garant, curator of the massive subdivision plan collection of the Archives Nationales du Québec, gave me scarce table space and complete liberty to consult the then unrestored and unorganized collection. Jean-Guy Laperrière gave me the necessary free passes to gain access to any Deeds of Loan, Deeds of Sale and other relevant material I wished to consult in the Registry Office of the Palais de Justice.

During the many research seasons devoted to record matching I became a virtual resident of three different facilities. Elizabeth Lewis, head of the Rare Books and Special Collections Library at McGill, provided a private study area even during summer shutdown periods. The City of Montreal's Central Library, Salle Gagnon, under the auspices of Daniel Olivier and Marie Baboyant, provided an excellent

milieu at a later stage. Finally, Jeanne Randle, head librarian at the Fraser-Hickson Institute, and Fernando Montserrat, reference librarian, offered much support during the last phase of record matching. I became a virtual fixture there.

The human support system also extended deep into circles of family and friends. May Chambers, my mother-in-law, and Helen Barben, my great aunt, gave exceptional and sustained help during the thesis project. I owe a deep debt of gratitude to each of them. Other members of the family provided help and support in one form or another: my parents, Helen and Blake Hanna, brother, Arnold Hanna, father-in-law, Gordon Chambers, brother-in-law, Donald Chambers, and his wife Rose Quinn. Several friends and neighbours were also very supportive, especially the Deevys and the Masons who opened their homes to me while away so I could lead the necessary monastic life during the final months of thesis writing and editing.

Finally, I wish to thank Sylvie Robert and Claude Filiautrault who put in many hours and skills in completing the final cartographic work. I especially wish to thank Jane McNee whose professionalism and sacrifice were truly extraordinary during the sometimes desperate stages of word processing.

I deeply appreciate the confidence and kindness shown toward me by all these people and others whom I have not

named. I appreciate the financial support given me by the Canada Mortgage and Housing Corporation and Québec Bourse which carried me through the first years of the PhD programme until I obtained a teaching post at the Université du Québec à Montréal.

Though the PhD programme was an exhausting and turbulent phase of life, it did much to deepen my faith in human kindness.

CHAPTER ONE

INTRODUCTION

A CRUCIAL PERIOD IN THE STUDY OF HOUSING

In the early nineteenth century, Montreal staked its future on the import-export trade of staples. It was a mercantilist water-based economy on which Montreal successfully achieved its role as middleman and trans-shipper for British North America¹. Financial institutions developed alongside this economy but factories were still exceptional. A contemporary observer in 1839 noted "as it has but few extensive manufactories to support it, [Montreal's] continued increase must depend upon the trade it can command"².

And grow it did, from 18,767 inhabitants in 1821, to 22,503 in 1831 and 27,297 in 1842, a moderate but sustained growth³. But this mercantilist world ensconced in a small colonial city came crashing down quite suddenly during the 1840s, as England moved to dismantle the old rules by which the game had been played. The anger and fears of the merchant élite, coupled with the effects of a commercial crisis at the end of the decade erupted in 1849 into severe riots in Montreal⁴. The old order was passing.

Change came rapidly. During the 1850s, Montreal found itself at the heart of a new railway system that linked the Atlantic Coast with Ontario and the American Mid-West. The city developed a whole range of financial services, from chartered banks to insurance companies of all sorts, and mortgage companies by the 1870s. Factories - large ones - popped up like mushrooms all through the 1850s and thereafter such that by 1881, 70% of Montreal's workers worked in factories employing 100 hands or more⁵. Its population soared, almost doubling in the decade between 1851 and 1861, and almost quintupling between 1852 and 1901. Ethnically Montreal became a French city once again as French-Canadian migrants poured in from the rural areas, edging out their British counterparts in numbers. Montreal had become an industrial city.

As the city altered its economic base, so did it change the social relations of production on a broad scale. Petty commodity production gave way to capitalist production. The labour process was undergoing dramatic reorganization. Along with these fundamental changes came modifications in the spatial order of the city. Home and work were separated. Urban land became functionally more segregated. As a result of the new class processes underway, residential differentiation took on increasing significance in the nineteenth century⁶. The city was rapidly reorganizing itself

into discrete neighbourhoods dominated by class and ethnic dimensions.

As all these transformations were taking place, equally radical processes of change were reshaping the basis of survival of the city's expanding proletariat.

The family, childhood, gender definitions, even motherhood were potentially subject to change ... Work outside the home, came to constitute a more significant part of both boys' and girls' lives ... Widespread employment of whole families, of children and of married women was typical of early industrial capitalism'.

Just as much as city, economy, society and family were being reshaped during the second half of the nineteenth century, it stands to reason that housing - the dominant occupier of urban space - was undergoing rapid change as well. The changes were fundamental as well as quantitative. Housing had to adapt to the new social and economic re-ordering of the city, as well as respond to a surge in the number of urban residents.

This thesis is about what happens to housing development in a rapidly industrializing city with mushrooming population growth. There are several parallel lines of inquiry pursued here in the examination of the architectural, spatial, social and financial dimensions of the changing residential city. The main questions raised are these: under industrialization, do housing models change? What spatial

patterns evolve in the stratification of the expanding housing market? Who, in a rapidly changing urban society, comes forward to build these houses? Finally, how is capital organized to cope with this sudden surge in demand?

It is argued here that urban housing underwent important changes in its structure, method of production and means of financing to adapt to the changed circumstances of the industrial city. We will examine these perspectives in the context of Montreal in the 1870s. Part of this temporal choice was dictated by practical considerations such as the existence of data for the 1870s which were not available for another period. More fundamentally, the choice developed from the realization, subsequent to my Master's thesis research, that the third quarter of the nineteenth century was crucial in the systematic re-ordering of Montreal's housing typology. The new forms that were created and propagated during that period pervade housing construction in Montreal even to this day.

The main argument about structural change in form, production and financing is similar to the one pursued by Joanne Burgess in her examination of the shoemaking industry in Montreal from 1840 to 1870. She noted that this was the period during which shoemaking - a major industry in Montreal - underwent massive structural change, such that by the 1870s

there were giant factories, embodying a strict division of labour, alongside a host of artisanal producers working out of workshops in the community⁸. Housing in the 1870s, while embodying new features of capitalism such as mass production techniques, a new division of labour, and institutional financing, was also very much influenced by an older artisanal mode of production with its small-scale output, family labour and financing arrangements made with individuals. We are examining here a critical bridge period in the house-building process.

Few researchers have delved into the realm of housing. Those who have use housing more as a backdrop against which to highlight social processes in the city. Some signal works stand out in the British arena, such as Enid Gauldie's Cruel Habitations or R.M. Pritchard's Housing and Spatial Structure of the City⁹. In Canada, several researchers have produced excellent works on nineteenth century housing conditions in working-class neighbourhoods: Gregory Kealey's Working Class Toronto at the Turn of the Century, Jacques Bernier's "La condition des travailleurs, 1851-1896", Terry Copp's The Anatomy of Poverty, Michael Doucet's "Working Class Housing in a Small Nineteenth Century Canadian City", Marc Choko's Crises du logement à Montréal, or Gregory Levine et al. The Housing Question in Kingston, Ontario¹⁰. The production of housing, however, despite its critical importance to the reproduction

of labour and the spatial sorting of social classes, is rarely the subject of a specific inquiry in itself, except among architectural historians, who look at it solely from a design point of view.

The exception to the rule is M.J. Daunton's House and Home in the Victorian City¹¹. In his work he grapples with the typological differences between British cities in terms of working-class housing characterized by tenements, terraced flats, back-to-back houses or cottages. Weighing supply and demand, he comes up with cogent arguments for the regional differences within the context of the same process - industrialization. This is one of the themes picked up in this thesis, through an examination of Montreal's unique typology of duplexes and triplexes in the context of this city's own process of industrialization and in the light of local supply and demand.

Rarer still is research pertaining to the group of producers who built homes. These people formed an important segment of urban society. They were responsible for building the most visible element of urban space - its residential neighbourhoods. They provided the physical framework within which the family economy functioned and reproduced itself. They were significant in the accumulation process in general, given the huge amounts of capital it took to build the

residential townscape. Yet we know little about them.

Two pioneers stand out in this otherwise deserted field, Harold Dyos and Sam Warner, both of whom greatly influenced my thinking and the structure of this thesis. Dyos, in Victorian Suburb, and Warner, in Streetcar Suburbs, were concerned about many of the same questions in two widely separated geographical locations - London, England, and Boston, Massachusetts¹². Each looked at the nineteenth-century building process as it affected new suburbs of those vast industrial cities.

Theirs were studies of middle-class suburbs, although pockets of wealth and poverty existed in each suburban locale. They looked at the backdrop of urban growth in terms of population, transportation and the separation of work and home. They scrutinized the building process in terms of legal constraints, land tenure and subdivision of land. They examined the circuits of capital that were tapped in financing construction. They described the architectural forms which resulted from these constraints and inputs. Finally they studied the builder himself, his social origins and the scale of his operations.

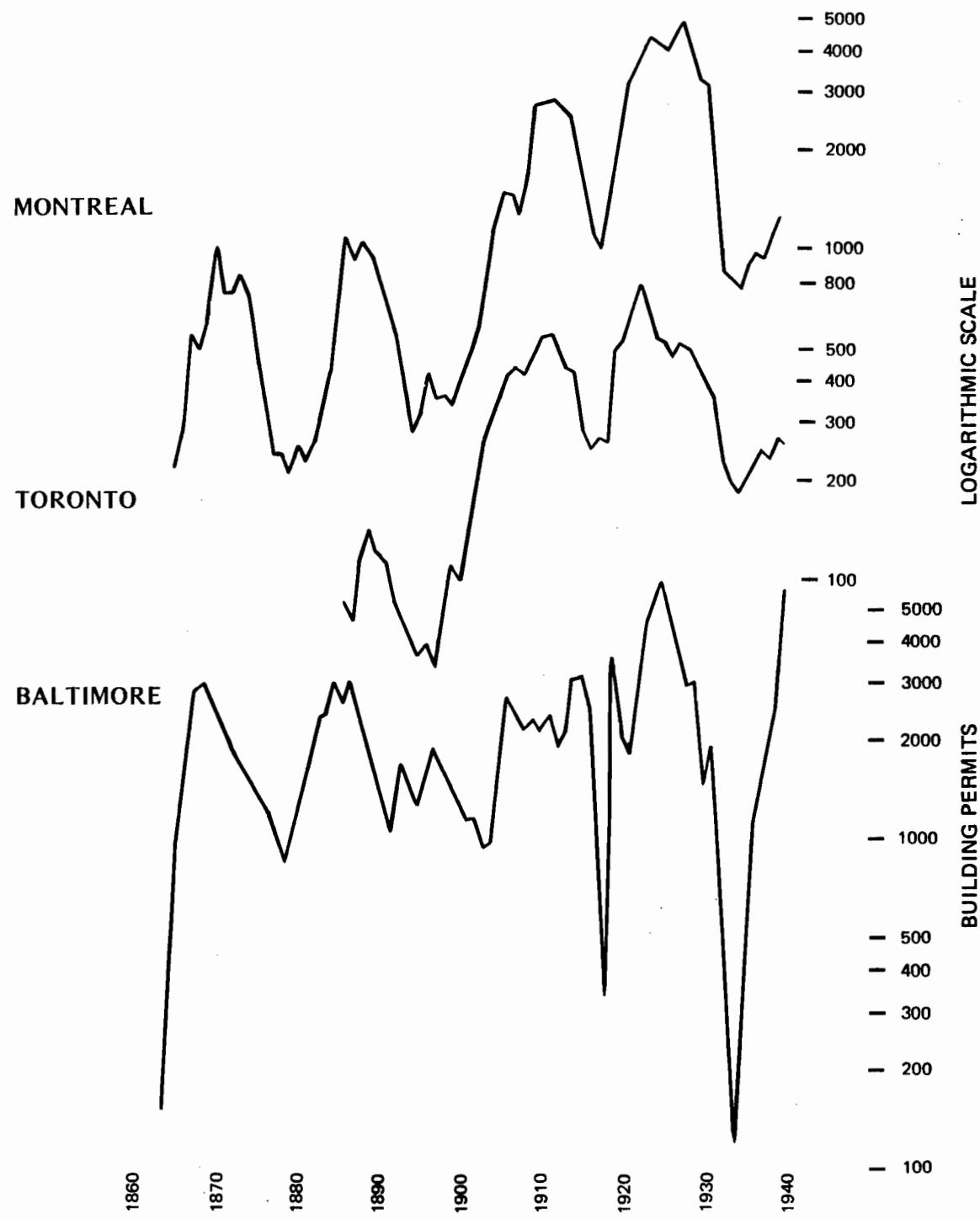
Closer to home John Weaver and Michael Doucet have done research on the building process and have focussed on builders

themselves. These two authors have independently examined different parts of Hamilton, Ontario, at different times¹³. Although Michael Doucet was more concerned with land speculation and subdivision, it is instructive that both their findings back up Warner's, allowing for differences in the scale of the respective cities. We will examine other aspects of the literature germane to the nineteenth century house-building process as we broach more specific subjects.

HOUSING BY BOOM AND BUST

While other works on housing construction and urban development have been set in some particular historic period, this thesis makes a conscious attempt to place housing production in the context of economic cycles of investment. Even a cursory glance at the cyclical behaviour of construction in Montreal reveals the logic of investigating the phenomenon of new housing in terms of its boom and bust pattern [see Fig. 1.1]. The creation of new housing graphically resembles a series of steep mountains separated by deep valleys, peaking and bottoming in synchronous fashion from city to city. Each cycle brings with it not only a spatial extension of the city but also innovations in the typology and architecture of housing. Therefore, investigating the production of housing by choosing its economic rhythm as a time frame constitutes not only a sound

FIG.1.1 SYNCHRONOUS BUILDING CYCLES



method of periodization but also a logical framework within which to examine changing patterns.

The cyclical character of economic activity has long been recognized in capitalist industrialized economies. Clément Juglar is generally credited with the discovery in 1860 of successive upward and downward phases, hence the term "Juglar" cycles coined later¹⁴. More significant is the eventual definition and elaboration of a model featuring three distinct cycles, the short, intermediate and long-wave cycles, which emerged in 1939 in Joseph Schumpeter's work¹⁵.

Intermediate economic cycles, especially those identified by Simon Kuznets in 1930, are the cycles most relevant to construction¹⁶. They involve basic realignments between major segments of the economy. The creation of excess capacity in the boom period is followed by a contraction period where the capacity is used up. The theory applies to items requiring a long investment commitment such as railways, canals, factories, gas-works, power dams and therefore goes beyond the commercial inventory adjustments typical of the short economic cycle. Ernest Mandel explained the rationale thus:

The cyclical development of [the] capitalist economy becomes particularly feverish through the extension of the basis of this economy at the beginning of each recovery, and this happens through the sudden appearance of new markets for important sectors of industry, which thus stimulates the activity of the capitalist goods industry. These new markets may result either

from the geographical extension of capitalist production (penetration into a non-capitalist milieu), from the appearance of new sectors of production (technological progress) or from sudden leaps in relations between competitors (disappearance of a powerful competitor as a result of war, of technological backwardness, etc.)¹⁷.

Railway building is the classic example of this feverish extension of the basis of the economy, reaching out to new markets with the opening of new trunk and branch lines during each cycle. In the United States, the entire railway building process, roughly encompassing the era 1830 to 1915, took place within the framework of five complete cycles. These cycles varied between 14 and 20 years in length (trough to trough) and averaged about seventeen¹⁸. A similar argument can be made for housing, as the city feverishly extends the basis of its economy. Housing, as a permanent final-demand good, is only part of a physical urban plant made up of streetcar tracks, streets, aqueducts, factories and so on. John Riggleman in a comparative study of major American cities found synchronous building cycles ranging between 13 and 22 years duration (trough to trough) and averaging about 17 years¹⁹.

The correlation between railway and housing construction cycles, in both timing and duration, may be carried a step further by examining the key inputs, labour (immigration) and capital. Brinley Thomas' comprehensive work makes clear the

correlation between capital inflow, immigration and North American building cycles. He also argues their inverse relationship with investment and building cycles in Great Britain²⁰. Alexander Cairncross pioneered in the study of this trans-Atlantic relationship and proved that for Canada, as well, building cycles were closely tied to capital and population inflow with much the same timing as in the American situation and inversely related to building cycles, investment and population retention in Great Britain²¹. Because the cycle itself is a feature of the economic system of the continent, North American cities have roughly synchronized building cycles which rise and fall together. Baltimore, Toronto, Montreal and other cities, are all extending the basis of their urban economies simultaneously [see Fig. 1.1]. Local factors modify the amplitude of one city's building cycle relative to another's.

With the broad context of the building cycle understood, what then are the specific causal factors involved in each phase of its rise and fall? It has been noted that the building cycle is one of the sharpest of all economic cycles, that is, clear-cut in outline, attaining enormous amplitudes with high peaks and deep troughs²². Maurice Lee provides a succinct explanation of the phenomenon by looking at both supply-side factors:

Cycles in residential building construction appear to be of even greater severity than the fluctuations in non-residential building. The reasons for this are not completely clear, but undoubtedly, the speculative character of the residential construction market carries a part of the answer. Once the upturn has begun, builders begin to produce in anticipation of demand either for sale or for rent. Such builders are subject to excesses of optimism during the expansion phase and inclined to excesses of pessimism during a decline²³.

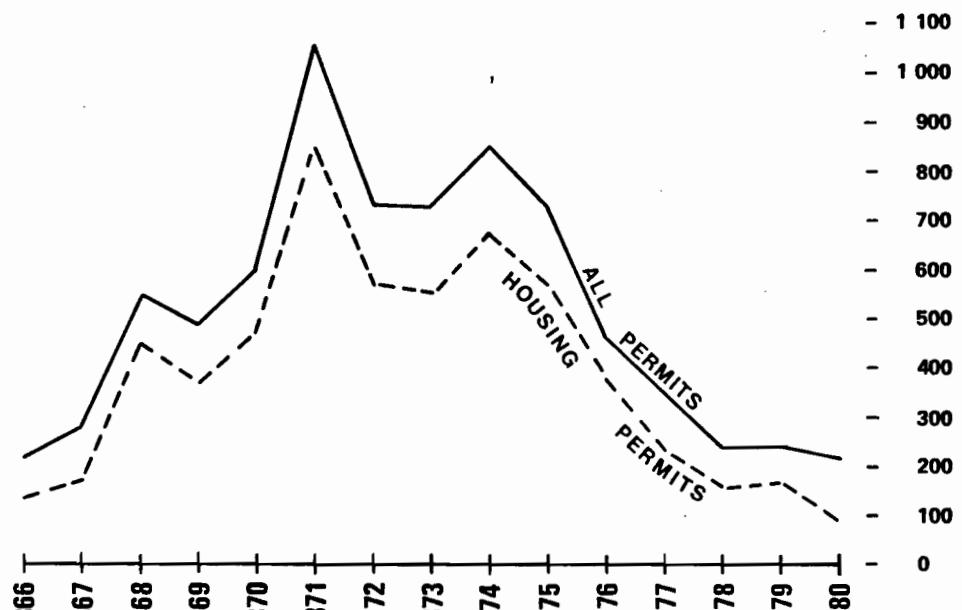
Although Lee places the emphasis on psychological factors, he also makes a cogent argument in terms of the supply of mortgage money. As an expansionary phase of the economy begins, the money market is characteristically "easy", with lenders making mortgage financing available at low rates of interest, with small down payments and extended amortization periods. As the expansion continues, corporations, which have been drawing on their liquid holdings, use up their internal funds and begin drawing on the money market to further their projects. At this point competition is fierce and credit tightens. Mortgage money becomes suddenly more expensive as funds are drawn back into the corporate markets and away from residential construction. The key point is that the supply of funds for residential construction is a residual flow from the capital markets²⁴. This contributes to the huge surges and deep troughs in housing construction.

Housing construction is an "end-of-line" or "last resort"

type of capital investment. It tends to be risky because the product is fairly complex to organize, is labour-intensive and cannot be turned over rapidly. It does not have the potential of quick and high profits possible in the stock market. Nor does it offer the secure profits of, for instance, bond investment. But most importantly, as this thesis will seek to demonstrate, the classic house builder in the late nineteenth century was a person of modest means operating on a very small scale [see Chapter Five]. His command of the money market was close to nil, and he was a poor credit risk [See Chapter Six]. He could not compete with strong opportunities for commercial and industrial investments. Small wonder then that capital flowed elsewhere except when there was a truly plentiful supply.

Building cycles are easily defined periods of housing production. They constitute logical slices of time within which the physical, social and economic characteristics of new housing construction may be examined. That building cycles and housing construction cycles are synonymous is easily verified in the accompanying graph comparing total housing permits with all permits (houses, shops, factories, churches, schools ...) between 1866 and 1880 [see Fig. 1.2]. This

**FIG. 1.2 NUMBER OF PERMITS ISSUED 1866-1880
CITY OF MONTREAL**



CITY OF MONTREAL - ANNUAL REPORTS

thesis focusses on one building cycle in Montreal, that of 1866 to 1880 (trough to trough), or put another way, the housing produced in 1867 through 1880. It seeks to explore what was built during that cycle and where that construction was occurring. It seeks to find out who was involved in the building process and to trace where the capital came from to finance it.

AN OUTLINE OF THE THESIS

Chapter Two explains the methodology of record matching used in this thesis. Since building permits were in the form of abstracts and did not provide full information on the houses or the builders, I have made use of two other contemporary sources to complete the information. City directories and insurance atlases together with the permits were used to generate a new data bank on a house-by-house basis. This technique allowed building construction information, typology, locational data, and occupational and ethnic characteristics to be compiled and correlated for each house and each builder.

This thesis brings a considerable body of new understanding to the existing works on the building process. While Warner does not delve into the origins and supply and demand explanations regarding Boston's distinctive housing

typology of double and triple-deckers, this thesis asks where Montreal's duplex type came from, why it spread so rapidly and why so many derivatives were created from it. It is argued here that the duplex was an important model which enabled builders to house adequately the newly created urban-industrial proletariat in lodgings it could afford. It is further argued that Montreal, unlike Boston or London, did not have a sizeable aging housing stock on which the new proletariat could fall back. Montreal developers therefore had to create new housing models. These new models resulted in a distinct tripartite housing typology. The definition of this new complex typology and the emergence of multi-family housing in Montreal form the subjects of Chapter Three.

Chapter Four places new housing production in the context of its market. The typology developed in the previous chapter is not scattered at random. Single-family housing and duplex housing tended to concentrate in mutually exclusive zones. But the typology was an overlapping one as well. Some areas featured a considerable mix of housing types. The building permits also reveal architectural variables which have important social class and therefore spatial implications. Building materials, roof types and basements all offer significant social cues to the city's housing market.

All the authors mentioned earlier have tried to come to

grips with the social origins of house builders. This thesis has the advantage of knowing who virtually all the house builders in 1870s Montreal were. They formed a population of nearly 2,000 people, just under 2% of the city's total population. Our view of the builder is enhanced by a concise knowledge of his scale of operation, and the occupational data allow us to analyse his social origins. The class dimension is analysed in relation to large and small-scale development. It is argued that the 1870s was a transitional period where capitalist and petty commodity production of housing worked alongside each other, though mostly aimed at different markets. We can also specify the role of each of Montreal's three main cultural communities in the construction of housing. These are the subjects of Chapter Five.

Chapter Six, using entirely different sources, discusses the financing of housing development. With the exception perhaps of Dyos, few have made a serious attempt to wrestle with this crucial aspect of house builders. But Dyos' work has less application to Montreal because the whole system he exposes was based on ground rents which did not exist in Montreal in the second half of the nineteenth-century. Because there is a dearth of studies on housing finance in freehold cities, Chapter Six begins with an examination of the financial system and how it relates to housing. It is argued that the 1870s was a transitional period where traditional

sources of credit from private individuals operated alongside new forms of institutional mortgage lending.

What this thesis is about is the building process under early industrial capitalism. It is concerned with how builders responded to industrialization and the creation of new instruments of capital investment, and how they responded to a pressing market for housing and to the advent of a huge proletariat. It especially seeks to find out who these builders were. The new typology of housing developed and the financial institutions founded during this crucial period have demonstrated a remarkable staying power through time. Small private house builders and large ones - still as anonymous as they were over a hundred years ago - remain today the chief creators of the built urban environment despite direct government intervention.

FOOTNOTES - CHAPTER ONE

1. See Gerald Tulchinsky, The River Barons: Montreal Businessmen and the Growth of Industry and Transport, 1837-1853 (Toronto: University of Toronto Press, 1977).
2. Newton Bosworth, Hochelaga Depicta (Montreal: Greig, 1839), p. 194.
3. David B. Hanna, "The New Town of Montreal; Creation of an Upper Middle Class Suburb on the Slope of Mount Royal in the Mid-Nineteenth Century", M.A. Thesis, Department of Geography, University of Toronto, 1977, p.27.
4. Ibid., pp. 83-89.
5. Jean de Bonville, Jean-Baptiste Gagnepetit: les travailleurs montréalais à la fin du XIXe siècle (Montréal: Editions de l'Aurore, 1975), pp. 34-35.
6. See R. Harris, "Residential Segregation and Class formation in the Capitalist City: a Review and Directions for Research", Progress in Human Geography, 8 (1984).
7. Bettina Bradbury, "The Working Class Family Economy: Montreal, 1861-1881", Diss., Department of History, Concordia University, 1984, pp. 1, 458-459.
8. Joanne Burgess, "L'industrie de la chaussure à Montréal: 1840-1870; le passage de l'artisanat à la fabrique", Revue d'histoire de l'Amérique française, 31, No. 2 (1977), pp. 187-210.
9. Enid Gauldie, Cruel Habitations: a History of Working-Class Housing, 1780-1918 (London: Allen & Unwin, 1974); R.M. Pritchard, Housing and the Spatial Structure of the City: Residential Mobility and the Housing Market in an English City since the Industrial Revolution (Cambridge: Cambridge University Press, 1976).
10. Gregory Kealey, Working Class Toronto at the Turn of the Century (Toronto: New Hogtown Press, 1973); Jacques Bernier, "La condition des travailleurs,

1851-1896", in Les travailleurs québécois 1851-1896, ed. N. Bélanger et al. (Montreal: Les Presses de l'Université du Québec, 1973); Terry Copp, The Anatomy of Poverty: the Condition of the Working Class in Montreal, 1897-1929 (Toronto: McClelland & Stewart, 1974); Michael Doucet, "Working Class Housing in a Small Nineteenth Century Canadian City: Hamilton, Ontario 1852-1881", in Essays in Working Class History, ed. G. Kealey and Peter Warrian (Toronto: McClelland & Stewart, 1976); Marc Choko, Crises du logement à Montréal, 1860-1939 (Montreal: Editions coopératives Albert Saint-Martin, 1980); Gregory Levine, R. Harris and B. Osborne, The Housing Question in Kingston, Ontario, 1881-1901, Report on an investigation (Kingston: Dept. of Geography, Queen's University, 1982).

11. M.J. Daunton, House and Home in the Victorian City: Working-Class Housing 1850-1914 (London: Edward Arnold, 1983).
12. Harold Dyos, Victorian Suburb: A Study of the Growth of Camberwell (Leicester: Leicester University Press, 1961); Sam B. Warner, Streetcar Suburbs: the Process of Growth in Boston, 1870-1900 (Cambridge: Harvard University Press, 1962).
13. John C. Weaver, "From Land Assembly to Social Maturity: The Suburban Life of Westdale (Hamilton), Ontario, 1911-1951", Histoire Sociale/Social History, 11 (1978), pp. 411-440; Michael Doucet, "Speculation and the Physical Development of Mid-Nineteenth Century Hamilton", in Shaping the Urban Landscape: Aspects of the Canadian City-Building Process, eds. Gilbert Stelter and Alan Artibise (Ottawa: Carleton University Press, 1982), pp. 173-199.
14. Clément Juglar, Des crises commerciales et leur retour périodique en France, en Angleterre et aux Etats-Unis (Paris, 1860).
15. Joseph A. Schumpeter, Business Cycles (New York: McGraw-Hill, 1939).
16. Simon Kuznets, Secular Movements in Production and Prices (Boston: Houghton Mifflin, 1930) and confirmed in Simon Kuznets, "Long Term Changes in National Income of the United States since 1870", in Income and Wealth, 2nd ser., ed. Simon Kuznets

(Cambridge: Harvard University Press, 1952).

17. Ernest Mandel, Marxist Economic Theory, trans. Brian Pearce (London: Merlin Press, 1969), I, pp. 358-359.
18. See Kuznets, Secular Movements... op. cit., Chart 53, p. 191 and Table 53, pp. 526-527.
19. John R. Riggleman, "Variations in Building Activity in United States Cities" (unpublished doctoral dissertation, Johns Hopkins University, 1934) as cited in Walter Isard, "A Neglected Cycle: the Transport-Building Cycle", The Review of Economic Statistics, 24, No. 4 (1942), p. 150.
20. Brinley Thomas, Migration and Urban Development, a Reappraisal of British and American Long Cycles (London: Methuen and Co., 1972), chapters 2-4.
21. Alexander K. Cairncross, Home and Foreign Investment 1870-1913 (Cambridge: Cambridge University Press, 1953). This theme was further developed by Kenneth Buckley, Capital Formation in Canada 1896-1930 (Toronto: McClelland and Stewart, 1974).
22. Arthur F. Burns and Wesley C. Mitchell, Measuring Business Cycles (New York: National Bureau of Economic Research, 1946), pp. 418-420.
23. Maurice W. Lee, Macroeconomics; Fluctuations, Growth and Stability, 4th ed. (Homewood, Ill.: R.D. Irwin, 1967), pp. 62-63.
24. Ibid., p. 65.

CHAPTER TWO

THE METHODOLOGY OF RECORD MATCHING

CREATING A COMPOSITE DATA BASE

Most historical urban research relies on one basic source for quantitative information and enhances it with qualitative material. The basic source might be hospital records, tax assessment rolls, manuscript census data, or company payrolls. This thesis uses a different approach - one of record matching - in order to reconstruct an adequate data base.

One entire cycle of housing production is under study here. Building permits would normally suffice as a data base, but such a source no longer exists in Montreal. Instead we have permit abstracts which summarize the information contained in a permit. Since these abstracts lack precise spatial coordinates, a second basic source - a city atlas - was required to complete and enhance the permit data. Because both sources lacked key building typology and sociological information, a third source - the city directories - was employed. These three sources were used simultaneously on a house-by-house basis to reconstruct the morphological and social data necessary to understand the meaning of the physical extension of the city in the context of a building cycle. Before we assess the findings, we need to evaluate

each source individually.

NATURE AND USE OF BUILDING PERMITS

The heart and soul of this research are building permits. Since 1863, the City of Montreal has published ward summaries of new building construction in its annual reports¹. Between 1868 and 1877, with the unfortunate omission of 1872, annual tabulations include an abstract of each permit. These data cover one building cycle. With permit abstracts available for 78.3% of residential buildings produced during the whole cycle, the decision was easy to concentrate the research on this building cycle². This left 21.7% of residential buildings unaccounted for, 9.7% due to the omission of the year 1872 from permit records and 12% in the "tails" of the cycle, that is the years 1867 and 1878-80. It was felt that these houses could be located individually by other means and that the lack of builder information for this "missing" 21.7% would not seriously compromise the social analysis.

The not-so-easy part was systemizing the research so that buildings could be located geographically, and so that necessary additional data for the social analysis could be generated through other sources. The initial problem lay in the summary nature of these permit abstracts. Each abstract

gives the name of the permit holder, the street and ward where he or she was building, how many buildings were being erected, the type of land use, the type of materials and roofing used, and the number of storeys and feet of frontage occupied by the project [see Table 2.1].

To learn how Montreal's housing production was located and what types of houses were built, two key variables were required: street address and the number of dwellings per house. These had to be ferreted out from other sources. The fact that many streets in Montreal, even within the boundaries of one ward, were about one and a quarter miles long (2 km), made the address search difficult, but the only means of distinguishing a triplex from a duplex from a single-family house was by locating the building.

The solution was a linkage of three separate contemporaneous sources: permit abstracts, Lovell's street directories, and the 1881 Goad atlas of Montreal, supplemented by the 1869 Plunkett & Brady map of Montreal. The first objective was to isolate the total housing production of the 1866-80 trough-to-trough cycle. Proceeding a street at a time, ward by ward, and using the 1881 atlas as a base, production was systematically subtracted through a visual check of the 1869 map and a search of civic addresses in the

TABLE 211 SAMPLE OF BUILDING PERMIT ABSTRACTS - CONDENSED AND ANNOTATED

ST. ANTOINE WARD 1875

STREETS	PROPRIETORS	churches & schools	dwellings	shops & dwellings	stores & offices	manufactories	stores	work shops	stone built	brick built	wood & brick built	metal or slate roof	gravel roof	no. of basements	no. of stories	no. of attics	no. of feet total frontage	REMARKS
St.Antoine	Hon. C.S. Rodier		2	1					1	1	2	1	2	2	1	37 6		
St.David	Antoine Deslauriers									2	2	1	2	2	1	40 0		
Fulford	John Gallagher				1					1	1	1	3		59 6	Boot & Shoe Factory		
St.Martin	Moise Lemieux						1			1	1	1	1		21 0	Blacksmith work shop		
Dorchester	George Monette		2						2	2	2	1	3	1	34 0	Erected in rear		
	Grey Nuns	1							1	1	1	1	3	1	140 0	Addition to Convent		
	G.W. Reed		1							1	1	1	2		17 0	Brick addition in rear		
St.Luke	Miss Ann Jones		1							1	1	1	2	1	20 0	Kitchen in rear		
University	G.B. Burland		1						1		1	1	2	1	47 6	Coach house in rear		
St.Catherine	Rector of Christ Ch.	1							1		1	1	2	1	48 0	Rectory of C. Ch. Cath.		
Mansfield	City of Montreal	2							2		2	1	2	1	55 0	Police & Fire Station		
	M. Building Assoc.	6							6		6	1	2	1	142 0			
	Evêché de Montréal	4							4		4	1	2	1	93 8			

NOTES TO TABLE 2.1:

Hon. C.S. Rodier's permit is for a 37 1/2 foot building, 2 1/2 storeys high, of load-bearing stone construction, topped with a sloped roof (either gable or mansard type) and containing an undetermined number of flats above a retail store. This type of permit was retained for study.

Antoine Deslauriers' permit is for a pair of (presumably) 20 foot residential buildings, 2 1/2 storeys high plus a basement, of classic plankwall construction (huge wooden board covered with brick veneer), topped with a sloped roof and containing an undetermined number of flats. This type of permit was retained for study.

John Gallagher's and Moise Lemieux's permits are for industrial land use only and were rejected for study.

George Monette's permit is for a pair of residential buildings, 3 storeys high with a flat roof, and was built at the back of the lot as rear housing. This type of permit was retained for study.

The Grey Nuns' permit is for a convent and although essentially residential in character was rejected for study as constituting an institution.

G.W. Reed's permit is for a two-storey brick masonry flat roofed extension to the rear of an existing building; this permit, although residential, was rejected for study as not constituting a building in its own right. The same was done for residential permits indicating "additional storey".

Miss Ann Jones' permit on the other hand does constitute an entirely new building, the remark "kitchen in rear" merely indicating that the building included a rear wing containing a kitchen. This type of permit was retained for study.

G.B. Burland's permit is similar except that the remark "coach house in rear" indicated that the permit allows for the construction of an independent stable as well as the house; the same applies to other permits with the remark "shed in rear". This type of permit was retained for study.

The Rector's permit, classified under churches and schools, is actually for a rectory which is essentially residential.

The City of Montreal's permit for a police and fire station, although classified with residential permits, was rejected for study as being a misclassification. All municipal buildings appear to have been arbitrarily classified under "dwellings".

The Montreal Building Association's permit is typical of those houses built by a financial institution as an investment. This type of permit was retained for study.

The Eveché's permit is for housing built as an investment and is not to be confused with presbyteries, schools or the Archbishop's palace, all of which could be built by the Eveché as well. This type of permit was retained for study.

1867 street directory³. By means of this painstaking procedure, a table of 1867 to 1880 production by street could be drawn up.

The second objective was to link houses to the permits at hand. This was done in three ways. (1) In some cases the owner's name, which appears on each property in the Goad atlas, could be matched with a permit holder and cross-checked with the dimensions of the building. (2) If the permit holder moved into his new building in the following two years, his name might appear in Lovell's directories, and the address could be matched to the physical description contained in the permit. (3) The remaining houses were dated according to the year prior to their appearance in the directories and matched by date and description to the permit information. Other techniques were applied where necessary, including field observations and cross-checking with modern land-use maps. Though the method was tedious, a high rate of success (89%) was possible. Out of 2,630 permits only 282, representing 441 houses, could not be located.

With all tracing work completed, 4,716 residential buildings had been individually located and fully identified. The highest success rate was in St-Laurent, St-Louis and the upper portion of St-Antoine Wards⁴. In these areas buildings were generally distinctive and property ownership fairly

stable. The lowest success rate was in the East End. St-Jacques and Ste-Marie Wards accounted for nearly two-thirds of all the unlocatable permits. The high degree of homogeneity and rapid turnover made tracing difficult. In summary, if our detailed permits represent 78.3% of the entire cycle's housing production, and if 441 untraceable residential buildings entail a further loss of 6.7%, then we are left with almost 72% of the cycle's production located and identified, still an ample portion on which to base the social analysis of housing producers.

It remains to be emphasized that even though only 72% of our residential building cycle's production was definitively traced to its builders, the remaining 28% was at least located on the map by comparing the 1867 street directory to the 1881 atlas. In other words, every residential building built in 1867, 1872 and 1878-80, years for which we have no detailed permit data, has been identified as to type (e.g. duplex ...) and located. Even the 441 untraceable buildings are in fact located; they simply cannot be linked to their builders. Thus the only difference between the 28% and 72% portions is that the former has no builder identification. Virtually 100% of the cycle's production has been located, type-identified and mapped.

ILLEGAL HOUSING

More houses have been mapped than the official returns allow for. Slight discrepancies were discovered between official permits registered and actual new houses found. There are roughly 350 apparently unreported construction projects, generally consisting of one or two residential buildings, between 1868 to 1877, excluding 1872. It is tempting to conclude that they must be our 282 untraceable permits, but in fact none of them corresponds to the descriptions in these permits. Rather, they are houses that escaped the notice of the civic authorities. The total is not negligible since they probably accounted for an additional 700 more than the 6583 residential buildings in the cycle's production. Aside from their numbers and locations, data are not available to ascertain how these houses may have differed from those in the cycle's official house count.

As might be expected, the illegal houses are overwhelmingly in working-class neighbourhoods. There appears to be a strong correlation between poor wards and the presence of illegal houses. The champion district is Ste-Anne Ward with 115 illegal houses during the years 1868-1871 and 1873-1877. We estimate 160 such houses were built during the entire cycle. Part of it is due to clerical error as the entire 1875 production on Seigneurs (later Shearer) Street

appears to have been omitted (fourteen houses). The remaining hundred or so houses are sprinkled throughout suburban Ste-Anne, especially in those areas south of the Lachine Canal surrounding three sides of the Grand Trunk Railway shops. Could it be that the English-speaking working class was just a little more suspicious of civil authority than anyone else? Or could it be that there was simply a greater ignorance of municipal regulations? Apparently the civic authorities rarely got down to that sector to impose their will.

The number of illegal houses increased just as the building boom was subsiding. Each year from 1874 onwards brings forth evidence of 65 to 100 illegal houses, while the official annual production figures were dropping from 773 to 286 residential buildings. Certainly a total of about 60 illegal houses against 286 official ones for 1877 remains startling. A more typical year on the upswing (1870) showed about 60 illegal houses against official figures of 529. One must remember that 1873 was the beginning of a sharp and long economic depression. Perhaps the increasing number of illegal houses was a conscious gamble on the part of builders to cut construction costs by building below standard, and to evade prosecution by selling quickly and disappearing.

The law provided that an owner or a builder of an illegal building should be prosecuted⁵. Once the building was sold to

an unsuspecting buyer, the city, upon finding out about the illegal structure, would pursue the new owner. It would be up to the owner to pursue the builder, if he could find him. This hypothesis becomes all the more plausible after a reading of the annual reports of the Building Inspector to City Council. One suspects that he and his office staff were suffering from fatigue in coping with the boom years of 1871-75. There was a backlog of court cases against recalcitrant builders who had not adhered to the building code, and the Council refused to increase the staffing complement.

Olivier Rouillard, Inspector of Buildings for the City of Montreal between 1865 and 1883, was a very conscientious agent of the City and enforcer of the building by-laws. One notices the number of building code infractions tabled by Rouillard in 1866 compared with his predecessor's performance in 1864 had nearly quadrupled⁶. One also notices the much increased size of the Inspector's annual reports during Rouillard's term and his frequent lobbying for building code amendments. This lobbying apparently produced results, as there is a dramatic increase in the different categories of building code infractions during the 1870's. His term was marked by a constant grappling with new building technology that was flooding into nineteenth-century Montreal, and by his indefatigable war on wooden buildings. He often railed

against owners who used by-law loopholes to re-build major parts of their buildings in wood, or to build huge three-storey all-wood tenements out of small one-and-a-half storey wooden houses'.

The fatigue factor due to the building boom, not to mention the extra work created by his diligence in trying to make the city safer from fire, produced the inevitable request for help from City Council:

Gentlemen, I have also to call to your attention that from the rapid progress and the extending of the City, it is quite evident that it has become an absolute necessity that the Inspector of Buildings should have some assistance to help him in the performance of his duties. It is certainly beyond the strength and power of any man to attend to the general Inspection of Buildings now erected throughout the City, and also the Inspection of Buildings which may hereafter be erected, and to examine the cause of complaints and other demands which are too numerous to detail in this Report. I therefore would humbly suggest, that two competent persons, understanding properly the French and English languages, Drawing, and also the Construction of Buildings, be appointed to act as Assistants to the Inspector of Buildings*.

Apparently his plea for help went unheeded, as Rouillard had to repeat his request, verbatim, in 1882, this time begging for just one assistant. In 1883 he dropped dead. His predecessor had dropped dead in 1865. Against this backdrop, violating the law was probably worth the risk. The increasing non-pursuit or late pursuit by the Inspector was known to builders, making the gambit all the more enticing to

unscrupulous or underfinanced builders. The supply of unsuspecting buyers was no doubt plentiful. Builders could reduce their construction costs considerably by omitting an internal firewall or skimping on structural beam and post construction, or even by going for broke and erecting a wooden house. Working-class Montreal was the most obvious victim of such attempts.

EVALUATION OF THE CITY DIRECTORIES

While the foregoing discussion constitutes a detailed evaluation of the building permit abstracts, the other basic sources of data require evaluation as well. Primary among them are the Montreal directories. Published annually by Robert Mackay from 1842 to 1854 (with the exceptions of 1846 and 1851), after his death by his wife Christina, from 1855 to 1862, and finally by the publisher John Lovell, from 1863 to this very day through his firm, these directories were designed as a reference to all heads of households in Montreal, largely for commercial purposes. Typically, women almost entirely escaped the notice of enumerators unless there was no male head of household to be had. This meant that only widows and independent spinsters appear in the listing. Starting as an alphabetical listing in 1842 based on family names, it included the head of household's occupation and address. Occupation is an important distinguishing feature

for people with the same name. It is the best and sometimes the sole clue to a social status and a connection to the economy, particularly in the construction sector.

Data for the Montreal Directory were collected each spring, generally during May, through a street by street enumeration. The data collected were as good as the individual enumerator and the degree of control exercised over him by the publisher. This explains the uneven quality street by street, year after year. Publication usually took place in July. Thus each directory carries a hyphenated date in its title indicating the second half of the year during which the directory was published and the first half of the following year for which the data were considered still current. For convenience, we will only refer to the year during which data were collected, not the hyphenated version in the title.

Beginning with the 1864 directory, a street directory section was added. This format offered the same information as before, but organized it spatially by street and civic address, complete with cross-streets. Although the 1864 edition itself is of little use, because of the strange and inconsistent address system and the many gaps in the data, the following year's edition uses the new systematic street addresses introduced city-wide in Montreal and shows a remarkable degree of completeness. Happily, these innovations

were introduced just in time for the 1866-1880 building cycle.

Beyond the act of locating new buildings, the Montreal Directory was used for generating two key variables missing from the building permit abstracts. The first was building type, that is whether the permit was for a single-family house or some form of multi-family building. A primary sorting was accomplished merely by counting the number of civic addresses per building. However, upstairs flats frequently shared the same outside door and sometimes the same address. A secondary sorting was done by counting the number of heads of household for each new residential building starting from the moment it first appeared in the directories. This count was verified for several years running to ensure accuracy. The entire exercise was based on the assumption that there was only one head of household per dwelling and that occupants would occupy a residential building as intended by the builder, at least in the first few years. In other words, it was assumed that there would be virtually no subdivision of dwellings in the years immediately following construction.

In practice, the assumption about heads of households was reasonable. In only very exceptional cases did the Montreal Directory list more than one head of household per dwelling, at least in the nineteenth century. The exceptions usually occurred in situations where two brothers, or often two

spinsters shared a same dwelling. Infrequently a man and a woman, with different family names, appeared to share the same dwelling. Generally, these exceptions were not difficult to figure out. The real problem in determining house type was with people overlooked during the enumeration process.

The missing people factor is the "Achilles' heel" of all city directories. Under pressure to collect data as cheaply as possible given the profit motive of such ventures, lacking the authority and the backing of the law that both City assessors and Government census takers had, and faced with the typically suspicious nature of people, it is a wonder that these directories are as good as they are. No single directory can be declared uniformly bad or good, save for exceptional circumstances such as 1864, because each directory was the product of a number of enumerators, some good and some bad. The variations in quality are more evident at the individual street-listing level rather than at the directory level. One factor clearly in Lovell's favour was the regularity of his annual enumeration and the longevity and reputation of his firm, founded in 1835. The recognition factor may have broken down some resistance to his annual door knocking.

John Lovell himself in 1863, the year he took over the organization of the Montreal Directory from Christina Mackay,

explained at some length the trials and tribulations of compiling a city directory:

In a city of the present extent of Montreal very many difficulties in compilation are met with. Many persons, from misapprehension or otherwise, absolutely refuse to give any information as to their names; and others, with some inconceivable object, give statements absolutely false. Care, judgment, and vigilance are required as necessary qualifications in those who go from house to house to obtain the original information, as well as competency in both languages as to the orthography of names; and where, as always is the case, care in selection does not protect from engaging one or two incompetent persons amongst over twenty employed for this purpose. ... A want of spelling some names, either French or English, exactly in the proper manner, has led in many cases to the notice by the compiler of the omission of the name in its proper place. Steps having been taken to ascertain the cause, such mistakes have been corrected, only on further investigation to lead to the discovery that the name had been taken and inserted many pages out of its place owing to incorrect orthography on the part of the person originally taking the names. This is but a sample of one of the many difficulties encountered. ... A considerable enlargement will be observed in the work, and the publisher may state that he has in point of fact endeavored to obtain the name of every resident in the city and suburbs'.

As one might expect, accuracy was less of a problem in wealthier neighbourhoods, not only because such people had a greater commercial interest in being included in the directory, but also because their neighbourhoods were heavily dominated by streets of fairly new single-family houses with relatively few complications. To enumerate in poorer neighbourhoods, one was either faced with very old housing,

often in zones of mixed land use, or new housing with high occupancy densities. The difficulty with the older housing was to find it in the first place, and then figure out how it was subdivided; the problem with the newer housing was to be sure to find rear entries and rear courtyard housing, very common in nineteenth-century Montreal. Rare is the street in any given directory that includes every single rear house address. Rather, successive years offer a smattering of residents from such housing, and different ones each year. Occasionally a street will appear one year with no rear housing residents whatsoever, the result of sloppy enumeration.

Some tests have been performed by other researchers on the Montreal directories in order to obtain a measure of their reliability¹⁰. Suzanne Cross and J.G. Dudley took 500 Irish heads of households from the 1871 manuscript census returns and attempted to trace them by name and occupation in the 1871 Montreal Directory¹¹. The retrieval rate was 58%, based on the restrictive condition that both name and occupation had to match. Thuy Thach, in a similar study of the Irish, managed to locate 59% of his 392 heads of households drawn from the 1861 manuscript census in the contemporary directory¹². He found that from his sample of city-wide Irish heads of households, he could trace 67% of white-collar occupations, 62% of skilled workers, and 52% of semi-skilled and unskilled

workers. There were not enough higher status occupations available in his sample to make a directory test valid.

Thach also found, interestingly enough, that Catholics fared significantly worse at the hands of enumerators than did Protestants in the same occupational groups. For example, he was able to retrieve 65% of his Protestant labourers from the 1861 directory but only 44% of his Catholic labourers, a curious wrinkle to the directory enumeration question¹³. It is unlikely that enumerators practiced discrimination on religious grounds. It is more probable that the Irish Catholic population was especially suspicious of authority. Certainly Thach's study supports the contention that the farther one descends the occupational ladder, the weaker their representation in the city directories. Christina Mackay, in the preface to her 1857 city directory, took particular note of this factor:

It is with the utmost difficulty that anything like accuracy can be obtained among the working classes in the suburbs, the fear of taxation, etc., causing them to give wrong names, and in many instances to withhold them altogether¹⁴.

Robert Lewis, in his thesis, examined a different segment of Montreal's working class population for a more recent period¹⁵. Looking at blue-collar workers, he drew a sample of 338 workers from the Grand Trunk Railway wage records of 1902 for the Point St. Charles Shops¹⁶. He was able positively to locate 60% of them in the 1900, 1901 and 1902 city

directories. Looking next at white-collar workers, he drew a sample of 299 government clerks from federal and municipal records in 1902¹⁷. In this instance, he was able to locate 66% from the same directories. In spite of the forty year gap between Thach's and Lewis' study periods, their retrieval rates are similar.

It is possible to get better results, as long as the researcher is willing to adopt less restrictive matching definitions and is able to span several consecutive years of directories in the search. It is this sort of flexibility which lies behind the 93% retrieval obtained here, despite the highly mobile nature of the study group. Of the 1,832 individuals who took out residential building permits in 1868-71 and 1873-77, a total of 1704 were found in the directories, leaving only 128 unlocated permit holders. The high success rate should not be construed to be the result of a population drawn from the ranks of the elite. The permit holders came from all walks of life, particularly from the ranks of skilled workmen as will be seen in Chapter Five.

The method used in tracking the 1,832 individuals who appeared on the building permits was to carry out a four-year search in the directories. The year the permit was issued, the preceding year and the two years following the permit issuance constituted the four directories consulted. A

certain latitude was allowed with the spelling of names. Misspellings were very common. For example, a Jean-Pierre Frisé with a development on Montcalm Street in the permit records, turns out to be Jean-Pierre Friiset in the 1874, 1876 and 1880 directories, but Jean-Pierre Frissé in 1877. Since the address was the same and there were no other Frisets, it was reasonable to tie these entries together. Several people bearing the same name were sorted out by finding one of them living in the new house or in close proximity. The search would occasionally go beyond the four years if there was a lead that required confirmation. Of the 128 untraceable permit holders, it is entirely possible that some were simply from out of town.

The technique was time-consuming, but the results confirm the value of city directories as research tools. Most heads of household were recorded by Lovell, as long as the researcher is willing to search for them in several consecutive volumes and adopt a flexible attitude towards spelling. Virtually everyone was listed at least two or three times in a decade. The main qualification to bear in mind when using city directories is that it is unwise to base research on only one or even two consecutive directories. Four appears to provide the necessary combination for reliability, making sure to straddle the year of prime interest.

EVALUATION OF CARTOGRAPHIC SOURCES

Directory research is greatly enhanced by coupling it with a cartographic source. The 1881 Goad Atlas, more correctly titled Atlas of the City of Montreal, is an urban research source of remarkable value. Showing every building and outbuilding at a scale of 100 feet to the inch or 1:1200 (with the exception of two suburban plates which are mapped at 200 feet to the inch or 1:2400), complete with civic address, cadastral number and identity of owner, it presents an extraordinary visual testimony of the city over a century ago.

The urban atlas was a relatively new concept in 1881. The true precursors of the genre were the early hand-drawn plans produced by fire insurance companies in the late eighteenth century in England. In 1808 and 1845, the Phoenix Assurance Company of London produced such plans for Montreal and a handful of other British North American cities. Apparently none survive. The first published Canadian urban atlas was the Boulton Atlas of 1858. It depicted Toronto at a scale of 1:1200 (one hundred feet to the inch), exactly the scale Goad would later employ. In 1867, the D.A. Sanborn Company of New York began producing published fire insurance atlases in the United States and later in Canada¹⁸.

Charles E. Goad, a British immigrant, came to Canada as a

civil engineer in 1869. He set up business in Montreal in 1875 to produce his own series of fire insurance city atlases. The all-important link with the insurance business was underlined by Goad himself in 1883:

Co-existent with the practice of fire insurance covering manufacturing risks especially, and hazardous and nonhazardous risks and occupations located at a distance from the office of the insurer as well, came the necessity for, if not the immediate use of the 'survey', a description of the premises to be covered by the policy, with the accompanying 'diagram' or ground plan, showing not only the internal hazard of the risk itself, but its relative position as to neighbouring structures, their classes, occupancy, etc., by which the insured premises might be exposed, not only for the security of the underwriter against misrepresentations of the hazard - wilful or otherwise, - as to the hazards attending such risks, but what might also be in possession of some acknowledged data upon which to approximate a fair premium rate for the risk assumed¹.

The rationale for the emergence of a firm such as Goad's specializing in the detailed cartography of cities lies in the very essence of the Industrial Revolution. To begin with, the organization of the economy along capitalist lines ushered in an era of private institutions designed to fulfill specific needs on a large scale while making a profit out of the enterprise. Fire insurance companies were one such innovation, designed as they were to spread the risk of insuring one's premises amongst a large number of policyholders all based on business principles. Such firms concentrated mainly on urban areas and rapidly expanded their base internationally. Detailed urban cartography arose as a

specific business need of insuring against fire. Hence the explosion of city atlases after the mid-century once lithography became widely available. These likewise were handled by specialized firms operating on business principles, also spreading out nationally and internationally.

It took Goad six years to produce his first city atlas, the Atlas of the City of Montreal. Each of the 44 plates is dated, variously 1879, 1880 or 1881, reflecting the year in which that area was finished and drawn. The link with the fire insurance business is readily apparent from the features highlighted in the Atlas: colours reflecting the building materials used, every building including annexes and out-buildings carefully drawn in, names of property owners, cadastral numbers and civic addresses indicated. In subsequent atlas series, Goad would increase the cartographic precision even further by draughting at a scale of 1:600 (50 feet to the inch) and including building function, height, roofing and dozens of other fire related details.

The Atlas was found to correlate exactly with the permit descriptions and to be extraordinarily free of errors. Only two important omissions were found, one in Ste-Anne and the other in St-Jacques Wards, involving several houses in each case - a row on the west side of Bourgeois Street, and a group on the south side of Ontario Street. Otherwise only errors

and omissions of a very minor nature were found, and exceedingly few (missing civic addresses, inaccurate owner identities, uncoloured or miscoloured buildings...). This represents a truly remarkable feat and a boon to urban research.

A second cartographic source, the Plunkett & Brady map²⁰, representing Montreal during the early part of the building cycle under study, was used as supporting graphic evidence in the compilation of total housing production. It was commissioned by the City of Montreal. Like the Goad atlas, it shows every single building in outline, within the city limits. The scale is much smaller than Goad's, 400 feet to the inch or 1:4800 compared with 100 feet to the inch or 1:1200. The map in question is dated December 1872 which would place it squarely at the middle of the building cycle. This date, however, does not correspond to the information shown. As street after street was searched in the course of locating housing permits, 1869 was found to be the actual date of the map. All houses with 1868 permits were pictured on this map as were most houses with 1869 permits. Few houses with 1870 or later permits were pictured. Thus it would appear that the surveys were made during 1869.

The peculiar exception to the 1869 date concerns a small number of houses with permits from 1870 and 1871. All were in

St-Antoine and St-Laurent Wards north of Dorchester Street, not more than a hundred houses. One suspects that given the lengthy delay between the surveying for and publication of the map, the authors must have noticed how houses were going up all over the city, being at the peak of a boom, and decided to do a quick and partial update of what they considered to be the most important part of the city - the wealthy slope of Mount Royal²¹. Still, despite this sizable discrepancy, the map bears excellent witness to the predominantly working-class areas of the city at the beginning of an important building boom.

Each source reviewed here has its failings. Yet once these problems are identified and isolated, their contribution remains significant. Fundamentally, all three major sources used - permit abstracts, city directories and city atlas - are reliable, good quality sources. Their significance and complementarity can only be enhanced by combining them. Record matching is a tedious and time-consuming technique. To create a new data base from these sources took approximately 60 full working days per ward. There were six such wards in the city not counting the Central Business District. The result was an extremely precise reconstruction of builders and buildings over the course of fourteen years.

Each basic source was originally compiled for different

reasons. Each constitutes an independent witness to the building process. In effect, the technique of record matching is nothing more than an adaptation of the legal principle of cross-examination. Each witness has a different version of what happened, but together, under cross-examination, the true story emerges. We have three reliable but different witnesses. What emerges is an accurate portrayal of what went on during this building cycle.

FOOTNOTES - CHAPTER TWO

1. See the "Annual Report of the Inspector of Buildings for the City of Montreal" contained in the Reports on the Accounts of the Corporation of the City of Montreal and Reports of City Officials for the year ending (31st January or 31st December 1866 through 1877) and in the Annual Reports 18... (1863-65; 1878-83) stored in the City of Montreal Archives under the title "Rapports annuels". The term "building permit" is used loosely in this thesis as Montreal did not have a formal building permit system in the 1860s and 1870s where an owner of property had to formally register his intention to build or modify a structure with City Hall. Instead, "building inspection" would be the more appropriate term as it was the Inspector's duty to ferret out all new construction, register it for statistical purposes and inspect it for building code violations. Since the process resembles the building permit system in all but the method of registration (by the City instead of by the builder) we will use the more easily recognized term "permit".
2. "Permits" are not to be confused with "buildings" as one building permit could and often did contain several buildings (whether residential, commercial, industrial or institutional, though rarely in the latter case). Furthermore, "residential building" or "dwelling house", to use the correct nineteenth century City of Montreal term - is not to be confused with "dwelling" (or "logement" in French) or currently used terms such as "flat" or "apartment". A residential building could, and usually did, contain more than one dwelling unit.
3. Because of the inaccuracies in any given year of the Montreal Directory, a running comparison sometimes had to be done with the preceding and following years. Major problems developed when the City changed the street numbering during intervening years. This was the case with a few streets. In each case a table of civic address equivalents had to be drawn up for the street. In rare cases, no addresses whatsoever existed for

certain suburban streets or portions thereof. Name matching by property was the only way to proceed in these instances.

4. The French ward names will be used exclusively throughout this thesis. This is done because of the paradoxical situation where all but St-Antoine Ward are commonly referred to in the nineteenth century by both their English and French names, yet St-Antoine, the most English of all wards (save perhaps Ste-Anne) was and is never referred to in anything but the French. Since French is historically the language used systematically, and since modern usage emphasizes the French, this will be our practice. East, West and Centre Wards, however, being generic terms, will be referred to in English.
5. See Corporation of the City of Montreal, The Charter and By-Laws of the City of Montreal, (Montreal: John Lovell, 1865) chapter 9, by-law concerning the erection of buildings, sections 27 and 36. Houses were deemed to contravene the building regulations in 1860s and 1870s Montreal if they were built out of wood, had a wooden roof covering, had an insufficient number of firewalls, had non-regulation chimneys, had insufficient structural wooden beams or posts, or contravened a variety of minor building regulations.
6. Rouillard's predecessor, Jean-Baptiste Dubuc, listed 375 building code infractions in 1863, and 237 in 1864; the transition year of 1865 lists only 207. But during Rouillard's first full year as Inspector, he tabled 918 infractions for 1866, followed by 974 in 1867 (See "Annual Report of the Inspector of Buildings ...", op.cit., for the years 1863-67).
7. City by-laws allowed the owner of an outlawed wooden shingle roof to patch such a roof with like materials. Owners found that by replacing their prohibited roofs in sections over several years, they could circumvent the City's by-laws and get a new cheap roof. Likewise, by-laws allowed owners to convert their otherwise prohibited old wooden houses to flat-roofed structures using only wood for the extended walls. There was nothing in the by-law about height, however, and the owner might therefore create his perfectly legal practically new all-wood tenement atop an old wooden house

(see "Annual Report of the Inspector of Buildings...", *Ibid.*, for the years 1869, 1870, 1871, 1873 and 1879).

8. "Annual Report of the Inspector of Buildings...", *Ibid.*, for the year 1874, pp. 5-6.
9. John Lovell, ed., Mackay's Montreal Directory for 1863-64 (Montreal: John Lovell, 1863), pp. 15-16.
10. See Gareth Shaw, "Directories as Sources in Urban History: a Review of British and Canadian Material", Urban History Yearbook (Leicester, 1984), for an overview of the uses and reliability of nineteenth century city directories.
11. D.S. Cross and J.G. Dudley, "Comparative Study of Street Directories and Census Returns for 1871", Urban History Review, 1, No. 3 (1972), pp. 12-16.
12. Quoc Thuy Thach, "The Occupational Structure and Residential Pattern of Irish-Born Heads of Households in Montreal in 1861", B.A. Thesis, Department of Geography, McGill University, 1984, p. 55, and Table 3.
13. *Ibid.*, p. 55, and Table 4.
14. Christina Mackay, ed., Mackay's Montreal Directory, New Edition, Corrected in May & June 1857-58 (Montreal: Owler & Stevenson, 1857), p. 7.
15. Robert D. Lewis, "The Segregated City: Residential Differentiation, Rent and Income in Montreal, 1861-1901", M.A. Thesis, Department of Geography, McGill University, 1985. Lewis did not conduct any formal retrieval tests on the Montreal Directory. However, calculations based on his original data reveal the rates expressed herein.
16. Lewis drew his sample of 338 railway workers in seven major occupational groups - foreman, boilermaker, brass finisher, machinist, carpenter, painter, labourer - from the "Accounts payable, Master Mechanics Office, GTR System, Motive Power Dept. & Car Dept.: for personal services rendered at Point St. Charles during the month of January 1902" (Public Archives of Canada, RG30, vol. 2034).
17. Lewis drew his sample of 299 government clerks from two sources: Post Office 1st, 2nd and 3rd

class clerks, letter carriers and customs clerks from the Government of Canada, Annual Report of the Minister of the Interior, and the Annual Report of the Auditor General (Ottawa: Queen's Printer, 1902); plus municipal clerks from the City of Montreal, Annual Report of the City Treasurer (Montreal: Modern Printing, 1902).

18. Robert J. Hayward, Fire Insurance Plans in the National Map Collection (Ottawa: Minister of Supply and Services Canada, 1978), pp ix-x.
19. Charles E. Goad, "Commentary", Insurance and Real Estate Society (1883), as cited by Gwyn Rowley, "An Introduction to British Fire Insurance Plans", The Map Collector, No. 29 (1984), p. 14.
20. Plunkett & Brady, "Plan of the City of Montreal Made by Order of the Mayor, Aldermen and Citizens from a Trigonometrical Survey by Plunkett & Brady, Engineers, Revised and Corrected to Dec. 1872" (Montreal: Burland, Lafricain & Co.).
21. At least Ste-Anne, St-Louis, St-Jacques and Ste-Marie Wards can be certified as dating from 1869. East, Centre and West Wards, the central business district, were not checked.

CHAPTER THREE

THE ARRIVAL OF MULTI-FAMILY HOUSING

A UNIQUE HOUSING TYPOLOGY

Montreal is a special case when it comes to North American urban housing. The city is renowned for its abysmally low home-ownership rate in comparison to almost every other North American city. What has been ignored, relevant to the home-ownership debate, is the basic question of housing types. Even the Canada Mortgage and Housing Corporation has been unable to recognize Montreal's unique typology for what it is and insists on classifying housing by a pan-Canadian formula that obfuscates more than it reveals¹. What social planners have failed to take into account is that Montreal's developmental path was different. Although it does not fit the norm, this does not necessarily imply failure. The duplex, Montreal's claim to distinction, was a housing model which, historically, may have been superior to English back-to-back housing or Scottish or American tenement housing. The duplex and its variants are today still much more comfortable and human-scale forms of housing than apartment blocks, subdivided old single-family houses and high-rise "jungles" so common elsewhere. From a property ownership point of view, they allow much greater access to income-producing housing by small investors. Sociologically,

they are renowned for their ability to integrate extended family groups.

Here we explore the special historical circumstances which allowed Montreal to go on its own path of housing development, parting company with the rest of North America. The duplex has been a durable and adaptable form of housing for the lower end of the market, showing decade after decade that happiness does not necessarily have to take the form of an individual castle with the cost of a heavy mortgage. Montreal builders still crank out blocks of duplex derivatives in the latest subdivisions despite federal subsidy to single-family bungalow projects. In analysing the housing produced during the 1866-1880 building cycle, we will seek a better understanding of the origin of the duplex and the context within which it became Montreal's dominant form of housing. But before we can embark upon this important change in the housing typology, we need to establish the basic features of that typology.

During the second half of the nineteenth century, Montreal's housing typology suddenly became much more complex than it had ever been. Housing evolved rapidly in architectural terms and it was during this period that new standard forms of multi-family housing made their appearance. The new typology may be viewed as a tripartite one made up of

single-family housing, duplex housing with all its variations, and triplex housing. Although the three segments tended to respond to a hierarchical market where single-family housing occupied the top layer and triplexes the bottom, they also overlapped with one another to a considerable degree. This overlapping series featured juncture points where a variety of housing models co-existed.

The accompanying illustration [Fig. 3.1] shows how this typological series might look if the most common Montreal house models of the 1860s and 1870s were assembled on one street. The series of nine houses are organized along a sliding scale of rent levels per household (i.e. house or flat) based on 1881 rental evaluations². Triplexes are absent from this illustration because they did not yet constitute a common house model in the 1870s.

The first type of the series was the single-family house. At the top of this category was the mansion, a large detached house set on a spacious lot. A fairly tight and workable definition of mansions allows them to be separated from the rest of the single-family housing. Mansions were taken to be detached houses (or semi-detached in one special instance). The term mansion simply means a large single-family house and Montreal had plenty of them. They were hardly ever flat-roofed. Most were square in shape, with a frontage of 36

feet (11 metres) or more, occupying a ground area of over 1800 square feet (167 m^2) and situated on a large lot. Such a definition left practically no ambiguous cases allowing for a clean break between large attached houses and free-standing houses set on large lots [see Fig.3.1, house no.1].

What followed next in the single-family series were the luxury multi-storey houses attached to one another. They were commonly two-and-a-half storeys high, although three-storey and three-and-a-half storey versions did exist. Semi-detached housing (i.e. two single-family houses joined by a common wall) was so rare as not even to warrant any analysis. Except for mansions, houses for the well-to-do in Montreal always shared their side walls with neighbours, whether such houses were built individually or in series. Conversely, these houses were often very deep [see Fig.3.1, houses no.2,3,4].

From this point on in the typology of housing, single-family models shared the market with duplexes. Such was the case for two-storey and one-and-a-half storey types, with or without a basement, usually found in rows in neighbourhoods where the larger duplexes could be found [see Fig.3.1, houses no.6,7]. These were the type of single-family houses that dominated. At the bottom of the series were the small individually built attached single-family houses that could be found scattered among working-class neighbourhoods.

The duplex family formed the next series. Multiple dwelling houses are commonly known as "plexes" in Montreal with a prefix signifying the number of units contained. At the top of the series was the luxury two-and-a-half storey duplex built on a raised basement. This model offered four complete floors of living space, divided two per family. This upper-income duplex model was in competition with smaller single-family models [see Fig.3.1, house no.5].

More common was the two-and-a-half storey basement-less duplex. This type allowed the builder to satisfy two different residential markets. The bottom unit, on the ground floor, was quite small. The upstairs unit spanned two floors, with the upper floor under a mansard or gable roof. This upstairs unit was quite spacious, about twice the size of the downstairs unit. The prevalence of this model in working class neighbourhoods gave Montreal its distinctive vertical social stratification. Skilled workers, artisans or local businessmen might be found above unskilled workers making such areas a social layer cake [see Fig.3.1, house no.8].

Finally came the two-storey duplex of working-class Montreal. This model was often found in a "fourplex" format, meaning two duplexes designed as one building with a common stairway to the upstairs flats [see Fig.3.1, House no. 9]. Variants of these duplex models included shop and dwelling

combinations which were basically two-storey and two-and-a-half storey duplexes with the ground floor flat used for commercial purposes.

A by-law of 1865 imposed certain limits on houses and the amount of squeezing that could be done:

Every Building, except a private dwelling, over thirty and under fifty feet in width, shall have at least one brick or stone wall running from front to rear; or if over fifty feet and under seventy-five feet width, shall have two partition walls as above; or if over seventy [five] feet and under one hundred, shall have three partition walls as above³.

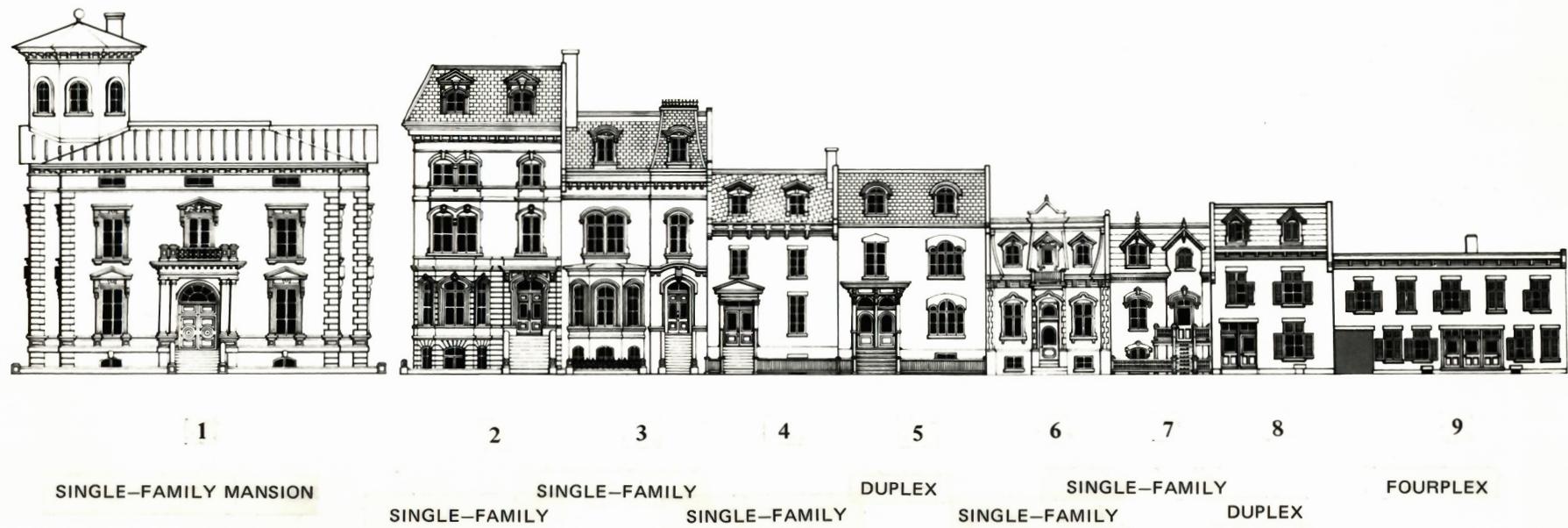
This means that single-family houses or "private dwellings", had no limits placed on them. But multi-family houses could be no wider than 30 feet (9.1 m) if built singly, no wider than 25 feet (7.6 m) if built in pairs or rows. No other constraints applied during the 1866-1880 building cycle. Height, number of units, windows, and ventilation were of no concern to the Municipal Government.

These limits set the tone for minimum housing in Montreal. Since masonry fire walls were expensive, they were to be avoided at all costs. So builders opted for duplexes, which were two superposed flats, no wider than 25 feet (7.6 m), occasionally as narrow as 12 feet (3.7 m). The 30-foot (9.1 m) individually built duplex allowed for some

imaginative combinations. Such buildings were used to incorporate a "porte-cochère" or enclosed passageway in the building and still allow for a unit upstairs and a smaller one downstairs. Sometimes the builder resorted to a configuration of two very narrow units side by side over one downstairs unit. These two-over-one duplexes or "three-plexes" were found in only a few cases. The classic approach for obtaining higher housing densities, however, was the option of building rear courtyard housing accessed via the enclosed passageway incorporated in the front buildings.

The triplex as the third type of the tripartite typology was a natural derivative of the duplex. Constrained by the same 25 or 30 foot (7.6 or 9.1 metre) by-law, it was found in two basic forms: a two-and-a-half storey mansard-roof or a three-storey flat-roof building containing three superposed flats. The upstairs flats generally shared a common outside door. The idea of pairing up duplexes into fourplex blocks with common upstairs access was transmitted at the outset of the triplex into a sixplex format with a common street level access to all the upstairs flats [see Fig.3.2]. The triplex was a new housing type in the 1860s and its full development lay in the future. Duplexes and triplexes remained the two mainstream models of multi-family housing right up to the 1930s when triplexes rapidly faded out of the housing market.

FIG. 3.1 MONTREAL HOUSE TYPES, 1881



1

2

3

4

5

6

7

8

9

SINGLE-FAMILY MANSION

SINGLE-FAMILY
SINGLE-FAMILY

DUPLEX

SINGLE-FAMILY
SINGLE-FAMILY

DUPLEX
FOURPLEX



FIG.3.2 TERRACED SIXPLEXES

Three-storey row of eight tripleplexes arranged in sixplex format, built by Charles Séraphim Rodier, manufacturer, in 1872-4 on Barré near de la Montagne, Sainte-Anne Ward.

The presence of multiple doorways in duplexes and triplexes distinguishes Montreal's multi-family dwellings from Boston's double-deckers and triple-deckers which typically have only one main outside doorway. During the 1866-1880 cycle in Montreal, working class house doorways were at ground level, and those for luxury duplexes were up a stone staircase. Only later was the outside wood and iron staircase adopted with setbacks, features for which Montreal became famous.

The shape of Montreal housing was fairly standardized except for height. The width of a house could vary from 12 feet (3.7 m) to 36 feet (11 m), but the overwhelming majority were between 20 and 25 feet wide (6.1 to 7.6 metres). Depth also varied little. The standard depth was 25 to 32 feet (7.6 to 9.7 metres), although the homes of the wealthy often reached back as far as 50 feet (15.2 m). The differences in ground area of a single-family house ran from a typical 500 to 700 square feet (46.5 to 65 m²) up to a maximum of 2000 square feet (186 m²). Montreal houses were always built to the lot line, and the idea of allowing a side path for direct access to the rear of the lot did not come into usage until the beginning of the twentieth century. Thus with the exception of mansions and a few isolated cases of detached houses, all housing, single-family or multi-family, for rich or for poor, inner-city or suburban, was attached housing.

We will return to this typology as we examine new housing in Chapter Four. Since Montreal during the nineteenth century diversified its typology with several forms of multi-family housing basically structured around the duplex, we need next to gain a clearer understanding of the origin of the duplex and the conditions that allowed its sudden hold on the city's market.

THE ORIGIN OF THE MONTREAL DUPLEX

One of the enigmas of Montreal housing is where the duplex comes from. Elsewhere in North America "duplexes" are semi-detached single-family houses. They bear no relation to Montreal's superposed flats. The closest housing form one can find in North America is New England's double-decker and triple-decker houses. There are enough parallels to establish these as close cousins of Montreal's duplexes and triplexes. Yet enough differences arise to reject any idea of mutual influence between the two urban environments.

The mass migrations of a rural French-Canadian population to New England during the second quarter of the nineteenth century and later would seem to provide a logical link with that region's double and triple deckers. Surely some of these migrants must have lived in "deckers". This cultural

transference hypothesis is rejected for several reasons. First, the link was between rural Quebec and urban New England. The ties between the cities of Montreal and, say, Worcester, Massachusetts, would be weak, even non-existent, compared to the ties between a rural "rang" on the lower Saint Lawrence and Worcester.

Both Sam Warner and Frederick Bushee in their separate studies of Boston note the importance of builders and contractors from the Canadian Maritime provinces⁴. They were second only to rural New Englanders in the building trades. Here too is a migration from a Canadian rural milieu to a New England urban milieu, yet neither Halifax nor Saint John became double or triple-decker cities.

The most definitive means of rejecting the Montreal-New England link in housing is in the architecture of the houses themselves. New England's "deckers" were usually detached or semi-detached structures built of wood under a front-facing gable roof. The styling was done in typically American fashion, the overall form emphasizing the American love affair with Greek Revival (e.g. gable and facing front) and the detailing suggested Greek, Colonial Revival, Italianate, Shingle and Stick styling and a host of other tastes. Typically they had one common front entrance⁵. Montreal's "plexes", on the other hand, were largely built as plankwall

structures covered with brick. The roof was flat or mansard, but rarely gable. The styling was very subdued, a local version of simplified British Italianate and French Second Empire styling. The fundamental difference was the separate outside entrances usually provided for the upstairs and downstairs flats.

Montreal's "plex" family has in fact a dual origin, neither linked to Boston. There existed in Québec a native form of duplex. Its origin appears to be a modification of the standard two-and-a-half storey steep gable roof urban house whose long side faced the street. Undergoing a subdivision process in the early nineteenth century, such houses were given an outside staircase, sometimes shrouded in wood for protection against the weather, with a new door punched into the gable end on the second floor level*. From this emerged a native duplex as builders adapted the idea to newly built two-and-a-half storey houses featuring one outside staircase at the side of the building for a duplex or two such staircases, one at each end, for a fourplex [see Fig.3.3]. Variants also existed where the outside staircase ran up the front of the facade flush to it.

These native duplexes found favour in Quebec City and Montreal during the 1840s, 1850s and 1860s, possibly elsewhere. Nowhere did they become a dominant building type.



FIG.3.3
NATIVE QUEBEC DUPLEXES

Two-and-a-half storey
stuccoed duplex on
Ste-Rose near Papineau,
built 1850s with outside
stairway to upper flat.



Two-and-a-half storey
wooden fourplex on
Visitation opposite
Ste-Rose, built 1852
with enclosed outside
stairway to one of the
upper flats.

In Montreal they cropped up occasionally in working-class districts. Only a few survive today. Yet by 1880, Montreal, and particularly its East End, was a sea of duplexes and fourplexes of a very different kind. These duplexes featured separate entrances to each flat with halls and stairways incorporated into the structure. Fourplexes often had a common doorway and inside staircase for their upstairs flats. Roofs were either flat or mansard and featured a typically early Victorian heavy wooden cornice. What was the origin of this model of multi-family housing which so rapidly supplanted the native duplex and became Montreal's dominant house type?

The architecture provides the necessary hint. One must refer to Great Britain, specifically to the Newcastle area in northeast England. This is the area of the unique "Tyneside flat" or terraced flat whose distinctiveness M.J. Daunton establishes:

The dominant form of working-class bye-law housing in Gateshead was peculiar to a small area of north-east England: the terraced flat. Although it was imitated in a few areas at the turn of the century, the terraced flat was the prevalent house type only in a narrow band on either bank of the river Tyne. It is indeed usually referred to as the Tyneside flat, and the style was rare even five miles from the river. In England and Wales in 1911, ... 3.7 per cent of the urban population [lived in flats]. The divergence of the north-east of England from the national pattern is striking, for 25.4 per cent of the population of Northumberland, and 14.6 per cent of the population of Co. Durham, lived in flats in

1911. Flat dwellers were, however, highly localized even within the north-east of England since in some areas the incidence of flat-dwelling was actually below the national average . . . The pattern in the towns along the Tyne was very different, for in Gateshead 62.5 per cent, and in South Shields 63.1 per cent, of the population lived in flats. Gateshead was thus typical of the bye-law house style which prevailed on Tyneside, the most overcrowded urban area in the English provinces'.

Architecturally, these nineteenth-century Tyneside flats were highly similar to Montreal's duplexes. They were built of brick, they came in rows, and they were two storeys high with separate entrances for flats at the street level. They also came in fourplex groupings. Like Montreal duplexes, they were almost without stylistic pretensions, simple windows and doors being punched out of a smooth facade⁸. The divergence was their use of a low-angle gable roof sloping to the front instead of the flat or mansard roof more typical in Montreal.

We have one localized region of Great Britain whose dominant housing form in the second half of the nineteenth century was different from anywhere else in Europe, and another localized region of North America whose dominant housing form during the same period was similar to the British model but unique in its own national and continental setting. While there was no direct physical link between the two, there does appear to be an indirect link through the railway industry.

THE ADVENT OF SEBASTOPOL ROW

When the huge Grand Trunk Railway project was launched in 1852, Montreal was chosen as the locus for one of the largest engineering projects the world had ever seen. That project was the Victoria Bridge, at two miles in length (about 3 km), easily the longest bridge ever attempted anywhere and under one of the harshest physical environments, given the extreme variations in temperature between summer and winter, and especially given the mass force of the spring breakup of a sheet of ice two miles wide. The site chosen for the bridge was Pointe Saint-Charles and accompanying the construction of the bridge was a massive railway shop complex and railway workers' housing. The firm of Peto, Brassey & Betts, the largest railway contracting firm in the world, was given the responsibility for the construction of railway, shops, bridges, stations and houses. The most prestigious engineer of the time, Robert Stephenson, son of one of the early innovators of the steam locomotive, was entrusted with the design of the Victoria Bridge⁹.

Peto, Brassey & Betts almost went bankrupt over the venture in spite of their vast resources. But in good British railway tradition they did build permanent housing for the railway labour force, and what they built is of particular interest here¹⁰. In 1857, on a slip of land next to the shops

on the western side, they built a long row of duplexes - essentially terraced flats¹¹. It was named "Sebastopol Row" to commemorate the 1855 fall of Sebastopol to French and British troops during the Crimean War¹². The size of the housing project was immense by Montreal standards, easily the largest ever attempted thus far in the city [see Fig 3.4]. It comprised twelve duplexes arranged in pairs, thereby constituting six fourplexes, with a tenement or boarding house section in the centre of the project¹³. It is likely the contractors had plans for more housing but serious financial difficulties foreclosed such options.

Visually, these terraced flats could have been right out of the Newcastle area, the birthplace of steam railways and heart of the coal and iron industry in Great Britain. The scale and innovative nature of these houses must have attracted widespread attention throughout Montreal. Besides their plain brick construction and simple functionalist architecture, the feature which clearly attracted attention was the grouping of four flats in one building and the shared doorway and interior staircase for each pair of upstairs flats. Each downstairs flat had its own individual entrance door. This format came to be embodied in most Montreal fourplexes in the second half of the nineteenth century. Sebastopol Row appears to be one of the prototypes for Montreal's duplex type and more specifically the prototype for its classic fourplex grouping.

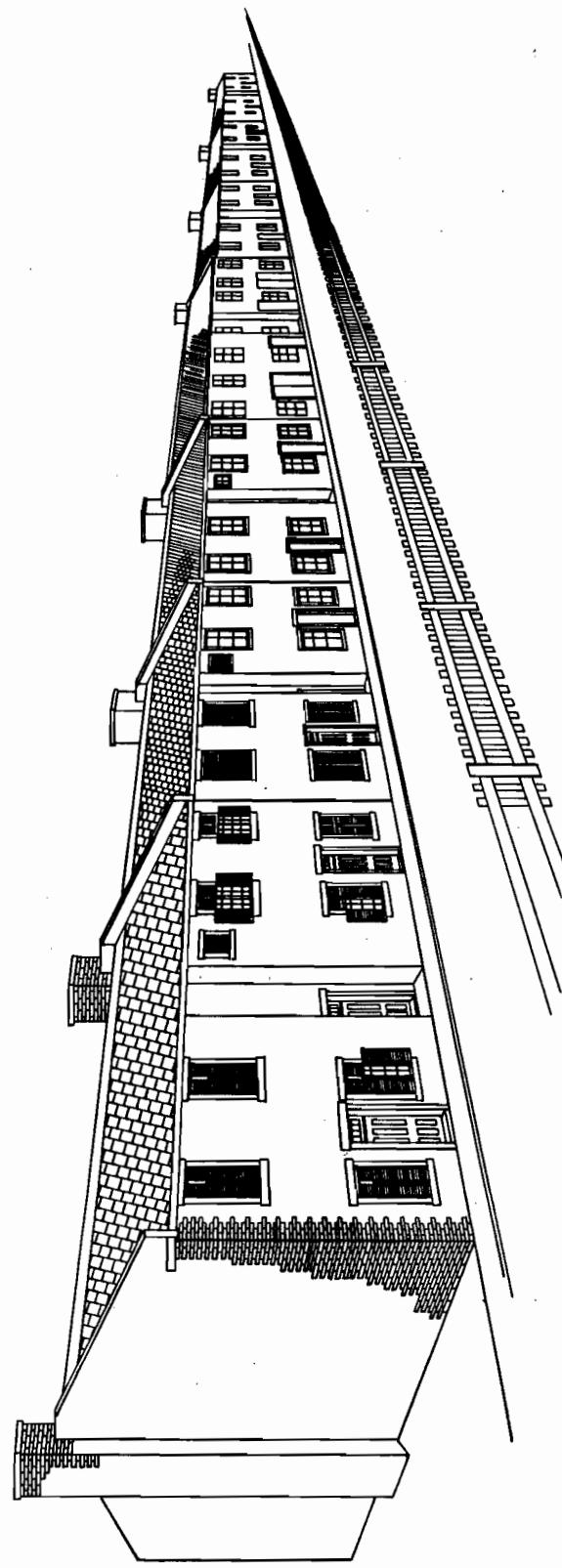


Fig. 3.4: Sebastopol Row

The link with Newcastle can be established, though so far only through circumstantial evidence. Thomas Brassey, although he built railways in every other region of Great Britain including southern Scotland, never garnered a railway contract in the northeast of England¹⁴. Nor, from the evidence available, was Morton Peto ever involved in that region even though he too was a leading railway contractor with thousands of railway miles to his credit¹⁵. Edward Betts' activities are apparently unrecorded.

Another possible link is James Hodges, the chief engineer on the Montreal scene during the 1850s, who supervised every aspect of construction on the bridge, shops and houses¹⁶. Although a man of vast railway experience, he was a native of the south of England and all his railway work was confined to that area or just north of London¹⁷. He probably had never seen a duplex before. But what of Robert Stephenson himself? He and his famous father were born on the Tyneside. His base of operation always remained the Newcastle area. Many of his engineering projects were located in the area and he was given contracts for all facets of railway work¹⁸. He certainly knew about terraced flats.

We know that Robert Stephenson came to Montreal in August 1853 to visit the site at Pointe Saint-Charles and do the planning¹⁹. We also know that he was at the top of the chain

of command in the planning and construction of the Victoria Bridge; he alone conceived and designed it²⁰. The streets that were laid out adjacent to the shops on the eastern side bear the names of his latest engineering triumphs. Britannia and Menai Streets were named for the spectacular high-level tubular Britannia Bridge over the Menai Straits in Wales, a feat that attracted the attention of every major engineer in western Europe. Conway Street was named for his innovative bridge over the Conway River²¹.

Robert Stephenson also was a manufacturer. He owned collieries in England and an engine manufactory at Newcastle²². There is a possibility that he or his father, who founded the works, may have had terraced flats built for their own workers. It is even more probable that it was someone on his Newcastle office staff who was responsible for designing Sebastopol Row. It is also possible that "Victoriatown", the site made up of Britannia, Conway, Forfar and Menai Streets, was supposed to be a planned workers' village²³. We lack, as yet, documentary proof to support these contentions. We do know that the financial difficulties of the Grand Trunk Railway forced it to sell off the Victoriatown lots to individuals in the 1860s and Sebastopol Row to the contractors in 1862. For similar reasons, they in turn sold the houses in 1868.

The architectural evidence seems to weigh on the side of Sebastopol as the prototype for Montreal's boom in fourplexes and sixplexes in later years. The key feature is the intriguing use of a common door and inside stairway for two upper flats in Sebastopol Row. Despite the strong link with the Tyneside area, duplexes and fourplexes there do not seem to offer this feature, at least insofar as the available literature on the Tyne region suggests. Where did this common upstairs access originate from? Three possible explanations may provide an answer.

The first and most simple is that the model was exported by Robert Stephenson's Newcastle-based engineers from a more exotic type of Tyneside fourplex. The second and more academic explanation is that someone working under the umbrella of the Peto, Brassey & Betts firm was aware of recent innovations in worker housing suggested by such philanthropic concerns as the "Society for Improving the Condition of the Labouring Classes". In 1851, under the patronage of Queen Victoria's husband, Prince Albert, a fourplex featuring a common staircase for the two upper flats was featured at the Great Exhibition in London²⁴. Although it bore no architectural resemblance whatsoever to Sebastopol Row, the idea of a common access to two upstairs flats may have influenced the designers of the railway housing.

The third and most colourful explanation was constructed from a recollection of long-term Sebastopol Row resident, Thomas Demick. He refers to the railway's "callboy" system. Freight trains were dispatched as traffic demanded from the Pointe-Saint-Charles yard adjacent. The railway could call on a train crew at any time of day or night. Railways traditionally relied upon the callboy system where, as soon as the train crew requirements were drawn up, callboys were dispatched a few hours ahead of departure time to a series of addresses to call, and wake up if necessary, the crew members from a priority list and back-up list.

Sebastopol Row did indeed house a large number of running trades people as well as shop employees, as the census and city directories testify. The story goes that the common inside access to each pair of upstairs flats, complete with hall doorways to the downstairs flats, was an architectural manipulation to allow callboys efficient access to four flats from the same hallway. The architecture of Sebastopol Row certainly bears out the story well.

No matter where the truth lies, the majority of Montreal fourplexes of the 1870s, whether West End, East End or North End, embody this feature of a common indoor access to the upstairs flats. When the sixplex (paired triplexes) came to supplant the fourplex around the turn of the century as

Montreal's standard house model for the popular market, the same common indoor access to the uppermost flats could be found, this time on the second floor at the head of an outside staircase. The stamp of Sebastopol Row on Montreal domestic architecture is undeniable.

John Cooper in his study of Montreal society in the 1850s certainly felt that Sebastopol Row was a prototype for duplex housing and Jean-Claude Marsan could find no reason to refute the claim²⁵. Marsan goes further and demonstrates how Montreal's classic fourplex was the standard housing type ("habitation type") of working-class neighbourhoods in the second half of the nineteenth century²⁶. There remains a gap, however, in explaining how Sebastopol Row of 1857 became Marsan's "habitation type", or how the duplex, from an unusual form of housing in the mid-century became Montreal's dominant form of housing by 1880. In order to answer this question, we need to backtrack to the 1840s and understand the housing market prior to the construction of Sebastopol Row. We also need to examine the series of extraordinary circumstances that led to the creation of an entirely different housing market by the time Sebastopol Row was built.

PROCESSES OF CHANGE IN THE HOUSING MARKET

In 1847, Montreal was very much a single-family city with

a moderate level of home ownership, about 32%²⁷. The ratio of households to houses appears to hover around one²⁸. These figures certainly do not leave much room for multi-family housing. In fact, Montreal was very much a pre-industrial single-family housing city with merchants living in rented premises in the heart of the city and artisans and workers living on the periphery, frequently in owner-occupied dwellings. The highest home-ownership rates were in Sainte-Marie Ward (45.4%) and Saint-Jacques Ward (42.4%), precisely where the onslaught of duplexes would be heaviest twenty years later²⁹.

By 1861, a dramatic shift had occurred. Montreal's home-ownership rate had dropped to 18.8% and Sainte-Marie and Saint-Jacques Wards had nearly halved their rates (24.2% and 22.6%). The trend continued to 1881 (14.7% home ownership) the same two wards again almost halving their rates (13.3% and 14.3%). Other districts also showed dramatic drops in home-ownership, Sainte-Anne Ward dropping from 32.7% in 1847 to 14.5% in 1861, then to 12.5% in 1881³⁰. Saint-Louis and Saint-Laurent Wards tumbled at about the same rate. Something dramatic had taken place in the 1850s.

It was actually a three-fold process. First, large-scale industrialization came to Montreal very suddenly and rapidly in the 1840s and 1850s, once a well-rounded transportation

network was in place (stone wharves, channel dredging, enlarged canal and the start of a main-line trunk railway)³¹. The rate of expansion was phenomenal with one or two new large factories opening up every year between 1842 and 1855 each offering 70 new jobs or more, with many in the hundreds, this in a city of about 58,000 people (1852) [see Table 3.1]. Coupled with this huge increase in the number of jobs came a rapid decline in the independence of artisanal work, a new division of labour and the loss of control over conditions of work. This shockingly swift proletarianization of the labour force in the mid-century was the source of much social friction in Montreal³².

The second process of change was massive immigration from abroad and migration from the countryside. From 1821 to 1850, the annual rate of population growth in Montreal was 5.5%. Between 1850 and 1861, it jumped to 9.7% [see Fig. 3.5]. The surge in population ensured a labour surplus. Sharp ethnic differentiations existed in the labour force. In 1850, 44% of Montreal's population claimed French origin, 32% claimed English-Scottish or British-Canadian origins, and 20% claimed Irish origin³³. This situation fostered a mutually disadvantageous competition. Common institutions and organizations were weak³⁴.

TABLE 3.1 MAJOR FACTORIES ESTABLISHED IN MONTREAL

1842 - 1855

YEAR OPENED	NAME OF FIRM	NUMBER OF EMPLOYEES
1842	MCDOWELL & ATKINSON, FURRIERS	95
1843	WM. SMYTH & CO., BOOTS & SHOES	80
1845	J. & W. HILTON, CABINET MAKERS	82
1846	AUG. CANTIN - MONTREAL MARINE WORKS	200-250
1847	GOULD - CITY FLOUR MILLS	200
1848	PAIGE & CO., THRESHING MACHINE FACTORY	175
1849	E.E. GILBERT - BEAVER FOUNDRY	60-80
c.1849	BROWN & CHILDS, BOOTS & SHOES	800
1850	R. SCOTT, EDGE TOOL FACTORY	76
1850	BARTLEY & DUNBAR - ST. LAWRENCE ENGINE WKS.	160
1851	GRANT, HALL & CO., SAW MILLS	70
1851	AITKEN & CO., SHIRT MAKERS	300
1852	OSTELL SASH & DOOR FACTORY	75
1852	A.W. OGILVIE, FLOUR MILLS	hundreds
1853	BURRY & CO., FOUNDRY	70
1853	BROWN, HIBBARD, BOURN - CANADA RUBBER CO.	158
1854	S.B. SCOTT, SHIRT FACTORY	100
1854	MONTRÉAL INDIA RUBBER CO.	110
1854	GRAND TRUNK RLY (Victoria bridge & shops)	thousands
1855	J. REDPATH - CANADA SUGAR CO.	100

NOTE Employment figures are as of 1855-56.

SOURCE: Montreal General Railway Celebration Committee,
Montreal in 1856, (Montreal: John Lovell, 1856)

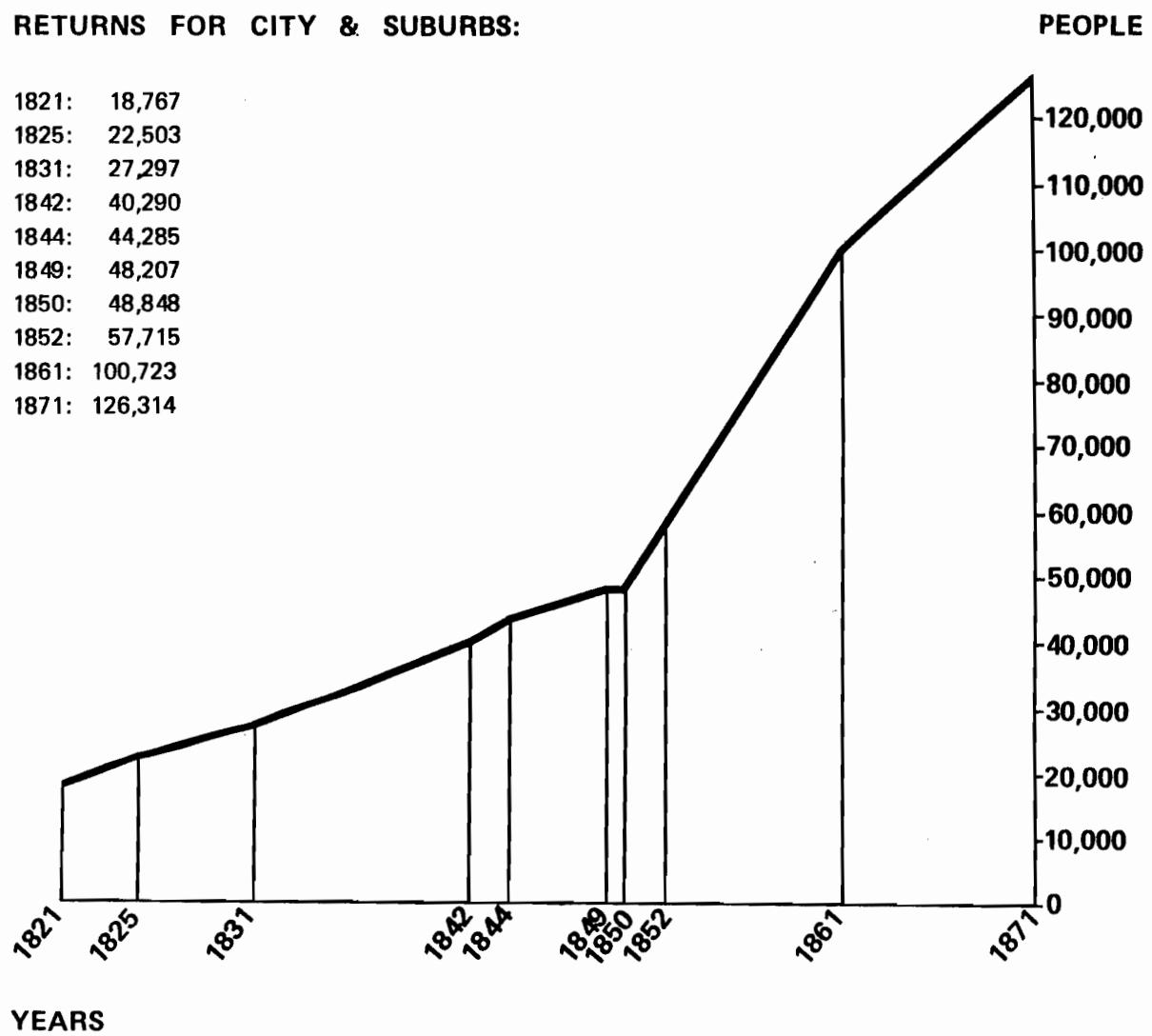
MONTRÉAL

POPULATION GROWTH

1821-1871

RETURNS FOR CITY & SUBURBS:

1821:	18,767
1825:	22,503
1831:	27,297
1842:	40,290
1844:	44,285
1849:	48,207
1850:	48,848
1852:	57,715
1861:	100,723
1871:	126,314



SOURCE: PUBLISHED SUMMARIES OF CENSUS RETURNS.

FIGURE 3.5

The third process which contributed to push Montreal toward multi-family housing was fire. Montreal lost 207 houses in Irish working-class Griffintown (Sainte-Anne Ward) in June 1850, and 150 houses in largely working-class old Faubourg Saint-Laurent (southern Saint-Laurent Ward) in July³⁵. In June 1852, a fire wiped out 1,100 houses in the French working class eastern part of Montreal (southern Saint-Louis and Saint-Jacques Wards)³⁶. This aggregate loss of 1,457 houses represented 19% of the 7,607 occupied and vacant houses recorded in the 1850 municipal census³⁷.

The majority of houses in Montreal in 1852 were wooden houses. The Canada census listed 4,531 frame houses out of a total of 7,190, or 63%³⁸. A by-law passed in 1841 had prohibited the construction of new wooden structures only in Old Montreal³⁹. Thus, if Montreal was a city of single-family housing prior to 1850, it was probably due in part to cheap construction costs. It was undoubtedly little wooden single-family houses that gave the East End the highest rates of home ownership in the city [see Fig.3.6]. All that changed after the fires of 1850. In 1851, the city sought and obtained permission from the Canadian Parliament, to change its charter so as to forbid all new wooden construction in the future:

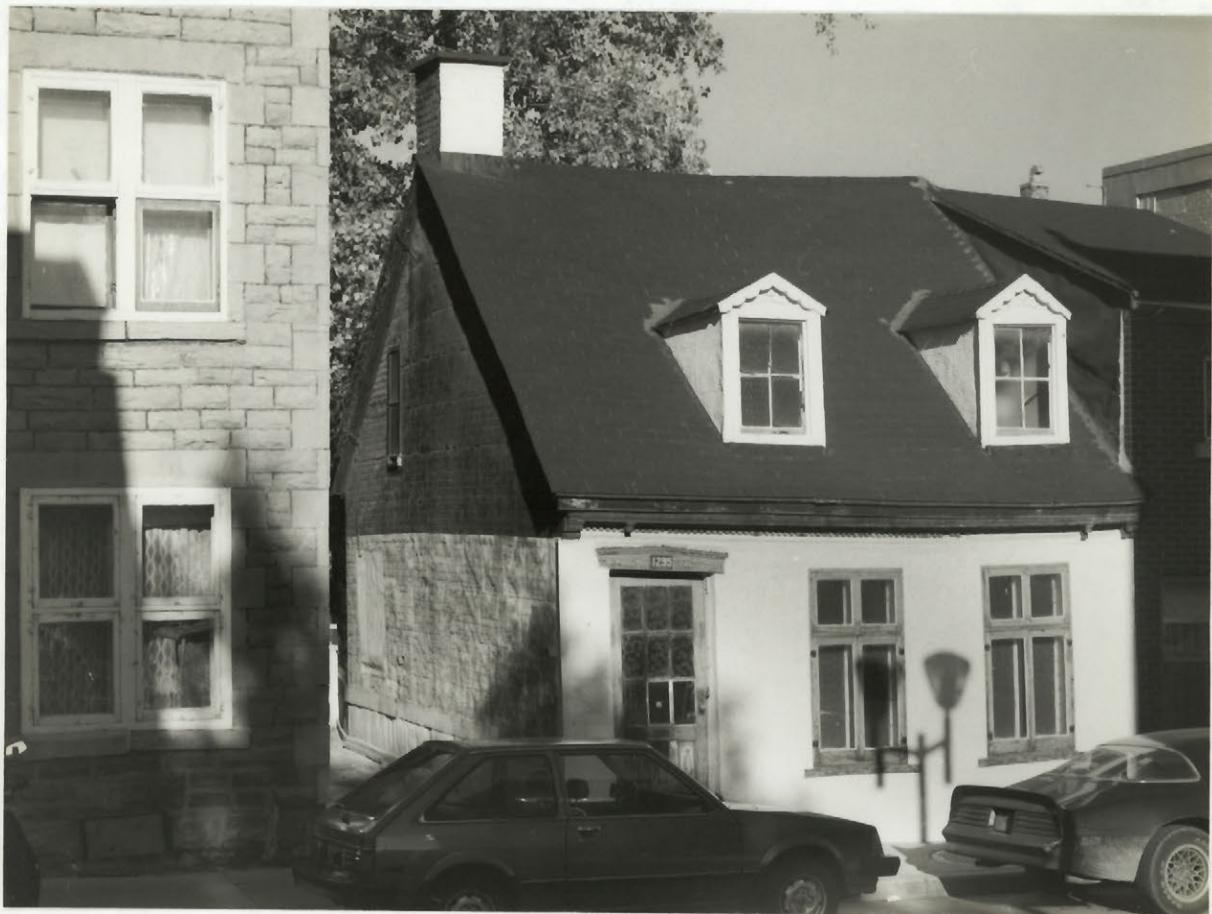


FIG.3.6 SMALL SINGLE-FAMILY HOUSE

One-and-a-half storey stuccoed wooden house on Montcalm near Ste-Catherine, built 1850s in Saint-Jacques Ward, typical of East End housing prior to the spread of the duplex.

...To prohibit and prevent the construction of any wooden building, of any kind or description whatever, or the covering of any building of any kind whatsoever, with Shingles or wooden materials of any kind whatsoever, within the City limits*⁰.

By 1852, there was an acute housing crisis in working-class Montreal. New migrants were surging into the city at a phenomenal rate. Jobs were plentiful but the proletarianization of the work force was making rapid inroads on working-class and artisanal independence. Wages were low. Manufacturers in 1856 boasted about the cheap supply of labour:

Agricultural wages are not so high here [the rural areas around Montreal] as in those portions of the Province where wheat is more largely grown, and hands can be obtained to work in the factories at more reasonable rates than there. All these causes concurring make this [Montreal] the best site for a manufacturing city in Canada, perhaps the best on this Continent*¹.

Housing, always lagging behind population growth, was even scarcer, given the loss due to fires. The new regulations required a much more expensive form of housing - brick or stone clad with fireproof roofing.

We have no typological data on housing in the 1850s. Such housing was wiped out so long ago that remnants from the 1850s can probably be counted in the dozens. Until a detailed study of records from that decade is made, we will not know

exactly how the transition took place. But Herzog's work offers a few leads. Home-ownership had dropped precipitously, by 1861. But Herzog could find no significant groupings of duplexes anywhere in the city in 1861⁴². Even more perplexing, he found that the newly developed streets featured a moderate level of home ownership, of the order of 28%, not far from the 1847 average⁴³. The decline in home ownership was not happening here. Even the redevelopment of all the burnt-over districts brought with it a higher occupational profile than before⁴⁴. These areas certainly were not accommodating burned-out families. We can only conclude that the precipitous drop in home ownership by 1861 came from a wave of overcrowding and subdivision of existing working-class housing.

When Sebastopol Row was built in 1857, builders must have found it an appealing solution, especially given the vast working-class market piled up in the old working-class districts with new members pouring in every week. A new boom took off in 1859. It was during this boom, which ended in 1866, that the duplex apparently began spreading throughout the city. Along with the introduction of the flat roof, it allowed builders to counter the higher costs imposed by the stiff post-fire building code. By the time our 1866-1880 building cycle dawned, the duplex type was spreading rapidly, especially in the East End where the crisis was most acute.

By the close of the cycle, far more duplexes had been produced than single-family houses, and the first triplexes had come on the scene.

THE MONTREAL DUPLEX - AN ARCHITECTURAL SYNTHESIS

In adapting the duplex to a mass market, builders showed interesting skills. Because the native duplex required the sacrifice of part of the width or frontage of the lot to accommodate the outside stairways appended to the side or front walls of the structure, it was rapidly supplanted by the Sebastopol model which internalized its stairways, combining them in the case of the fourplex. This increased the ground coverage of the lot for residential purposes. The native duplex model survived, however, by being shoved to the rear of the lot where rear courtyard duplexes featured outside stairways appended to their facades.

While this marriage between the native duplex and Sebastopol Row was taking place, another significant union was occurring simultaneously. Impressed by the huge upper-class British terraces newly erected in Montreal's "New Town" by British-trained architects, local builders drew from this model as well. This townscape, centred around McGill College Avenue and Sainte-Catherine Street, featured brick construction, flat roofs, heavy wooden cornices and an

Italianate architectural vocabulary [see Fig.3.7]⁴⁵.

The flat roof was a product of the Industrial Revolution. Made from rolls of manufactured felt, sealed with "composition" (probably a form of tar), and covered with gravel, this innovation allowed the construction of a highly efficient cubic building. It was much cheaper to build a flat roof as it required far fewer materials, and solved a special Montreal problem - falling snow and icicles. Snow build-up on the flat roof even had the advantage of insulating the house during the winter. Its introduction to Montreal can be accurately dated. It was brought here from Boston in 1854 by the firm C.M. Warren & Co.⁴⁶. The first known residential application in Montreal was made in 1855 by the noted architect George Browne on his spectacular terrace of row houses called "Wellington Terrace"⁴⁷. This prestigious set of ten single-family houses built on Sainte-Catherine Street, with palatial facade and ornate flat roof surmounted by statuary, must have drawn attention from all across the city.

Builders reduced these terraces in scale, dispensed with the basement and simplified the ornamentation. This basic architectural form was not treated as a single-family row but rather as a duplex or fourplex of the Sebastopol Row tradition [see Fig. 3.8]. The result was a model that dominated the 1866-1880 building cycle and persisted through until World

FIG. 3.7 MOUNT ROYAL TERRACE
built 1858-9, McGill College Avenue

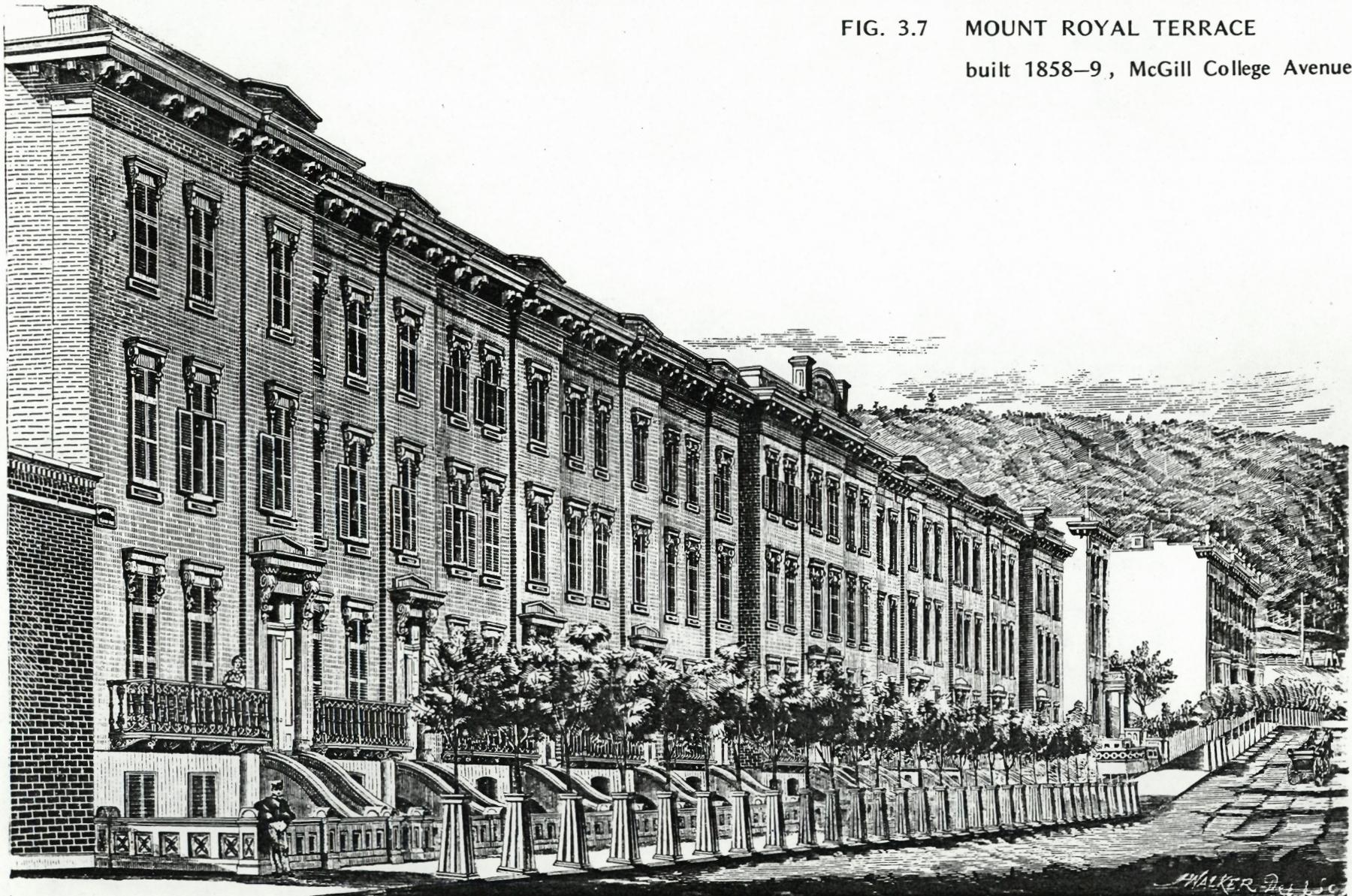




FIG.3.8 TERRACED FOURPLEXES

Two-storey row of brick duplexes, arranged in fourplex format, built by Jean-Baptiste Deslongchamps contractor, in 1870 on Logan near Plessis, Sainte-Marie Ward.

War I in all working-class districts of Montreal. Thus were the working-class terraced flats of Newcastle united with the elegant terraces of west-end London on North American soil.

Nor were the adaptive abilities of Montreal's builders to end there. The mansard roof, invented by the French in the 17th century and revived under Napoléon III in the 1850s, could easily be found by the 1860s and 1870s as a competitor of the flat roof model. Offering a large nearly cubic volume, it completely supplanted the traditional steeply pitched gable roof such as might have been found on a native duplex, and the more British low pitched gable roof which Sebastopol Row carried. This new roof type gave Montreal's duplexes a slightly more French flavour to complement the heavy British overtones [see Fig.3.9].

This adaptive activity during the 1860s and 1870s shows the impressive skills of local builders. Going well beyond slavish copying, builders drew their inspiration from innovative elements introduced from British, American and French sources and adapted them to their native architectural vocabulary. They developed a special Montreal model suited to the particular social and economic conditions of the time. This evolution continues down to the present day as the duplex is still undergoing changes to meet needs in the lower end of the housing market.



FIG.3.9 LARGE DUPLEXES

Two-and-a-half storey mansard roof brick duplex row (third duplex modified with a false mansard roof in the 1890s), built by Joseph Morache, carpenter-joiner, Isidore Morache, bricklayer, Pierre Pelletier, bricklayer, and Odillon Riopelle, plasterer, in 1873-4 on St-André near Ontario, Saint-Jacques Ward.

HOUSING ELSEWHERE IN THE INDUSTRIALIZING WORLD

It is hard to evaluate whether Montreal's experience was unique. Studies on nineteenth-century housing development are scarce and housing typology statistics virtually non-existent. One exception is M.J. Daunton's book on British working-class housing. He makes the observation, based on statistical analysis of data from the 1900s and 1910s, that the typical English situation of single-family working-class housing was exceptional when placed in a broader European context. The Scottish tenement situation was the more typical one. On the other hand, he acknowledges that working-class housing in North America was closer to the English model⁴⁸.

Within the overall pattern, Daunton allows that there was also great diversity in what type of tenement (e.g. scale of building, size of rooms ...), or what type of single-family house (e.g. back-to-back, narrow run-through ...) dominated from one city to the next. Furthermore, he notes a certain number of divergent cities which offered something different to its working-class populations - the double or triple-family house. He mentions Newcastle and nearby Tyneside cities at the top of a list which includes Boston and Chicago. To this list we could add Montreal.

Typologically, none of Canada's major urban centres, save

perhaps Quebec City, featured the duplex, or superposed flat concept, as anything but an exotic form of housing, if at all. Toronto, Hamilton, London, Kingston and Ottawa in Ontario, Halifax and Saint John in the Maritimes, all were characterized by varieties of single-family housing and handfuls of boarding houses, tenements and apartment blocks. While the duplex format could be found in Quebec City's working-class neighbourhoods in the second half of the nineteenth century, its development came more from the evolution of the native duplex. It was far from being a dominant form as it was in Montreal by 1880. Of course, nowhere in Canada were the forces of industrialization, intense in-migration and rapid proletarianization felt to such a degree than in Montreal during the second half of the nineteenth century.

Interestingly, as other cities in Québec began to industrialize more intensely around 1900, they too adapted the duplex format to their housing stock. Trois-Rivières, Sherbrooke, Hull, Chicoutimi, as well as Quebec City developed working-class neighbourhoods of duplexes and triplexes after 1900. They represented a spread of the Montreal model although they also incorporated the wooden galleries and outside stairways more typical of traditional Québec architecture. By World War II, the classic form of multi-family housing throughout Québec was the "plex" format.

Thus Québec developed its own brand of multi-family housing quite distinct from any other Canadian region much as Boston's "decker" housing spread rapidly to other industrializing cities in the southeastern New England region.

Besides housing typology, another perspective to look at is home-ownership rates. In Canada, it is difficult to find an adequate comparison with Montreal. The only city that came anywhere near Montreal's population, Toronto, had a home-ownership rate of 33%*. Toronto, however, was a city of single-family row and semi-detached houses with no resemblance to Montreal whatsoever. For a comparison elsewhere in North America Robert Barrows' study of major cities in the United States in 1890 is helpful*. If we bear in mind Montreal's 1881 home-ownership rate of 14.7%, the city does indeed stand out. Only New York City, at 6.3%, had a rate lower than Montreal's, but its exceptional size and position in the American economy placed it in a class all by itself. Besides, the extremely low home-ownership rate is easily explained by the huge number of tenement houses in the city. Boston, was next on the low home-ownership list after New York. Its rate of 18.4% was not that far from Montreal's. Here the numbers of double-decker and triple-decker houses were obviously reflected in the high non-ownership proportion. Sam Warner's study of Boston's housing development provides some valuable analysis of that city's housing typology which can be related

to Montreal⁵¹.

It would appear that Boston presents the most viable comparison with Montreal in the late nineteenth-century. We need to know where its double and triple deckers came from and under what conditions they flourished. Much work needs to be done comparing the industrial base and wages in the two cities. As Barrow points out, Boston's home-ownership rate had jumped to 25.7% by 1930⁵², while Montreal's had slumped further to 11.5% by 1941. Evidently the two cities diverged at some point during the twentieth century. We need to know what underlies that divergence.

Montreal certainly was and remains a special case in the Canadian urban context when it comes to housing. The emergence of the duplex form in Montreal was due to a series of special historical circumstances. Its rapid spread through all contemporary working-class districts and its evolution throughout the late nineteenth and entire twentieth century are, however, anything but accidental. The dominance of the housing market by duplexes since 1880 underscores the socio-economic realities of Montreal during the industrial era. The duplex remains the most visible legacy of that period. In the following chapter, we will examine more closely the spatial attributes of the housing market during the 1866-1880 building cycle.

FOOTNOTES - CHAPTER THREE

1. C.M.H.C., which has monitored housing construction across Canada for the Canadian Government since 1946, and administers Federal housing subsidy programmes, produces an annual compilation of housing. Most research on the industry and political decisions regarding housing policy are based on these statistics. The standard classification used defines four different forms of single-family houses, to wit: single detached houses, semi-detached houses, row or attached houses, and mobile homes. On the multi-family side, it recognizes duplexes and apartments. The problem arises in the definition of duplex. It is considered to be a two-dwelling detached house with one flat over the other. This is a rare type indeed in the Montreal region. As a result, Montreal's classic duplexes which come in semi-detached, attached or row form are merely lumped in with apartments (as are triplexes, five-plexes, sixplexes and other variants). Of course none of these forms of houses bears any affinity whatsoever with apartment blocks, hence the futility of basing any study of Montreal's multi-family housing market on C.M.H.C. data.
2. The following data are taken from the 1881 City of Montreal assessment rolls ("feuilles de route") under the entry "valeur locative - rental value": house no.1, \$1200. annual rent; no.2, \$700.; no.3, \$450.; no.4, \$270.; no.5, \$180. over \$140.; no.6, \$140.; no.7, \$120.; no.8, \$80. over \$60.; no.9, \$50. over \$40. This illustration is taken from Sherry Olson and David Hanna, Plate 67 "The Transformation of Montreal, 1847-1901", in Historical Atlas of Canada, II, ed. Louis Gentilcore (Toronto: University of Toronto Press, in press).
3. Corporation of the City of Montreal, The Charter and By-Laws of the City of Montreal, (Montreal: John Lovell, 1865), chapter 9: "by-law concerning the erection of buildings", section 26, p.46.
4. Sam B. Warner, Streetcar Suburbs - the Process of Growth in Boston, 1870-1900 (Cambridge: Harvard University Press, 1962), p. 129 and p. 201,

footnote 14; also Frederick Bushee, "Ethnic Factors in the Population of Boston", Publications of the American Economic Association, IV, 3rd ser. (May 1903), pp. 80-83.

5. An illustration of a Boston double-decker house of the 1850s appears in Warner, op.cit., p.20.
6. Michel Lessard and Huguette Marquis illustrate one such conversion in their Encyclopédie de la maison québécoise (Montreal: Editions de l'homme, 1972), p.508. It shows a large two-and-a-half storey stone house of traditional Quebec styling in Quebec City, built c.1780, with a wooden clapboard extension added onto one end, c.1825, featuring two doors and an enclosed staircase each leading to a different level of the building, effectively making the house into a duplex.
7. M.J. Daunton, House and Home in the Victorian City; Working-Class Housing 1850-1914 (London: Edward Arnold, 1983), pp. 39-41.
8. Illustrations of the Tyneside flat appears in John N. Tarn, Five Per Cent Philanthropy: An Account of Housing in Urban Areas between 1840 and 1914 (Cambridge: Cambridge University Press, 1973), p. 12. (in Newcastle), in Stefan Muthesius, The English Terraced House (New Haven: Yale University Press, 1982), pp. 132-134 (in South Shields and Gateshead), and in Daunton, op.cit., end of chapter 4 (in Gateshead).
9. James Hodges, Construction of the Great Victoria Bridge in Canada (London: 1860), attests to the singular engineering feat this bridge represented; Harold Pollins, "Railway Contractors and the Finance of Railway Development in Britain", in Railways in the Victorian Economy, ed. M.C. Reed (New York: Kelly, 1968), pp. 212-228, singles out the importance of contractors like Morton Peto and Thomas Brassey. L.T.C. Rolt in George and Robert Stephenson - the Railway Revolution (London: Longmans, Green & Co., 1960), documents the exceptional engineering career of Robert Stephenson compared with his contemporaries.
10. John N. Tarn, op.cit., pp. 148-151, discusses the strong association between British railways and workers' housing projects during the 1840s and 1850s.

11. See internal correspondence from Grand Trunk Railway concerning conveyance of "workers' cottages in Point St. Charles" to the contractors Peto, Brassey & Betts dated February 10, 1859 with map and deed (Canadian National Corporate Archives, Montreal). Confirmed by Deed of Sale between G.T.R. and the contractors before notary J.W. Isaacson, December 26, 1862, for sale of "workmen's houses and outbuildings" (Archives nationales du Québec à Montréal).
12. Referred to as "Sebastopol Row" in the Deed of Loan and Deed of Sale dated October 14, 1868, where Jonathan A. Simpson, an engine driver, borrowed money from John Partington to purchase the entire row of houses from G.T.R. contractors Peto, Brassey & Betts (Provincial Registry Office, Montreal).
13. See Robert Doucet, "La deuxième bataille de Sébastopol", unpublished report to the Ministère des affaires culturelles (Montreal: 1983).
14. Arthur Helps, Life and Labours of Mr. Brassey, 1805-70 (London: 1872).
15. See Pollins, op.cit., and Alexander W. Currie, The Grand Trunk Railway of Canada (Toronto: University of Toronto Press, 1957), p.5.
16. Kathleen Jenkins, Montreal - Island City of the St. Lawrence (New York: Doubleday & Co., 1966), p. 344.
17. J. Douglas Borthwick, Montreal History and Gazetteer (Montreal: 1892), pp. 386-388.
18. See Rolt, op. cit.
19. Samuel Smiles, The Life of George Stephenson and His Son Robert Stephenson (New York: 1868), p. 477.
20. Jenkins, op. cit., p. 344.
21. Rolt, op. cit., pp. 304-315. Both projects were undertaken between 1846 and 1850.
22. Smiles, op. cit., p. 474.
23. The hypothesis of a planned workers' village seems likely. Sebastopol Row, which itself appears to

have been planned for expansion at both ends, contained a mere six buildings with 24 flats plus one tenement block, this against a local G.T.R. work force of about 2000 employees. It pales in significance compared to the workers' housing projects built by contemporary British railways such as the 845 workers' houses built at Crewe by the Grand Junction Railway, and the 242 workers' houses built at Wolverton by the London & Birmingham Railway, both during the 1840s [see John N. Tarn, *op.cit.*, pp. 148-151].

24. Tarn, *op. cit.*, pp. 20-21.
25. John J. Cooper, "The Social Structure of Montreal in the 1850s", Canadian Historical Association, Report of the Annual Meeting, (1956), p. 68; Jean-Claude Marsan, Montréal en évolution (Montreal: Editions Fides, 1974), p. 268.
26. Marsan, *op. cit.*, pp.267-273.
27. Stephen Hertzog, "A Stake in the System: Domestic Property Ownership and Social Class in Montreal, 1847-1881", M.A. Thesis, Department of Geography, McGill University, 1984, p. 95b.
28. The City of Montreal's assessment rolls show a total of 5,389 households in 1847. The municipal censuses of 1842 and 1844 show a total of 4,406 houses occupied in 1842 and 6,252 in 1844. The discrepancy between the 1847 household figures and the 1844 number of houses means either the former was under-reported or the latter was over-reported. The leap is sudden between 1842 and 1844 but appears to be confirmed by the 7,607 vacant and occupied houses in the 1850 municipal census after a severe economic slowdown, and the 7,424 vacant and occupied houses in the 1852 Census of Canada following some disastrous fires. See Hertzog, *op. cit.*, p. 95 and David B. Hanna, "The New Town of Montreal - Creation of an Upper Middle Class Suburb on the Slope of Mount Royal in the Mid-Nineteenth Century", M.A. Thesis, Department of Geography, University of Toronto, 1977, pp.28, 83-89, 94-95 and in much condensed form in Hanna, "Creation of An Early Victorian Suburb in Montreal", Urban History Review, 9, No. 2 (1980) pp.42,50.
29. Hertzog, *op. cit.*, pp. 94-100.

30. Ibid., p. 95b.
31. See Gerald Tulchinsky, The River Barons: Montreal Businessmen and the Growth of Industry and Transportation, 1837-1853 (Toronto: University of Toronto Press, 1977); also see Montreal in 1856 by the Montreal General Railway Celebration Committee (Montreal: John Lovell, 1856).
32. The process of proletarianization and the social friction resulting from it are eloquently described in Joanne Burgess, "L'industrie de la chaussure à Montréal: 1840-1870 - le passage de l'artisanat à la fabrique", Revue d'histoire de l'Amérique française, 31, No. 2 (1977), pp. 187-210; and Margaret Heap, "La grève des charretiers à Montréal, 1864", ibidem, 31, No. 3 (1977), pp. 371-395.
33. See Census of the City of Montreal, 1850, in Montreal Pocket Almanac and General Register - 1851 (Montreal: J. Starke & Co., 1851).
34. Cooper, op. cit, p. 68.
35. Alfred Sandham, Sketches of Montreal, Past and Present (Montreal: George Bishop & Co., 1870), pp. 125-126.
36. Ibid., pp. 132-134.
37. See footnote 31.
38. Census of the Canadas, 1851-52, op. cit.
39. City of Montreal, Compilation of the Bye-Laws and Police Regulations in Force in the City of Montreal (Montreal: J. Starke & Co., 1842), chapter 2: "Fire Department", article 56, p.58: "That any person or persons who shall hereafter build in that portion of the said city bounded by the River Saint Lawrence, Craig and Saint Louis Streets, and by Lacroix and McGill Streets, any wooden dwelling house, or use any such building as a dwelling house, or who shall make any fire in any wooden out-house, shall incur and pay a penalty not exceeding five pounds for each offense".
40. Statutes of Lower Canada, 14-15 Vic., cap 128 (Aug. 30, 1851), article 58: "An Act to Amend and Consolidate the Provisions of the Ordinance to

Incorporate the City and Town of Montreal",
(Toronto: Derbshire & Desbarats, 1851).

41. Montreal in 1856, op. cit., p.37.
42. Hertzog, op. cit., p. 132.
43. Ibid., pp. 126-127.
44. Ibid., pp. 124-125.
45. See Hanna, "The New Town of Montreal", op.cit. or condensed version in Hanna, "Creation of an Early Victorian Suburb...", op.cit., pp. 53-54.
46. The introduction and features of the flat roof are well described in Montreal Business Sketches by Canada Railway Advertising Company (Montreal: Longmoore & Co., 1864). pp. 108-111.
47. See Hanna, "The New Town of Montreal..", op. cit., pp. 108-112; or condensed version in Hanna, "Creation ...", op. cit., pp. 53-54.
48. M.J. Daunton, op. cit., pp. 57-58.
49. See M. Campbell, "The Changing Residential Patterns in Toronto, 1880-1910", M.A. Thesis, University of Toronto, 1971, as cited in R. Harris, G. Levine and B. Osborne, "Housing Tenure and Social Classes in Kingston, Ontario, 1881-1901", Journal of Historical Geography, 7, No. 3 (1981), p. 275.
50. Robert Barrows, "Beyond the Tenement: Patterns of American Urban Housing, 1870-1930", Journal of Urban History, 9, No. 4 (1983), p.416.
51. See Warner, op. cit.
52. See Barrows, op. cit., p. 416, and John T. Saywell, Housing Canadians: Essays on the History of Residential Construction in Canada (Ottawa: 1975).

CHAPTER FOUR

THE SPATIAL ORGANIZATION OF THE HOUSING MARKET

CONSTRUCTION FEATURES AS SOCIAL CUES

Having identified and located every residential structure built during the 1866 to 1880 building cycle (i.e. buildings produced from 1867 to 1880 inclusive), we can look into how the housing market was segmented. Housing typology and construction features provide convenient ways of examining the segmentation. The distinctions between single-family, duplex, triplex and mixed commercial-residential buildings create a system by which we can observe how housing producers viewed their market spatially. We will see how the single-family house became increasingly restricted in spatial terms. We will also see how a relatively new and distinctive model, the duplex, overwhelmed the housing market, and how and where the triplex emerged during this building cycle.

Housing also differed in the quality and types of materials used and in the basic form of the house. While typological data had to be reconstructed from other sources, an analysis of materials and form is possible directly from the permit records. In themselves they reveal interesting spatial patterns worth examining for their social implications. As we relate the details of form and materials

in housing, we will examine how they were distributed in the city and who lived in such housing. The object is to sort out their social meaning as their distribution reflects a social structure.

Building materials can be a reliable indicator of social class. Several materials and methods of construction were available to the builder. The 1860s and 1870s were a turning point for construction materials and techniques. Prior to the 1840s, Montreal had been a wood and stone city. After World War I, it was destined to become a brick city. According to the 1825 census, for example, wooden houses accounted for 64.3% of all houses, stone houses for 31.9%, and brick houses only 2.6%¹. In the Census of 1852, the proportion of wooden houses remained virtually unchanged at 63%, but brick houses (13.7%) had made rapid gains at the expense of stone (23.3%)². Fires and anti-wooden construction bylaws in the 1850s changed those proportions radically.

By 1868, wooden houses were a purely residual form of construction allowed only in exceptional circumstances. Instead, a brick-clad wooden house was the standard. The method of construction was a combination of old and new techniques. The ancient French method of construction was known as "pièce-sur-pièce" and consisted of stacking squared timbers horizontally between upright squared timbers using a

mortise and tenon technique. From this, builders in the nineteenth century developed the plankwall technique [see Fig. 4.1]. It employed broad boards sawn two inches thick, stacked horizontally edge on edge and toenailed to substantial posts³. The result was a solid free-standing wooden house whose only voids were window and door openings, the antithesis of the light balloon frames being introduced in the United States. A brick veneer was then built up course by course, covering the plankwall construction and linked to it by small metal tabs set in the mortar. This constituted the legal fireproofing.

The 1866-1880 building cycle was evenly divided between the production of masonry structures, either brick or stone, on the one hand, and plankwall structures and a residual number of wooden structures, on the other hand. In masonry structures, brick had overtaken stone as the favoured material [see Table 4.1]. These house-building materials correspond to social divisions. Plankwall construction, a cheaper method, was synonymous with working-class housing. Thus western Sainte-Marie Ward (districts 21,22,23) featured 92% of its new housing in the plankwall category⁴. At the other extreme, northern Saint-Antoine Ward (districts 8,9,10,11) had only 3.7% of its new houses of plankwall construction and two-thirds of stone. Indeed over half of all new houses built of stone city wide were in that area. Stone was a sign of affluence in a city increasingly dominated by



FIG.4.1 PLANKWALL CONSTRUCTION

Exposed plankwall construction undergoing renovation with brick veneer removed from 1870s fourplex on Henri-Julien near Roy, Saint-Louis Ward.

TABLE 4.1 BUILDING MATERIALS USED IN HOUSING CONSTRUCTION
MONTREAL: 1866-1880 BUILDING CYCLE

WARD SUB-DIVISIONS	STONE MASONRY	BRICK MASONRY	WOOD FRAME	BRICK-FACED PLANKWALL	
	#	#	#	#	%
Northern St-Antoine	563	253	0	31	3.7
Saint-Laurent	149	186	1	60	15.2
East-Centre-West	12	9	0	9	30.0
Saint-Louis	81	321	6	241	37.1
Western St-Jacques	111	168	1	223	44.3
Southern St-Antoine	75	266	12	327	48.1
Sainte-Anne	8	160	11	311	63.5
Eastern Ste-Marie	15	48	1	170	72.6
Eastern St-Jacques	3	44	13	377	86.3
Western Ste-Marie	2	45	14	701	92.0
	<u>1019</u>	<u>1500</u>	<u>59</u>	<u>2450</u>	
		<u>MASONRY CONSTRUCTION</u>		<u>WOOD CONSTRUCTION</u>	
		2519		2509	

NOTES Figures are for the years 1868-71 and 1873-77
only, years for which we have detailed permits.
For map of wards, refer to Appendix.

brick. The social distinction of stone was of particular importance since brick masonry and brick-clad plankwall were indistinguishable except to the trained eye.

Roofing also showed distinctive features and some social differentials. The gable roof with its two sloping sides, Montreal's traditional roof, was on the wane in the 1870s. Two new types of roof were now dominant. One was the mansard roof. It took hold in Montreal by the mid-1860s and swept the gable roof out with amazing rapidity. Although counted as a half storey (quite accurate for the old gable roof), it probably should be called a three-quarter storey because it allowed much greater use of the floor under the roof. In the 1860s and 1870s this roof was used everywhere in Montreal, on one-and-a-half storey single-family houses, two-and-a-half storey duplexes, just as much as on big luxurious three-and-a-half storey single-family houses.

After 1855, the flat roof made rapid inroads in Montreal [see Chapter Three for origins]. In 1868, the first year for which we have detailed permit data, 41% of all new residential buildings had flat roofs. In Sainte-Anne, Sainte-Marie and eastern Saint-Jacques Wards, all strong working-class areas, they constituted the majority of new roofs. The cheapness of the innovation had obviously not escaped builders. The principal hold-out against the flat roof, in spite of such

prestigious flat roof terraces as Wellington Terrace, Mount Royal Terrace, Prince of Wales Terrace, Holyrood Place, Roxburgh Place and several others was the wealthy enclave of the northern half of Saint-Antoine Ward⁵. This area swung to the new stylish mansard roof. To a lesser extent, so did Saint-Laurent, Saint-Louis and western Saint-Jacques Wards, all of which had pockets of affluence.

Of all new residential buildings erected according to the permits, 42.2% had gravel roofs - that is, flat roofs - as opposed to 57.8% with slate or metal roofs which included both gable and mansard types, although field observations found the gable to be scarce [see Table 4.2]. There was a strong class dimension to roofing as only a minority of new housing had flat roofs in the central and western wards where the bourgeoisie was present. In the mainly working-class wards in the east and southwest of Montreal, the flat roof was the norm. Yet the class connotation was never exclusively applied as prestigious houses did have flat roofs while scores of two-and-a-half storey duplexes had mansard roofs. In the subsequent 1880-1895 building cycle, the two dominant roof forms - mansard and flat - were married producing a flat roof dressed with a false mansard facade, made out of slate or sheet metal, covering the front of the upper storey [refer to Fig.3.9]. This new roof type was already in evidence by the end of the 1866-1880 cycle.

TABLE 4.2 HOUSE ROOF TYPES IN NEW HOUSING
MONTREAL: 1866-1880 BUILDING CYCLE

WARDS SUB-DIVISIONS	SLOPING ROOFS		FLAT ROOFS	
	#	%	#	%
Northern St-Antoine	747	88.2	100	11.8
Saint-Laurent	276	69.7	120	30.3
Western St-Jacques	352	70.0	151	30.0
Saint-Louis	445	68.6	204	31.4
East-Centre-West	18	60.0	12	40.0
Southern St-Antoine	383	56.3	297	43.7
Eastern Ste-Marie	105	44.9	129	55.1
Eastern St-Jacques	191	43.7	246	56.3
Western Ste-Marie	281	36.9	481	63.1
Sainte-Anne	109	22.2	381	77.8
	<hr/> 2907	<hr/> 57.8	<hr/> 2121	<hr/> 42.2

NOTES Figures are for the years 1868-71 and 1873-77
only, years for which we have detailed permits.
For map of wards, refer to Appendix.

A basement was also a good indicator of the quality of the building. It was expensive to excavate and required a lot of additional materials. If a builder could get away with simply scratching down below the frost line to provide footings, he did away with much of the capital expenditure required in building a house. Houses without basements were dug out to about four feet below ground level and a stone foundation laid in around the perimeter to provide a footing. This type predominated in working-class neighbourhoods. About 59% of all houses built during the 1866-1880 building cycle had no basements. The relationship between housing construction and social class is easily grasped when one realizes that in a working-class neighbourhood like western Sainte-Marie and eastern Saint-Jacques Wards, about 94% of all new housing built had no basements. In Sainte-Anne Ward, the proportion was much the same, about 93%. In contrast, northern Saint-Antoine Ward had only a little over 10% of its new housing built without basements [see Table 4.3].

Basement-less working class houses offered only an earth dugout in which coal and perhaps provisions could be stored, but the space was otherwise unfit for habitation. Basements in the wealthier districts, on the other hand, constituted a fully usable floor. This full-height finished space was generally used as a service area. Where income permitted, domestic servants laboured away preparing meals, washing

TABLE 4.3 USE OF BASEMENTS IN HOUSING CONSTRUCTION
MONTREAL: 1866-1880 BUILDING CYCLE

WARD SUB-DIVISIONS	HOUSES WITH BASEMENTS		HOUSES WITHOUT BASEMENTS	
	#	%	#	%
Northern St-Antoine	759	89.6	88	10.4
Saint-Laurent	248	62.6	148	37.4
Saint-Louis	355	54.7	294	45.3
Western St-Jacques	269	53.5	234	46.5
Southern St-Antoine	287	42.2	393	57.8
East-Centre-West	12	40.0	18	60.0
Eastern Ste-Marie	33	14.1	201	85.9
Eastern St-Jacques	35	8.0	402	92.0
Sainte-Anne	33	6.7	457	93.3
Western Ste-Marie	36	4.7	726	95.3
	<hr/> 2067	<hr/> 41.1	<hr/> 2961	<hr/> 58.9

NOTES Figures are for the years 1868-71 and 1873-77
only, years for which we have detailed permits.
For map of wards, refer to Appendix.

clothes, receiving deliveries and storing goods. Where income did not, the woman of the household laboured there at these tasks.

These spaces were well lit with natural light as most Montreal basements were well out of the ground by half or more of the basement height. Some houses, particularly in wealthier areas, also had "tails", that is rear wings narrower than the width of the house. Although common in many other cities, they were not particularly prevalent in this city.

The point that emerges from these analyses of construction features is that there were important architectural distinctions in the housing that carried strong social connotations. Whether building materials, roof types or basements are used as measuring sticks, the city's housing stock appeared to be polarized around two extremes. Northern Saint-Antoine Ward was at one extreme, reflecting a bourgeois reality, while Sainte-Anne, eastern Saint-Jacques and Sainte-Marie Wards were at the other extreme, reflecting a working class reality. Between the two a middle ground represented by southern Saint-Antoine, Saint-Laurent, Saint-Louis and western Saint-Jacques Wards stood out suggesting areas of considerable mixing of social classes or areas undergoing redevelopment and social change. For further refinement, we will now approach the spatial attributes of the

housing market from a typological angle.

THE PERSISTENCE AND EXPANSION OF SINGLE-FAMILY HOUSING

Nearly half of all houses built from 1867 to 1880 were duplexes*. Once other forms of multi-family housing are added in, the proportion climbs to 60%. That includes flats over shops (9.4%), triplexes (4.3%) and a few boarding houses [see Table 4.4]. Montreal was transformed. The other 40% of production was taken up by single-family housing including the 1% that were mansions. There was decidedly a dual market. Where were these new houses of each type distributed, and what do the distributions tell us about the sorting out of urban society in the 1870s?

The individual's ability to pay for housing is best indicated by rent. Montreal possesses an annual rental evaluation for each and every household whether rented or owned by its occupant. This special assessment has been compiled since 1847 for the purposes of computing a property tax known locally as the "water tax". Though despised by Montrealers for generations, this rent assessment by household is a boon to social scientists. Its systematic nature provides a good relative measure of the value of housing by household. It can be used as a substitute for income since the ability to pay for housing of a certain standard reflects overall purchasing power.

TABLE 4.4 PERCENTAGES OF HOUSES BY TYPE
BUILT IN MONTREAL, 1867-1880

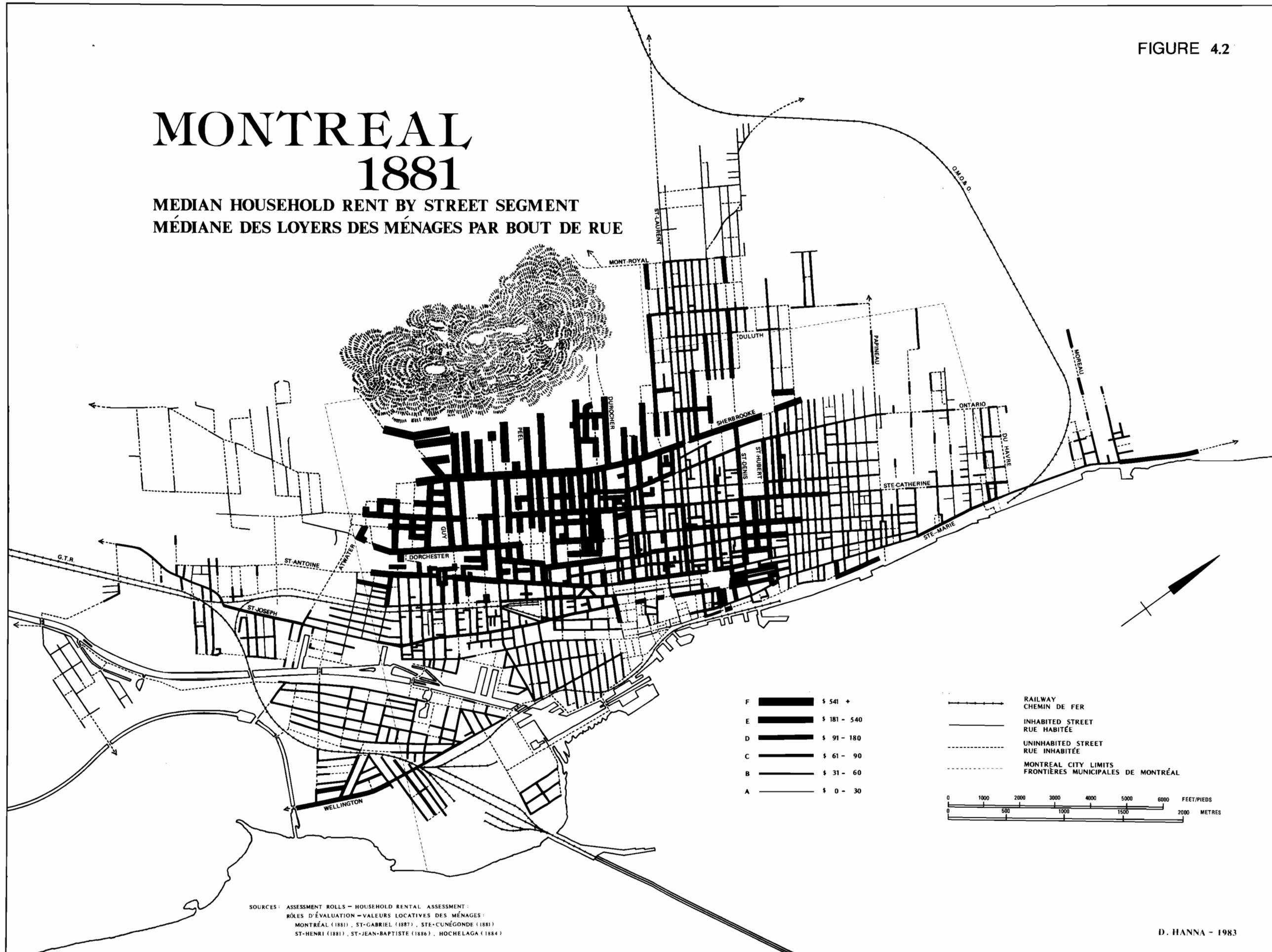
DISTRIBUTION BY WARD	SINGLE FAMILY HOUSES	DUPLEX HOUSES	SHOPS WITH FLATS	TRIPLEX HOUSES	ALL NEW HOUSES
STE-ANNE	8.5	11.9	8.9	29.3	11.0
ST-ANTOINE (south)	12.4	15.8	13.6	10.7	14.0
ST-ANTOINE (north)	34.5	2.7	9.5	1.0	16.1
ST-LAURENT	10.1	4.3	14.0	3.3	7.4
ST-LOUIS	16.0	10.6	13.0	6.2	13.0
ST-JACQUES (west)	8.3	9.9	7.4	2.6	8.7
ST-JACQUES (east)	1.9	13.6	11.4	24.1	9.1
STE-MARIE (west)	5.4	25.3	13.7	17.3	15.8
STE-MARIE (east)	2.5	5.9	7.2	3.9	4.5
EAST-CENTRE-WEST	0.4	-	1.3	1.6	0.4
ALL WARDS	100.0	100.0	100.0	100.0	100.0
# OF NEW HOUSES	2887	3295	677	307	7179
% OF NEW HOUSES	40.2	45.9	9.4	4.3	100.0

NOTES All figures, except number of new houses are expressed as percentages.
 Total of 7179 new houses includes 13 new boarding houses.
 Ward subdivisions occur at St-Antoine Street for St-Antoine Ward, Amherst Street for St-Jacques Ward, and Colborne Avenue (Delorimier) for Ste-Marie Ward.

Any use of rental assessments should bear in mind the pitfalls outlined by Gregory Levine⁷. We need not be overly concerned with these problems here, as the use of rent assessments (hereafter called "rents") is used only as a relative, not an absolute value, to show gross patterns of distribution. By grouping all the rents in a pair of block faces (the two facing sides of a street between two major cross-streets) and picking out the median rent to represent the group, many anomalies are eliminated. The median is preferable to the mean as the latter can be heavily influenced by exceptional values, such as a mansion. To counter the bias that Levine notes in over-evaluating the poor or under-evaluating the rich, we have divided up the lower end of the rent scale more finely than the upper end. Although caution must be exercised in interpreting the absolute values, the overall picture of low rent versus high rent remains a valid one. The date chosen for this "snap-shot" of the city's housing is at the end of the building cycle with construction at a near standstill.

Figure 4.2 - the map of median household rents - shows two major concentrations of high rent housing⁸. The first covers Saint-Antoine Ward from Saint-Antoine Street north to the mountain, and a good portion of Saint-Laurent Ward as well. The second, more modest, includes the western half of

FIGURE 4.2



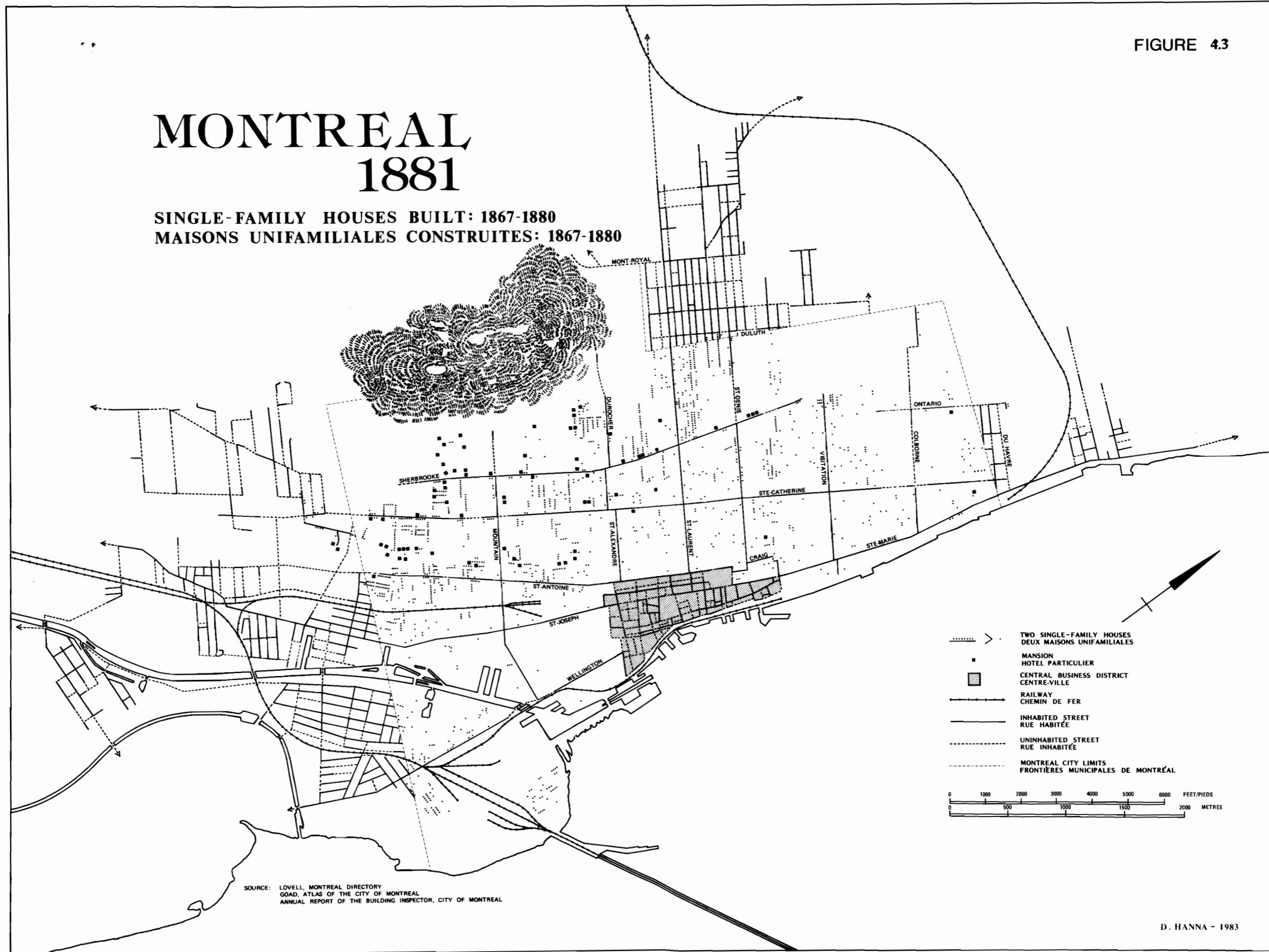
Saint-Jacques Ward and most of East Ward in Old Montreal. If we had data for the village of Côte Saint-Antoine (later Westmount), we would see an extension of the high value rents of northern Saint-Antoine Ward. Aside from pockets of low rents in southern Saint-Louis and Saint-Laurent Wards, a new low-rent zone in the North End stands out (made up mostly of northern Saint-Louis Ward) with pockets of affluence evident here and there. An extension of the assessment data into Saint-Jean-Baptiste Ward in 1886, following annexation, demonstrates that low rents clearly prevailed in that end of the city [see Appendix for municipal boundaries].

Two immense zones of low rents stand out. One is the East End including virtually every single street east of Saint-André Street. The rents dipped even lower still as one reached the northern edge of this zone around Ontario Street, and immediately west of Papineau Avenue. The other major zone of low rents is the southwest, mainly Sainte-Anne Ward and Saint-Antoine Ward south of Sainte-Antoine Street. These areas north and south of the industrial corridor along the Lachine Canal extend into adjacent suburban towns, Saint-Gabriel south of the canal and Sainte-Cunégonde and Saint-Henri north of the canal. Only in the extreme southern end of Sainte-Anne and Saint-Gabriel Wards did a few streets escape the overall pattern of poverty.

How does the pattern of new housing construction mesh with this distribution of household rents? If we look at single-family housing first, Figure 4.3 shows that the general pattern of development was for builders to aim for the mountain. Single-family housing shows a very heavy concentration in a crescent surrounding Mount Royal from the upper reaches of Saint-Denis Street at the city limits to the vicinity of Saint-Bonaventure Street where the Grand Trunk Railway penetrated the city. This swath corresponds with the northern portions of Saint-Antoine, Saint-Laurent and Saint-Louis Wards. Together they accounted for almost two-thirds (62.5%) of the single-family housing built in the city (districts 7,8,9,10,11,13,15,16 in the Appendix).

The correlation between high rents and single-family houses is strong but by no means perfect. The western half of Saint-Jacques Ward is notably absent from the pattern described thus far. This niche of affluence (district 17) had only 37% of its new housing in single-family format while 53% was in duplex format, on the whole very luxurious duplexes. The standard model was a two-and-a-half storey stone masonry building with raised basement and mansard roof. The four complete floors of living space gave each family two floors of its own. These were tall elegant structures at complete variance with the squat brick-clad duplexes of the working class. This was the locus of the French bourgeoisie while the

FIGURE 4.3



single-family bastion near Mount Royal was the home of the Anglo-Scottish-Irish bourgeoisie'.

The single-family market near Mount Royal was not by any means uniform in the type of single-family housing built. Many different sub-markets existed within this zone. A distinctive market for mansions showed a marked tendency to concentrate in northern Saint-Antoine Ward (76.7% of all new mansions). The rest were strung out along Sherbrooke Street. The identification of mansions with the British-Canadian bourgeoisie is an indication of real economic power. The occupants read like a "who's who" list of financiers, merchants and industrialists in the national economy¹⁰.

On the fringes of the vast northern Saint-Antoine Ward were modest one-and-a-half storey cottages built in rows to one or the other of two standard designs. One was a Gothic Revival design featuring a prominent front-facing gable decorated with the carpenter's delicate vergeboard ("gingerbread"). The other was a Second Empire design dominated by a heavy mansard roof with dormers. These modest little cottages were quite different in size, style and material from the swath of luxurious two-and-a-half storey single-family row houses loosely filling the space in a wide arc from Sainte-Antoine Street to Upper Saint-Urbain Street. The fringes of little cottages were concentrated in the

northern portion of Saint-Louis Ward where they shared the market with duplexes. There was a sizeable pocket of little cottages in southern Saint-Antoine Ward around Coursol, Fulford, Canning and Saint-Martin Streets as well, and two small pockets along Baile and Tupper Streets in the west of Saint-Antoine Ward. A fourth was along Saint-Christophe and Sainte-André streets in western Saint-Jacques Ward where they also mingled with duplexes.

These fringes are worth singling out not only because they are visually distinctive but also because they represented an alternative to the roomy duplexes that dominated that segment of the market. They are worth studying for another significant reason. These fringe zones stand out with the highest proportions of speculatively-built single-family houses in the city. The rates of permit-holder occupied single-family houses were around 3 to 6% in these areas while the norm elsewhere in the city was generally between 12 and 34% ¹¹. We will have the opportunity to come back to these special areas of speculative building when we look at who built them in Chapter Five.

Working-class Montreal, represented by Sainte-Anne Ward, and both eastern Saint-Jacques and Sainte-Marie Wards, accounted for 18.3% of the new single-family houses but also half (56.6%) of the new duplexes. The single-family houses

here appear as a sprinkling across the entire area. The only portion of working-class Montreal where single-family housing registered a much stronger showing was in Pointe Saint-Charles and Victoriatown. These residential areas surrounding the Grand Trunk Railway Shops in Saint-Anne Ward were presumably high-wage areas. Half (50.4%) of the new housing in Victoriatown was single-family in character (district 1) as was 62.4% on the other side of the shops south of the G.T.R. main line (district 2).

A high proportion of these houses were non-speculative, that is, occupied by their permit-holders. In fact, the areas with the highest proportions of permit-holder-occupied houses in the city were precisely these areas. Even northern Saint-Antoine Ward with all its mansions did not come close to these areas in non-speculative single-family housing, with only 8.5% of new houses being occupied by permit-holders. In eastern Saint-Jacques and Sainte-Marie Wards the proportion was 25%. In western Sainte-Marie north of Sainte-Catherine Street (district 22), it was 34%, and in Sainte-Anne, 26.6%. The highest level of non-speculative single-family housing found anywhere in the city was in Victoriatown (district 1) at 50.4%. We will have the opportunity in Chapter Five to explore who built these interesting little houses scattered throughout the new duplex landscape of working-class Montreal.

In short, the city's building cycle yielded two distinct zones of single-family houses. One zone was for the well-to-do and those aspiring to be. Most of the single-family housing was built there, stone and brick row houses on streets reaching toward the mountain. The overwhelming majority were built by builders looking for profits, not a home. The other market was for the less affluent. There the single-family housing was almost invisible, submerged in a dense townscape of multi-family housing. Their scatter hid a reality of working-class life in Montreal usually overlooked - that some residents of working class neighbourhoods could afford their own self-contained houses. Houses were built individually, often for builder occupancy. All of it was small-scale enterprise. The numbers of such houses erected are not insignificant. We are talking about 528 houses in the above mentioned wards or 7.3% out of the total production of houses of all types city wide.

THE NEW DOMINANCE OF DUPLEX HOUSING

The map of duplex housing, Figure 4.4 contrasts with the single-family housing distribution in Figure 4.3. The area near the mountain, stretching from Saint-Antoine Street to Saint-Laurent Street is almost devoid of any duplex construction. Sainte-Anne and the central wards, southern Saint-Laurent and Saint-Louis, feature duplexes quite

FIGURE 4.4



prominently. The most intense concentration of duplexes is found in Saint-Jacques and Sainte-Marie Wards in the East End and southern Saint-Antoine Ward in the West End.

Figure 4.4 actually shows both duplex construction and related shop and dwelling combinations. The standard shop and dwelling was a two or two-and-a-half storey structure containing an upstairs flat and a store where the downstairs flat would normally have been. Another variant, resembling a rooming house, had a shop below with a stairway leading upstairs to several apartments. Such buildings, often three storeys high, tended to be closest to the central business district. Combinations of shop and dwellings were typically located along important arteries such as Saint-Joseph, Saint-Laurent, Ontario and Sainte-Catherine Streets. Important groupings were also built along Sainte-Marie, Bleury and Saint-Antoine Streets. The rest were scattered across the city in corner-store fashion. In all there were 677 new shop and dwellings built or 9.4% of the total house production.

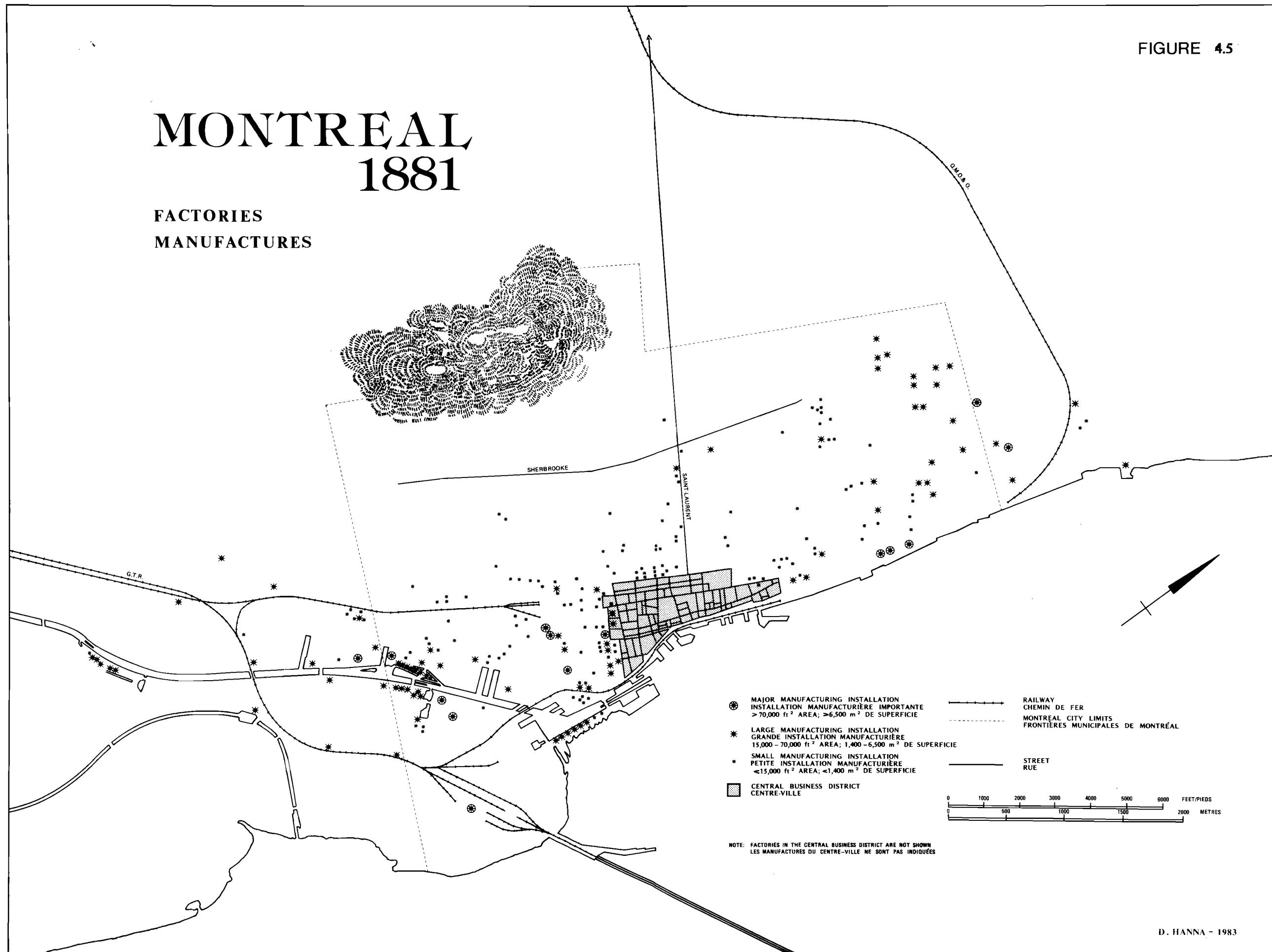
The feature that immediately catches the eye is the intense development of duplexes in Saint-Jacques and Sainte-Marie Wards between Amherst Street and Papineau Avenue north of Sainte-Catherine Street (districts 19 and 22). Virtually the entire district was developed in one fell swoop between 1867 and 1880, indeed mostly between 1870 and 1873, at

the peak of the cycle. Prior to this development there had been nothing more than a corridor along Visitation Street north of Mignonne Street. That corridor was developed well in advance of our period and contained mostly small wooden housing and several factories and workshops. The reason for this finger of development was to provide access to an early brickyard at the end of the street.

One-third of new duplexes and one-fifth of shop and dwelling combinations were built here (in districts 19 and 22). It was in this overwhelmingly francophone Saint-Jacques/Sainte-Marie area that the quintessential Montreal fourplex gained its strongest foothold. Here was a modified version of Newcastle at its most impressive. Street after street of terraced flats, four blocks almost uninterrupted along Amherst, Wolfe, Montcalm, Beaudry, Panet, Durham (later Plessis), Sydenham (later Maisonneuve) and Seaton (later Champlain) Streets. Almost overnight, this became Montreal's densest neighbourhood¹².

Why did this east-end district undergo such a massive transformation? The industrial base in the northeastern sector of the city may have attracted builders [see Fig. 4.5]. The existing Visitation Street corridor with its glue, leather, thread, wood and food factories, small but numerous, would have drawn builders in that direction. The extensive

FIGURE 4.5



brickworks and other assorted factories out in the nearby fields north and east of the Papineau-Ontario intersection were a magnet to potential housing developers. The underlying reasons are the surge in the francophone population coupled with a delayed reaction to the Great Fire of 1852 which eliminated so much east-end housing. The francophone element of the population had more than doubled by 1871, a mushroom growth of 117% between 1852 and 1871 against an overall population growth of 86% for the total population of the City of Montreal¹³.

There was a new and growing market for duplexes in the far East End next to the city limits. This area had started out as an artisanal village along Dufresne Street. With the arrival of the brick works in the north, the street railway car barns and the New City Gas Works in the 1860s just outside the city limits off Sainte-Marie Street, multi-family housing began to fill in the streets on both sides of the boundary. Several other factories, notably the MacDonald Tobacco Company, established themselves in the vicinity during the 1870s. Although the area was small in comparison with the district west of Papineau Avenue, housing densities in a few localized spots, such as Logan Street, resembled those of the area to the west, a portent of things to come.

Another market of increasing importance was the North End. Northern Saint-Louis Ward accounted for 4.7% of new duplexes. The bulk of those duplexes lay in the narrow band between Saint-Laurent and Saint-Hippolyte (later Coloniale) Streets (district 15). As Saint-Laurent, Saint-Dominique and Saint-Hippolyte Streets reached north, the zone of duplexes widened out crossing the city limits and embracing most of Saint-Jean-Baptiste Village. Figure 4.3, the map of rents, shows this pattern. This part of Saint-Louis Ward and, increasingly, Saint-Jean-Baptiste Village (soon to be annexed) were becoming working-class suburbs, removed from any places of employment. A glance at Figure 4.5 confirms the lack of factories north of Sherbrooke Street. Most workers simply walked down the hill to their places of employment.

The old central wards reveal some changes in make-up. Saint-Louis and Saint-Laurent Wards south of Ontario Street, formerly known as Faubourg Saint-Laurent, featured much new single-family housing [see Fig. 4.3]. Duplexes built in this old district (districts 12 and 14) accounted for 8.5% of the new duplexes in several small concentrations. Shop and dwellings were confined to Saint-Laurent and Craig Streets, and to a lesser extent Sainte-Catherine Street. This weave of small patterns is what made the district distinctive. Many factories in Figure 4.5 were closer to the scale of workshops. The area lacked the huge manufacturing installations so

typical of the East End and West End.

Likewise in rents, we see a complex mixture of bits of streets with widely contrasting median rents [see Fig. 4.2]. Even the median rents do not do justice to the complexity of this area's housing as values differed widely within each street segment, especially in the Saint-Louis half of the district. What we have is the antithesis to the model prevalent elsewhere in the city. Here all housing types played a role. The new housing included 43.1% duplexes, 30.9% single-families, 21.5% shop and dwellings and 3.9% triplexes (districts 12 and 14). This was the most diversified distribution anywhere in the city. The area was about evenly balanced between French and English, and claimed a high proportion of the few non-French, non-British ethnic groups Montreal could lay claim to, according to the 1871 census.

Meanwhile, housing in the area was undergoing a densification process with the infilling of rear lanes, the redevelopment of old sites, and the occupation of the last vacant lots. In so doing, it was reaching out to several different markets. There was no single model. Its main arteries featured sophisticated commercial buildings with upstairs apartments. Duplexes could be either spacious and luxurious or narrow and cramped. The single-family houses ran the gamut from cheap back-yard or rear-lane dwelling to

expensive mansion. Heterogeneity was the main characteristic of lower Saint-Louis and Saint-Laurent Wards.

In Sainte-Anne Ward, exactly half the new housing was of the duplex variety, its townscape resembling the East End except perhaps for the less frequent use of the mansard roof. Architecturally, the area looked very homogeneous as single-family and duplex houses blended together in brick-clad flat-roof rows, the only feature separating them being the number of doors at ground level. The duplex type was spread throughout the area, even in old Griffintown (district 4). Although we have no housing development information for the Village of Saint-Gabriel adjacent, rents in Figure 4.2 and field observations show a similar trend across the city boundary.

North of Saint-Joseph Street, in Saint-Antoine Ward, the situation was one of contrasts. The area between Saint-Joseph and Saint-Bonaventure (district 6), cut in two by the Grand Trunk Railway which ended here with its main freight and passenger terminal, was one of high densities, second only to the east-end cluster (districts 19 and 22)¹⁴. That wedge of southern Saint-Antoine Ward (district 6) also held the second highest concentration of duplexes in the city, about two-thirds of its new housing. The impact of new construction was especially felt in the numerous side lanes so common in

this area, and in the new streets at the city limits - Workman, Delisle and Albert Streets. In fact, these three new streets hinted at what was happening just across the boundary line. A new town had sprung up during the 1866-1880 building cycle. The Town of Sainte-Cunégonde extended the several east-west streets of Montreal. A large and concentrated duplex townscape came into being, becoming one of Montreal's densest suburbs.

The reason behind the creation of this dense corridor of duplexes and the sudden existence of the new working-class suburb of Sainte-Cunégonde was heavy industrialization. Numerous factories, all large and all labour intensive, had been built along the north side of the Lachine Canal, especially at the Saint-Gabriel locks where des Seigneurs Street crossed the canal [see Fig. 4.5]. On the southern edge of Saint-Joseph Street, on either side of the city limits, lay two of the biggest employers in Montreal - the Montreal Marine Works, established in 1846 and the Montreal Rolling Mills, established in 1868. Each had payrolls in the hundreds. At the Saint-Gabriel Locks, a string of factories encompassed large foundries, flour mills, machine shops and woodworking shops.

There is no question that housing development, especially the duplex development on either side of the city boundary,

owed its existence to this strong industrial presence. Montreal was still very much a walking city, at least for the working class who could ill afford the price of city transit.

Le prix du billet et la lenteur des chars suffisent à convaincre l'ouvrier de demeurer près de son usine. Il lui faut débourser \$0.25 pour six billets et \$1.00 pour vingt-cinq billets; un journalier devrait consacrer une heure de travail à défrayer le coût de son déplacement. D'autant plus que le privilège de correspondre n'existe pas avant 1892 ... Le char urbain ne concurrence pas un bon marcheur¹⁵.

North of Saint-Bonaventure Street, duplex development melted away quite rapidly. From Saint-Bonaventure to Saint-Antoine Street (district 7), a transition took place, with pockets of small brick-clad working-class duplexes giving way to elegant stone or brick two-and-a-half storey mansard-roof duplexes with a basement. Although these two types were submerged in a sea of single-family houses and although they were spatially quite close to each other, they looked in a different direction, figuratively speaking. The working-class duplexes looked across the tracks to the industries on the Lachine Canal, while the larger duplexes looked up the hill towards the mansions along Dorchester Street.

In this wedge of southern Saint-Antoine Ward where several housing markets co-existed side by side, and people of different class origins rubbed shoulders, house builders had

conflicting ideas as to which way the area would ultimately swing. In 1887, the invasion of the Canadian Pacific Railway viaduct north of Saint-Antoine Street cut the area off from the luxurious mansions just up the slope, and cast the die in the direction of low-income housing, but that story properly belongs with the 1880-1895 building cycle. In the 1870s the area had very much the appearance of those other transitional areas like northern Saint-Louis Ward or Saint-Jacques Ward, especially around Saint-Christophe and Saint-André Streets.

THE ARRIVAL OF THE TRIPLEX

As rapidly as the duplex burst onto the Montreal housing market after 1857, yet another form of housing, the triplex, seems to have made its debut sometime in the 1860s. Commonly associated with the 1895-1918 and 1918-1935 building cycles, triplexes began appearing at least two cycles earlier. Once the basic duplex model had been assimilated, it did not take much imagination to create a triplex. Still it is interesting that builders were prepared to build to such densities so early. The emergence of the triplex, even in small numbers, underscores the revolutionary impact of industrialization, mass migration to the city, and fires on the housing market in working-class Montreal.

To pin down the first triplex is impossible at this stage as detailed permits only go back as far as 1868, however the first was probably built not much before this date. Furthermore, triplexes are hard to identify from the permits as the typology must be worked out in conjunction with other sources. There is a slight margin of error in interpreting what was built as a triplex, or a "three-plex" (2 sided-by-side flats over one downstairs flat), or an overcrowded duplex, or a boarding house, but the error is towards under-reporting. Field work was used wherever possible to verify the identity of such buildings. In 1868 three permits were issued for a total of seven triplexes, all in the East End. The first identifiable permit for West End triplexes appears in 1870. By 1871, 20 permits had been issued for 55 triplexes around town. Basically, triplexes appeared in different parts of the city about the same time.

The number of triplexes built between 1867 and 1880 was 307 or 4.3% of the cycle's production, a small portion of the housing market. However, in localized terms they were significant as they tended to be highly concentrated in the densest neighbourhoods [see Fig. 4.6]. Saint-Jacques and Sainte-Marie Wards between Amherst Street and Papineau Avenue, north of Sainte-Catherine Street accounted for 40.7% of triplex production city-wide (districts 19 and 22).

FIGURE 4.6



A second concentration was in Sainte-Anne Ward along the north side of the canal, on Barré and Payette Streets, two relatively insignificant streets located behind commercial Saint-Joseph Street. They were a few steps from large industrial employers at Saint-Gabriel locks and near the Grand Trunk freight terminal [see Fig. 4.5]. The same logic of location applies to small clusters in southern Saint-Antoine Ward where the new Montreal Rolling Mills were located and in eastern Sainte-Marie Ward near MacDonald Tobacco.

In general, triplex development was suburban. The theoretical argument that cheaper suburban land permitted looser, less dense forms of housing does not apply. Most of these triplexes were located in areas where land was plentiful. The cluster on Poupart Street opposite the MacDonald Tobacco factory stood in the midst of fields. The largest grouping, between Ontario and Sherbrooke Streets, looked out at the vast totally undeveloped northern suburbs. The units down on Barré Street were surrounded by more vacant land than developed land.

The new factories employed vast pools of unskilled, low-wage labour. Wages of \$1.00 a day were common for unskilled workers in the Montreal Rolling Mills. Temporary wage cuts, rather than incremental raises, were the norm during the last third of the nineteenth century¹⁶. With such

an enormous increase in low-wage workers and with housing undergoing acute shortage problems as outlined earlier, contractors were coming up with new solutions to enable profit between the cost ceiling and the floor of purchasing power. Hence the squeeze of low wages and rising land costs produced the triplexes in the fields.

Overall the housing market was spatially segmented. Two vast almost mutually exclusive zones divided up the city. One was a zone of single-family housing clustered around the apron of Mount Royal. This corresponded with Montreal's wealthiest neighbourhood. The other was a truncated zone of duplexes with pockets of triplexes, part in the southwest, part in the East End. Both were contiguous to areas of industrial development. Yet there were zones of juncture and overlap. Here small single-family houses and large duplexes mixed. The most significant ones were the aspiring white-collar and small business zones lapped onto the outer fringes of the apron. The other ones were the smattering of single-family houses amidst the working-class areas where high wage earners and local businessmen lived.

The main story of the 1866-1880 building cycle, however, was the dominance of the housing market by the duplex. From an unusual format of housing in the 1840s and 1850s, the duplex spread rapidly during the 1860s. By the time the end

of the building cycle came in 1880, duplexes had overwhelmed the East End where once single-family housing had dominated, taken over in other working-class areas and even penetrated the middle-class market with a larger, more luxurious model. It had become Montreal's main house type. Behind this distinctive new element of the built environment lay another reality of industrial Montreal - the speculative builder. Just who he was and how he operated will be the subject of the next chapter.

FOOTNOTES - CHAPTER FOUR

1. Jacques Viger, Tablettes statistiques du Comté de Montréal, 1825, as cited in Groupe de recherche sur la société montréalaise au 19e siècle, Rapport 1972-73, (Montréal: 1973), no page numbers. Viger also recorded a small number of houses using mixed materials, accounting for 1.2% of all houses.
2. Census of the Canadas, 1851-52 (Quebec: John Lovell, 1853-55), II, p.467.
3. See John Rempel, Building with Wood (Toronto: University of Toronto Press, 1967); T. Ritchie, "Plankwall framing, a modern wall construction with an ancient history", Journal of the Society of Architectural Historians, 30, No. 1 (1971).
4. Maps of ward boundaries and of ward sub-districts are to be found in the Appendix.
5. For further discussion of Montreal's great flat roof terraces, see David B. Hanna, "The New Town of Montreal - Creation of an Upper Middle Class Suburb on the Slope of Mount Royal in the Mid-Nineteenth Century", M.A. Thesis, Department of Geography, University of Toronto, 1977.
6. The year 1867, when construction began to climb after the 1866 low point, is the first year whose housing production is counted in the 1866-1880 building cycle.
7. See Gregory J. Levine, "Criticizing the Assessment: Views of the Property Evaluation Process in Montreal 1870-1920 and their Implications for Historical Geography", Canadian Geographer, 28, No. 3 (1984), pp. 276-284.
8. This map shows median household rent distributions for Montreal and the independent municipalities of Saint-Gabriel, Saint-Cunégonde, Saint-Henri, Saint-Jean-Baptiste and Hochelaga (clockwise order). Data were not available for the municipalities of Côte-Saint-Paul, Côte-Saint-Antoine (future Westmount, Saint-Louis du Mile-End and Coteau-Saint-Louis (clockwise order). See Appendix for map of municipalities.

9. See Paula Kestelman, "The Evolution of an Urban Culture Core: A Study of French-Canadian Institutions and Commerce in Central East Montreal", M.A. Thesis, Department of Geography, Carleton University, 1983, and David B. Hanna, op.cit.. Each demonstrates the strong ethnic, linguistic and religious homogeneity within each zone, French and Catholic in the one, British (English-Scot-Irish) and Protestant in the other. Despite the common social class position, these two areas developed separately.
10. See Fennings Taylor, Portraits of British Americans (Montreal: 1865), I, and J. Douglas Borthwick, op. cit.
11. The percentages of permit-holder occupancy are based on those years for which we have permits - that is 1868-71 and 1873-77, and not on the entire building cycle. Since these years capture the bulk of the cycle's building activity, (see Chapter Two) the percentages quoted should not be very far removed from the actual situation.
12. Densities in 1881 were calculated at between 8,000 and 10,000 households per km^2 in this district. See Sherry Olson, David Hanna and Patricia Thornton, "Partage social et partage de l'espace à Montréal, 1847 à 1901", Rapport d'étape du 31 mai 1985 au Fonds F.C.A.R. Québec, Projet 84EQ, pp. 18-19.
13. The francophone population rose from 26,153 to 56,856 people while the total population for the City of Montreal rose from 57,715 to 107,225 between 1852 and 1871. See Censuses of Canada of 1851-52 and of 1871.
14. Densities in 1881 were calculated at between 6,000 and 9,000 households per km^2 in this district. See Olson, Hanna, Thornton, op. cit., pp. 18-19.
15. Jean de Bonville, Jean-Baptiste Gagnepetit: les travailleurs montréalais à la fin du XIXe siècle (Montréal: Editions de l'Aurore, 1975), pp. 115-116.
16. William Kilbourn, The Elements Combined: A History of the Steel Company of Canada (Toronto: Clarke, Irwin & Co., 1960), pp. 24-25. This wage is also confirmed in Jean de Bonville, op. cit., p.87.

CHAPTER FIVE

THE SOCIAL ORIGINS OF BUILDERS

THE BUILDER - INVISIBLE YET DISTINCTIVE

If we are to understand the process of urban growth, particularly that related to the development of housing, we need to know the people who were behind it. Few have looked into this pivotal group of urban society, yet no other group is responsible for such a vast expanse of urban development as housing developers. No study of urban capitalism should ignore this group, yet we know far more about those who built the banks, factories, railways and streetcar lines than we do about those who built the houses which surround and even overwhelm those other elements of the built environment. This group has always been obscure. House builders operate out of no fixed location. Once the houses are built, they sever all connections with their product. Their identity is recorded usually just once - in a building permit. Few outside of the immediate purchaser of the finished house are ever aware of their identity. They are unsung in the annals of business history and business promotion. Yet our daily lives are probably more affected by this group of capitalists than any other because they plan and conceive the shelters we live in.

A tiny number of researchers have tried to come to grips with this group of entrepreneurs. Sam Warner in his study of Boston developers in the second half of the nineteenth century found that builders fit a specific profile. He described them as "local middle class amateurs; ... men who had come to Boston from small New England and Canadian [Maritime] towns ... without any formal training in architecture or subdivision, and hard pressed by lack of capital, ... small investors who lived [in the neighbourhood] or nearby"¹. He also found a small group of large-scale developers, 1.4% of the total, who were responsible for 23% of all new houses in his study area. In Hamilton, Ontario, Michael Doucet found that builders in the second half of the nineteenth century rarely erected more than six dwellings in any given year and few were involved in more than two developments².

Harold Dyos in his study of suburban London, England, emphasized how many builders lacking resources, built only one or two houses, even at the peak of the building boom in 1878-80. Although his small-scale developers were working on a somewhat larger scale than either Warner's or Doucet's, his findings parallel theirs. Of his 416 individual and corporate builders who produced 5,670 houses during the years (1878-80), half built 6 or fewer houses, and almost three-quarters built 12 or fewer houses. However, 15 builders who operated on a large scale each built more than 75 houses, and together

accounted for about one-third (1,800 houses) of the total production³.

These studies from widely separated geographical locations agree on a profile. Most nineteenth-century house builders were small operators, with a few very large ones. We shall see that they fit certain occupational profiles and social class affiliations. They show a distinctive profile in their origins when compared to the rest of the urban population. In short, builders, despite their seeming invisibility, were an identifiable population. The purpose of this chapter is to ferret out the distinctive characteristics of Montreal's house builders, while at the same time establishing what they had in common with builders elsewhere.

In order to determine the profile of the house builder in Montreal during the 1866-1880 building cycle, we will approach the matter from three different angles, each drawn from our linkage of permits, directories and atlases. All data are drawn from the years 1868 to 1871 and 1873 to 1877, years for which we have detailed permit abstracts. As described in Chapter Two these permits represent 78.3% of the cycle's production.

The first approach is to classify permit holders by their scale of operations, and their position in the market, that is

whether they were building for profit or not. This in turn will be linked with the spatial patterns of large and small developers, as described in Chapter Four. Of particular interest is the contrast between builders of single-family houses and those of duplex housing. The second approach is to focus on the social origins of developers by looking at their declared occupations. This will ultimately lead to a discussion of occupation and its relation to class position.

The third approach is an ethnic perspective. Is there any ethnic specialization among Montreal's developers? Given the overwhelming dominance of financial, mercantile and industrial enterprise in Montreal by the minority British element, were French-Canadians passive bystanders or active participants in the capitalist opportunities of the building industry? This promises to be the most revealing local finding. The chapter will be rounded out with a look at a special group of builders, the corporate and institutional developers.

THE NON-SPECULATIVE HOUSE BUILDER

Before embarking on discussion of the scale of operations, we must address the question of speculative versus non-speculative builders. The distinction is crucial as it sorts out the production of housing into profit and non-profit

groups, with the former squarely inside the sphere of capitalist commodity production, the other somewhat outside this realm. A not-for-profit or non-speculative builder is defined as a permit holder who had a house built for his personal use. He might purchase the labour of others to build his house or he might build it himself, perhaps with some family help. A house for his own occupancy was not meant to reap profits upon production. Of course, ultimately the house might enter the capitalist market by being sold to another individual, whereupon a profit might be realized, but we are not concerned with this step.

What concerns us here is the immediate purpose for the production of the house. If a permit holder was having a house built for himself or if a builder was building himself a house, we cannot classify these people as producers within the capitalist realm of production. On the other hand, the permit holder who occupied his own duplex cannot be grouped with these not-for-profit producers, since the second flat remained for rental occupancy, and provided the means by which a profit could be realized on the production of that duplex. Likewise, the builder who erected a row of single-family houses and occupied one of the units has to be considered part of the group of capitalist producers. Only those permit holders who built one solitary house of the single-family type for personal occupancy are considered as a special group outside

the realm of capitalist production. These producers will be referred to as not-for-profit or non-speculative permit holders.

Just how significant this group of non-speculative housing producers was remains a moot question. Because our data are limited to certain years we have no way of knowing if one-house permit holders built other houses subsequent or prior to that permit unless they appeared during the years for which we have permits. We do know that we have 355 non-profit type houses or 7.5% of the 4,762 houses built by identifiable builders (excluding corporate and institutional developers). Some of these 355 permit holders did appear in other permits with speculative housing to their credit. If they are eliminated, we are left with 260 permit holders who built or had built a house for themselves and who as far as we know did not enter the house-building arena again. They represented 5.5% of all identifiable builders.

On the whole, permit-holder-occupied single-family houses did not represent an important feature of Montreal's housing market. Yet spatially and socially, there are some important points to make. Since all mansions fall into this category, it is easily supposed that non-speculative housing was a phenomenon associated with affluent neighbourhoods. Northern Saint-Antoine Ward had over a quarter of these

houses, and generally affluent Saint-Laurent, Saint-Louis and western Saint-Jacques Wards showed high levels as well [see Table 5.1].

In terms of occupational status, nearly 20% of the non-speculative permit holders were merchants, manufacturers and financiers, and another 11% were professionals, senior government officials and senior managers. Most were of British ethnic origin (English, Scottish, Welsh) and almost all lived in northern Saint-Antoine and Saint-Laurent Wards.

The other two-thirds did not fit that social or spatial profile. We find wholesalers (dealers and traders), retailers (grocers and shopkeepers) and especially artisans (butchers, bakers, blacksmiths, etc.), not to mention a handful of contractors - a classic petite bourgeoisie. Representing about 24% of the non-speculative permit holders, these people were scattered across northern Saint-Antoine, Saint-Laurent, Saint-Louis and western Saint-Jacques Wards, and in eastern Sainte-Marie Ward. Most were French-Canadian in origin.

The largest group were members of the working class. Representing 43%, these 111 privileged working class owners of custom-built houses were drawn overwhelmingly from the ranks of blue-collar, not white-collar, workers. The largest occupational group were joiners and carpenters who possessed

TABLE 5.1 NON-SPECULATIVE SINGLE-FAMILY HOUSING
IN MONTREAL - 1866-1880 BUILDING CYCLE

WARDS	#	%
Sainte-Anne	35	13.5
Southern St-Antoine	13	5.0
Northern St-Antoine	69	26.5
Saint-Laurent	27	10.4
Saint-Louis	35	13.5
Western St-Jacques	27	10.4
Eastern St-Jacques	14	5.4
Western Ste-Marie	31	11.9
Eastern Ste-Marie	6	2.3
East-Centre-West	3	1.1
	<hr/> 260	<hr/> 100.0

NOTES Figures are for houses appearing in 1868-71 and 1873-77
permits only.
Ethnically, 117 of these permit holders were of British
origin, 103 of French origin and 22 of Irish origin.
There were also 18 of undetermined origin.

the skill to build their own homes. Beyond workers involved in the building trades were four other groups, each about as important numerically as the next: carters, shoemakers, Grand Trunk Railway blue-collar employees, and labourers. Carters were more independent than most workers and in good times could prosper. Shoemakers might be artisanal or factory workers, we have no way of proving either contention. The G.T.R. workers were highly skilled shop workers who commanded good salaries. The labourers are mystifying and are as diverse locationally as they are ethnically.

The 111 working-class permit holders showed a decided spatial and ethnic pattern. They were concentrated in three key areas: in the working-class East End (eastern Saint-Jacques and Sainte-Marie Wards) they were almost all French, in working-class Sainte-Anne Ward they were mostly of British extraction and a few of Irish origin, and in Saint-Louis Ward most were French.

This working class group of non-speculative house builders arrests our attention most of all because of the English-French split into western and eastern camps. These two groups shed light on the minority single-family housing markets in Sainte-Anne Ward and the East End noted earlier in Chapter Four. In Sainte-Anne these permit holders were generally skilled workmen, more often than not employed by the

G.T.R. In the East End they were workers involved in the building trades, carters, or shoemakers. These two geographically separated camps underscored the completely different composition of the more privileged working class in French and English Montreal.

Even though owner-occupied not-built-for-profit housing did not account for a large portion of the market in Montreal, its minority position in the 1870s housing market helps to highlight the dominance of the speculative builder, whether he was producing rows of single-family houses or merely one or two duplexes. Thus we have a firm indication that in Montreal house production was a profit-oriented enterprise, a commodity built for mass consumption.

THE BUILDER'S SCALE OF OPERATIONS

House building in Montreal during the 1860's and 1870's as a profit oriented venture occupied 94.5% of all individual permit holders. Corporate and institutional developers swelled their ranks further. The term speculative builder is used loosely and is not meant to be a reference to the stricter meaning of the term "speculation" whereby someone buys and sells a commodity, such as land, in the marketplace, exercising his right of ownership over it in order to extract extra surplus value without engaging in any productive

activity. The term "speculative builder" is widely used in the literature on housing and is meant in the more general sense of risk taking, production in expectation of a market, production for a potential but unknown client. We know that Montreal was built up by such people who constructed houses in the expectation that they would sell. In this respect they were no different from other capitalist producers. What we need to know now was their scale of operations.

The size of a builder's operations is an important first step in understanding his social origins. However, there are certain methodological problems associated with this quest. The foremost of these is the fact that we lack permit holder information for the years 1867, 1872 and 1878 to 1880 during the 1866-1880 building cycle. Of these, 1872, a peak building year, is a particularly unfortunate loss. While 1867 and 1878 to 1880 might marginally affect some developers' totals, 1872 would probably add significantly to a good many house builders' total production. Nevertheless, the results obtained from those years for which we do have data reveal patterns and trends.

The smallest operators built only one house for sale and the largest (not counting corporate developers) built 67. To simplify the analysis of scale, we have chosen ten houses as the break point dividing small-scale from large-scale

producers. The threshold of ten was selected because it corresponds to a difference in the type of house they built. Builders of under-ten houses produced mostly duplexes. Because the under-ten group is so large, we will frequently subdivide it, looking at one-to-two house or one-to-four house developers.

Another methodological question in analysing scale of development is partnerships. Occasionally, two or more people took out a permit together. Only 6% of 1,572 speculative builders were involved in partnerships. Half these partnerships were two people building two houses. It was decided, therefore, to divide these houses by the number of partners and treat each person as an individual for the purposes of scale of operations calculation. This method does not falsify the data since partnerships were small and even if their production is left undivided, all but one would still fall into the one-to-nine house range*. Still the question of partnerships has implications beyond mere points of methodology and we will return to them later in this chapter and the next.

Looking at the overall picture, the pattern of housing development is pronounced. The distribution of builders by scale would resemble an enormously skewed curve peaking at two-house developers with about 88% of all builders in the

one-to-four house range. Small builders (one to nine houses) comprised 95.7% of all builders and most of them were in the one-to-two house range (70.6%). This leaves only 4.3% of all builders in the 10-to-67 house range. On the other hand, lest we dismiss this group of large-scale developers too rapidly, it is worth noting that they were responsible for a quarter of all houses built by speculative builders [see Table 5.2].

We therefore have a city built by very small operators, but with a handful of big developers active. Were these two groups operating at all levels of the housing market? Or can we hypothesize that the handful of large-scale developers confined themselves to the luxury housing market? By checking the spatial distribution at the two extremes - that is one-to-two house builders versus 10-to-67 house developers - we can check this hypothesis. Table 5.3 shows that the very small-scale builders operated throughout the city. They accounted for more than half the new for-profit housing in each sub-ward. They were most important in Sainte-Anne, eastern Saint-Jacques and western Sainte-Marie Wards, the former representing the biggest west-end working-class area, the two latter forming the big east-end working-class district. They were weakest in wealthy northern Sainte-Antoine Ward.

TABLE 5.2 PROFIT-ORIENTED BUILDERS BY SCALE OF OPERATION
MONTREAL: 1866-1880 BUILDING CYCLE

	BUILDERS		HOUSES		%
	#	%	#	%	
SMALL-SCALE BLDRS. (1 TO 9 HOUSES)	1505	95.7	3364	74.7	SINGLE-FAMILY 26
					MULTI-FAMILY 74
LARGE-SCALE BLDRS. (10 TO 67 HOUSES)	67	4.3	1138	25.3	SINGLE-FAMILY 56.5
	<u>1572</u>	<u>100.0</u>	<u>4502</u>	<u>100.0</u>	MULTI-FAMILY 43.5
SMALL-SCALE BLDRS. (1 TO 2 HOUSES)	(1111)	(70.6)	(1668)	(37.0)	
(1 TO 4 HOUSES)	(1382)	(87.9)	(2593)	(57.6)	

NOTE The percentages are based on builders whose permits were registered in 1868-71 and 1873-77 only.

TABLE 5.3 SCALE OF DEVELOPMENT BY SUB-WARD IN MONTREAL
DURING THE 1866-1880 BUILDING CYCLE

[Expressed as Percentages of all Speculative Builders by Sub-Ward]

SUB-WARDS	SMALL-SCALE BUILDERS (1-2 HOUSES)	LARGE-SCALE BUILDERS (10+ HOUSES)
Sainte-Anne	70.3	5.7
Southern St-Antoine	65.3	9.5
Northern St-Antoine	53.5	12.3
Saint-Laurent	61.7	9.2
Saint-Louis	65.7	5.9
Western St-Jacques	58.1	8.1
Eastern St-Jacques	73.0	5.6
Western Ste-Marie	73.4	2.8
Eastern Ste-Marie	57.1	6.3

NOTES The percentages cover builders whose permits were registered in 1868-71 and 1873-77 only. Percentages are not shown for East, Centre, and West Wards because the number (10) of builders is too small to produce meaningful results.

Large-scale developers show just the opposite trend, confirming our hypothesis. Their representation was weakest in the poorer wards while it was strongest in northern Saint-Antoine. Another strong showing was in southern Saint-Antoine Ward which is indicative of large-scale developer activity in the new white-collar worker fringes identified in Chapter Four. Even so, large-scale developers did build everywhere in the city. Moise Ouimet, for example, built 35 single-family two and three-storey masonry houses on fashionable streets such as Victoria or Mansfield in northern Saint-Antoine Ward. Pierre Houle built 27 plankwall flat-roof triplexes and shops with dwellings above, in working-class eastern Saint-Jacques Ward. Joseph Robert built 22 little brick single-family row cottages in southern Saint-Antoine Ward, and Hypolite Pichette built 21 plankwall triplexes for workers living near the Lachine Canal in Sainte-Anne Ward. These large-scale developers were a very mixed group.

The most enduring image of the house builder in Montreal, however, is the small-scale builder for his numbers were legion. He built throughout the city, but he built only once or twice during the entire cycle. He never strayed far as 90.5% of two-to-nine house builders built within one sub-ward. The few who ventured outside these narrow confines rarely went any further than the adjacent sub-ward. Such a builder could not have been a full-time developer because one simply could

not survive economically on one or two construction undertakings in fifteen years. In fact, the limited nature of his entrepreneurship suggests that he probably did not do well. The majority of permit holders never returned for a second building permit.

The methodological problem raised earlier may be resolved by generalizing on these findings. Since house builders were such small operators and since about 88% of all speculative builders built only one to four houses, this leaves only 8% more to fill up the rest of the small-scale developer category [see Table 5.2]. It would appear that the lack of 1872 data in particular would have no significant bearing on these results except to perhaps accentuate the contrast between small and large-scale operators by increasing the number of small-scale builders while increasing the size of operations of the large-scale builders. This parallels Doucet's findings on nineteenth-century Hamilton where he found that 81% of his house builders built on no more than two lots between 1847 and 1881⁵.

The classic Montreal builder, no matter where he operated in the city, fit Warner's description of the typical suburban Boston builder - an amateur. Building a house was a sideline, a venture, perhaps a "get-rich-quick" scheme ... who knows the myriad reasons individuals had for building speculatively.

Certainly it could not have been an easy living, otherwise the ten houses and over group would have been much larger. We need next to fathom this army of speculative builders by looking into their occupations to trace the social origins of these "part-timers".

A WORKING DEFINITION OF OCCUPATION AND CLASS

We have 1,572 speculative builders and over 200 declared occupations. The thorniest problem is how to group these occupations meaningfully and arrive at some form of logical social class structure. Warner's classification of occupations into nine economic sectors (e.g. trade, manufacturing, construction, public service, etc.)⁶ would miss crucial social differences within each economic sector. For example, his transport sector would group a railway office clerk with a train conductor, a railway shop machinist, a chief engineer and even a railway president. Furthermore, the occupational data derived from the city directories are specific enough as to allow these meaningful social distinctions to be made.

We have already discussed in Chapter Two the extremely high success rate in finding our permit holders in the city directories. In the occupational search, we can state that a full 92% of our speculative builders were so located. Robert

Lewis, who worked with rent and occupation parameters in his work on residential differentiation in late nineteenth-century Montreal, noted that occupations were generally more accurately specified in the directories than in the tax assessment rolls'. The directories often specified when an individual owned his own business. For example, we might find "boot and shoe store", "proprietor of cooperage", or "publisher" listed under the occupations of certain individuals. These same individuals were listed as "shoemaker", "cooper" and "printer" in the tax rolls where occupational titles were reduced to the barest of necessities. The city directories, designed as business directories, were evidently more concerned about accuracy among the business-owning class.

Among the speculative builders a high number of occupations included company names, or the word "proprietor" or "store" appeared next to the occupation. A good many Grand Trunk Railway workers and managers had the letters "GTR" next to their occupation, an important feature since the railway was Montreal's largest single employer. The classification of a senior executive in the directories almost always included his title and the name of the company. If professionals belonged to an organization such as McGill College, this was usually stated. Clerks who were really managers were so recorded so as to allow interpretation (e.g. Clerk of

Bonsecours Market). However, none of the above examples should be interpreted to mean that the directories were consistent in their distinction between owners and non owners of businesses. These examples merely point to the fact that directories may make the leap from occupational structure - an objective label within the technical division of labour - to social class position - a theoretical concept - much easier.

There are several theoretical constructs of class to choose from. For example there are the weberian inspired theories of Frank Parkin, which focussed on a market-based theory of social stratification, or those of Gerhard Lenski, based on power and privilege⁸. There is the more integrationist theory of class such as Talcott Parsons', based purely on social status⁹. There is Karl Marx's theory of class based on objective social relation to the means of production, and all the refinements and modifications of his theory that have followed since¹⁰. All these theories carry with them significant practical problems in trying to infer class position from occupationally derived data.

Because this thesis seeks to study people in their role as producers of housing and because the production rather than the consumption of housing has been the prime concern throughout, Marx's theory of social class is a logical choice. In his terms this is a group of petty commodity producers.

Since most house builders in Montreal were part-time producers of housing, we need to know what other spheres of production they were involved in. Occupational labels, with the aid of extra information contained in the city directories relative to the ownership of the means of production, will be used to arrive at an occupational analysis along these lines.

Traditional nineteenth-century marxian class categories defined society as an antagonistic division. There were the capitalists (the "bourgeoisie") on the one hand, who owned the means of production, did not sell their labour but bought the labour of others. On the other hand were the workers (the "working class") who did not own the means of production, could not buy the labour of others but rather sold their own labour. A class of artisans was recognized as an adjunct to the capitalists insofar as they too owned the means of production and did not sell their own labour. Where they differed was in the fact that they did not buy the labour of others except in a limited way.

But the polarization of society around two opposed classes - the bourgeoisie and the working class - and the presence of a traditional artisanal class is not enough to explain what was in fact a more complex society. Many theorists have attempted to produce a more refined system of marxian class categories, theorizing on the existence of other

middle groups between these two poles. Such writers as Wright, Poulantzas, Carchedi and Johnson have focussed on elements of society that do not fit neatly into one or the other classification, such as managers, technicians, professionals, executives, public sector workers and so on¹¹. These writers have attempted to identify old and new middle classes or have expanded the definitions of bourgeoisie, petite bourgeoisie and working class to include these ambiguous cases.

Studies on class in urban nineteenth-century Canadian society are somewhat inadequate for the analysis of our speculative builders. Michael Katz, the first to make tests of occupation and class in such a context, evolved a fairly confused and conflictory class structure which lumps clerks with advocates and merchants in an entrepreneurial class¹². Brian Palmer, also looking at nineteenth-century Hamilton - undoubtedly the best studied Canadian city - evolved a much clearer class analysis of urban society but failed to provide any differentiation within the working class¹³.

Our approach will be to translate a marxian class structure into an analytical typology. Borrowing mainly from G. Carchedi, we will identify a bourgeoisie as those who had ownership of the means of production, who performed the global function of capital in that they controlled and supervised the

labour process, and who derived their income by appropriating surplus-value, either directly in the case of a manufacturer, or indirectly in the case of a merchant¹⁴. We will include two main occupational groups in this class: manufacturers, those most directly involved in the control of production, and merchants and bankers, representing mercantile and finance capitalists. The merchants and agents of various descriptions were importers and exporters in control of the circulation of goods. Bank or insurance company officers and directors, owners of investment agencies and brokerage firms were in control of the circulation of capital itself.

We will next identify an artisanal class and a traditional petite bourgeoisie (Carchedi's "old middle class"). They owned the means of production, albeit on a small scale, but performed both the individual function of capital and the function of the collective worker¹⁵. Members of these two classes owned their business premises, and were at once worker and one who controlled workers. They represented the individual capitalist who was sometimes helped by a few workers. The artisan and the small-scale capitalist (i.e. small producers and retailers) are distinct from our bourgeoisie which encompasses the truly large-scale capitalist.

The artisan was represented by such occupations as

butcher, baker, blacksmith, cabinetmaker, carriagemaker, engraver, sculptor, jeweller and upholsterer. Among the artisans we will highlight a special group of individuals involved in the building trades. They included joiners and carpenters, masons, bricklayers, stonecutters, plasterers, plumbers, roofers and tinsmiths. The traditional petite bourgeoisie, on the other hand, was an entrepreneurial group made up of local wholesalers (dealers and traders), retailers or shop owners (grocers, storekeepers, saloonkeepers, druggists, confectioners, barbers, etc.). We have distinguished building trades entrepreneurs as a special group (contractors, builders and undertakers, the latter not to be confused with morticians).

We will also identify another element of the petite bourgeoisie group, quite distinct from the first, consisting of high-status autonomous workers. This corresponds to Carchedi's "new middle class" and occupied a particularly ambiguous class position relative to the means of production. This group did not own the means of production as did the other two reviewed so far, yet it performed both the global function of capital and the function of the collective worker¹⁶. Ideally, the members of this class were the managers and technicians who worked for the capitalists but had a high degree of control over their working conditions and over other workers. We will interpret this class rather

loosely to include two main groups: a managerial group consisting of private sector managers and public sector government officials, and a professional group consisting of notaries, advocates, doctors, church ministers, professors, architects, civil engineers, and so on.

Finally we arrive at the working class. This class did not own the means of production and performed the function of collective labour power. Members of this class derived their income either by being paid part of the surplus-value they created or by being paid out of the surplus-value of production¹⁷. This definition allows both the inclusion of productive and non-productive labour, the latter including both private and public sector workers. We will break down this class along the lines of a weberian division into unskilled, semi-skilled and skilled groupings (productive workers), and the service sector (non-productive workers, both private and public). These groups are frequently referred to as blue-collar workers. The other group of non-productive workers distinguished here (both private and public sectors) are the white-collar workers or non-manual workers.

As a means of illustrating these various subdivisions of the working class, we have the unskilled workers who were represented solely by labourers, and the semi-skilled and skilled workers who were the most diversified occupationally.

They included machinists, engineers (responsible for boilers), millwrights, cutters, finishers, moulders, bottlers, weavers, shoemakers, coopers, brickmakers, and many more. The blue-collar service sector was made up essentially of carters, milkmen, railway conductors, drivers, coachmen, shippers, watchmen and sailors in the private sector, and policemen, constables, bailiffs and turnkeys in the public sector. Finally, in the white-collar labour force there were the occupations of clerk, bookkeeper, messenger, reporter and commercial traveller.

Women formed a special group among our speculative builders. As our class categories are linked to occupations which generally refer only to male heads of households, women are the silent participants of this class typology. However, 31 women (or 2%) appear among our permit holders and therefore can be classified in this study of occupation and class. These women were recorded in the permits and in the directories by their marital status, either "Miss", "Mrs." or "Widow". Linkage with the city directories yielded occupations for the unmarried women, husbands' occupations for the married women (except in one case where a married woman was listed as principal of a Ladies' Academy), and deceased husbands' occupations for the widowed women. Based on these occupations, female permit holders were classified anonymously with the rest leaving a residual 0.8% of all speculative

builders who were widows who could not be traced. These women came from varied backgrounds. Almost all were small-scale operators.

In summary, we have attempted to define an analytical social class typology based on the social relation to the means of production. Of the four categories distinguished, the first is the bourgeoisie, the group with control over capital. This class corresponds with large-scale capitalists in productive and circulatory spheres of capital. The second group is the petite bourgeoisie which is comprised of small capitalists. The other members of the petite bourgeoisie are those whose prime definition is autonomy in the workplace and control - either direct or indirect - over workers. This group is not made up of capitalists per se but rather high-status professionals, officials and managers. The third group is the artisanal class comprised of petty commodity producers. Finally, the fourth group is the working class which we will subdivide into unskilled, semi-skilled and skilled workers, service sector workers and white-collar or non-manual workers. Let us now look at our speculative builders.

THE LARGE-SCALE PROFIT-ORIENTED BUILDER

Speculative builders who operated at a large-scale had a

big impact on the new housing market. They represented 4.3% of all non-corporate profit-oriented permit holders. Who were these exceptional individuals in a market dominated by small producers?

Four groups stand out: contractors (28.3%), artisans involved in the building trades (19.4%), professionals (16.4%), and large-scale mercantile and finance capitalists (13.4%) [see Table 5.4]. They represented over three-quarters of our group. The working class was by definition non-existent among these large-scale developers. The one "working-class" builder is something of a curiosity both because of his origins and because of what he built. Olivier Dorion built what appear to be fourteen tiny back-to-back one-storey flat roof plankwall houses at the head of Visitation Street in 1875, in an old east-end working-class corridor. He claimed to have been a turner, that is a skilled workman, the year he took out the permit and every year thereafter. The year before, he was recorded as a joiner and prior to that as a painter.

The classic large-scale developer was the contractor-builder-undertaker. These were people who fit the label of "professional developers". They clearly made a living out of building houses although it remains conceivable that some might also have worked on major non-residential

TABLE 5.4 OCCUPATION AND CLASS OF PROFIT-ORIENTED BUILDERS
MONTREAL: 1866-1880 BUILDING CYCLE

	BUILDERS OF 1-2 HOUSES %	BUILDERS OF 1-9 HOUSES %	BUILDERS OF 10-67 HOUSES %
<u>BOURGEOISIE</u>	6.9	8.2	14.9
Mercantile and Finance Manufacturers	4.9 2.0	5.8 2.4	13.4 1.5
<u>PETITE BOURGEOISIE</u>	54.4	58.8	83.6
AUTONOMOUS WORKERS Professionals Managerial	2.8 0.9	3.8 1.2	16.4 7.5
ENTREPRENEURIAL Wholesalers Retailers Contractors	4.0 10.5 6.0	4.7 11.2 7.6	6.0 4.5 28.3
<u>ARTISANS</u>			
Artisans Building Tradesmen	8.7 21.5	8.2 22.1	1.5 19.4
<u>WORKING CLASS</u>	27.9	23.9	1.5
NON-PRODUCTIVE White collar Service sector	2.8 7.3	2.3 6.3	0 0
PRODUCTIVE Semi-skilled, skilled Unskilled	11.2 6.6	9.9 5.4	1.5 0
<u>UNKNOWN</u>	10.8 100.0	9.1 100.0	0 100.0
TOTAL # OF BUILDERS	1,111	1,505	+ 67 = 1,572
TOTAL # OF HOUSES	1,668	3,364	+ 1,138 = 4,502

NOTE Figures are based on permits for the years 1868-71
and 1873-77 only.

construction jobs. They were largely French-Canadian in origin, with a smattering of Irish Protestants, judging by their names. All shared their origins in the building trades in the 1840s, 1850s or 1860s. They had been joiners or carpenters, with an occasional mason, bricklayer or painter.

The professional developers tended to specialize in one type of house in one area. Some did cross ward boundaries but rarely strayed far. Edouard Bastien, for example, concentrated on duplexes in working-class western Sainte-Marie Ward. Archibald McIntyre built nothing but luxury two-and-a-half storey single-family homes out of stone in northern Saint-Antoine Ward, mainly on MacKay Street. Toussaint Deslauriers built mostly small one-and-a-half storey single-family row houses in southern Saint-Antoine Ward at the city limits, while Paul Fournier catered to a lower income market nearby using duplexes as his model.

A few contractors who did work in two widely separated areas may have played a vital role in spreading house models around the city. Alexis and Joseph Robert individually took out permits for small single-family houses in southern Saint-Antoine Ward, the largest concentration of such housing in Montreal. They also did the same in western Saint-Jacques Ward, contributing to the spread of that model. Francis McMann, who usually built luxury single-family houses,

introduced a row of luxury three-storey duplexes with raised basements deep in wealthy northern Saint-Antoine Ward in 1875.

Hard on the heels of these professional developers were the artisans involved in the building trades. All of them claimed to be carpenters and/or joiners. Whereas one might expect to find a difference in the level of skill and experience between carpenter and joiner (the latter presumably being more skilled than the former), in practice this presumption appears to be meaningless. Individuals used the terms interchangeably, calling themselves a joiner one year, a carpenter the next. Since this pattern is so consistent, we will refer to them as carpenter-joiners.

Some of the carpenter-joiners built one model in one area, such as Martin Lefebvre who built duplexes in small numbers in the working-class Saint-Jacques/Sainte-Marie district. Others built several models in several wards, such as Honoré Lefebvre with his duplexes in eastern Saint-Jacques, triplexes in Saint-Louis, and single-family houses in Saint-Laurent. This group of builders may well have been responsible for the rapid spread of the duplex and fourplex models throughout the city [refer to Chapter Three]. Witness the fact that Jean-Baptiste Champagne and his presumed brother Joseph Champagne were building single-family rows on Magdalen Street for Grand Trunk Railway workers just two blocks over

from Sebastopol Street while erecting rows of duplexes simultaneously on east-end Saint-Christophe Street. A similar case for the rapid transmission of the triplex from one part of the city to another could be made with François-Xavier Labrègue who built triplexes at the city limits in Sainte-Anne Ward and also in more easterly Saint-Louis Ward.

It is difficult to establish just how this carpenter-joiner group differed socially from the group of contractors. At a comparable scale of operations, both would appear to be living from the profits of their building enterprises. Yet some differences are apparent. Contractors operated mostly in the luxury and "middle-class" housing markets. Spatially this translated into a broad sweep running from southern Saint-Antoine Ward, past the mountain to upper Saint-Louis, then down into western Saint-Jacques Ward. This corresponds with our high-rent areas in Figure 4.2. Conversely, the carpenter-joiner group operated almost exclusively in low-rent districts, from Sainte-Anne and southern Saint-Antoine Wards, leapfrogging over to lower Saint-Louis, Saint-Jacques and Sainte-Marie Wards. They built mostly multi-family housing, while contractors and builders preferred single-family houses.

While contractors were overwhelmingly French in origin, carpenters and joiners were exclusively so. Perhaps the

carpenter-joiners were simply "contractors-in-waiting", since virtually all contractors had been originally carpenters and joiners. Except for the different spatial patterns of each group, there was little to distinguish them. Both were small capitalists. The contractor group not only came from carpenter-joiner origins, about a quarter of them shifted back to the occupation of carpenter-joiner at one time or another during the course of the building cycle under study. All this points to a possible fluidity in class relations as these contractors, joiners, carpenters, undertakers may well have been workers on larger projects when not investing in their own. One point must be made - the term "carpenter" or "joiner" cannot be automatically taken to mean a simple skilled worker or even an artisan, as the small capitalist obviously lurks within these numerically important occupations in Montreal.

Outside of those directly involved in construction, professionals and large mercantile and finance capitalists were the only significant groups, represented among large-scale developers [see Table 5.4]. The term "professional" in this case is almost synonymous with advocate. Ethnically most were French, two were Jewish. Almost all aimed for the new target "middle-class" markets described in Chapter Four, building single-family houses and a few duplexes in southern Saint-Antoine, upper Saint-Louis and

western Saint-Jacques Wards. The two Jews, Frederick and Henry Judah, besides being advocates, were also a solicitor for the Trust & Loan Company of Upper Canada and a Seigneurial Tenure Commissioner respectively. Both were obviously into property-based activities and each had a sumptuous mansion on Dorchester Street near the city limits, perched on the cliff overlooking their huge speculative housing developments below.

The mercantile and finance capitalists were a disparate group. François-Xavier Beaudry brashly labelled himself "owner of 200 houses" in the city directories. He built 19 buildings according to the permits, almost all shop and dwelling combinations in lower Saint-Laurent Ward. Jean-Baptiste Beaudry was director of the Jacques-Cartier Bank and of the Mutual Insurance Company. He erected 16 luxurious single-family row houses near his mansion. Jean Leclerc, a big leather and commission merchant, built triplexes and single-family houses on a small street in the heart of the city. Jesse Joseph, the Belgian Consul and a prominent Jew in Montreal, concentrated on mixed commercial-residential buildings in the wealthiest part of town. The most outstanding developer in Montreal, was Alexander Foster, a Scot, owner of a brokerage and warehousing firm, who built 67 luxury two-and-a-half storey stone single-family houses, 55 of them in one single year (1871). With one sweep he built up the neighbourhood immediately adjacent to McGill College

(University) on Lorne, Shuter (Aylmer) and Prince Arthur Streets.

Taking all 67 large-scale developers together, some social patterns become clear. Contractors and building trades artisans formed almost half the group [see Table 5.4]. Together with wholesalers and retailers, this group formed 59.7% of all large-scale developers. Only two other groups stood out among the remaining 40.3%: professionals and big mercantile and finance capitalists.

When comparing these findings with Sam Warner's 122 most active builders¹⁸, we find that the proportions vary with certain occupational groups, however it is interesting to note that the hierarchy remained the same in the two cities. Boston simply had relatively more contractors and proportionately fewer merchants, financiers, wholesalers, retailers and advocates involved in large-scale housing development. As in Montreal, manufacturers, non building-trades artisans and all segments of the working class were absent from large-scale development.

The large-scale house builder in Montreal had one more specific social trait - he was more likely to be of French-Canadian origin. Comprising about 68% of the whole group, French-Canadians represented but 53% of the total

population of the city of Montreal in 1871¹⁹. These French-Canadian entrepreneurs, coming from the ranks of carpenters and joiners, eventually became contractors, and joined by French-Canadian advocates, were Montreal's big housing developers. English and Scottish developers were present roughly in proportion to their population percentages. Only the Roman Catholic Irish were missing from the equation.

THE SMALL-SCALE PROFIT-ORIENTED BUILDER

The other 1,505 small-scale builders diverge significantly from the social-class patterns of the large-scale group. The bourgeoisie and the petite bourgeoisie recede, while the working class gains in importance. These trends are magnified when one pares down the small-scale builders to the smallest operators - the one-and-two house builders [see Table 5.4].

Professionals and managers represented only 5% of all small-scale builders and the bourgeoisie only 8.2%. Little need be said about them. Instead the focus will be on the artisans and entrepreneurial petite bourgeoisie who formed half (53.8%) of the small-scale builders, and the working class who formed a quarter (23.9%). Among the artisans, the building trades were as important as ever (22.1%), and artisans outside the building trades even gained some

prominence (8.2%). Local retailers were also a significant factor (11.2%).

If we sort out small-scale builders by individual occupation, we find that carpenters and joiners were the largest single group, representing a full 16% of all small operators. The second largest occupational group was grocers, representing 6.6%. In fact, small-scale construction was heavily influenced by a battery of small local storefront or workshop businessmen including grocers, butchers, storekeepers, blacksmiths and saloonkeepers in that order.

These people, generally on location day in and day out and in touch with the local population as customers, used their local knowledge to make investments in housing. Their role in housing development was significant in every area of the city except affluent northern Saint-Antoine Ward. Nowhere were they more important than in the working-class districts - Sainte-Anne, eastern Saint-Jacques and Sainte-Marie Wards - especially if local wholesalers are added in too. They were also just as important in Saint-Louis Ward which had concentrated working-class areas in its heterogeneous make-up.

To typify this group of builders, we might look at Clément Soulière, a grocer, who built a duplex in 1871 and a shop with flats above in 1873 on Ontario Street in

Sainte-Marie Ward. He moved his residence into the duplex and rented out the other flat. He also moved his business into the shop space and rented out the flats above. The building enterprise for him was not a terminal investment. It was a way of supplementing his income on a long-term basis. In contrast, Léon Perrault, a grocer who built a duplex and a shop with dwellings in Saint-Louis Ward liquidated his newly created assets. He moved neither his residence nor his business into these properties but disposed of them instead.

Small-scale builders drawn from the building trades were the real developers of Montreal. They dominated small-scale housing construction in every ward but two - affluent northern Saint Antoine and Saint-Laurent. In the eastern wards their presence was overwhelming. They were mainly carpenters and joiners, but their numbers included bricklayers, masons, stonecutters, plasterers and roofers. They were the main propagators of Montreal's vast duplex cityscape by copying and repeating the model wherever working-class markets existed.

Jean-Baptiste Gagné, a bricklayer, was typical of many of these small-scale builders. He built a very cramped duplex - only 16 feet wide (about five metres) with a flat roof - and took up residence in one of the flats. The next year he built another duplex next door. We have no record of any other construction. These projects were on Panet Street in the

heart of the working-class East End. Nearby on Sainte-Catherine Street, Joseph Bleau, a joiner, built a more standard 21 foot (6.4 metres) flat-roof duplex in the rear of his lot in 1869. He too moved into one of the flats. Building in the rear of a lot was a typical feature of development in working-class neighbourhoods. Usually about a decade or so later, a builder - not necessarily the same person - would close off the front of the lot with another duplex leaving a passageway or tunnel for access to the rear. Just as often, the pattern was reversed, building in the front first and adding rear courtyard housing later.

In the same vast east-end working-class district, Benjamin Dénommé, a joiner, built a row of four duplexes (organized as a pair of fourplexes) on Beaudry Street in 1875. He did not occupy these houses but moved from one address to another in the area every year. Perhaps he was trying to confuse his creditors. Joseph Peltier, was a more diversified joiner. In 1873 he erected four duplexes, and in 1876 he built one triplex and two shop and dwelling combinations on separate sites, all in Saint-Jacques Ward. The foregoing examples demonstrate the versatility of most east-end operators.

While house builders involved in the building trades did not quite dominate in the West End as they did in the East

End, they were the largest occupational group in Sainte-Anne and southern Saint-Antoine Wards. George Monette, a joiner, was such a developer in southern Saint-Antoine. He built himself a modest single-family house on Saint-Martin Street in 1870, then went on to build a concentrated little development across the street in 1875. In a 34 foot lot (10.4 m) he squeezed two triplexes (a sixplex).

In Sainte-Anne Ward, François Leduc, a carpenter, took a different tack, erecting a row of four single-family houses on Magdalen Street (Sainte-Madeleine), obviously aiming at the market amongst skilled workers at the Grand Trunk Railway shops nearby. He himself lived across the tracks in the same neighbourhood and was one of many builders to seize the opportunity presented by the presence of a large number of salaried workmen.

All those involved in the building trades were traced over the span of the building cycle. We have already discussed the occupational fluidity of building contractors who frequently reverted to carpenter-joiner status. The same sort of versatility is evident among the carpenter-joiners themselves (i.e. those who were not contractors). It was found that other occupations sometimes entered into the situation, usually temporarily. This was probably an indication of the risks involved in house building or of a

downturn in construction forcing them to find other employment.

George Simpson, for example, who built two duplexes in northern Saint-Louis Ward in 1870, listed himself variously as a carpenter or as a joiner. In 1873, following the building project, he became a foreman, although we do not know for whom. From 1875 on, he consistently listed himself as a carpenter. Joseph Labrèque, also a carpenter-joiner, built two triplexes on southern Saint-Louis, then listed himself as a cabinetmaker for two years. While a cabinetmaker, he allied himself with a contractor and together they built six single-family houses. He later reverted to being a carpenter-joiner as did the contractor.

SMALL-SCALE BUILDER PARTNERSHIPS

This latter example raises the question of the role of partnerships. There were very few declared partnerships among the permits. Only 11% of all speculative builders formed such joint ventures. The vast majority of those partnerships built only two or four houses, usually duplexes, placing them squarely in the small-scale builder camp. However, circumstantial evidence points to a large percentage of unofficial partnerships, in the form of family groups.

Illustrative of this phenomenon is the permit taken out by Télesphore Nadon, a joiner, for two small flat-roof duplexes on Durham Street (Plessis) in Sainte-Marie Ward in 1871, followed by two more next door in 1872. He moved into one, then the other, as did François Nadon, a plasterer, and Sylvain Nadon, a labourer. One can guess that the three were brothers and that the construction of the duplexes was undertaken jointly. Perhaps only Télesphore appeared on the permit because he arranged the financing. Perhaps the three made an unwritten profit-sharing deal. We will never know. Eventually all three moved out. This pattern repeated itself elsewhere in the city but most frequently in the East End.

In Griffintown (Sainte-Anne Ward), John Britt, a grocer living on Nazareth Street, took out a permit in 1877 and built a duplex on the lot next door. The city directory shows that Dennis Britt, a ship carpenter, became an immediate resident in the duplex, and the 1881 atlas shows he was the owner of the new building. We can surmise that John probably put up the capital initially but that presumed brother Dennis contributed the building skills and through an agreement acquired the property. This informal type of partnership appears to have been common.

Figure 3.9 in Chapter Three illustrates another common type of joint undertaking not officially recorded in the

permits as a partnership. The permits show that four separate individuals each built a duplex on Saint-André Street. Field research showed the architecture to be identical on all four duplexes. City directories gave their occupations as carpenter, joiner, bricklayer and plasterer. Apparently these four skilled workmen, each with skills complementing one another, collaborated on the design and execution of this row of four duplexes. Yet each owned and lived in his own duplex, renting the other flat. The point is important as uninformed field observation would automatically conclude that one builder was behind the entire row. Many row housing projects in Montreal, especially in working-class districts, were built under this form of partnership.

We have often referred to cases where builders moved into their projects, occupying them as a residence. The practice was indeed widespread among speculative builders. About 40% were found to have occupied at least one of their buildings right after construction. In the majority of cases this meant moving into a duplex flat. This made the house builder a landlord as well. The situation was usually temporary as it was found that builders rarely stayed long in their projects. The more likely pattern was one where the builder occupied his project but because of financial stringency had to sell it a year or two later. The new owner might have wished to move in himself, or the builder might have left of his own volition.

There is also the possibility the builder might have been living in the house as a tenant, having sold it to repay his debts.

WORKING CLASS BUILDERS

It remains to look into the role of the working class who accounted for a quarter of all small-scale builders, or 28% of the one-to-two house builders [see Table 5.4]. The skilled and semi-skilled worker was the most active, but the unskilled workers and manual service workers were quite visible. Only white-collar workers were absent.

The skilled worker as a builder was noticeable in three specific areas: Sainte-Anne, southern Saint-Antoine and Sainte-Marie Wards. These were the areas where all the large factories were. Thus a number of boilermakers, engineers (boiler mechanics), moulders, machinists, shipbuilders (at Canada Marine Works), coopers, tanners, etc., appear to have accumulated enough savings from their wages to engage in housing development on a modest scale.

Typical of the group is Moses Cockfield, an English fitter at the G.T.R. shops, who built two flat-roof duplexes on Congregation Street in 1873 adjacent to the shops in Sainte-Anne Ward. He moved into one of the four flats

himself. Isidore Godin, a French-Canadian boilermaker, erected two flat-roof triplexes on a 30 foot lot (9.1 m) near the city limits in southern Saint-Antoine Ward. Being 30 feet wide, the triplexes constituted in effect one building with six flats, as the bylaws allowed buildings up to that width with no interior firewalls. This sixplex can be considered typical of the minimum standard housing of the era. Godin occupied one of the flats as did most skilled workers who built houses.

More surprising were the strong showings by shoemakers (semi-skilled workers) and labourers (unskilled). Neither would be expected to receive high wages yet both contributed significantly to the working-class participation in speculative building. These groups operated in Sainte-Marie Ward alone. Labourers were the third largest group of developers in that ward after building trades people (carpenter-joiners) and retailers (grocers).

Although shoemakers in general are known to have concentrated in Saint-Jacques and Sainte-Marie Wards, there is no plausible explanation for their non-participation in house building in the former ward. Labourers were present in large numbers in almost every ward. Why only those in Sainte-Marie should be so active in building houses remains a puzzle. Not even the existence of a distinct working-class "village" in

eastern Sainte-Marie Ward helps to explain the situation. This was where the bulk of the large east-end factories were located, but our labourers and shoemakers neither lived nor built their houses there. Their base of operations was strictly western Sainte-Marie Ward, the zone between Visitation and Papineau Streets, especially north of Sainte-Catherine Street.

Examples of these singular builders include Modeste Beaudoin, a labourer, who built two flat-roof duplexes in the rear of a lot on Visitation Street in 1868. He moved into one of the flats. Similarly, André Lachapelle, a shoemaker, built one duplex on Durham Street (Plessis) nearby in 1870. He too occupied one flat. Virtually all the labourers and shoemakers opted for duplexes, and remained in the one-to-two house range. The only other sizeable working-class group was the carters who showed the same concentration phenomenon in western Sainte-Marie Ward. Their development patterns were also similar. Thus, working-class builders, who represented nearly a quarter of all small-scale operators, were evident only in Sainte-Marie Ward, save for a significant showing by skilled workmen in the western wards.

ETHNICITY PATTERNS AMONG BUILDERS

Each ward showed some degree of specialization among its

builders. Affluent northern Saint-Antoine and Saint-Laurent Wards were unique, with the presence of small-scale builders who were outside the mainstream. Here the bourgeoisie and contractors were the principal small-scale operators. Meanwhile, somewhat affluent western Saint-Jacques Ward was built by contractors in alliance with the building trades artisans to the virtual exclusion of all other groups.

A look at the overall ethnic patterns of all speculative builders leads us to a comparison with the ethnic distribution of Montreal's population. The census definition of national origins, meaning the ethnic origins of the head of household (not necessarily the place of birth), was used to classify the population by ward. The 1871 census was retained in preference to the 1881 as being more representative of the city's make-up when most builders were making their construction decisions.

To classify builders, the simple expedient of ethnic surname dictionaries was employed²⁰. French surnames presented no problem. To sort out the surnames of the three other main groups - English, Scottish and Irish - the dictionaries proved invaluable. The fact that we had first names in every case was also helpful. Because of the considerable crossover between northern English and Scottish surnames, a decision was reached to combine these groups,

include the Welsh, and classify them together as British. Irish names proved fairly easy to sort out as a separate group. The few that could not be distinguished from Scottish or English names represented only 2.4% of all speculative builders. These were classified as "unknowns". While surname dictionaries are less useful in a mixed ethnic population of long standing because of intermarriage, it was assumed that this would not be a major factor in Montreal in the 1870s due to its generally new population.

By referring to Table 5.5 it becomes evident that the most significant ethnic attribute of speculative builders was that they were French. While the French made up half (53%) of the city's population in 1871, speculative builders were over two-thirds (68.3%) French. The English (21.2%) contributed speculative builders in almost exact proportion to their population (21.6%), while the Irish (23.7%) were under-represented (6.8%) as builders²¹.

In every single ward French-Canadian builders were over-represented, relative to their proportion of the population. The British group was over-represented in the three "English" wards of Sainte-Anne, Saint-Antoine and Saint-Laurent, although it managed to hold its own in Sainte-Marie Ward. The Irish were definitely the non-participators in the game of housing development.

TABLE 5.5 ETHNICITY OF PROFIT-ORIENTED BUILDERS
MONTREAL: 1866-1880 BUILDING CYCLE

WARD	FRENCH CANADIAN %	ENGLISH SCOTTISH %	IRISH %	OTHER %	UNKNOWN %
<u>SAINTE-ANNE</u>					
BUILDERS	27.8	37.2	28.3	1.1	5.6
POPULATION	26.5	22.4	49.8	1.3	0
<u>SAINT-ANTOINE</u>					
BUILDERS	42.6	41.5	8.8	2.5	4.6
POPULATION	38.9	35.6	24.1	1.4	0
<u>SAINT-LAURENT</u>					
BUILDERS	42.5	45.1	7.1	3.5	1.8
POPULATION	29.1	33.9	33.1	3.7	0.2
<u>SAINT-LOUIS</u>					
BUILDERS	79.7	14.2	3.7	0.8	1.6
POPULATION	69.3	16.9	10.9	2.8	0.1
<u>SAINT-JACQUES</u>					
BUILDERS	93.4	3.9	2.1	0.3	0.3
POPULATION	82.5	8.0	8.2	1.3	0
<u>SAINTE-MARIE</u>					
BUILDERS	89.9	7.3	1.8	0.5	0.5
POPULATION	77.8	7.0	14.1	1.1	0

NOTES Population percentages are calculated from the 1871 Census of Canada.
East-Centre-West Wards are not shown here because the number of builders is too small to produce meaningful results. However, the French clearly dominated here too.
English-Scottish category also includes Welsh.

Even in Sainte-Anne Ward, they fell far short of their share of the population. The sizeable Irish population in Saint-Laurent Ward was largely absent from the building process as was the east-end working-class pocket. The city was French by a slim majority and that majority made its presence felt in the building process.

INSTITUTIONAL AND CORPORATE DEVELOPERS

In the foregoing discussion about small and large-scale builders, we have omitted one important group of developers. There were institutions and corporations in Montreal who built houses. The institutions were basically religious or charitable organizations and the corporations were building associations. Almost all were involved in building houses on speculation. The permits reveal 266 houses built by institutions and corporations or 5.3% of all residential buildings. The proportion is much the same as the number of non-speculative houses. In spite of their small number, they are worth pausing over because of their impact on specific areas and markets.

A tiny number of these houses were built by institutions for reasons other than profit, for example, a parsonage, a house for the city's weigher, the principal of an academy. Charitable institutions did build speculatively, however, as a

means of investing capital in land they already held and making a profit for the organization. Roman Catholic institutions were the leaders in this practice, no doubt spurred on by their generous land endowments. None was prolific. Four such institutions did, nevertheless, attempt some serious investments in housing development.

The Montreal "évêché" or Roman Catholic Diocese acted as a small-scale builder, building two houses here, three houses there, 14 in all, generally within a stone's throw of the Cathedral in northern Saint-Antoine Ward. They built one row of duplexes in southern Saint-Antoine. The rest were elegant stone single-family houses in the northern part of the ward. All were architect-designed and built by local contractors.

The Sulpician Seminary, the "Messieurs de Saint-Sulpice", former "seigneurs" of the Island of Montreal (i.e. holders of ground rents and other privileges until the system was abolished in the middle of the nineteenth century) were also the largest landowners in Montreal. But they appear to have exercised only once the option to develop their land themselves, rather than simply subdividing and selling it. In northern Saint-Antoine Ward they built 14 stone single-family houses in 1875 in a cluster adjacent to the Grey Nuns' Convent. All were aimed at the affluent market.

The Nuns of the Hôtel Dieu Hospital were the only female order to invest in housing development. Their project opposite the hospital in suburban Saint-Laurent Ward, consisted of nine brick single-family houses built in a row. The only Protestant organization to engage in speculative building was the Protestant Home of Industry and Refuge. The members of its official board, drawn from Montreal's anglo-Protestant élite, apparently decided to generate some income for this society by developing its land in southern Saint-Laurent Ward with a row of six single-family houses and four shop and dwelling combinations.

Although the total housing production by institutions was modest, these different organizations did behave in much the same way in their response to the market for housing. They favoured the upper end of the market where profit margins were wider. The single-family house of masonry construction was the usual model. With the exception of one row built by the Diocese, institutions did not involve themselves in the dominant form of housing, the duplex. They restricted themselves to northern Saint-Antoine and Saint-Laurent Wards which were definitely bastions of single-family housing. These houses were all intended as long-term income generating properties as the Goad atlas of 1881 shows most of them still in the hands of their original owners, despite their single-family configuration. In short, these houses

represented an alternate form of investment for these religious institutions.

Corporate housing development, on the other hand, was big business. Two corporations shared the market - the Colonial Building & Investment Association, and the Montreal Building Association (M.B.A.). Both were joint-stock corporations set up as shareholder owned companies. In each case the shareholders were among Montreal's leading financiers, merchants and manufacturers. The Montreal Building Association was incorporated in 1868 having set out, in rather quaint terms, its purpose:

Whereas the persons hereinafter named, by petition, have represented that, mainly with the view of meeting wants long and widely felt - of providing increased and improved accommodation for those large and eminently useful classes of the community who, unaided, must remain unable generally, to acquire it, and also of inducing and enabling them, gradually to become owners absolute of houses or dwellings, such as comfort, health and decency require, the petitioners desire to engage in the business of acquiring all such lands or lots, and erecting, temporarily holding and afterwards transferring or otherwise disposing of all such buildings, houses, or other premises as are or may be necessary to meet the wants or supply the requirements above mentioned²².

The statement of purpose sounds like a philanthropic enterprise, but in fact those whose comfort, health and decency they wished to promote by building houses for home ownership tended, in fact, to be their managers, chief

cashiers, factory superintendents, brokers and agents. This apparently was what they meant by "useful classes of the community". Their houses were luxurious by 1870s standards.

The Colonial Building & Investment Association was much more frank about its purpose:

Whereas the persons hereinafter named ... have petitioned for an Act of incorporation ... whereby powers may be conferred ... for the purchase of building materials, to construct an improved class of villas, homesteads, cottages, and other buildings and premises and to sell or let the same²³.

This it did, building far fewer houses than the M.B.A. (only 30), but building innovatively. Its houses were distinctive, and avant-garde in design. They were also unabashedly luxurious.

The Montreal Building Association was the city's largest housing developer. With 167 houses to its credit, according to our permits, it alone represented 3.3% of the city's new housing produced during the 1866-1880 building cycle. It was definitely a force to be reckoned with. Despite the volume, or perhaps because of it, its products followed standardized techniques. Virtually all its houses had mansard roofs, were of brick or stone masonry construction and featured a basement.

The M.B.A. had two specific markets in mind for its houses. One was the luxury market which it met by building its standard two-and-a-half storey model in northern Saint-Antoine and Saint-Laurent Wards. The other was the more modest one-and-a-half storey model aimed at the white-collar fringe zones of northern and southern Saint-Antoine, and especially northern Saint-Louis Ward. The M.B.A. was instrumental in helping to carve out the single-family house pocket in this area (see Appendix, district 15). The ethnic division of Montreal was apparent in the M.B.A.'s complete absence from the housing market in affluent western Saint-Jacques Ward. This was a natural market for its house models, but was also the home of the French élite, while the M.B.A. was run by individuals from the British élite.

The M.B.A. made one very significant departure from its standard offerings. In 1873, with several years of successful construction behind it, the company ventured into working-class Montreal. It built six narrow single-family houses across the tracks in southern Saint-Antoine Ward. This was duplex and triplex territory. The houses were of a plankwall construction, featured two storeys and had a flat roof with no basement, a departure in almost every way from the M.B.A.'s architectural practice. Evidently the project was not profitable enough as the company did not repeat the experiment, retreating instead to its familiar ground up the

slope nearer Mount Royal.

From a design point of view, the Colonial Building & Investment Association was a precursor. Builders would catch up to its architectural innovations 15 to 30 years later. However, it was the Montreal Building Association which created the real model for successful housing development. Its repetition of standard tried-and-true housing models, even if somewhat conservative, with a corporate structure capable of commanding respect in the money market, was the formula which would be used increasingly during the twentieth century.

The performance of institutional and corporate developers demonstrates the dichotomy in Montreal's housing market. The fact that they restricted themselves to a luxury housing market points to its higher profitability. The fact that the few forays into Montreal's working-class markets were not repeated says a lot about housing development for the poor. It was impossible to build something the working class could afford to pay for and expect to come away with a large profit. That market was therefore left for the local carpenter-joiner, carter or grocer.

The quintessential house builder in Montreal was a French-Canadian petty commodity producer. He was essentially an artisan drawn from the building trades. He built one to

four houses, almost always duplexes, during the course of the 1866-1880 building cycle. If he was successful he went on to become a full-fledged contractor. He was imitated by others, especially local retailers and artisans outside the building trades, also generally French-Canadian. Other imitators included French-Canadian blue-collar workers who were smaller scale still in operations (one to two houses). Together, these individuals, whether grocer or labourer, built up Montreal's new housing bit by bit in every corner of the city.

FOOTNOTES - CHAPTER FIVE

1. Sam B. Warner, Streetcar Suburbs - The Process of Growth in Boston, 1870 - 1900 (Cambridge: Harvard University Press, 1962), pp. 127-130.
2. Michael Doucet, "Speculation and the Physical Development of Mid-Nineteenth Century Hamilton", in Shaping the Urban Landscape: Aspects of the Canadian City-Building Process, eds. Gilbert Stelter and Alan Artibise (Ottawa: Carleton University Press, 1982), pp. 193-194.
3. Harold J. Dyos, Victorian Suburb - A Study of the Growth of Camberwell (Leicester: Leicester University Press, 1961), pp. 124-125.
4. The only exception was a consortium of four builders who banded together to produce 54 houses. Whether this production is divided by four or not does not affect their status as large-scale developers.
5. Doucet, op.cit., 194-195. Based on this extremely small scale of development, Doucet reached the wrong conclusion, supposing instead that this was an indication of widespread non-speculative development. Had he checked further he would have found, as have researchers elsewhere, that this was actually the scale at which speculative builders worked and that only a minority of these people were non-speculative builders.
6. Warner, op. cit., App. B, p. 185.
7. Robert Lewis, "The Segregated City: Residential Differentiation, Rent and Income in Montreal, 1861-1901," M.A. Thesis, Department of Geography, McGill University, 1985, pp. 92-93.
8. See Frank Parkin, Class Inequality and Political Order: Social Stratification in Capitalist and Communist Societies (London: MacGibbon & Kee, 1971), and Gerhard Lenski, Power and Privilege: A Theory of Social Stratification (New York: McGraw-Hill, 1966).

9. See Talcott Parsons, Essays in Sociological Theory, rev. ed. (New York: Free Press of Glencoe, 1954).
10. See Karl Marx, Capital (New York: Vintage, 1977), I.
11. See Erik Wright, "Class Boundaries in Advanced Capitalist Societies", New Left Review, No. 98 (1976), pp. 3-41; Nicos Poulantzas, Political Power and Social Classes, trans. Timothy O'Hagan, (London: Sheed & Ward 1973); G. Carchedi, "On the Economic Identification of the New Middle Class", Economy and Society, 4, No. 1 (1975), pp. 1-86; Leo Johnson, "The Development of Class in Canada in the Twentieth Century", in Capitalism and the National Question in Canada, ed. Gary Teeple (Toronto: University of Toronto Press, 1972), pp. 141-183.
12. See Michael B. Katz, The People of Hamilton, Canada West: Family and Class in a Mid-Nineteenth-Century City (Cambridge: Harvard University Press, 1975).
13. See Brian Palmer, A Culture in Conflict (Montreal: McGill-Queens University Press, 1979).
14. Carchedi, op. cit., pp. 46-47.
15. Ibid., p. 50.
16. Ibid., p. 51.
17. Ibid., pp. 46-47.
18. Warner, op. cit., App. B, p. 185.
19. Census of Canada, 1870-71 (Ottawa: 1873), I.
20. The sources consulted for sorting ethnic origins by name were: George Black, The Surnames of Scotland, (New York: N.Y. Public Library, 1946); Basil Cottle, The Penguin Dictionary of Surnames, (Harmondsworth: Penguin Books, 1967); Owen Connellan, The Annals of Ireland, (Dublin: 1846); Percy Reaney, The Origin of English Surnames, (London: Routledge & Kegan Paul, 1967); Elsdon Smith, American Surnames, (Philadelphia: Chilton Book, 1969).

- 21. Census of Canada, op. cit.
- 22. Statutes of Quebec (1868), 31 Vic., cap. 41.
- 23. Statutes of Canada (1874), 37 Vic., cap. 103.

CHAPTER SIX

FINANCING NEW HOUSING

THE MARKET FOR MORTGAGE MONEY

The financing of housing development, just as much as the social origins of housing developers, is another key area of nineteenth-century urban research which has received little attention. If we are to understand the role of housing as a spatial sorting mechanism of urban society, both the producers of housing and their means must be exposed. This thesis has sought to explore the producers of Montreal's residential buildings through an exhaustive study of one entire building cycle. Looking into how these producers found financing for their production demands an even more complex study, which is unfortunately beyond the scope of this thesis.

We are able to add to the knowledge of the financing of nineteenth century urban development by undertaking a few strategically planned areas of research. These shed considerable light on the house construction financing process in Montreal. It is hoped that the results will encourage other scholars to begin researching the financial history of housing.

The starting point of our discussion on the capital

market in housing development in Chapter One centered on the presumed low profits, high risk and slow turnover associated with construction financing. Theoretically, the supply of funds for residential construction was a residual flow from the capital markets. This implied that financial institutions would generally shun such financing endeavours. Yet just as surely as housing was being built for profit, so there had to be a market for mortgage money. Since few houses were built by individuals strictly for their own personal consumption, the market for mortgage money had to be a substantial one [see Chapter Five]¹. Between 1868 and 1877, excluding 1872 for which we have no data, the building permit records reveal 1,572 different builders or 94.5% of all non-institutional permit holders were building for profit². Since "speculative" housing construction was the norm and Montreal was such a fast growing city [see Chapter Three], the market for mortgage money must have been important.

If housing is a branch of commodity production and is bought and sold in order to reap potential profits at every transaction, one could expect that a specialized segment of the capital market would develop to provide funds for this branch of the capitalist economy. Normally this would take the form of an institution set up as a financial intermediary designed to buy and sell capital while using land and any buildings erected thereon as collateral for the extension of

mortgage financing. Although Montreal was the largest urban centre in Canada, and oriented heavily toward housing for profit, there was a surprising weakness of institutional mortgage financing as we shall see.

Most of the specialized forms of institutional financing we know today were developed in the nineteenth century. Montreal was the location from which most of the country's capital developments such as railways, steamship lines, and factories were organized and financed, or at least through which they were handled. For the large amount of financing originating in Great Britain, Montreal was the intermediary, containing the largest number of financial head offices and Canadian offices of British and American financial institutions³.

Aside from little tidbits of information which appear from time to time in various researchers' work, we owe what we know about mortgage financing in the nineteenth-century Canadian urban context to Edward Neufeld. There is nothing else even approaching a systematic or even monographic treatment of the subject. Neufeld, in his seminal work, The Financial System of Canada, devotes an entire chapter to the development of building societies and mortgage loan companies in Canada⁴. The subject of mortgage financing crops up elsewhere in his book as well. By force of circumstances, Neufeld will provide

the basic frame of reference for the ensuing discussion of mortgage financing in 1870s Montreal.

The aims of this chapter are limited, insofar as the building permits on which this thesis is based yielded no financial information whatsoever. New sources of material must be examined if the mystery surrounding the financing of housing is to be unlocked. The strategy pursued is to first complement Neufeld's work by providing a closer examination of Montreal's institutional mortgage lending network in the 1870s. Neufeld focussed mainly on developments in Ontario. With material generated from John Lovell's City Directory, Charles Goad's 1881 Atlas of the City of Montreal, the Government of Canada's Sessional Papers and Canada Gazette, and both the Statutes of Canada and the Statutes of Québec, we will be in a position to fill the void in knowledge concerning the state of mortgage financing institutions in Montreal.

Secondly, a more intimate look at the realities of financing housing construction and how builders coped with the problem will be done through very selective readings of Deed of Sale and Deed of Loan records contained in the Government of Québec's Montreal Registry Office. These are copies of the notarized documents affecting urban properties. Three case studies will be undertaken of the actual financing of newly built-up streets in Montreal. These case studies were

selected to illustrate in depth the development histories of three key types of houses in three neighbourhoods of the 1870s.

One, a case study of Wolfe Street in Saint-Jacques Ward, represents working-class Montreal with its classic fourplexes in a row. A second case study examines Drolet Street in Saint-Louis Ward where one of the many large developments of small single-family row housing in a burgeoning white-collar neighbourhood was located. Finally, in a third case study, we will look at housing near the top of the hierarchy by choosing an example of luxury houses on Sherbrooke Street in Saint-Antoine Ward. Before examining mortgage financing at the builder's level, let us first look at the framework within which such financing operated.

MARGINAL FORMS OF INSTITUTIONAL MORTGAGE FINANCING

To gauge the amount of institutional mortgage financing and to find the sorts of institutions involved in such activity in Montreal, we will examine Charles Goad's 1881 Atlas of the City of Montreal, which shows the owner of every building in the city⁵. The mortgager or lender is not normally the legal owner unless the mortgagee cannot meet his financial obligation. In cases of default, repossession would cause the mortgage lender's name to appear in the Atlas. If

that lender was a corporation, then its name should so appear, giving us a rough idea of what corporations were involved in mortgage lending. Repossessions should be plentiful as 1881 was a year of economic depression. The figures provide a rough indication of institutional mortgagor patterns in a snapshot at the end of our building cycle (consistent with the scope of this thesis, only residential and mixed residential-commercial buildings were verified). Of course the unknown element in this exercise is how many repossession were initiated by private individual mortgage lenders. We will come back to individual mortgage lenders later.

Only a handful (0.4%) of residential properties were listed under the ownership of banks in the 1881 atlas. Put in other terms, chartered banks held one-tenth of the residential buildings repossessed by financial institutions [see Table 6.1]. Because the Banque d'Hochelaga and Banque Ville-Marie appear repeatedly on new residential buildings, we suspect that they were engaged in illicit mortgage financing. Or they may have been discounting notes from merchants which included credits extended by the latter to others for housing construction.

Following British practice, Canadian bank charters generally prohibited the banks from lending mortgage money, and charters granted or reviewed after the Act of Union in

TABLE 6.1 RESIDENTIAL BUILDINGS OWNED BY FINANCIAL INSTITUTIONS
MONTREAL, 1881

WARDS:	CHARTERED BANKS	SAVINGS BANKS	INSURANCE COMPANIES	BUILDING SOCIETIES MORTGAGE LOAN CO'S	TOTALS BY WARD	ALL RESIDENTIAL BUILDINGS IN MONTREAL
STE-ANNE	0	0	6	47	53	1982
ST-ANTOINE	30	0	0	77	107	4171
ST-LAURENT	0	0	0	9	9	1910
ST-LOUIS	8	0	1	54	63	2373
ST-JACQUES	9	0	0	130	139	2552
STE-MARIE	18	0	0	265	283	2594
TOTAL:	65	0	7	582	654	15581
PERCENTAGES:	10	0	1	89	100	
PERCENTAGE OF ALL RESIDENTIAL BUI- BUILDINGS	0,4	0	0,04	3,7		4,2

Chartered banks: Banque d'Hochelaga 30
 Banque Ville-Marie 22
 Bank of Montreal 9
 Banque Jacques-Cartier 4
 Insurance company: Sun Mutual Life Insurance 7

NOTE: Ownership is equated with repossession by reason of default on mortgage payments to the financial institution in question. An additional 47 houses in St-Antoine and 6 more in St-Laurent Wards have been omitted from the count as these were built directly by building societies according to building permit records. They might well have been repossessed but more than likely reflect lingering ownership by the building society that built them, justifying their omission here.

SOURCE: Charles Goad, Atlas of the City of Montréal (1881).

1840 specifically included provisions prohibiting banks "from lending on the security of lands [and] houses ... or holding lands or houses except for the transaction of their business"*. The regulation did not entirely prevent the practice. For example, illicit operations were made obvious during the spectacular failure of the prestigious Bank of Upper Canada in 1867'.

The official returns of the chartered banks for 1875 show nationwide average monthly assets of \$744,000 in real estate other than bank premises, a mere 0.4% of their total assets*. Both the national statistics and our investigation confirm that chartered banks, despite their vast capital resources, may be reasonably excluded from further study of mortgage financing.

Savings banks, on the other hand, held no residential property in Montreal in 1881. This is not surprising as by 1871 there were only two privately controlled savings banks (one in Montreal and one in Quebec City), a handful of savings branches run by the chartered banks, and a string of savings banks operated by the Federal Government generally through the Post Office¹. Moreover, loans on real estate were prohibited by law¹⁰. Gone was the possibility that Sam Warner notes in Boston's case: Massachusetts, since 1834, "had established a number of mutual savings banks that served as a useful means

of gathering small savings and pooling them for mortgage investment¹¹. Small investors could not turn to this source of capital funding for housing construction in Canada.

What about insurance companies? Along with the chartered banks, they were among the most powerful and fastest growing instruments in the circulation of capital. Property and casualty insurance companies were not likely to mobilize capital for long-term investments, as the nature of their business was short-term policies, and claims against them varied from year to year¹². Life insurance companies though, were undoubtedly a vital source of real estate mortgage capital. They were allowed to invest their funds in real estate and by 1881 about three-quarters of their total assets were in real estate mortgages and bonds¹³. Life insurance business was split up between Canadian, American and British firms, the Americans being responsible for about half of all life insurance in force in Canada in 1875, with Canadian and British firms dividing up the other half. Montreal was the locus of 21 out of 29 foreign firms maintaining head offices or chief agencies in Canada, but only two of the seven native life insurance companies¹⁴.

The Goad Atlas of 1881 shows only seven residential buildings (three properties) held by an insurance company, the Sun Mutual Life Insurance Company. This represents only 1% of

all such buildings owned by financial institutions [see Table 6.1]. What happened to the 73% of insurance assets invested in real estate in 1881? It must be remembered that the majority of insurance firms located in Montreal were foreign and these companies tended to siphon their funds away to their country of origin¹⁵. Also Montreal's two native companies were new to the business in the 1870s. The real heartland of the native insurance business was in Ontario.

It is possible that insurance companies were also very selective as to where they invested their funds, preferring wealthy neighbourhoods to poor ones or perhaps larger commercial properties in the downtown areas to small residential properties. Their strong concentration on huge office projects in Canadian central business districts today lends credence to such a possibility¹⁶. Or perhaps their mortgage financing went into land speculation and subdivision instead of buildings, the arena of an entirely different set of investors and segment of society. Land speculation was a pursuit enjoyed by the bourgeoisie¹⁷, not by the typical builder who operated at a very small scale of investment. It was the bourgeoisie who controlled life insurance companies in the 1870s¹⁸.

Further research into insurance company records could clarify their role in real estate investments. One thing

appears certain. Their involvement in small-scale residential construction, the type that dominated Montreal's housing industry, was probably nil.

BUILDING SOCIETIES AND MORTGAGE LOAN COMPANIES

What does stand out in Table 6.1 is the heavy participation of building societies and mortgage loan companies in the mortgage financing business in Montreal. They were active in virtually every ward of the city except the central business district. As measured in 1881 [see Table 6.1], the building societies were responsible for 89% of all repossession by mortgage financing institutions. What is even more striking is that the location of these repossession is almost exclusively in new areas of development. As none of these repossession occurred in new wealthier areas of the city, we can deduce that the building societies at least played an active role in financing construction in working-class areas. The potential for a link with our small-scale builders is strong. We will come back to this link in a case study of Wolfe Street. First we need to understand how these institutions were structured, how they functioned, and who was behind them in Montreal.

Building societies and mortgage loan companies were near the peak of their development in the 1870s. They would be

gradually superseded by trust companies beginning in the 1880s¹⁹. There were two fundamentally different types of mortgage lending institutions, both formed during the 1840s. There were the mortgage loan companies set up on commercial principles and the terminating building societies, frequently called mutuals, set up on co-operative principles²⁰. Mortgage loan companies, as the name implies, were in the business of extending loans on the security of real estate, generating profits from the transaction for their shareholders. They originated in Great Britain and were designed to fill the need for long-term funding as opposed to the commercial credit provided by the banks which was inherently short term in nature. Their niche in the capital market was the financing of real capital investments and facilitating the transfer (i.e. resale) of such fixed assets²¹. Their clientele might include land speculators, farmers, builders, buyers of existing buildings and even commercial interests who were interested in building or expanding their premises. Mortgage loan companies were, therefore, joint-stock or like corporations formed to provide funds in the broad field of mortgage lending.

The other type of mortgage lending institution was fundamentally different. This was the terminating building society. It was set up as a closed circle of investors who pooled their capital and drew on the collected funds one at a

time. When each member had had his turn, the profits were divvied up among them and the society was terminated²². The terminating nature of such organizations was only a way stop, however, in an evolution that rapidly brought about other forms of mortgage lending institutions. The most important change occurred in 1859 when the Canadian Government brought in the Permanent Building Societies Act. Following British precedent in 1846, the new act embodied the realization that there were two groups of people interested in dealing with building societies : non-borrowing members who were interested in investing in them, and borrowing members who were not interested in investing in them²³. A permanent building society was an institution set up to collect investment capital and lend it out to the builders and buyers of real estate as a purely commercial proposition.

The new Act was a step forward in the evolution of mortgage lending institutions because:

... theoretically its life was perpetual and because it began to accept deposits. Its life was perpetual because of an arrangement whereby a new group of members could begin a new cycle of share payments on the first day of each month, in contrast to the former arrangement whereby a new member, if he wished to join a society after it had begun operations, had to pay up all past instalments. A further improvement was that the duration of share payments was fixed, not indefinite ... [Its capital] was revolving capital and its permanency depended on a steady stream of new members or of old members subscribing to a new cycle of shares. [Thus] the act of 1859 is an important one, not only because it permitted

capitalization of shares, but also because it formally recognized the practice of societies taking deposits and excluding borrowing members from profits²⁴.

Although terminating building societies were still possible, there was henceforth a new breed of building society which resembled joint-stock companies and hardly differed from the traditional mortgage loan companies. The practical difference, lay in the fact that mortgage loan companies could issue debentures, a valuable tool in attracting capital. Even that right was extended to an Ontario permanent building society in 1873. After that the floodgates opened, and the larger building societies were allowed to invest in government securities²⁵. The change was formalized in Québec in 1877 with the passage of an act²⁶.

By the mid-1870s, permanent building societies and mortgage loan companies were basically the same and the evolution continued into the 1880s with the formation of trust companies. There were more differences between individual companies of whatever category than between categories as they were set up under a variety of governmental jurisdictions²⁷.

Montreal had many mortgage-lending institutions during the 1866-1880 building cycle. They came from a variety of backgrounds, legally speaking, and were well rooted in the several dominant ethnic groups of the city. They also evolved

structurally during the course of the building cycle, some extending the scope of their business, others fading into oblivion. Montreal entered the beginning of the cycle with seven mortgage-lending institutions, reached an all-time peak in 1876 with 29 societies and companies, and ended the cycle with 23.

Following the basic structural cleavage between terminating building societies on the one hand, and permanent building societies and mortgage loan companies on the other hand, our Montreal institutions are separated into generically labelled "co-operative" and "commercial" mortgage lending institutions. The former category includes building societies based on co-operative principles where shareholders were members in a financial structure generally designed to accommodate the small investor. These were often called mutual building societies. The other category includes a variety of mortgage lending institutions operating on purely commercial principles. These companies were generally aimed at the bigger investor and were profit-oriented.

CO-OPERATIVE MORTGAGE-LENDING INSTITUTIONS

The co-operative building societies in Montreal fell into two main groups: terminating buildings societies and trustee building societies. In the 1866 to 1880 cycle, of 21 new

co-operative societies, the majority came from the francophone sector of the city [see Table 6.2]. While terminating building societies in Ontario were on their way out by the 1870s, they seem to have been in full flower in Montreal²⁸. The sudden emergence of French terminating building societies is especially noticeable [see Fig.6.1]. Perhaps a lag factor due to language was the reason, since these were institutions of British origin. Or perhaps it was due to the very recent nature of French-Canadian mass migration to Montreal²⁹.

Besides being overwhelmingly French in character, the social and spatial origins of the officers and directors of these terminating building societies reveal a lot about just who among Montreal's francophone population was underwriting mortgages. Using the social class typology developed in Chapter Five, we find that 19.7% of the officers and directors were members of the bourgeoisie (merchants and manufacturers) while 70.5% were members of the petite bourgeoisie. The latter can be broken down into the following groupings: 34.4% were of the traditional petite bourgeoisie (grocers, dry goods storeowners, dealers, contractors, all of whom owned their work premises); 21.3% were professionals (advocates for the most part) who can be placed with the petite bourgeoisie by virtue of their ownership or control over their workplace; and finally 14.8% others were closely identified with the bourgeoisie and exercised a huge degree of control over

TABLE 6.2 CO-OPERATIVE MORTGAGE LENDING INSTITUTIONS
MONTREAL 1866-1880

<u>TERMINATING BUILDING SOCIETIES</u>	<u>OPERATION</u>	<u>NOTES</u>
Montreal City & District Bldg. Soc.	+1866-1868	a
Soc. de Cons. Canadienne de Montréal	+1866-1868+	b,c
Société de Construction Montarville	1872-1879	
Société de Cons. Métropolitaine	1872-1880+	
Soc. de Cons. Mutuelle des Artisans	1872-1880+	
Société de Construction du Canada	1873-1876	
Dominion Building Society	1873-1877	d
Société de Cons. de Maisonneuve	1874-1876	
Société de Cons. de Saint-Jacques	1874-1877+	c
Société de Construction Nationale	1875	
Soc. de Cons. du Comté d'Hochelaga	1875-1878+	c
Soc. de Cons. du Coteau St-Louis	1875-1878	
Soc. Mutuelle de Cons. Soulange	1875-1879	
Soc. Cdnne-Française de Cons. de Mtl	1875-1880+	
St. Mary's Building Society	1876-1877	
<u>TRUSTEE BUILDING SOCIETIES</u>		
Montreal Mutual Building Society	1867-1880+	
Provident Mutual Building Society	1871-1880+	
Commercial Mutual Building Society	1873-1880+	
St. Ann's Mutual Building Society	1875-1880	
Irish Mutual Building Society	1876-1880	
Canada Mutual Building Society	1876-1880+	
Imperial Mutual Building Society	1876-1880+	
Victoria Mutual Building Society	1879-1880+	

NOTES a Was founded ca. 1863.
 b Was founded in 1857 (see Statutes of Quebec 31 Vic. cap. 40).
 c See Table 6.6 for reincorporation as permanent building societies under same name.
 d Name changed in 1877, without change in structure or status, to Dominion Mortgage Loan Co. (Statutes of Canada 40 Vic. cap. 80).
 + Means the company was in operation before or after our study period.

Most building societies were incorporated in one language only. Those that did have bilingual titles are listed here under the language of their executive officers.

SOURCES: John Lovell (ed.), Montreal Directory, 1866-67 to 1880-81, Statutes of Canada, Statutes of Quebec.

FIG 6.1 ETHNIC IDENTITY OF CO-OPERATIVE MORTGAGE LENDING INSTITUTIONS, MONTREAL 1866-1880

TERMINATING BUILDING SOCIETIES

1866	67	68	69	70	71	72	73	74	75	76	77	78	79	80
B	B	B												
F	F	*												
			F	F	F	F	F	F	F	F	F	F	F	
			F	F	F	F	F	F	F	F	F	F	F	F
			F	F	F	F	F	F	F	F	F	F	F	F
			FI											
				F	F	F	F	F	F	F	F	F	F	
				F	F	F	F	F	F	F	F	F	F	
				F	F	F	F	F	F	F	F	F	F	
					F	F	F	F	F	F	F	F	F	
						F	F	F	F	F	F	F	F	
							F	F	F	F	F	F	F	
								F	F	F	F	F	F	
									BF	BF	BF	BF	BF	

TRUSTEE BUILDING SOCIETIES

1866	67	68	69	70	71	72	73	74	75	76	77	78	79	80
BF	BF	BF	BF	BF	BF	BF	BF	BF	BF	BF	BF	BF	BF	BF
					B	B	B	B	B	B	B	B	B	B
						B	B	B	B	B	B	B	B	B
							B	B	B	B	B	B	B	B
								I	I	I	I	I	I	I
									I	I	I	I	I	I
										B	B	B	B	B
										B	B	B	B	B
											B	B	B	B
											B	B	B	B

NOTES F = Officers and directors have French Canadian names.
 I = Officers and directors have Irish names.
 B = Officers and directors have English or Scottish
 (British) names but may include a few Irish as well.
 * = Societies were reincorporated as permanent building
 societies.

See Table 6.2 for names of Societies.

capital by virtue of their senior managerial occupations (secretary-treasurers and cashiers - i.e. general managers - of financial institutions). The remaining 9.8% were members of the working class or building trade artisans.

This dominance by the French petite bourgeoisie especially wholesale and retail grocers, dealers, and advocates is readily confirmed in spatial terms. Looking at the place of residence of these 79 directors and officers, an overall pattern becomes very clear. A small part of Saint-Jacques Ward, specifically Saint-Denis, Berri, Saint-Hubert Streets and linking cross-streets south of Sherbrooke Street, was where 33% of them resided. This was precisely the locus of Montreal's francophone bourgeoisie during the latter third of the nineteenth century³⁰. Another 20% of all directors lived on adjacent streets in lower Saint-Louis Ward, especially Sanguinet, Sainte-Elizabeth and Saint-Germain (German) Streets, and a further 15% came from nearby lower Saint-Laurent Ward and Old Montreal. Not a single director came from the anglo-bourgeois heartland in northern Saint-Antoine Ward.

It would appear that most terminating building society directors were not directly concerned with housing construction. Only a few were found in the permit records. For the most part, shareholders of terminating building

societies must have been interested mainly in buying used housing as an investment as evidenced by the sudden expansion of such societies between 1871 and 1875, when building activity was subsiding. We are left with the impression of a French-Canadian petite bourgeoisie emerging from the Saint-Denis corridor to found a series of co-operative building societies, with the intent of investing in post-boom housing as a means of furthering its economic progress.

The trustee building societies were creations of the anglophone segment of the population, including the Irish. These societies had two features distinguishing them from the terminating societies. They had long lists of directors, and officers and directors turned over every two to four years. The other feature was their highly organized nature. All had advocates, notaries, surveyors and an auditor on retainer. With this expertise, the financial affairs of these societies seem to have been better managed than those of the French terminating societies where bankruptcies were frequent. The three trustees appointed at the top of each organization were the guarantors of clean operations, doubling the traditionally elected executive of president, vice-president and secretary-treasurer. These societies were designed to be professional.

The members of these trustee building societies also

exhibited somewhat different spatial and social patterns from those of the simple terminating societies. The city directories give complete lists of the directors of all eight societies. The first one to be founded, the Montreal Mutual Building Society, had minority French participation on the board, while five others were run by English and Scottish directors. The other two were exclusively Irish [see Fig. 6.1.]. They seem to have been formed at regular intervals over the course of the building cycle. All were in operation at the end of the cycle. Like the terminating building societies just examined, only a minority of the directors were picked up in the permit records, signifying that most were probably investing in houses already built.

The trustee building societies like the terminating ones were dominated by petit bourgeois elements of society (44.6% of the 85 officers and directors traced). They were dealers, grocers, dry-goods storeowners, and small merchants for the most part. The real difference lay in the participation rate of artisanal and working class elements. A mere 10% of the directors of the terminating societies, they formed a hefty 37.7% of the directors of the trustee societies, quite competitive with the group of small businessmen. A white-collar group of clerks and bookkeepers and a blue-collar group of skilled workmen plus a few independent artisans made up this important group. Clearly the social base of these

trustee building societies was broader and somewhat lower down the social ladder than their cousins, the terminating building societies.

Just as significant and as distinctive were the spatial patterns of residence. The officers and directors, being mostly English-speaking, were predictably mostly West-End residents. They lived in wealthy Saint-Antoine Ward north of Saint-Antoine Street (26%), in lower Saint-Laurent Ward (17%) and in lower Saint-Louis Ward (12%). The southern portion of Saint-Antoine Ward appears to have missed out on involvement, but Sainte-Anne Ward contributed a large portion of members (37%).

Co-operative building societies as a whole would appear to have been used to further the economic interests of the petite bourgeoisie, both French and English. The cleavage between the two main linguistic groups appears complete. Even their internal management structures differed, the English ones being better organized and generally more successful. Yet not to be overlooked was the sizeable participation rate by workers and artisans in English societies while the French working class was noticeably absent from its co-operative societies.

The special case of Sainte-Anne Ward should be underlined

because its residents contributed so many directors to the trustee societies. They appeared on the boards of every one of these societies. Two were made up almost exclusively of residents of Sainte-Anne, with the St. Ann's Mutual Building Society catering to the ward's Irish population, and the Victoria Mutual Building Society, headquartered at Grace Church (Anglican), catering to its English population³¹. Among working class districts, Sainte-Anne Ward stands out again, as it did elsewhere in this chapter, for its extremely low rate of repossession [see Table 6.1] and in Chapter Two for its extremely high rate of illegal housing.

It is difficult to gauge the impact of co-operative building societies on housing construction. Few members turn up in the building permits. It is quite possible that the trustee societies were designed for the purpose of helping members to acquire homes, not invest in them. The French terminating societies, on the other hand, appear to have been designed as investment tools and may, therefore, have had an impact on east-end housing construction. Further research into these mortgage financing institutions is necessary to highlight their role in Montreal housing.

COMMERCIAL MORTGAGE-LENDING INSTITUTIONS

The evolution of the commercial institutions parallels

that of the co-operative societies, except that the commercials entered the 1866-1880 building cycle with a much stronger base. They fell into three categories: permanent building societies, mortgage loan companies, and a special group of housing development corporations which had the powers of a mortgage loan company [see Table 6.3]. The expansion of permanent building societies took place early in the cycle and tapered off rapidly as the boom peaked and subsided [see Fig. 6.2]. The permanent building societies and the mortgage-loan companies were well represented by both linguistic communities.

Montreal entered the building cycle in 1866 with two major English permanent building societies, the Montreal Permanent Building Society and the Provincial Permanent Building Society. Both had powerful financial backing and both broke new ground in Montreal by transforming themselves into mortgage loan companies with greatly expanded powers in 1875. From straightforward permanent building society operations with the right to grant only mortgage loans secured by real property and to invest surplus funds in either bank stock or public securities³², they transformed themselves into complex financial institutions.

In 1875, as the Montreal Loan & Mortgage Company and the Provincial Loan Company, these mortgage loan companies

TABLE 6.3 COMMERCIAL MORTGAGE LENDING INSTITUTIONS
MONTREAL 1866-1880

<u>PERMANENT BUILDING SOCIETIES</u>	<u>OPERATION</u>	<u>NOTES</u>
Montreal Permanent Building Society	+1866-1875+	a
Provincial Permanent Building Society	+1866-1875+	a
Soc. Perm. de Cons. du District de Mtl.	+1866-1880+	b
Soc. de Cons. Canadienne de Montréal	+1868-1880+	c
Soc. Perm. de Cons. Jacques-Cartier	1871-1880+	
Société Permanente de Cons. Royale	1872-1873	
Société Permanente de Cons. Mont-Royal	1875	
Société de Construction Saint-Jacques	+1877-1880+	c
Soc. de Cons. du Comté d'Hochelaga	+1878-1880	c
<u>HOUSING DEVELOPMENT AND MORTGAGE LOAN ASSOCIATIONS</u>		
Montreal Building Association	1868-1880+	d
Colonial Building & Investment Assoc.	1874-1880+	
<u>MORTGAGE LOAN COMPANIES</u>		
Trust & Loan Co. of (Upper) Canada	+1866-1880+	e
Crédit Foncier du Bas Canada	1873-1880+	
Montreal Loan & Mortgage Co.	+1875-1880+	a
Provincial Loan Company	+1875-1880+	a
Crédit Foncier Canadien	1876-1877	
Canada Investment & Agency Co.	1879-1880+	
Crédit Foncier Franco-Canadien	1880+	

NOTES: a Reincorporated as a mortgage loan company with new powers in 1875, the Montreal Permanent Building Society becoming the Montreal Loan & Mortgage Co., the Provincial Permanent Building Society becoming the Provincial Loan Co.

b Name changed in 1872 to Compagnie de Prêt et Crédit Fonciers without change in structure or status.

c Converted from terminating building societies of the same name.

d Reincorporated in 1878 under the name Montreal Investment and Building Co. with expanded powers commensurate with those granted to the Colonial Building & Investment Association.

e Founded in Kingston in 1843.

NOTE Companies incorporated under bilingual titles are listed only under the language of their executive officers.

SOURCES: John Lovell (ed.), Montreal Directory, 1866-67 to 1880-81, Statutes of Canada, Statutes of Quebec.

FIG 6.2 ETHNIC IDENTITY OF COMMERCIAL MORTGAGE LENDING INSTITUTIONS, MONTREAL 1866-1880

PERMANENT BUILDING SOCIETIES

1866	67	68	69	70	71	72	73	74	75	76	77	78	79	80
B	B	B	B	B	B	B	B	B	*					
B	B	B	B	B	B	B	B	B	*					
F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
		F	F	F	F	F	F	F	F	F	F	F	F	F
				F	F	F	F	F	F	F	F	F	F	F
					F	F	F	F	F	F	F	F	F	F
									F					
										F	F	F	F	F
										F	F	F	F	F

HOUSING DEVELOPMENT AND MORTGAGE LOAN ASSOCIATIONS

1866	67	68	69	70	71	72	73	74	75	76	77	78	79	80
B	B	B	B	B	B	B	B	B	B	B	B	B	B	B

MORTGAGE LOAN COMPANIES

1866	67	68	69	70	71	72	73	74	75	76	77	78	79	80
B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
						F	F	F	F	F	F	F	F	F
									B	B	B	B	B	B
									B	B	B	B	B	B
									B	B	B	B	B	B
									F	F	F	F	F	F
													B	B
														F

NOTES F = Officers and directors have French-Canadian names
 B = Officers and directors have English or Scottish (British) names but may include a few Irish as well.
 * = Societies were reincorporated as mortgage loan companies.

See Table 6.3 for names of companies

obtained the right to invest their surplus funds in municipal and corporate debentures, Dominion and provincial securities, and corporate stocks, not just bank stocks. They could henceforth accept deposits like a bank and even issue their own debentures. They could act as an agency and trust company with the fiduciary powers of holding and investing securities, mortgages, debentures and stocks, much like a modern trust company. Finally, they could acquire land and buildings, lease and sell and even construct houses, though this latter right does not seem to have been exercised³³. In short, these two corporations, together with the Colonial Building & Investment Association founded in 1874 (which we will discuss later), were the first true trust companies in Quebec and as such were precursors of the big trust company expansion of the 1880s and 1890s.

It is small wonder these two building societies gained such sweeping powers from the Québec Legislature, once one ascertains who was on their boards of directors. The Provincial Permanent Building Society had Sir Hugh Allan as its president, transatlantic and inland shipping magnate without equal, railway investor and head of the first Pacific railway syndicate, president of one of the largest Canadian banks, the Merchants' Bank, of the Citizens Insurance & Investment Company, of the Montreal Telegraph company, of the Montreal Warehousing Company and of a host of cotton and

woollen mills and mining companies, plus innumerable other directorships³⁴. His vice-president was none other than William Workman, director of the Montreal City & District Savings Bank and president of the City Bank, partner in one of the largest hardware importing and manufacturing businesses, former mayor of Montreal and a major land subdivider in the town of Sainte-Cunégonde.

The other building society, the Montreal Permanent, had a blue-ribbon list of powerful merchants on its board. Its founder was Matthew Gault, also founder of the Exchange Bank and the Sun Mutual Life Insurance Company. The board included George Frothingham, partner with William Workman in both a huge hardware importing firm and the St. Paul Shovel & Scythe Works on the Lachine canal, Thomas Caverhill, one of the city's big grain and produce merchants, Frederick Kay, owner of one of the large dry goods importing firms, Henry Thomas, wholesale dry goods merchant and president of the New City Gas Company, and A.W. Ogilvie, the flour milling magnate and grain merchant. These two building societies obviously had clout in the financial and political arenas. All their officers and directors, save three, lived in wealthy Saint-Antoine Ward north of Saint-Antoine Street.

The francophone sector's credit instruments appear to resemble one another. What we saw with its terminating

building societies seems to hold true with its permanent building societies. It is not quite so easy, however, to draw conclusions based on the ownership of these firms as we did with the terminating societies. With the exception of the Société Permanente de Construction du District de Montréal, none listed their directors in the Montreal Directory. However, if their officers can be deemed representative of the group, they were run by a petite bourgeoisie made up of commercial businessmen, professionals drawn from the legal profession, and senior managerial people. Most lived in the western end of Saint-Jacques Ward, essentially Saint-Denis to Saint-Hubert Streets.

The francophone element of the population entered the 1866-1880 building cycle with only one permanent building society and no mortgage loan companies. The fact that one institution changed its name to the Compagnie de Prêt et Crédit Fonciers in 1872 did not in any way make it a mortgage loan company as it was a change in name only and did not come with any new powers or privileges³⁵. Three other permanent building societies came into being by converting the capital of their terminating building societies into fixed capital³⁶. Finally, three more building societies were founded as permanent ones although two of them failed within a year or two [see Table 6.3]. All these permanent building societies operated with the simple powers granted by the 1861 Building

Societies Act and its predecessors, allowing only mortgage loans secured by real property and very carefully circumscribing their investment of surplus cash.

Two mainly francophone mortgage loan companies were founded during the building cycle. One failed while the other survived [see Table 6.3]. The survivor, The Crédit Foncier du Bas Canada, was an innovation on the Québec capital market³⁷ and was designed to compete with the Ontario-based Trust & Loan Company of Upper Canada³⁸. This new company had important backers from both the French and English élites in Montreal, the French ones being numerically dominant. For example, the Honourable Charles Wilson, a merchant and former mayor of Montreal, and senator of the Dominion Government obviously had political connections. Both he and Charles S. Rodier, a merchant and manufacturer, were no strangers to real estate development judging by what is known through the permits and through their earlier careers.

The backers also had links with other financial institutions, particularly other building societies. Alfred Larocque was a director of the Montreal City & District Savings Bank and president of the Artisans Mutual Building Society; M. P. Ryan, a merchant and a member of the Québec Legislature was vice-president of the "Artisans"; Jean-Baptiste Lafleur, an advocate, was Secretary-treasurer of

the "Artisans". Thomas Caverhill, an important grain merchant, was also vice-president of the Exchange Bank of Canada and a director of the Montreal Permanent Building Society. Interlocking directorships with other building societies and financial institutions were important features of mortgage lending institutions. Each building society or mortgage loan company for which we have lists of directors features two and sometimes more members who were on the boards of other building societies and banks. Bank connections were undoubtedly crucial.

The Crédit Foncier du Bas Canada was limited to lending first mortgages only, but could also make loans to municipalities, corporations and "fabriques" (parish church stewards). It could issue debentures and take deposits. Its key role was the granting of long-term (up to 50 years) fully insured first mortgages. Two other mortgage loan companies joined the fray at the very close of the building cycle - the Canada Investment and Agency Company and the Crédit Foncier Franco-Canadien.

The third category of the mortgage lending firms were the housing development corporations. The Montreal Building Association was the first and was founded in 1868 by wealthy backers with the express purpose of building houses, something which it subsequently did quite well³⁹. Although the building

activities and boards of directors of this and the second development firm - the Colonial Building & Investment Association - have been discussed earlier [see Chapter Five], their more purely financial transactions must be mentioned here.

There is little evidence on which to form an idea of the mortgage lending activities of these development associations, although they were empowered to extend such funding. In addition to the many clauses dealing with land acquisition and housing development, the Montreal Building Association was a mortgage lender. Its market, however, was probably as restricted as its development area - wealthy upper Saint-Antoine and Saint-Laurent Wards. An interesting breakthrough in mortgage lending occurred when the Colonial Building & Investment Association was incorporated in 1874. Here, for the first time, a mortgage lending company in Québec was given fiduciary powers similar to those of a true trust company^{*0}. This was the breakthrough that the Montreal Permanent Building Society and the Provincial Permanent Building Society seized upon in 1875, thus forming the nucleus of Québec's new trust company industry. Finally, in 1878, the Montreal Building Association, after a successful ten years of building single-family houses, sought for itself the new privileges granted the others under the name Montreal Investment & Building Company^{*1}.

SOURCES OF FUNDS FOR HOUSE CONSTRUCTION

To better understand the role all these building societies and mortgage loan companies played in housing construction, let us refer again to Goad's 1881 Atlas of the City of Montreal. Grouping the French-Canadian terminating and permanent building societies, we find that virtually all their names appear in it. All owned properties which had been repossessed. Beyond the expected concentration of properties in the francophone East-End, many of these building societies appear on residential properties in the West End, including Sainte-Anne Ward. They are absent only from the wealthy area near Mount Royal. The overwhelming majority of these repossessed properties anywhere in the city were new houses built during the 1866-1880 building cycle. It is therefore reasonable to suggest that these financial institutions were heavily engaged in the financing of housing construction.

These francophone terminating and permanent building societies had developed almost from scratch at the beginning of the building boom. They undoubtedly played a crucial role in housing development at least in east-end Montreal. They were basically creations of the French petite bourgeoisie, both commercial and professional elements. Their loan market obviously was the fast expanding francophone working-class suburbs and secondarily the west-end working-class districts.

These societies seem to have been all conceived and controlled in the few blocks around Saint-Denis and Saint-Hubert Streets south of Ontario Street. It is probably not too far from the truth to say that French-Canadian professionals and businessmen played a large role in financing the new duplex townscape.

On the anglophone side, excepting the trustee building societies which do not appear to have been involved in new house construction, a small number of permanent building societies and mortgage loan companies stand out. These permanent building societies, together with the two housing development corporations, transformed themselves structurally to form the nucleus of a new trust company industry. Their ownership was in the hands of people who were members of Montreal's anglophone élite and were either part of or close to the organization of Canada's capital economy. They had a major impact on new house construction.

The names of the Montreal Loan & Mortgage Company and the Provincial Loan Company (both former permanent building societies) and the Trust & Loan Company of Canada appear frequently on repossessed properties across the city in 1881. They were active everywhere but nowhere more than in the newest housing districts. The powerful anglophone bourgeoisie seems to have competed in the same areas and in the same types

of housing as the French petite bourgeoisie. These English-speaking merchants and industrialists were apparently no more strangers to the vast new east-end townscape of duplexes than were the French building society directors of the Saint-Denis Street area. Big merchant-industrialist capital definitely seems to have found its way into the hands of the small-scale French-Canadian builder.

But lest the role of the building society and the mortgage loan company in Montreal be exaggerated, it might be wise to recall Edward Neufeld's analysis of mortgage lending institutions in Canada: "Mortgage companies in general by the 1880s had experienced phenomenal expansion, accounting for about one-quarter of the assets of all financial intermediaries or about half as large as the chartered banks". Yet he asserts that the industry was concentrated in Ontario in such a way that "in the year 1888, for example, 92% of the assets of 78 loan companies (which represented nearly all of the companies) arose from business in Ontario⁴². For a city of its size, Montreal did not have that many mortgage lending institutions. The total at the end of the building cycle was 24 societies and companies in 1880, but three were in liquidation. For a city of 170,745 people including suburbs, 21 active mortgage lending firms, at a time when such institutions were supposed to be at their historical climax, was not an impressive total. We will compare these figures

with building societies elsewhere in the English-speaking world at the end of the chapter.

Besides the Ontario case, we have a few building society statistics for other cities in the English-speaking world. To take a geographically remote example, Victoria State in Australia, which essentially means the City of Melbourne, registered 158 building societies in 1874 according to the local Building Societies Act⁴³. Closer to home, 148 building associations were chartered between 1860 and 1869 in Philadelphia while Montreal had about eight. By 1876, while Montreal had 27 building societies and mortgage loan companies, Philadelphia had at least 450 associations in active operation⁴⁴.

In Baltimore in 1899, a city of just over 500,000 people, there were some 250 to 300 active building societies.

Their capital was entirely local and often very small. Their members were chiefly artisans and mechanics, mill and factory hands, sometimes laborers, often women. Some associations were based on ethnic solidarities ... Some were associated with a craft or shop ... While an investor class and institutions such as churches held the ground rents, the working class contributed the largest share toward financing the houses through the building and loan associations⁴⁵.

Montreal was a long way off from any of these models. Exactly why remains something of a puzzle.

Like in Baltimore, the Roman Catholic church played a very conservative role in urban development. The Church was an important landowner in Montreal, especially its religious orders. Huge estates given to these orders in the early days of the colony were located in strategic areas of nineteenth-century development, primarily in west-end Montreal⁴⁶. While the Church in Baltimore derived large sums from its ground rents, it is known that the Church in Montreal derived large sums from the subdivision and sale of building lots on these estates⁴⁷. But neither made a serious attempt to build or to finance construction.

It is apparent that a significant amount of mortgage financing came from elsewhere, outside the realm of capitalist financial institutions. The search for mortgage lenders finally narrows down to individual lenders⁴⁸. The local lumber merchant, the neighbourhood doctor, the widow - these were the kind of people with surplus funds, who were willing to invest them in a conservative manner on the security of something real, something palpable, something with obviously accruing value - land and the buildings erected thereon. Neufeld notes the process in the context of 1840s Upper Canada (Ontario):

This demand for credit was first catered to by the local investor through barristers and solicitors, somewhat in the same manner as the local private banker provided commercial banking

facilities. But the lawyer acted primarily as a broker between borrower and lender and, of course, as a legal adviser⁴.

Exactly the same could be said for Montreal, indeed for all of Québec, by substituting the word "notary" for "barrister", "solicitor" and "lawyer". Québec's notarial system provided the tool for matching up lender and borrower.

FINANCING WORKING CLASS HOUSING CONSTRUCTION - A CASE STUDY

Ultimately it is in notarial documents that the real sources of mortgage funding can be unlocked. One route is to track the dealings of a particular building society, or a known individual lender, through the Notarial Archives, once the identity of the lender's notary is ascertained. Another route is to conduct a search through the notarized deeds, organized by property, at the District Registry Office. We chose the latter route.

The area chosen is in the midst of the most intense zone of housing development during the 1866-1880 building cycle - east-end Montreal north of Sainte-Catherine Street. That slice of Saint-Jacques and Sainte-Marie Wards from Saint-Hubert to Papineau Streets running up to the Sherbrooke Street escarpment was almost wholly built up during this building cycle. It was built up to accommodate the swelling ranks of French-Canadian workers. Practically every street

was built on Montreal's standard housing model, the two or two-and-a-half storey duplex, usually in its quadruplex configuration. Wolfe Street, between Ontario and Robin Streets, was arbitrarily chosen to represent the district⁵⁰. As both sides of the street were ostensibly identical, the west side was chosen for the deed search.

The story begins in April, 1871, when the executors of the Louis Boyer estate sold part of lot 974 to Augustin and Olivier Robert for \$13,000 (\$1000 down payment and a 15-year mortgage at 6% the first year, 7% for the remainder). The purchase was for 90,105 square feet (8371 m²) of land, future Wolfe and Robin Streets included. It was bordered by Ontario, Amherst and Mignonne Streets, and the lot line between future Wolfe and Montcalm Streets. The transaction seems to have been concluded between suppliers and buyers of provisions. Boyer's sons, who were the executors, were part owners of Boyer, Hudon & Co., produce, provision and grocery merchants in the wholesaling district of Old Montreal; Augustin and Olivier Robert were each owners of a grocery, wine and liquor store along Sainte-Catherine Street west of their land purchase. The Roberts also dabbled in housing construction as we have permits for three different buildings each, mostly flats over shops, located near their stores and near their Wolfe Street purchase, all built between 1868 and 1870.

The next transaction occurred in May 1872, about a year later, when the Roberts subdivided their parcel into 21 x 66 and 21 x 70 foot lots (6.4 x 20.1 m and 6.4 x 21.3 m) and extended Wolfe and Robin Streets through their land. The purchase and subdivision were timely as the permits show that housing development was sweeping through the area, 1872 being the peak year. The lots were snapped up immediately. Our sample contained 30 lots, numbers 61 to 90, most of which sold between June and August of 1872. Only two of the lots did not sell immediately.

The first houses were built by Olivier Robert himself. His houses set the tone for the whole street. He built two flat-roofed quadruplexes (eight flats) on four lots during 1872. These houses reflected what was being built all over the entire district and his lot purchasers followed suit [see Fig. 6.3].

Olivier Robert held onto the two quadruplexes for several years. He rented the flats to shoemakers, a baker, a sailor, a carpenter, an engineer (machinist), a clerk and a teacher. Aside from this rental income, he mortgaged the houses late that year. He garnered \$1800 for four years at 8% from Mary Cushing, widow of the late Canfield Dorwin, a prominent broker, and \$2000 for ten years at 7% from the Société de Construction Montarville, both on the security of the houses



FIG.6.3 FOURPLEX ON WOLFE STREET

An example of the typical fourplex built on Wolfe near Ontario in the early 1870s, Saint-Jacques Ward.

and the land on which they sat. No doubt he had other real estate projects elsewhere, because as a further demonstration of how he could squeeze investment capital out of his assets, he managed to obtain a large mortgage of \$10,000 for five years at 8% in June of 1873 from the Trust & Loan Company of Canada on the strength of the debts owed him from many of his lot sales. He certainly was not allowing any grass to grow under his feet.

The Roberts' lot purchasers did not fare quite so well. They were a mixture of workmen involved in the building trades, and small retailers and local businessmen, precisely the sorts of people who dominated the building permit records. They were drawn from the working class and the petite bourgeoisie, in roughly equal numbers. Twelve lots were purchased by people whose occupations were carpenter, plasterer, painter and joiner, while twelve more were bought by people listed as a merchant jeweller, the wife of a hotelkeeper, a dealer from Laprairie, a brick contractor and a "rentier et commerçant" (gentleman and dealer).

The terms extended to all buyers were much the same - \$400 per lot (\$700 for the lots nearest Ontario Street, an important artery of mixed land use), no down payment required, with 14-year mortgages for early buyers, 12-year ones for the others, all at 7%. All buyers were required to build within a

year and were forbidden to erect tanneries, soap or candle factories⁵¹. The lots were mostly sold in foursomes, with most purchasers teaming up to make the purchase. For example, Narcisse Racette, the brick contractor, went before the notary with Alphonse Saint-Jean, a plasterer, each to buy two lots. Together they could pool their respective building skills and contacts to complete each other's quadruplex. In another case, Joseph and Calixte Richer, presumably brothers and both painters, purchased adjacent lots and borrowed from the same sources at the same time. These unofficial partnerships are entirely consistent with the building permit findings in Chapter Five where evidence of family links or of mutual help arrangements through complementary skills were uncovered.

The first sign of trouble occurred very early, by August, 1872. Pierre Piché, a carpenter, transferred four lots, two to Jean-Baptiste Houle, another carpenter, and two to Alphonse Pauzé, a dealer. Each of the buyers took over the debt owed to the Roberts for the land. Not a cent had been paid on the land nor did Piché register a penny of profit on the transaction. Obviously he had been unable to line up financing for the building project. A similar situation took place the following June when Alphonse Saint-Jean, a plasterer, his one-year allotment to build expired and no building underway, handed over two lots to Elie Archambault, a joiner, with no profit on the transaction.

The remaining buyers proceeded fairly rapidly to line up mortgage financing for construction, given the stringent building deadline. Seven of the eleven buyers took out loans with the local lumber dealers, Alfred Roy & Fils, for sums ranging between \$300 and \$500 per quadruplex, (always with no interest for the first three months, and 8% thereafter with no fixed term to the debt which was secured by the lots). Presumably this loan was to facilitate the acquisition of materials. Houses in Montreal were built with two-inch thick (5 cm) solid plankwall construction. Bricks were required only for the fire walls and the veneer. Montreal houses were really heavy wooden houses, hence the importance of the local lumber merchant.

The Roys were astute businessmen used to dealing with the poorly capitalized builders typical of the area. By offering no-interest loans, they guaranteed the builders' patronage. This allowed the builder to use the materials absolutely free of charge, carry the construction project three months closer to completion and line up additional mortgage financing which would pay off the Roys at the same time. Should the builder be unable to line up further financing, then the Roys, as second mortgagors, were counting on the accrued value of the property imparted by construction in order to claim the value of part of it. Alternately, the unlimited term allowed by the Roys to the builder gave him the choice of paying off the loan

in fairly tiny amounts. It was a business gamble that had its risks but probably allowed for a profitable volume in sales.

The same seven builders took out mortgages with building societies anywhere from two weeks to two months after the Roy mortgages. Unlike today's mortgage financers the building societies were willing to extend mortgage financing on properties that were already twice encumbered. Neither the Roberts nor the Roys were paid off at the time the building societies drew up their mortgage deeds. In six cases, it was the Société Permanente de Construction Jacques-Cartier extending the funding; the seventh one was the Société Permanente de Construction Royale. Each builder obtained between \$1100 and \$1200 for twelve years at 6% interest. The seventh builder obtained \$1000 for only 6 years at 7%.

What followed in all seven cases was financial ruin. Alphonse Pauzé, the dealer, and Philomène Bétournay, the wife of a hotelkeeper, had to hand their properties, complete with quadruplex, back to the building society. The transaction was recorded as a sale equal to the amount still owing on the mortgage, presumably to prevent a formal default where the building society might have had to fight other creditors for the equity. In the Pauzé case the building society assumed the \$2024.64 debt owed it, the entire \$800 debt owed the Roberts, plus a small sum owed the city for a sewer connection

on Wolfe Street; it acquired title to the land and a quadruplex still lacking its brick veneer. In the Bétournay case, the building society assumed the \$2224.88 debt owed it and acquired title to the land and what appears to be a substantially finished quadruplex.

Jean-Baptiste Houle, the carpenter, had to hand his property over to Alfred Roy, the second mortgagor, in April, 1873, with the one-year deadline almost up; no mention was made of any building on the land but undoubtedly some construction had taken place. The transaction was recorded as a sale, again to protect the mortgagor's interest in the equity, and Roy agreed to take over the \$800 mortgage owed to the Roberts and the \$1100 mortgage owed to the building society. Three months later, Roy sold the property, complete with quadruplex, to Patrick Jordan and François Bénard, other lumber dealers, for \$2000 plus the assumption of the \$800 mortgage belonging to the Roberts. Jordan and Bénard were apparently involved in all stages of the building industry. They sold materials through their lumber business, they built houses themselves, and they bought new rental properties as in the present case.

Three other builders had to sell their properties with partially completed quadruplexes, to outside parties. In each case there was no profit, but the buyer assumed the

outstanding debts. In one case, Olivier Goyette, the jeweller, had to bail out in September, 1872, only one month after obtaining financing, while Elzéar Augé, a joiner, quite possibly working for him, took over the \$2824.64 of debts owed to the Roberts and the building society. He successfully completed the building. Joseph Richer, the painter, had to sell his property and all its mortgages to François Martineau in August, 1873. The other painter, Calixte Richer, sold to Pascal Hébert dit Lecompte, a carpenter. This turned out to be a nightmare for Hébert where the building contractor, Ferdinand Gagnon, took out a lien on the property. It was eventually seized and sold at a sheriff's sale to the building society.

The seventh and last of the unsuccessful builders was Jean-Baptiste Marchand, a carpenter and joiner, who lost his property including an apparently finished quadruplex through a seizure and sheriff's sale to the lot vendor Augustin Robert in November, 1873. The same day Robert sold the quadruplex to Henri Pépin, a notary. Thus was the street built up chiefly through a string of failures.

Some builders did, however, manage to complete their projects successfully. Were they in any way different from the others? Interestingly, all three of the builders who completed their projects without financial ruin, had gone

directly to a building society, the Société de Construction Canadienne de Montréal, to negotiate substantial mortgages in order to pay off the lot vendors and finance construction. One can infer as evidenced by the financing they obtained, that their credit standing was higher than the others. Narcisse Racette, a brick contractor, Elie Archambault, a joiner, both of whom appear in the building permit records for other projects nearby, and Jean-Baptiste Fortier, a dealer from Laprairie, borrowed between \$1800 and \$2200 for 10 or 12 years at 6%, for the construction of each of their quadruplexes. Fortier, leased his building out for a neighbourhood school during the winter of 1872-73, then sold it for housing the following spring. Racette and Archambault held on to their properties for several years extracting rental income before disposing of them.

Only one other builder remains to be dealt with and he constitutes a special case. Pierre Sainte-Marie, "gentleman" and dealer, was the buyer of the \$700 corner lots. He also bought the adjacent lots on Amherst Street behind. By locating at the intersection of Amherst and Ontario, two important mixed commercial-residential streets in east-end Montreal, he held property of potentially high value. He chose to concentrate on the Amherst rather than the Wolfe side of his purchase, turning the lots around to face Ontario Street. He lined up \$1200 interim one-year mortgage financing

at 8% with Benjamin Limoge, a "bourgeois", while he was building his three-storey buildings on the corner of Ontario and Amherst. He must have previously obtained financing elsewhere on some other security. One year later he remortgaged the property, with its completed buildings, with the Société de Construction Métropolitaine, of which he was a shareholder, obtaining \$3000 loan interest free. He never did build on Wolfe Street but this does not seem to have caused any problem with the Roberts.

Excluding Sainte-Marie's four lots and the two which did not sell, the Wolfe Street sample yields 24 lots on which construction of twelve quadruplexes took place. Of the successful completions, two quadruplexes were built directly by Olivier Robert, one of the subdividers, and three more were built by Fortier, Archambault and Racette. The seven remaining quadruplexes were not completed by the permit holders, that is, the original builders. The factor that seems to separate failed from successful builders is building experience. Not one of the failed builders crop up in the permit records for 1868-71/1873-77. Apparently these were first and last ventures for them all. Conversely, the successful builders, except Fortier from Laprairie, do appear in the permit records, once or twice prior to their 1872 Wolfe Street developments. The general finding in Chapter Five of a city built overwhelmingly by small-scale builders, and more

particularly by one-time only builders, is confirmed here in the case study.

The residents of Wolfe Street were overwhelmingly of working class background. Of the 48 new residents listed in the 1873 and 1874 directories as inhabiting our 12 fourplexes, 35 were clearly of the working class, almost all in blue collar trades (shoemakers, joiners, carpenters, stonecutters and layers, carters, sailor, painter, plasterer, tailor and labourers) with a handful in white collar jobs (teachers, post office clerk). Ten other residents might be qualified as being petit bourgeois or artisanal (grocers, bakers, butcher, contractor, blacksmith, jeweller) and the balance comprises three widows. Only two of the quadruplex builders actually appeared among the residents.

What this analysis of the legal documents on the development of Wolfe Street reveals, with its astonishing number of properties repossessed by financial institutions, is that the 1881 Goad atlas study shows but the tip of the iceberg. It is interesting to note that repossessions by corporate financial intermediaries in 1881 were equal to 4.2% of all residential buildings in Montreal [see Table 6.1]. If we isolate only those districts dominated by new construction during the 1866-1880 building cycle, then an even more severe picture emerges, especially with regard to the contrast

between new high-rent districts and new low-rent districts. While in the new rich districts, corporate repossession represented slightly over 1%, in the new poor districts, between 4 and 17 percent of the houses had been repossessed by financial institutions in 1881. In our East End area, the picture was even more stark, between 9 and 17 percent⁵². Yet our Wolfe Street sample demonstrated that a larger share of properties were either seized by individual mortgage lenders such as Roy or Robert, or unloaded at a loss onto a new buyer willing to take on the accumulated debts. This leaves no doubt that Montreal housing was undercapitalized. Yet somehow, with one mortgage on top of another, and often with builders changed in mid-construction, housing got built.

HOUSING CONSTRUCTION FOR OTHER SEGMENTS OF THE MARKET

In contrast to the financial fiascos that surrounded housing construction in working class Saint-Jacques and Sainte-Marie Wards, dealings in new "middle class" suburbs like parts of upper Saint-Louis Ward, or in the heartland of bourgeois Montreal - upper Saint-Antoine Ward - were much more tranquil. In upper Saint-Louis, on Cadieux, Laval, Drolet and Saint-Denis Streets, where developers created a single-family housing enclave, larger scale operators dominated production.

One of the largest such developments occurred on Drolet

Street. A consortium of real estate speculators, in a rare case of involvement in housing construction, had a row of 45 houses built, 44 little Gothic cottages and one two-storey duplex [see Fig. 6.4]. The process was orderly. Benjamin Comte, a "bourgeois" according to the deeds, a financier, president of the Mutual Fire Insurance Company, commuted his huge tract of land in the North End of all seigneurial fees in October, 1871, thereby translating it into the "franc aleu roturier" regime or freehold system⁵³. This event signalled that he was ready to sell.

A consortium of four members of the French-Canadian élite, purchased the land in February, 1872, right at the peak of the building boom. The purchase price was \$120,000 for 4,275,690 square feet ($397,212 \text{ m}^2$), with a \$40,000 down payment and 6% interest on the balance, plus a three cent surcharge on every square foot sold for building lots, eventually adding \$128,271 to the purchase price. This meant a full purchase price of 6¢ a square foot (63¢ per m^2) as opposed to 14¢ a square foot (\$1.55 per m^2) for the Robert property discussed earlier. Of course, the Comte property was 50 times larger. The lower price may be attributable to the scale of the purchase, and to the fact that the land was further from the centre of economic activity, translating into lower land values according to classic land value theory. Actually, the Comte purchase was even cheaper when one



FIG.6.4 SINGLE-FAMILY HOUSES ON DROLET STREET

Two units of Place Comte, the 45 unit row erected by David, Drolet, Laurent and Richard in 1873-4 on Drolet near Roy, Saint-Louis Ward.

considers that half did not have to be paid until the lots were sold. Thus the original capital outlay was a mere 3¢ a square foot (31¢ per m²).

Gustave Drolet and Sévère Rivard, both advocates, were part of the consortium, while Michel Laurent was a prolific and well-known architect (designer of several important French-Canadian owned downtown buildings as well as much housing, including, of course, this row). The fourth member of the group was Ferdinand David. Originally a painter, he became a highly successful building contractor during the 1860s, city alderman and member of the Provincial Parliament at the time of these real estate undertakings⁵⁴. These people had money, professional know-how, and political connections, the right recipe for successful real estate ventures.

The consortium filed subdivision plans in March, 1872, for the Montreal portion and in December, for the Village Saint-Jean-Baptiste portion⁵⁵. At the same time the Roberts were subdividing their property down in the Amherst, Wolfe, Montcalm Street area. Lots were 20 x 72 feet (6 x 22 m), much the same size as the Robert lots. They sold for about \$270 undeveloped, or 19¢ a square foot (\$2.00 per m²), in sharp contrast to the \$400 the Roberts were getting for their lots on Wolfe Street at 29¢ a square foot (\$3.11 per m²). Of course, the original cost of the land would have been a major

factor. The mere act of subdividing was a very profitable exercise, registering a 216% increase in the price of land in the Drolet Street case, 107% in the Wolfe Street one.

The consortium then engaged itself in building the 45 unit row in one block of its massive tract of land. Construction began near Duluth Street in Village Saint-Jean-Baptiste early in 1873 and ran down the west side of Drolet Street to Roy Street by early 1874. The row was distinguished with the name "Place Comte", following a British tradition of naming row house constructions (and probably to keep old Benjamin Comte happy as he was still owed a lot of money). The houses were all sold between October, 1873, and September, 1875.

No doubt the project was launched to stimulate building and to set the tone for the type of development the lot vendors wanted. The move was similar to the Robert strategy. However, the Drolet Street strategy was a departure from both the prevalent form of development just a few blocks east on Saint-Laurent and Saint-Dominique Streets, where cramped duplexes predominated, and from the prevalent Montreal housing typology. Little Gothic cottages in a row were definitely innovative. The developers hoped to attract the French petite bourgeoisie from lower Saint-Denis Street. Other single-family row housing was indeed attracted to the area,

but it would take decades, or two more building cycles, before the entire subdivision was built up.

No financing was ever arranged for the construction of the row of houses. Except for the 6% mortgage and the deferred payment scheme obtained from Comte for the original purchase, the consortium registered no deeds of loan on the security of their lots during the construction phase. It is likely that they had sufficient capital reserves from their lot sales since 1872 to enable them to finance the construction of the 45 houses themselves. As soon as the row was finished (1874), the consortium mortgaged ten of the houses with the Trust & Loan Company of Canada, either to pay off some debts or to raise capital for some other venture.

Purchasers of the new houses likewise exhibited an uneventful financial history. Five houses, sold to two different buyers, were repossessed by the vendors, many years after the initial purchase. All purchasers accepted mortgage terms directly from the vendors, and no other lenders, institutional or individual, were involved. The price range was \$1770 to \$1875 per house with four slightly wider houses selling for \$2000 each and the corner duplex for \$3400. Down payments were as low as \$200 in some cases although some purchasers managed to pay in full; mortgages on the balance owing usually was for five years at 7% and in a few cases for

eight years at 8%. The purchase price included the deferred land payment that the consortium had to pay Comte (i.e. \$43.20 per house). Other terms included fire insurance on the property in order to protect the mortgagors' assets, fireproof construction on all future additions, the usual prohibition of factories and manufacturing activities, and interestingly, the obligation to plant a tree in front of each house and maintain it in perpetuity.

Most customers bought only one house, four purchased in pairs, and three others bought groups of four houses. Of the 45 houses built, only 15 were occupied by their owners (33%). This is low considering these are single-family houses. It serves to underscore the fact that even among single-family houses, Montreal was a tenant city. The Wolfe Street sample yielded a home-ownership rate of only 4.2%. The group of 34 people who eventually purchased houses on Drolet Street differed markedly from those we examined on Wolfe Street. The predominant buyers (35%) were wholesalers or retailers involved in one form of trade or another, small merchants, dealers, grocers and one contractor who often bought more than one house. They were largely speculative buyers who would earn a rental income while waiting for the right moment to sell with a good profit. The blue-collar working class buyers (about 26%) did not buy in volume. They were drawn from a variety of skilled and semi-skilled trades. Only two took up

residence. A quarter of the buyers (26%) were mainly looking for an attractive place to live. A few were advocates but most were white collar workers - clerks, bookkeepers, government office employees.

The consortium of builders did indeed attract elements of the French petite bourgeoisie up Saint-Denis Street, but primarily as investors. What they created in the end was the germ of a new white-collar worker neighbourhood off upper Saint-Denis. When one looks at the residents of the row, whether tenant or owner-occupier, only one group stands out - white-collar workers. Occupying roughly half the available houses, they were about evenly divided between English and French speakers. As other builders copied their example of small single-family row housing on adjacent streets, a new white collar neighbourhood came slowly into being.

If the petite bourgeoisie preferred to stay down on Saint-Denis Street, Montreal's real bourgeoisie lived elsewhere, and quite separate from the newly emerging white collar suburbs. The bourgeois heartland was located on the southern slope of Mount Royal down as far as Dorchester Street, west of University Street and Beaver Hall Terrace [see Fig. 4.2]. As a means of establishing a comparative measuring stick for housing costs, we will briefly examine a property located at the south-west corner of Sherbrooke and Victoria

Streets.

When McGill University (known officially as the Royal Institute for the Advancement of Learning - the R.I.A.L.) sold off the rest of its estate facing the campus across Sherbrooke Street in the 1870s, the lots were larger and more expensive than the norm. In September 1870, the R.I.A.L. sold off a 28 x 120 foot lot (8.5 x 36.6 m) on Sherbrooke Street to Rebecca Blake, widow of the late William Blake, a New England businessman, and daughter of Thomas Brown, who was an official assignee (a sort of property trustee). It sold for \$1330 cash or 40¢ a square foot (\$4.26 per m²), while four adjacent lots sold for roughly the same price, but with a 10-year mortgage at 6% interest, to Charles Wilson, a senator of the new Dominion Government. He had been a mayor of the City of Montreal and was founder of one of the largest hardware importing businesses in Montreal. He was a director of the Scottish Provincial Assurance Company and a prominent real estate developer.

When Wilson resold one of the lots a year later, he had bid the price up to \$1.00 a square foot (\$10.77 per m²), a hefty increase symptomatic of the value of prestige in location. Meanwhile, both Thomas Brown and Charles Wilson set about building three stone houses on the same model in 1870-71 [see Fig. 6.5]. Each house was three and a half stories. The



FIG.6.5 SINGLE-FAMILY HOUSES ON SHERBROOKE STREET

Row of three 3 1/2 storey houses built by Wilson and Brown in 1870-1 on Sherbrooke at Victoria, Saint-Antoine Ward.

half storey provided servants' quarters under a full mansard roof, and there was a full basement half above ground, equipped as a kitchen and service area. There were therefore five full floors of usable space.

The Browns sold their new house in March, 1875, to John Pillow, a big industrialist, co-owner of Pillow, Hersey & Company, a huge nail factory in Pointe Saint-Charles (Sainte-Anne Ward), for \$22,000. A \$3000 down payment was made and Pillow was given ten years to come up with the rest of the cash free of interest charges. The price was twelve times that of a \$1800 single-family home on Drolet Street for three and a half times the floor space.

COMPARISON OF HOUSE PRICES

Table 6.4 allows a comparison of land and house prices in our three sample areas. All figures represent the recorded sale price and do not take interest charges into account. Of course, the cost of financing, is always incorporated into every subsequent sale. In other words, every selling price generally reflects the vendor's purchase price, plus his financing costs, plus improvements costs if applicable and a profit if possible. Table 6.4 also shows the same figures reduced to standard units per square foot (or m^2).

TABLE 6.4 COST OF HOUSING IN MONTREAL 1870-75

	SIZE OF LOT	LOT PRICE (\$)	SIZE OF HOUSE	TOTAL PRICE (\$)	AREA PER H.H.	PRICE PER H.H. (\$)
A.	21 x 66	400	21 x 25	1,250	525 ea. (48.77)	625
B.	"	"	21 x 30	1,400	630 ea. (58.53)	700
C.	"	"	"	1950	630 lower (58.53) 1,260 upper (117.05)	650 1,300
D.	20 x 72	269	20 x 30	1,800	1,800 (167.22)	1,800
E.	-	-	21 x 30	2,000	1,890 (175.58)	2,000
F.	28 x 120	1,330	28 x 46	22,000	6,440 (598.28)	22,000

A and B - Wolfe St. 2 storey duplex

C - Wolfe St. 2 1/2 storey duplex

D and E - Drolet St. 1 1/2 storey single-family house

F - Sherbrooke St. 3 1/2 storey single-family house

NOTES H.H. = household

Measurements are in feet and square feet; figures in brackets are in square metres. Metric equivalents for lots and houses are as follows (in metres): 20 (6.1), 21 (6.4), 25 (7.6), 28 (8.5), 30 (9.1), 46 (14), 66 (20.1), 72 (21.9), 120 (36.6).

The Wolfe St. 2 1/2 storey duplex contains one flat on the ground floor and another flat in the two upper floors under a full mansard roof.

The Drolet St. and Sherbrooke St. houses feature a full mansard roof and a full usable basement half above ground.

TABLE 6.4 continued: COMPARITIVE PRICES PER SQUARE FOOT (per m²)

	ORIGINAL PRICE OF LAND (\$)	PRICE OF SUBDIVIDED LAND (\$)	AVERAGE PRICE PER HOUSEHOLD (\$)
A.	0.14 (1.55)	0.29 (3.11)	1.19 (12.81)
B.	0.14 (1.55)	0.29 (3.11)	1.11 (11.96)
C.	0.14 (1.55)	0.29 (3.11)	1.03 (11.11)
D.	0.6 (0.63)	0.19 (2.00)	1.00 (10.76)
E.	-	-	1.06 (11.39)
F.	-	0.40 (4.28)	3.42 (36.77)

NOTES Prices calculated according to gross area.
 The Drolet St. and Sherbrooke St. houses are calculated
 on the basis of a full usable basement, thus three
 floors and five floors respectively.

We have already commented on the vagaries of land pricing, but it would appear that once housing was built on the land a clear pricing gradient took over. Thus the final price for a flat in a duplex was \$625 to \$700 while a larger flat occupying two upper floors was \$1,300. However, flats were never sold separately, as a duplex was legally indivisible. A single-family house of identical ground dimensions but offering two floors of living space plus a full-size usable basement half above ground was \$1800 to \$2000. Finally, a leap to ultra luxury, four floors plus usable basement, on a much larger ground plan, with all the trimmings included, produced a \$22,000 price tag.

On a square foot (or m^2) basis, all household prices work out to between \$1.00 and \$1.19 per square foot (roughly \$11 to \$13 per m^2) whether one lived on Wolfe Street or Drolet Street, in a simple duplex flat, a double-storey flat or a small single-family house. The luxury house on Sherbrooke Street, with its many extra features and high quality materials had a much higher cost of \$3.42 per square foot (or about \$37 per m^2).

THE SHAKY FINANCIAL SCAFFOLDING AROUND HOUSING CONSTRUCTION

What we know about the financing of housing development

can be summarized in several main points. Builders in the wealthier districts seem to have been able to take care of themselves financially. Builders like David and company, or Wilson, did not have recourse to mortgage lending individuals or institutions, having ample capital resources from other ventures. Should a builder require it, these districts were provided with institutional financing.

The bulk of Montreal's new housing was built under quite different circumstances. House building was dominated by small developers, mostly one-time-only developers. The bankruptcy rate was fiercest in working class east-end Montreal, and illegal housing was rampant in working class west-end Montreal [see Chapter Two].

Based on the macro-economic theories expressed in Chapter One, investment in housing construction can be viewed as one of the less attractive forms of capital investment, because of its slow turnover, high risk and low profitability. Under such circumstances the capital market for housing would likely be piece-meal and poorly developed. This would appear to be the case given the few institutional outlets for mortgage financing, evident in the review of financial institutions, created to organize and circulate capital in the nineteenth century. The case study of Wolfe Street and the 1881 Goad atlas study illustrate the shaky financial scaffolding around

housing development. The system did produce houses but the builder who finished a house was often not the one who began it.

Mutual and permanent building societies which involved shareholders in housing investments were fewer in number in Montreal than in other cities. Only 24 building societies and mortgage loan companies were active in 1880. Except for the eight trustee building societies, few of Montreal's societies could claim the working class and artisanal memberships other cities seemed to have. Therefore, although Montreal's mortgage-lending institutions did have an impact on local housing production it seems to have been weaker and less broadly based than in other cities of the English-speaking world. Private individual lenders invariably picked up the slack.

In reference to individual lenders, Bellman, an authority on building societies in Britain, wrote that "many of the misfortunes of mortgagors have been caused by the calling in of a private mortgage at an inconvenient moment, and even when it is found possible to replace the private mortgage, the borrower may be involved in higher interest charges and fresh legal expenses"⁵⁶. The double and triple encumbrances seen in the Wolfe Street case study, appears to have been a standard feature of the development process in working-class

neighbourhoods⁵⁷. The situation was fraught with danger for the builder as it only took one mortgage creditor to bring the whole financial scaffolding down.

FOOTNOTES - CHAPTER SIX

1. The distinction made here between permit holders who built for profit and those who did not is not intended to imply that people who built or contracted to have built a house for personal use did not require mortgage financing; some did and some did not. The distinction is made because it is assumed that in a capitalist economy where housing is viewed as a means of producing surplus value there is a far greater likelihood that the investor would have need to call upon the capital market.
2. The total number of residential buildings for the City of Montreal in 1881 was 15,581 according to a count done from the Goad Atlas of the City of Montreal (1881). This count includes residential buildings with shops on the ground floor. The City assessment rolls for 1881 record 26,539 households. The city-wide ratio of households per building in 1881, therefore, was 1.7 households, basically a duplex. The figure would probably be yet closer to 2 if commercial premises were leached out of the data. Old Montreal, that is East, Centre and West Wards, were not included in this calculation. According to our 1868-1871 and 1873-1877 permits, only 5.5% of all houses were of a non-profit type, built exclusively for occupancy by the permit holder.
3. Official tabulations of banking and insurance companies operating in Canada recorded monthly in the Canada Gazette reveal the overwhelming financial dominance of Montreal in the 19th century.
4. Edward P. Neufeld, The Financial System of Canada; its Growth and Development (Toronto: Macmillan of Canada, 1972).
5. Charles E. Goad, Atlas of the City of Montreal (Montreal: Charles E. Goad, 1881), I.
6. Edward P. Neufeld, "Banking Legislation 1822 to 1944", in Money and Banking in Canada, ed. Edward P. Neufeld (Toronto: McClelland & Stewart, 1964), p. 360.

7. Adam Shortt, "Currency and Banking, 1840-1867", in United Canada 1840-1867, Vol. V of Canada and its Provinces, a History of the Canadian People and their Institutions by One Hundred Associates ed. Adam Shortt and Arthur Doughty (Edinburgh: Edinburgh University Press, 1914), pp. 289-290.
8. C.A. Curtis, Statistical Contributions to Canadian Economic History (Toronto: Macmillan Co., 1931), I, p. 59. These assets were reported under the heading "Real estate, the property of the Bank (other than Bank Premises), and mortgages on real estate sold by the Bank". These figures would also include commercial and industrial properties as well as undeveloped land owned by the banks.
9. The fascinating history of Savings Banks in Canada is recounted R. T. Naylor, "The Rise and Decline of the Trustee Savings Bank in British North America", Canadian Historical Review, 65, No. 4 (1984), pp.532-539 and in Neufeld, The Financial ..., op.cit.
10. Ibid., p. 153.
11. Sam B. Warner, Streetcar Suburbs, the Process of Growth in Boston, 1870-1900 (Cambridge: Harvard University Press, 1962), p. 118.
12. Neufeld, The Financial ..., op.cit., pp.,. 178,288.
13. Ibid., p. 258.
14. Information relating to insurance companies operating in Canada are compiled from the "Report of the Superintendent of Insurance for the year ending 31 Dec. 1875", in Dominion of Canada, Sessional Papers, 9, No. 8 (1876).
15. Neufeld, The Financial ..., op.cit., p. 178.
16. Henry Aubin, City for Sale (Montreal: éd. l'Etincelle, 1977) documents the international financing of 1970's urban development in Canada and the key role played by insurance companies. Central business district development has been omitted from our research as it did not integrate housing. The huge Barron Block, an office building (1871), and massive warehouses built by the Montreal Warehousing Company and various religious orders of nuns (1860s-70s) testify to the existence of this form of development in the

local market.

17. For a portrait of the typical land speculator and subdivider, see Paul-André Linteau and Jean-Claude Robert, "Propriété foncière et société à Montréal: une hypothèse", Revue d'histoire de l'Amérique française, 28, No. 1 (1974), pp. 56-62, and also Paul-André Linteau, Maisonneuve 1883-1918 (Montréal: Boréal Express, 1981), pp. 41-46.
18. A verification of the officers and directors of the Canadian insurance companies more than justifies this statement. See insurance company advertisements in any 1870s Montreal Directory and Joseph Schull, The Century of the Sun (Toronto: Macmillan of Canada, 1971).
19. Canada's first trust company - the Ontario Trust and Investment Society - was a loan company which received fiduciary powers in 1872. But most of the large modern-day trust companies were founded in the 1880s and 1890s. Trust companies had all the financial advantages of building societies and mortgage loan companies plus additional ones making them better equipped competitors and much more flexible to change. Ultimately, some building societies and mortgage loan companies simply reincorporated themselves as trust companies, while most either disappeared, merged together or were absorbed by trust companies. The apex of building society and mortgage loan company development was reached during the 1880s when they counted for nearly 30% of all financial intermediary assets in Canada. Ever since then they have witnessed a long and steady decline relative to other financial intermediaries. See Neufeld, The Financial ..., op.cit., pp. 177, 203-204, 217-219, 293-295.
20. The first mortgage loan company was the Trust & Loan Company of Upper Canada, founded in Kingston in 1843. The other basic type of mortgage lending institution - the terminating building society - had its origins with the Port Sarnia Syndicate, founded in Sarnia in 1844. See *Ibid.*, p. 176.
21. *Ibid.*, p. 178.
22. *Ibid.*, pp. 186-188. See Statutes of Canada (1845), 8 Vic., cap. 94, and (1846), 9 Vic., cap. 90 for more details.

23. Harold Bellman, The Building Society Movement (London: Methuen & Co., 1927), p. 12.
24. Neufeld, The Financial ..., op. cit., pp.192-194. See Statutes of Canada (1859), 22 Vic., cap. 45 for details.
25. Ibid., pp. 194-195.
26. Statutes of Canada (1877), 40 Vic., cap. 50. Only building societies with a capital stock of \$250,000 or more could be constituted and such societies would be allowed to invest in municipal debentures and Dominion or provincial securities, as well as accept deposits and issue debentures of their own.
27. Neufeld, The Financial ..., op. cit., p.180.
28. Ibid., pp.192-196.
29. The censuses of 1842, 1844, 1850, 1852 and 1861 show the francophone element of the City population as 42.5%, 43%, 43.6%, 45.3% and 48.4% respectively. However by 1861, Montreal's urban population had spilled over city boundaries, and if these predominantly francophone suburbs are added, the French element was slightly over 50%.
30. This statement is confirmed by the research on French-Canadian élites and institutions by Paula Kestelman, "The Evolution of an Urban Culture Core: A Study of French-Canadian Institutions and Commerce in Central East Montreal", M.A. Thesis, Department of Geography, Carleton University, 1983, and the research on occupations and assessed rents by David Hanna and Sherry Olson, "Métier, loyers et bouts de rue: l'armature de la société montréalaise de 1881 à 1901, Cahiers de géographie du Québec, 27, No. 71 (1983), pp. 255-275.
31. The Irish Mutual Building Society, appears to have catered to the Irish population outside Sainte-Anne Ward as none of its directors came from there.
32. See Consolidated Statutes for Lower Canada (1861), cap. 69, under which they were incorporated.
33. See Statutes of Québec (1875), 39 Vic., cap. 63 and 62, for a description of these rights and

powers.

34. Brian J. Young, "Hugh Allan", in Dictionary of Canadian Biography, eds. Frances G. Halfpenny and Jean Hamelin (Toronto: University of Toronto Press, 1982), II, pp. 5 - 15.
35. See Statutes of Canada (1872), 35 Vic., cap. 109 and compare with the Building Societies Act in the Consolidated Statutes for Lower Canada (1861), cap. 69.
36. These were the Société de Construction Canadienne de Montréal, converted in 1868 under Statutes of Québec, 31 Vic., cap. 40, the Société de Construction Saint-Jacques in 1877 and the Société de Construction du Comté d'Hochelaga in 1878 under Statutes of Canada, 40 Vic., cap. 81 and 41 Vic., cap. 41. The mechanism for such conversions was prescribed in the acts.
37. The innovative aspect was summarized in the preamble to the act of incorporation: "Whereas the persons hereinafter named have, by their petition, represented that great advantages would result to the public from the formation of a landed credit company, with sufficient capital for the making of loans for long periods, repayable by means of sinking funds, or for short periods with or without sinking funds; and that such an institution, formed on the model of the best landed credit institutions of Europe, would be a boon to Canada ...". See Statutes of Canada (1873), 36 Vic., cap. 102 and Statutes of Québec (1875), 39 Vic., cap. 64.
38. The use of the word "trust" in the corporate title did not impart fiduciary powers on the company in question. This firm was simply a mortgage loan company, the first one in Canada (founded in Kingston, 1843), and did not possess any fiduciary powers on which to build an estates, trusts and agency business as would be the case with true trust companies. See Neufeld, op. cit., p. 203.
39. See Statutes of Québec (1868), 31 Vic., cap. 41.
40. See Statutes of Canada (1874), 37 Vic., cap. 103.
41. See Statutes of Canada (1878), 41 Vic., cap. 42.
42. Neufeld, The Financial ..., op. cit., pp. 176 and

180, and Table 7.1 on p. 181.

43. Bellman, op.cit., p.64.
44. F.B. Sanborn, "Report to the American Social Science Association", (1888), as cited in Bellman, op.cit., p.85.
45. Sherry Olson, Baltimore: the Building of an American City (Baltimore: Johns Hopkins University Press, 1980), p.220.
46. The largest of these estates, or "fiefs", at the outset of the nineteenth century were the "Fief Lagaucheti re" owned by the Soeurs hospitali res de Saint-Joseph de l'Hotel Dieu de Montr al (the Hotel Dieu sisters) and located in suburban Saint-Laurent Ward; the "Fief Nazareth" owned by the Soeurs Grises (the Grey nuns) equivalent to the entire extent of Griffintown; the "Domaine de la montagne" owned by the Messieurs de Saint-Sulpice (the Sulpicians) forming the entire area west of Guy Street extending south to the escarpment near Dorchester Street; the two "Fermes Saint-Gabriel" owned by the same order and by the Soeurs de la congr gation Notre-Dame forming virtually all of Sainte-Anne Ward west of Griffintown; finally the "Fief Saint-Joseph" and "Fief Saint-Augustin" located mostly just outside the city limits in suburban Sainte-Cun gonde and Saint-Henri.
47. For example, documents proving the extent of this business are available in the "Archives de Saint-Sulpice" located in the Vieux S minaire next to Notre-Dame church on Place d'Armes in Old Montreal.
48. This source of mortgage money must be substantial, possibly dominant. No firm answer can be provided on the real role individual mortgage lending played in financing housing development in Montreal because the research is a thesis in itself. But accurate sources do exist. It would suffice to take a sample of the names of residential permit holders in 1868-71/1873-77 from the Building Inspector's annual reports of the City of Montreal and track them one by one in the "Index aux noms" at the Provincial Registry Office in the Montreal court house ("Palais de justice"). Deeds of Loan pertaining to those names can be looked up by their registration number to verify

that they relate to the construction described in the permit. Details as to the amounts borrowed, interest rates and amortization period, as well as the identity and occupation of the lender can be gleaned from this source.

49. Neufeld, The Financial ..., op. cit., p. 179.
50. Jean-Claude Marsan chose Wolfe Street to illustrate his concept of the typical vernacular house of the second half of the nineteenth century in Montreal:

"C'est...dans le secteur...délimité par les rues Amherst, Sherbrooke, l'avenue Papineau et par le boulevard Dorchester, que l'on peut le mieux reconstituer l'évolution domiciliaire vers un premier palier d'habitat type. En effet, dans ce district à peine transformé depuis son premier développement, on peut retracer une standardisation progressive des îlots, des lots à bâtir et des habitations, pour aboutir à un modèle caractérisé de rue et d'habitation dont la rue Wolfe constitue sans doute un bon exemple." Jean-Claude Marsan, Montréal en évolution (Montréal: Fides, 1974), p. 269.

51. Buyers were obliged to build within the year a "good" house of two or more storeys, or a one-storey house topped with a "comble français" meaning a mansard roof. Otherwise, no other building terms were laid down. If the buyer did not meet this obligation, then the Roberts were empowered to repossess the lot.
52. In these newly developed areas of Montreal, the new high-rent districts and new low-rent districts are defined as those areas dominated by new construction and located at either extreme of the assessed rent scale [see Fig. 4.2 map of rents in 1881]. New high-rent districts are: Saint-Antoine Ward north of Saint-Antoine Street and Saint-Laurent Ward north of Ontario Street. The new low-rent districts are: Sainte-Anne Ward south of the Lachine Canal, Saint-Antoine Ward south of Saint-Antoine Street, Saint-Louis Ward north of Sherbrooke Street, Saint-Jacques Ward north of Sainte-Catherine Street, western Sainte-Marie Ward, north of Sainte-Catherine Street and eastern Sainte-Marie Ward (east of Colborne Ave.). The latter three divisions constitute the new East End.

53. The commutation of property from a ground-rent system to a freehold system had been made gradually possible under the 1840, 1843, 1859 and 1860 acts affecting the seigneurial regime on the Island of Montreal. Property owners availed themselves of the right whenever they wished upon payment of commutation fees to the "Seigneurs" of Montreal, the religious order of Saint-Sulpice. See Georges E. Baillargeon, La survivance du régime seigneurial à Montréal (Paris: Cercle du livre de France, 1968).
54. J-C Robert, "Ferdinand David", in Halfpenny and Hamelin, op. cit., p. 235.
55. The delay in filing the Saint-Jean-Baptiste plan was caused by the Province's total revamping of the cadastral system. The City of Montreal was restructured between 1869 and 1871 while the surrounding suburban villages were done in 1872-73. The rest of the island was accomplished in 1874 and 1877. The Village Saint-Jean-Baptiste cadaster was officially reopened for registration in November, 1872. It could be argued that the cadastral restructuring in suburban Montreal, coming as it did at the peak of a building cycle, caused significant delays in subdividing and may have damped real estate activity during the upswing. The same could be said for Sainte-Marie Ward which remained largely unsubdivided north of Sainte-Catherine Street until its cadaster was reopened in April, 1871. West-end Montreal was not so inconvenienced as its lands had been subdivided long ago, well in advance of urban expansion.
56. Bellman, op. cit., p.47.
57. Warner found that multiple mortgages on a same property were the norm in late nineteenth century housing development in Boston and vicinity. Thus the risk was spread among several mortgage lenders, a feature made necessary by the number of small lenders in the field. See Sam B. Warner, op. cit., p. 123.

CHAPTER SEVEN

CONCLUSION

JOINERS, FLATS, AND FINANCIAL JEOPARDY

There were two major spheres of investment in Montreal. One was the sphere discussed by R.T. Naylor who demonstrated that a small group of powerful merchants, headquartered in Montreal, retained control of Canada throughout the nineteenth and early twentieth centuries. They dominated patterns of investment through the state structure and the British portfolio capital at their disposal. Naylor also showed that this group of merchant-financiers invested heavily in large-scale manufacturing in nineteenth-century Montreal, giving the city its lopsided industrial structure¹. This was the business world of the mansion dweller.

Beyond the windows of his mansion, office and factory was the other sphere. The construction of housing in Canada's largest city required the mobilization of an enormous amount of capital and labour. The city almost doubled its housing stock during the 1866-1880 building cycle. Indeed it more than doubled if we consider the number of flats. This is the sphere which this thesis has explored.

The house building industry was not controlled by an

oligopoly. It was not characterized by large investments or by large-scale operators. Rather houses were built on location in artisanal fashion. An entrepreneur, usually a carpenter-joiner with experience in building, built one or two houses, usually duplexes. After obtaining a double or triple mortgage on his property, he rolled up his shirtsleeves and worked alongside a small number of other skilled workers, often members of his extended family. If he was the neighbourhood grocer or butcher, then he had the local contacts to engage the necessary workmen for the project. Building houses was a part-time occupation. Often the builder failed to complete the project due to financial stringency and someone else carried it to term.

The house building industry was characterized by small-scale entrepreneurs who operated with small sums of capital and survived on small profits. Building a house was seen as a manageable investment. The existence of some large-scale operators opens up a different view of the building industry. They tried to standardize their models as much as possible, using the same house model over and over again. This allowed for economies of scale in planning layout, organizing materials and creating ornamentation. There were several large sash and door factories in Montreal in the 1870s, and of course bricks, iron and glass were available from local factories. The Montreal Building

Association mobilized the resources of many wealthy shareholders in a successful corporation that cranked out scores of houses following three or four basic designs. All these factors were signs of a new organization of production within the industry.

Large-scale development, however, was mainly restricted to the upper end of the housing market. Spatially, this translated into a broad arc cradling Mount Royal. Typologically, it was equivalent to single-family row housing although there were significant exceptions to both trends. This scale of operation was largely absent from working-class districts which, after all, contained the bulk of Montreal's housing stock. Here the builder was caught between the high floor of building costs and the low ceiling of worker purchasing power. We have shown that the per square foot cost of a dwelling unit was much the same at all levels of the market [refer to Table 6.4]. That was the floor. The only significant way to trim the total cost per household was to reduce living space.

The low ceiling was wages and researchers are agreed that Montreal was a low-wage city². Nineteenth-century statements by industrialists corroborate this research.

Hochelaga Cotton manufacturer, Mr. Nye, specifically stated in 1876 that one of the reasons he had helped to start a company in Canada rather than the United States was because

labour was 'cheaper by from 25 to 30 per cent'. An American manufacturer believed wages in Quebec were 'nearly 60 per cent less' and stressed the advantages of having local people to draw on³.

It was this low ceiling that gave rise to the duplex in Montreal. Nothing better explains its astonishingly rapid spread throughout the city than wages. By the 1870s more duplexes were being built than single-family houses. The mingling of several, mainly British, housing models and the deployment of duplex derivatives such as the fourplex, triplex and sixplex shows the innovative and adaptive skills of Montreal's builders while underscoring the market constraints. In the process, Montreal received a unique typology of working-class housing.

If builders opted so massively for the duplex it was not because building bylaws forced them to. The standard 25 foot (7.6 m) duplex could just as easily have been reshuffled into a pair of 12 foot (3.7 m) single-family houses as was, for example, the case in Philadelphia⁴. Nor can cultural reasons be invoked as the duplex was not particularly important to either British or French-Canadian housing traditions. Large families were not a factor either, as the phenomenal French-Canadian birthrates were a rural experience. In Montreal, French-Canadian birthrates were no different from those of other working-class families⁵.

M.J. Daunton asked the same question of the Tyneside region in Britain. Why terraced flats (duplexes) when the rest of working-class England was made up of single-family houses? He rejected cultural factors, land prices and land tenure systems as explanations after examining each one empirically. He likewise rejected other supply-side arguments such as land monopolies and speculation. The key to the Tyneside enigma is on the demand side. He empirically proved that working-class wages in Newcastle were lower than anywhere else in England during the nineteenth century⁶. Our argument is that the same reasoning applies to Montreal in the North American context. Certainly the evidence gathered in this thesis points in that direction.

All it took was a chance introduction in Montreal of fourplexes with Tyneside connections and the solution to the city's housing crisis spread rapidly. That chance introduction was Sebastopol Row, a railway-built housing project in Pointe Saint-Charles introduced in 1857 coincidentally following a series of devastating urban fires. Builders operating in the vicinity with connections in the East End were responsible for the model's rapid diffusion.

With low wages a key factor affecting the housing market, the duplex represented the best solution in a very tight investment opportunity for the small builder. Translated into

its classic fourplex configuration [refer to Fig. 3.8 or 6.3] the builder could cut corners in construction. For example, he could roll four chimneys into one central shaft and use only one flight of stairs for the two upstairs flats. In an equivalent row of four narrow two-storey single-family houses, the builder would have had to supply at least two chimneys and certainly four separate stairways.

The builder who responded to the investment opportunities inherent in a rapidly growing, increasingly proletarianized population was French-Canadian. Usually of modest social origins and building on a small scale, French-Canadian builders were over-represented by 15% relative to their proportion of the population. The British-Canadian builders equalled their share of the population. It was the Irish (21% of the population) who were largely absent from the building process.

English, Scottish and French builders were found at all levels. The differences between the British-Canadian and French-Canadian groups in terms of class origins was slight. The most significant difference was in the much higher proportion of merchants, financiers, transportation company owners and manufacturers who were building for profit on the British side. Conversely there was a much higher proportion of carpenter-joiners among the French. Several went on to

become successful large-scale contractors.

In general, the builder's social profile was the same in the several cultural communities. In other words, despite ethnic differentiation, there were identifiable types of profit-oriented builders. They were most often building tradesmen (30.5%). If not, they were likely to be retailers, wholesalers, or artisanal retailers, such as grocers, storekeepers, dealers, butchers, bakers, blacksmiths (23.6%). If not from either of these groups, the builders were blue-collar workers, particularly skilled workers, carters, shoemakers or labourers (20.7%). These were the people who stepped in and took the risks, trying against odds to make a profit out of building houses. Housing construction was not particularly a concern of the élite, professionals or white-collar workers.

The lack of Irish builders may be explained by their lack of contact and familiarity with the building process. Irish carpenters, joiners, bricklayers or roofers were scarce, thus they did not have a springboard in housing construction. They were also absent from the circuits of capital normally tapped in the building process. The French-Canadians had their building societies, and the British-Canadians their mortgage loan companies. The Irish were a target clientèle for French and British builders.

The financing of new housing fell mainly to the two French and British élites. On the French-Canadian side, the building societies which made east-end duplex construction possible, were run by the major wholesalers, dealers, retailers and advocates of the Saint-Denis Street corridor. This was French Montreal's petit bourgeois nucleus, close-knit, enveloping all the important French-Canadian institutions, public administration functions and commercial enterprises. Competing with them in the same working-class neighbourhoods were the mortgage loan companies, run by the powerful British-Canadian merchants, industrialists and financiers. They tended to finance larger developers in both East and West Ends and were no strangers to the underwriting of duplexes and triplexes. For this bourgeoisie, spread over the flank of Mount Royal, mortgage financing was a small cog in a huge wheel of diversified investments. Beyond these two groups of institutional mortgagors, there were the more informal circuits where building capital was made available through the mediation of the local notary or lumber merchant. This was probably the source of a majority of house building funds.

Between the three groups of mortgage lenders, housing got built. There were failures, especially among the French building societies, but the system survived and expanded, developing more sophisticated tools for mortgage financing by

the end of the era. The builders themselves did not always get through in such good financial shape. Market demand was strong, hence the incentive to build. But ability to pay for housing was weak, hence the risk. Judging by the small number of mortgage lending institutions in Montreal compared with other cities in North America, building capital was hard come by. Small-scale builders took the risk and tapped into several sources of capital in succession in order to complete a project. The method was as dangerous as the creditors were numerous. As a result many builders failed in the gambit to build and make a profit. Property seizures, especially in the East End were plentiful.

Alexander W. Ogilvie could not help but reflect on these questions as he pulled up in his carriage to his new mansion on Edgehill Avenue, off Dorchester Street, one evening late in 1880 ⁷. Ogilvie was the founder of the giant flour milling company bearing his name. He was a founding director of the Sun Mutual Insurance Company, and president of the National Insurance Company. He was on the boards of many other major firms.

Pulling into Edgehill he had glanced over to Fort Street where an impressive row of houses stood, built by the Montreal

Building Association of which he was a director. They had been good investments. But times were bad economically, and a builder on Essex Street, just a block beyond Fort, had failed to meet his commitment to the Montreal Loan & Mortgage Company of which Ogilvie was also a director. The company had had to seize seven houses. Who would buy them in these times of tight money?

After alighting from the carriage, Ogilvie walked over to the beautiful gazebo perched on the edge of the cliff overlooking the lower town. He and his fellow mansion owners on Edgehill had purchased the cliff in common to preserve the view. He could see through the haze his flour mills down by the Saint-Gabriel and Mill Street locks. The smoky factories on the Lachine Canal had created thousands of jobs, and the workers' houses lay before him like a carpet. Production was down at his mills and there had had to be dismissals. The idle capital frustrated him.

He turned his gaze from the mills to the houses. At least, he thought, his building and mortgage loan companies had gotten out of there early. The M.B.A. had last built down there in 1873, and the Montreal Loan & Mortgage had wisely refrained from financing houses down there. Workers' housing just could not be built for a profit as far as he was concerned, at least not for the kind of profit he was willing

to risk capital on.

But someone was sinking money into those houses. He remembered his friend Louis Tourville, who was on the board of the Société de Construction Canadienne de Montréal. He was a grain merchant on Commissioners Street with whom he had concluded many business deals. He lived over on Saint-Denis Street in an elegant stone house in the French district. Tourville had recently mentioned ruefully how his building society had had to repossess five different properties in the West End. They were all in the city below the hill, amidst those plain little boxes of houses jammed up one against another. If Tourville wanted to invest in that kind of housing, Ogilvie thought, it was all right with him, but he could not see any sense in it.

Then he smiled. He thought of his rivals over at the Provincial Loan Company - Sir Hugh Allan and his brother Andrew, William Workman and the others. He had just found out from an acquaintance, George Cruikshank, a flour merchant on the board, that the Provincial was in deep trouble over its East-End investments. It had repossessed 39 different residential properties out there, 112 buildings in all. Allan, the richest man in Canada, was not so smart after all, mused Ogilvie. Certainly, the Montreal Loan had sustained some losses there as well but nothing on that scale. It only

proved his point, workers' housing was not worth investing in.

He turned away, entering his house through its wide oak doors, without a thought of the hundreds of carpenters, joiners, grocers, butchers, skilled factory workers and others who had undertaken to build those houses below the hill and elsewhere. They were the people who most often lost the game of financial jeopardy.

FOOTNOTES - CHAPTER SEVEN

1. See R. T. Naylor, "The Rise and Fall of the Third Commercial Empire of the St. Lawrence", in Capitalism and the National Question in Canada, ed. Gary Teeple (Toronto: University of Toronto Press, 1972); Naylor, A History of Canadian Business, 1867-1914, 2 vols. (Toronto: Lorimer, 1975).
2. See Jean de Bonville, Jean-Baptiste Gagnepetit: les travailleurs montréalais à la fin du XIX siècle (Montréal: Editions l'Aurore, 1975); Yvan Lamonde, La culture ouvrière à Montréal (1880-1920): bilan historiographique (Montréal: Institut québécois de recherche sur la culture, 1982); Terry Copp, The Anatomy of Poverty: the Condition of the Working Class in Montreal, 1897-1929 (Toronto: McClelland and Stewart, 1974); Herbert B. Ames, The City Below the Hill (Montreal, 1897; rpt. Toronto: University of Toronto Press, 1972).
3. Government of Canada, Parliament House of Commons, Journals, 1876, App. 3, "Report of the Select Committee on the Causes of the Present Depression of the Manufacturing, Mining, Commercial, Shipping, Lumber and Fishing Interests", p. 133. These statements and others are cited in Bettina Bradbury, "The Working Class Family Economy: Montreal, 1861-1881", Diss. Department of History, Concordia University 1984, pp. 44-46.
4. See Laurence Lafore and Sarah Lee Lippincott, Philadelphia, the Unexpected City (New York: 1965).
5. Yvan Lamonde, op.cit., p.75, notes that: "La famille ouvrière montréalaise ne semble pas avoir connu l'expérience traditionnelle - rurale et pré-industrielle - de la 'famille nombreuse'. Jean de Bonville (1975) précise que la taille moyenne de la famille montréalaise en 1891 était de 5.1 personnes. Elle était de 5.2 dans le quartier Sainte-Anne, de 4.7 dans Sainte-Marie, de 5.3 dans Hochelaga et de 4.9 dans Saint-Jean-Baptiste. Selon Ames (1897) elle était de 4.9 dans la 'City Below the Hill' où, de fait,

la famille canadienne-française n'était pas plus populeuse que la famille irlandaise, par exemple. ... La famille ouvrière montréalaise ne semble pas avoir été élargie comme la famille rurale traditionnelle".

6. M.J. Daunton, House and Home in the Victorian City: Working-Class Housing 1850-1914 (London: Edward Arnold, 1983), pp. 65-71, 78, 80-81.
7. This hypothetical scenario is based on people, places and facts drawn from our research.

APPENDIX

Administrative wards are divided into "sub-wards" in order to break up contrasting social areas within the same ward, or to distinguish areas that underwent different periods or processes of development. Saint-Antoine Ward is divided along Saint-Antoine Street into north and south in order to separate the rich and poor sections. The same operation is performed on Saint-Jacques Ward, dividing it into eastern and western zones along Amherst Street. Sainte-Marie Ward is split into eastern and western halves along Colborne Avenue (later Delormier) because the two zones, both poor, were physically separated, with little housing around the dividing line. Each area had an entirely different development history. The divisions of Saint-Antoine and Sainte-Marie Wards correspond with the official partitions of 1899.

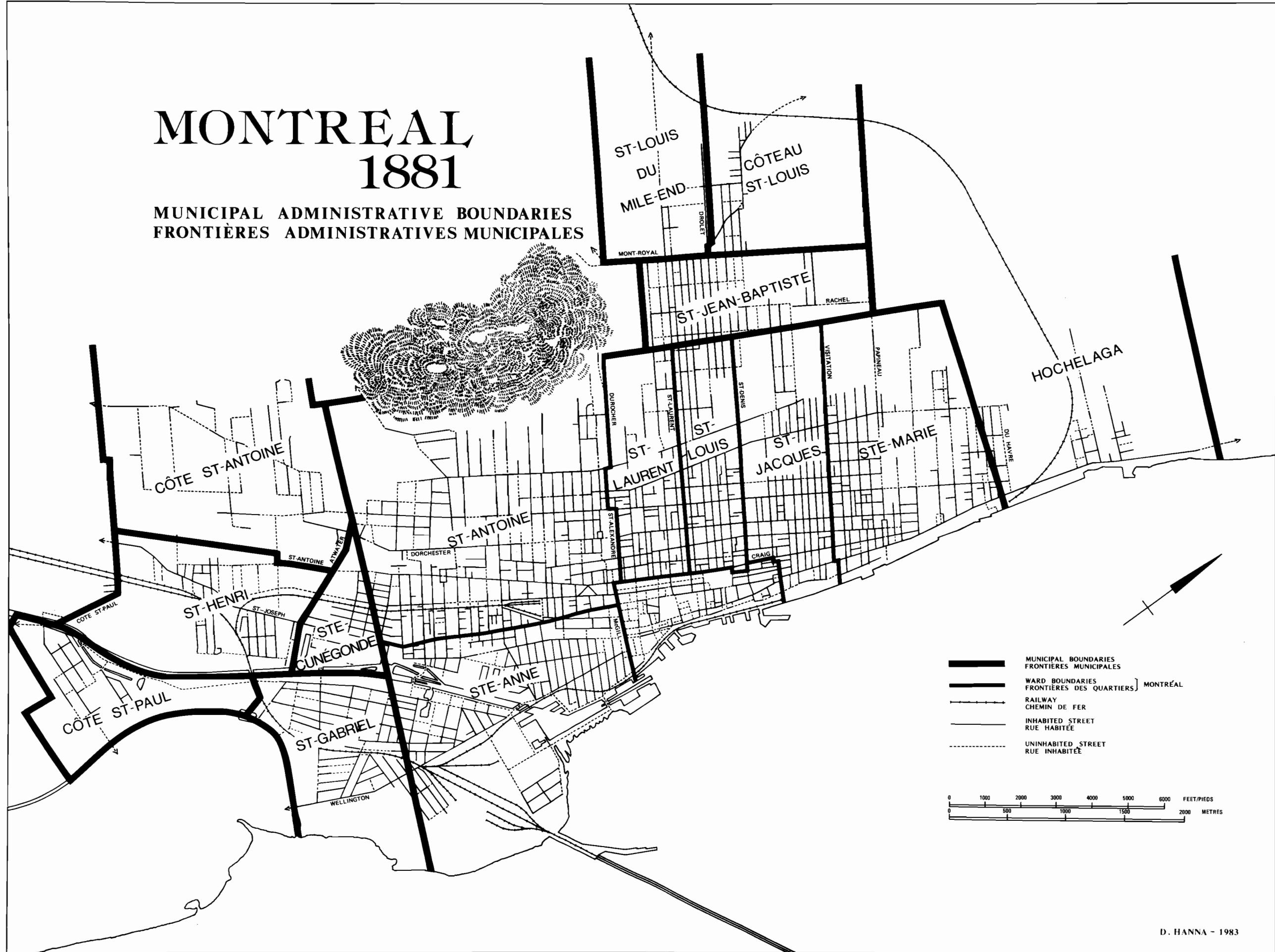
When referring to cardinal points, we have retained traditional Montreal usage. Hence, what should be the north end of the city is commonly known as the East End while the North End actually lies in a more westerly direction. A good portion of the West End lies more accurately in a southerly direction [see compass points on accompanying boundary maps].

Montrealers have always thought of their city as located along a major west-east river (which just happens to jog north

past Montreal) along which two major axes of development occur, one called the East End, the other the West End. When a third axis developed leading away from the river and perpendicular to it, it was naturally referred to as the North End.

MONTRÉAL 1881

MUNICIPAL ADMINISTRATIVE BOUNDARIES
FRONTIÈRES ADMINISTRATIVES MUNICIPALES



MONTRÉAL

1881

WARD SUB-DISTRICTS
SOUS-DIVISIONS DE QUARTIERS



BIBLIOGRAPHY

PRIMARY SOURCES

Canada Census. Census of Canada, 1870-71. Vol I. Ottawa: 1873.

Canada Census. Census of Canada, 1880-81. Vol I. Ottawa: 1882.

Canada Census. Census of the Canadas, 1851-52. Vol. II. Quebec: John Lovell, 1853-55.

Canada Census. Census of the Canadas, 1860-61. Vol. I. Quebec: John Lovell, 1863.

Census of Lower Canada, 1842. Government of Canada Archives.

Census of Lower Canada, 1844. Journal of Assembly, 1846. Appendix D.

Census of the City of Montreal, 1850. Montreal Pocket Almanac and General Register - 1851. Montreal: J. Starke & Co., 1851.

City of Montreal. Assessment Rolls [all wards], 1881.

City of Montreal. Compilation of the Bye-Laws and Police Regulations in Force in the City of Montreal. Montreal: J. Starke & Co., 1842.

City of Montreal, Corporation of. "Annual Report of the Inspector of Buildings for the City of Montreal, for the year..." Reports on the Accounts of the Corporation of the City of Montreal and Reports of City Officials for the year ending ... 1863 to 1883. Montreal: J. Starke & Co., 1864-1884.

City of Montreal, Corporation of. The Charter and By-Laws of the City of Montreal. Montreal: John Lovell, 1865.

Goad, Charles E. Atlas of the City of Montreal. Vol. I. 44 Plates. Montreal: Charles E. Goad, 1881.

Government of Canada. Consolidated Statutes for Lower Canada. 1861.

Government of Canada. Sessional Papers. Vol. 9. No. 8. 1876.

Government of Canada. Statutes of Canada. 1845-1846; 1857-1880.

Government of Canada. Statutes of Lower Canada 1851. Toronto: Derbshire & Desbarats, 1851.

Government of Canada. The Canada Gazette. Vol. 8. 1874-75.

Government of Quebec. Registry Office - Montreal Cadastral Division. Deeds of Loan [various]. 1870-75.

Government of Quebec. Registry Office - Montreal Cadastral Division. Deeds of Sale [various]. 1870-75.

Government of Quebec. Statutes of Quebec. 1868-1880.

Government of Quebec. The Quebec Gazette. Vol. 1-12. 1869-80.

Grand Trunk Railway. Internal correspondence dated February 10, 1859, to Peto, Brassey & Betts, map and deed. Canadian National Corporate Archives, Montreal.

Lovell, John, ed. Lovell's Montreal Directory, 1875-76 to 1882-83. Montreal: John Lovell, annual, 1875-1882.

Lovell, John, ed. Mackay's Montreal Directory, 1863-64 to 1867-68. Montreal: John Lovell, annual, 1863-1867.

Lovell, John, ed. Montreal Directory, 1868-1869 to 1874-1875. Montreal: John Lovell, annual, 1868-1874.

Mackay, Christina, ed. Mackay's Montreal Directory, 1856-57 to 1862-63. Montreal, annual, 1856-1862.

Mackay, Christina, ed. Montreal Directory, 1855-56. Montreal: 1855.

Mackay, R.W.S., ed. Montreal Directory, 1842-43 to 1845-46; 1847-48 to 1850-51; 1852-53 to 1854-55. Montreal: annual 1842-45, annual 1847-50, annual 1852-54.

Plunkett, & Brady. Plan of the City of Montreal Made by Order of the Mayor, Aldermen and Citizens from a Trigonometrical Survey by Plunkett & Brady, Engineers, Revised and Corrected to Dec. 1872. Montreal: Burland, Lafricain & Co. .

SECONDARY SOURCES

Ames, Herbert B. The City Below the Hill. 1897; rpt. Toronto: University of Toronto Press, 1972.

Aubin, Henry. City for Sale. Montreal: Editions l'Etincelle, 1977.

Baillargeon, Georges E. La survivance du régime seigneurial à Montréal. Paris: Cercle du livre de France, 1968.

Barrows, Robert. "Beyond the Tenement: Patterns of American Urban Housing, 1870-1930." Journal of Urban History, 9, No. 4 (1983), 395-420.

Bellman, Harold. The Building Society Movement. London: Methuen & Co., 1927.

Bernier, Jacques. "La conditions des travailleurs, 1851-1896". In Les travailleurs québécois 1851-1896. Ed. N. Bélanger et al. Montreal: Presses de l'Université du Québec, 1973.

Black, George. The Surnames of Scotland. New York: N.Y. Public Library, 1946.

de Bonville, Jean. Jean-Baptiste Gagnepetit: les travailleurs montréalais à la fin du XIXe siècle. Montreal: Editions de l'Aurore, 1975.

Borthwick, J. Douglas. Montreal History and Gazetteer. Montreal: 1892.

Bosworth, Newton. Hochelaga Depicta. Montreal: Greig, 1839.

Bradbury, Bettina. "The Working Class Family Economy: Montreal, 1861-1881." Diss. Department of History, Concordia University, 1984.

Buckley, Kenneth. Capital Formation in Canada 1896-1930. Toronto: McClelland and Stewart, 1974.

Burgess, Joanne. "L'industrie de la chaussure à Montréal: 1840-1870 - le passage de l'artisanat à la fabrique." Revue d'histoire de l'Amérique française, 31, No. 2 (1977), 187-210.

Burns, Arthur F., and Wesley C. Mitchell. Measuring Business Cycles. New York: National Bureau of Economic Research, 1946.

Bushee, Frederick. "Ethnic Factors in the Population of Boston." Publications of the American Economic Association. Vol. 4, 3rd Ser. (1903), 80-83.

Cairncross, Alexander K. Home and Foreign Investment 1870-1913. Cambridge: Cambridge University Press, 1953.

Carchedi, G. "On the Economic Identification of the New Middle Class." Economy and Society, 4, No. 1 (1975), 1-86.

Choko, Marc. Crises du logement à Montréal, 1860-1939. Montreal: Editions coopératives Albert Saint-Martin, 1980.

Conellan, Owen. The Annals of Ireland. Dublin: 1846.

Cooper, John J. "The Social Structure of Montreal in the 1850s." Canadian Historical Association. Report of the Annual Meeting, (1956), 68.

Copp, Terry. The Anatomy of Poverty: the Condition of the Working Class in Montreal, 1897-1929. Toronto: McClelland and Stewart, 1974.

Cottle, Basil. The Penguin Dictionary of Surnames. Harmondsworth: Penguin Books, 1967.

Cross, D.S., and J.G. Dudley. "Comparative Study of Street Directories and Census Returns for 1871." Urban History Review, 1, No. 3 (1972), 12-16.

Currie, Alexander W. The Grand Trunk Railway of Canada. Toronto: University of Toronto Press, 1957.

Curtis, C.A. Statistical Contributions to Canadian Economic History. Vol. 1. Toronto: Macmillan Co., 1931.

Daunton, M.J. House and Home in the Victorian City; Working-Class Housing 1850-1914. London: Edward Arnold, 1983.

Doucet, Robert. "La deuxième bataille de Sébastopol." Unpublished report to Ministère des affaires culturelles. Montreal: 1983.

Doucet, Michael. "Speculation and the Physical Development of Mid-Nineteenth Century Hamilton." In Shaping the Urban Landscape: Aspects of the Canadian City-Building Process. Eds. Gilbert Stelter and Alan Artibise. Ottawa: Carleton University Press, 1982, pp. 193-194.

Doucet, Michael. "Working Class Housing in a Small Nineteenth Century City: Hamilton, Ontario, 1852-1881." In Essays in Working Class History. Ed. G. Kealey and Peter Warrian. Toronto: McClelland & Stewart, 1976.

Dyos, Harold J. Victorian Suburb - A Study of the Growth of Camberwell. Leicester: Leicester University Press, 1961.

Gauldie, Enid. Cruel Habitations: a History of Working-Class Housing, 1780-1918 (London: Allen & Unwin, 1974).

Groupe de recherche sur la société montréalais au 19e siècle. Rapport 1972-73. Montreal: 1973, n.p.

Halfpenny, Frances G., and Jean Hamelin. Dictionary of Canadian Biography. Vol. II. Toronto: University of Toronto Press, 1982.

Hanna, David B. "Creation of an Early Victorian Suburb in Montreal." Urban History Review, 9, No. 2 (1980), 38-64.

Hanna, David B. "The New Town of Montreal - Creation of an Upper Middle Class Suburb on the Slope of Mount Royal in the Mid-Nineteenth Century." M.A. Thesis, Department of Geography, University of Toronto, 1977.

Hanna, David B. and Sherry Olson. "Métier, loyers et bouts de rue: l'armature de la société montréalaise de 1881 à 1901." Cahiers de géographie du Québec, 27, No. 71 (1983), 255-275.

Harris, R. "Residential Segregation and Class Formation in the Capitalist City: a Review and Directions for Research". Progress in Human Geography, 8 (1984).

Harris, R., Levine G., and B. Osborne. "Housing Tenure and Social Classes in Kingston, Ontario," Journal of Historical Geography, 7, No. 3 (1981), p. 275.

Hayward, Robert J. Fire Insurance Plans in the National Map Collection. Ottawa: Minister of Supply and Services Canada, 1978.

Heap, Margaret. "La grève des charretiers à Montréal, 1864." Revue d'histoire de l'Amérique française, 31, No. 3 (1977), 371-395.

Helps, Arthur. Life and Labours of Mr. Brassey, 1805-70. London: 1872.

Hertzog, Stephen. "A Stake in the System: Domestic Property Ownership and Social Class in Montreal, 1847-1881." M.A. Thesis, Department of Geography, McGill University, 1984.

Hodges, James. Construction of the Great Victoria Bridge in Canada. London: 1860.

Isard, Walter. "A Neglected Cycle: the Transport-Building Cycle." The Review of Economic Statistics, 24, No. 4 (1942), 149-158.

Jenkins, Kathleen. Montreal - Island City of the St. Lawrence. New York: Doubleday & Co., 1966.

Johnson, Leo. "The Development of Class in Canada in the Twentieth Century". In Capitalism and the National Question in Canada. Ed. Gary Teeple. Toronto: University of Toronto Press, 1972.

Juglar, Clément. Des Crises commerciales et leur retour périodique en France, en Angleterre et aux Etats-Unis. Paris: 1860.

Katz, Michael B. The People of Hamilton, Canada West: Family and Class in a Mid-Nineteenth-Century City. Cambridge: Harvard University Press, 1975.

Kealey, Gregory. Working Class Toronto at the Turn of the Century. Toronto: New Hogtown Press, 1973.

Kestelman, Paula. "The Evolution of an Urban Culture Core: A Study of French-Canadian Institutions and Commerce in Central East Montreal." M.A. Thesis, Department of Geography, Carleton University, 1983.

Kilbourn, William. The Elements Combined: A History of the Steel Company of Canada. Toronto: Clarke, Irwin & Co., 1960.

Kuznets, Simon. Secular Movements in Production and Prices. Boston: Houghton Mifflin, 1930.

Kuznets, Simon. "Long Term Changes in National Income of the United States since 1870." In Income and Wealth. 2nd ser. Ed. Simon Kuznets. Cambridge: Harvard University Press, 1952.

Lamonde, Yvan. La culture ouvrière à Montréal (1880-1920) bilan historique. Montreal: Institut québécois de recherche sur la culture, 1982.

Lee, Maurice W. Macroeconomics: Fluctuations, Growth and Stability. Homewood, Ill.: R.D. Irwin, 1967.

Lafore, Laurence and Sarah Lee Lippincott. Philadelphia, the Unexpected City. New York: 1965.

Lenski, Gerhard. Power and Privilege: A Theory of Social Stratification. New York: McGraw-Hill, 1966.

Lessard, Michael and Hugnette Marquis. Encyclopédie de la maison québécoise. Montreal: Editions de l'homme, 1972.

Levine, Gregory J. "Criticizing the Assessment: Views of the Property Evaluation Process in Montreal 1870-1920 and their Implications for Historical Geography." Canadian Geographer, 28, No. 3 (1984), 276-284.

Levine, Gregory, R. Harris and B. Osborne. The Housing Question in Kingston, Ontario, 1881-1901. Report on an investigation. Kingston: Dept. of Geography, Queen's University, 1982.

Lewis, Robert D. "The Segregated City: Residential Differentiation, Rent and Income in Montreal, 1861-1901." M.A. Thesis, Department of Geography, McGill University, 1985.

Linteau, Paul-André. Maisonneuve 1883-1918. Montréal: Boréal Express, 1981.

Linteau, Paul-André and Jean-Claude Robert. "Propriété foncière et société à Montréal: une hypothèse." Revue d'histoire de l'amérique française, 28, No. 1 (1974), 45-65.

Mandel, Ernest. Marxist Economic Theory. Trans. Brian Pearce. London: Merlin Press, 1969.

Marsan, Jean-Claude. Montréal en évolution. Montreal: Editions Fides, 1974.

Marx, Karl. Capital. Vol. I. New York: Vintage, 1977.

Montreal Business Sketches. By the Canada Railway Advertising Company. Montreal: Longmoore & Co., 1864.

Montreal in 1856. By the Montreal General Railway Celebration Committee. Montreal: John Lovell, 1856.

Muthesius, Stefan. The English Terraced House. New Haven: Yale University Press, 1982.

Naylor, R.T. A History of Canadian Business, 1867-1914. 2 vols. Toronto: Lorimer, 1975.

Naylor, R.T. "The Rise and Decline of the Trustee Savings Bank in British North America." Canadian Historical Review, 65, No. 4 (1984), 511-541.

Naylor, R.T. "The Rise and Fall of the Third Commercial Empire of the St. Lawrence." In Capitalism and the National Question in Canada. Ed. Gary Teeple. Toronto: University of Toronto Press, 1972.

Neufeld, Edward P. "Banking Legislation 1822 to 1944." In Money and Banking in Canada. Ed. Edward P. Neufeld. Toronto: McClelland & Stewart, 1964.

Neufeld, Edward P. The Financial System of Canada; its Growth and Development. Toronto: Macmillan of Canada, 1972.

Olson, Sherry. Baltimore: the Building of an American City. Baltimore: Johns Hopkins University Press, 1980.

Olson, Sherry and David Hanna. Plate 67 "The Transformation of Montreal, 1847-1901". In Vol. II of Historical Atlas of Canada. Ed. Louis Gentilcore. Toronto: University of Toronto Press, in press.

Olson, Sherry, David B. Hanna, and Patricia Thornton. "Partage Social et partage de l'espace à Montreal, 1847-1901. Rapport d'étape du 31 mai 1985 au Fonds F.C.A.R. Québec Projet EQ.

Palmer, Brian. A Culture in Conflict. Montreal: McGill-Queens University Press, 1979.

Parkin, Frank. Class Inequality and Political Order: Social Stratification in Capitalist and Communist Societies. London: MacGibbon & Kee, 1971.

Parsons, Talcott. Essays in Sociological Theory. rev. ed. New York: Free Press of Glencoe, 1954.

Pollins, Harold. "Railway Contractors and the Finance of Railway Development in Britain." In Railways in the Victorian Economy. Ed. M.C. Reed. New York: Kelly, 1968.

Poulantzas, Nicos. Political Power and Social Classes. trans. Timothy O'Hagan. London: Sheed & Ward, 1973.

Pritchard, R.M. Housing and the Spatial Structure of the City: Residential Mobility and the Housing Market in an English City since the Industrial Revolution. Cambridge: Cambridge University Press, 1976.

Reaney, Percy. The Origin of English Surnames. London: Routledge & Kegan Paul, 1967.

Rempel, John. Building with Wood. Toronto: University of Toronto Press, 1967.

Ritchie, T. "Plankwall framing, a modern wall construction with an ancient history." Journal of the Society of Architectural Historians, 30, No. 1 (1971).

Rolt, L.T.C. George and Robert Stephenson - the Railway Revolution. London: Longmans, Green & Co., 1960.

Rowley, Gwyn. "An Introduction to British Fire Insurance Plans". The Map Collector, No. 29 (1984).

Sandham, Alfred. Sketches of Montreal, Past and Present. Montreal: George Bishop & Co., 1870.

Saywell, John T. Housing Canadians: Essays on the History of Residential Construction in Canada. Ottawa: 1975.

Schull, Joseph. The Century of the Sun. Toronto: Macmillan of Canada, 1971.

Shaw, Gareth. "Directories as Sources in Urban History: a Review of British and Canadian Material." Urban History Yearbook (Leicester, 1984).

Shortt, Adam. "Currency and Banking, 1840-1867." In United Canada, 1840-1867. Vol. V of Canada and its Provinces, a History of the Canadian People and their Institutions by One Hundred Associates. Ed. Adam Shortt and Arthur Doughty. Edinburgh: Edinburgh University Press, 1914.

Shumpeter, Joseph A. Business Cycles. New York: McGraw-Hill, 1939.

Smiles, Samuel. The Life of George Stephenson and His Son Robert Stephenson. New York: 1868.

Smith, Elsdon. American Surnames. Philadelphia: Chilton Book, 1969.

Tarn, John N. Five Per Cent Philanthropy: An Account of Housing in Urban Areas between 1840 and 1914. Cambridge: Cambridge University Press, 1973.

Taylor, Fennings. Portraits of British Americans. Vol. I. Montreal: 1865.

Thach, Quoc Thuy. "The Occupational Structure and Residential Pattern of Irish-Born Heads of households in Montreal in 1861." B.A. Thesis, Department of Geography, McGill University, 1984.

Thomas, Brinley. Migration and Urban Development, a Reappraisal of British and American Long Cycles. London: Methuen and Co., 1972.

Tulchinsky, Gerald. The River Barons: Montreal Businessmen and the Growth of Industry and Transportation, 1837-1853. Toronto: University of Toronto Press, 1977.

Urquhart, M.C. and K.A.H. Buckley, eds. Historical Statistics of Canada. Toronto: Macmillan Co. of Canada, 1965.

Warner, Sam B. Streetcar Suburbs - the Process of Growth in Boston, 1870-1900. Cambridge: Harvard University Press, 1962.

Weaver, John C. "From Land Assembly to Social Maturity: The Suburban Life of Westdale (Hamilton), Ontario, 1911-1951". Histoire Sociale/Social History, 11 (1978).

Wright, Erik. "Class Boundaries in Advanced Capitalist Societies."
New Left Review, No. 98 (1976), 3-41.



Q

Q

Q