CHANGING URBAN ERAS IN CANADA:
FROM THE MODERN TO THE POSTMODERN CITY.

by
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Date **APRIL 20, 1992**
This thesis examines the production of space in Canadian cities since World War II. It is hypothesized that there has been a considerable shift in the city building process (encompassing the fields of planning, architecture and urban design) over the last two decades (1970-1990), and that new types of urban landscapes are being created, often very different than those built during the immediate post-war era (1950-1970). This shift is often described in academic literature as the move from the modern to the postmodern city. The approach adopted in the thesis is to examine the modern/postmodern distinction from a design perspective.

Academic literature in planning, geography and architecture, and observations from Canadian urban landscapes were sources used to gather information on the modern/postmodern distinction. These sources suggest that modern design principles produced functional landscapes (where form follows function), and that postmodern design principles are creating spaces that are both functional and "funky". Seven specific design principles are useful in describing the modern/postmodern distinction: the level of diversity, the level of exteriorization, the relation to nature, the level of decoration, the relation to urban history, the relation to urban context, and the scale of development.
A case study of plans for downtown Vancouver since World War II was used to verify the findings from the literature and observations from Canadian urban landscapes. Two plans were chosen from the modern era (1956 and 1964 reports) and two from the postmodern era (1974 and 1991 reports). Four of the seven shifts in design principles were supported, and a further two were in evidence, though only in an implicit manner. The case study thus upholds the findings derived from the literature and observations from Canadian urban landscapes.

It is suggested that the understanding of the shift from modern to postmodern design principles will help planners gain a better grasp on the current planning context, and hence be better suited to plan in an effective manner in today's "postmodern" world.
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I dedicate this thesis to Andy Melamed, formerly a professor in Urban Studies at Concordia University in Montreal, who taught me to always question authority. What an anarchist!
A cursory glance at Canadian cities in the 1990s reveals that certain features of recent urban landscapes (1970-1990) present themselves as markedly different than those created during the first two decades after the Second World War (1950-1970). In the past twenty years, the shape of buildings, the appearance of streets, the location of activities, and other urban features all seem to have gradually deviated from the norms established by planners, designers and architects in the post-war decades. Parts of the contemporary city of the 1990s appear to be significantly different places to live, work and play than those in the post-war city.

For instance, the boxy office buildings of the International Style movement that dominated the central business districts during the post-war period have been shunned since the mid-1970s, and generally have been replaced by a variety of architectural styles that are eye-catching compared to their predecessors. The flat, prairie-like space of the typical suburb built after World War II is now being superceded by suburbs that have a central core of ten-storey office buildings. Previously working-class inner-city neighbourhoods and vacated industrial lands are currently being rezoned and rebuilt for professionals who want to live close to downtown. And with the gradual dissolution of the
Welfare State, many cities have experienced a swelling in the numbers of homeless people over the last decade. These examples are a sample of what appears to be a significant structural shift in the way Canadian cities are organized.

My initial intrigue with the "contemporary city" was generated when I visited "downtown" Mississauga, Ontario in the summer of 1989. There I was, standing in the middle of this seemingly artificial neo-suburban office centre, whose focal point was a large shopping mall appropriately called "Square One". The municipal hall's architecture, though built in the mid-1980s, captured elements of classical architecture (see Figure 1.1): a rotunda, a clocktower, a large plaza with a fountain, columns, and a fascinating staircase inside the building. I could sense the building's aura. The surrounding area consisted of a series of well-spaced ten to fifteen storey office buildings. Though it looked like a downtown, it did not seem walkable - only cars would feel comfortable in that environment. After that visit, questions poured into my head. Why does Square One exist? Why does it look like it does? Is it urban or suburban? How does it relate to downtown Toronto? Is this a new type of city? Is this the city of the future?

Subsequent visits to major cities in Canada generated new information and new questions. What was happening in the Toronto area seemed to be occurring all across Canada, from Vancouver to
Figure 1.1 City Hall, Mississauga, Ontario
Montreal. The Canadian city appears to be mutating into something different. It is as though the form, function and structure of cities are gradually changing from an old system to a new one. The traditional city dominated by dormitory suburbs, urban freeways, downtown high-rise development, bland architecture and the dominance of the automobile no longer seems applicable to describe all the trends occurring in the contemporary city in Canada. Why do buildings look flashy? Why is there a push for housing in the inner-city? Why are there efforts to create pedestrian malls? It does seem that some type of new city appears to have emerged. It may not be well defined, but some of its roots are increasingly making their way into the urban landscape. The task of this thesis is to discover the characteristics of these new urban landscapes and to contrast them with post-war landscapes.

It is hypothesized that there has been a considerable shift in the city building process (encompassing the fields of planning, architecture and design) over the last two decades (1970-1990), and that new types of urban landscapes are being created, often very different than those built during the immediate post-war era. This shift is often described in academic literature as the move from the modern to the postmodern city, or as the move from the industrial to the post-industrial city. At the conclusion

1 For reasons of simplicity, I will use, from this point on, the terms modern and postmodern to refer to the periods corresponding to 1945-1970 and 1970 to today.
of this study, I hope to determine whether the modern/postmodern distinction is warranted in the Canadian context, and, if such a distinction exists, to describe the main features that characterize the shift from the modern to the postmodern city. I am not undertaking to deal with the causal factors of this shift in this thesis, but simply to describe its characteristics. This study is thus a descriptive analysis of the shift from modern to postmodern urban landscapes.

1.1 Scope of thesis

The scope of this thesis will be limited in three ways. First of all, since it is possible to analyze the topic from different points of view, one specific approach will be adopted. For instance, the shift from the modern to the postmodern city can be investigated from an economic perspective, from a political standpoint, from a technological position, or, for that matter, from a sociological perspective. All these points of view are valid and interesting ways of examining the modern/postmodern distinction. However, in this thesis, I will focus on changes in Canadian cities from a design perspective, as I believe it is an aspect of urban planning that is not well understood.

I will examine the modern and postmodern city by analyzing "design principles", and by this, I mean the planning and architectural notions that are ultimately translated into the built form of the city. As geographer Edward Relph comments in
The Modern Urban Landscape, "landscapes are made by ideas as well as by construction", (Relph, 1987: 11). Physical form in nearly all cases originates from basic ideas of how to build and organize cities: do we want urban or suburban character?, do we want tall buildings or small ones?, do we want freeways or not?, do we want one strong core or a multi-nodal city?, etc. Very often, these design principles are referred to as goals, objectives, principles, and even vision in the planning literature. Nevertheless, they are at the heart of how cities are built, rebuilt and managed.

Here is an example of what is meant by design principle as it pertains to commercial development: the relationship between shops and the street. Using this example, the form of the city will be articulated differently depending on the approach that is adopted. If retail fronting onto the street is desired, an area similar to Robson Street in Vancouver will be created; however, if inward-looking commercial development is what is prescribed, the result will be similar to Pacific Centre in Vancouver. Other design principles can include the role of the car in the city, the height and bulk of buildings, the relationship between nature and urban development, the distribution of employment in the urban region, etc. As this list demonstrates, design principles play a crucial role in how Canadian landscapes are shaped and reshaped over time. The essence of this thesis is to understand if and how design principles have changed from the 1950s and
1960s to the 1970s and 1980s. What basic notions have changed and how are they being translated into built form?

The second way in which this thesis will be limited is by only examining issues related to the city building process. The fields that I include in this study are planning, architecture and urban design. These three professions are instrumental in shaping the built form of the city. David Ley referred to the "design professions" (Ley, 1989: 44) in his 1989 article on modernism and postmodernism, which discussed planning, urban design and architecture. Preeminence will be given to the planning profession, since this is a planning thesis, but it does not preclude using examples and notions from architecture and urban design. The latter disciplines are in many ways microcosms of the city as a whole, and consequently parallels can be found in all three fields, though obviously at different scales.

Disciplines that will not be incorporated into this thesis are philosophy, arts, literary criticism, communications, social theory, urban economics, and urban politics, even though each one plays an important role in shaping cities. Many authors have already begun to analyze the modern/postmodern distinction from these perspectives. Though these contributions to academic thought are invaluable, they form an immense body of literature that goes way beyond the scope of a master's thesis. Thus, for practical reasons, the literature review included in this thesis
will consist of texts written by planners, geographers, urban designers and architects. This, in itself, consists of an incredible amount of reading, but provides enough diversity to permit lateral thinking when it comes to examining the modern/postmodern distinction as it pertains to the city.

Finally, the scope of this thesis will be limited by investigating the modern/postmodern distinction in Canadian cities. Urban areas over 500,000 people were generally selected as sites for field observations, though visits were also made to cities like Kitchener, Ontario, Thunder Bay, Ontario, and Kamloops, British Columbia. Even though large cities in Canada form an incredibly large pool of experience, they are appropriate for this analysis because they offer a cross-section of urban development across the country. Generalizations about trends in the city building process are easier to make if this approach is taken, even if some accuracy is lost along the way.

To summarize, the scope of this thesis will be limited to the study of modern and postmodern design principles: the two main sources of information will be literature in the fields of planning, geography, and architecture, and urban landscapes in selected large Canadian cities.

1.2 Methodology

This thesis is divided into four parts, each with its own
purpose. The first major step in this thesis is to gather background information on the general meaning of modernism and postmodernism; this will be done in the literature review (Chapter 2). The second major step is to derive some modern and postmodern design principles from two sources: the literature (Chapter 2) and Canadian urban landscapes (Chapter 3). The next step is to analyze the whole of this information and to organize it into a systematic framework (Chapter 4). Finally, I will examine design principles in a case study of plans for downtown Vancouver (Chapter 5), and compare them to what I derived from the literature and observations from Canadian urban landscapes.

This thesis begins with a literature review of key readings on the topic (Chapter 2). Over the last two years, I have read many articles and books about postmodernism from a variety of disciplines (from planning to philosophy). As I have stated in the previous section, I will focus on readings in planning, geography and architecture. Because there are widely divergent views as to the meaning of postmodernism, I have limited the literature review to those that specifically discuss design principles. Five authors were chosen (Jencks, Holston, Relph, Ley and Mills) and each reading is summarized in half of dozen pages or so. Important quotes and selected images from the readings will be included. While this exercise will provide the necessary background for examining the modern/postmodern distinction, it will also provide a body of information from
which modern and postmodern design principles can be extracted.

Chapter 3 is devoted to describing my observations of Canadian urban landscapes. Since 1990, I have travelled to seven major cities in Canada (Quebec City, Montreal, Ottawa, Toronto, Winnipeg, Calgary and Vancouver) and I have visited hundreds of modern and postmodern landscapes. I have taken close to five hundred photographs, some of which have been included in Chapter 3. I describe approximately a dozen landscapes, from which I extract modern and postmodern design principles.

Flowing from this literature review and observations of Canadian urban landscapes will be an analysis of the modern/postmodern distinction (Chapter 4). I will try to capture in a systematic framework what I have extracted from both sources of information. A list of criteria will be developed to compare modern urban development and postmodern urban development, and a discussion about the "depth" of the changes will be presented. At the end of the chapter, I develop guidelines as to what constitutes a modern landscape and a postmodern landscape.

How do these guidelines compare with actual planning documents from the 1950-70 and the 1970-90 periods? I have chosen to examine four planning documents for downtown Vancouver in Chapter 5 and to derive what design principles were promoted in them. I will examine two documents from the modern era, the 1956 report
entitled *Downtown Vancouver 1955-1976*, the 1964 plan entitled *Redevelopment in Downtown Vancouver, Report No. 5*, and two reports from the postmodern era, the 1974 *Downtown Vancouver: Report for Discussion*, and the 1991 *Central Area Plan*. These documents were selected after discussions with Brahm Wiesman, Ann McAfee and Ron Youngberg. The design principles derived from these four documents will be compared to the findings in Chapter 4, and important overlaps and differences will be noted.

Chapter 6 provides a summary of the findings. The main finding of this thesis will be to support or dispel the notion that postmodern urban development is significantly different than modern urban development. A second important finding will be to describe what are the key shifts, if any, in design principles that have occurred over the last two decades. A brief discussion is also incorporated in this chapter in order to add context and personal comments to the thesis.

1.3 Relationship between planning and architecture

In this thesis, there will be little discrimination between planning and architecture. Though these two fields may appear to be far apart, they are in fact many parallels between these disciplines. Both architecture and planning are basic professions when it comes to the city building process: they are both involved in the production of space in the city, architecture at the micro-scale and planning at the macro-scale.
I have chosen to separate design principles based on this planning/architecture split, and this will become evident in Chapter 4. Many authors do not make a strong distinction between the two disciplines, and sometimes it is hard to separate them when examining Canadian urban landscapes. Yet, it is still useful to separate the design principles into two broad categories for clearer understanding.

1.4 Context of thesis
How does this thesis fit into the larger planning context? Why is it useful to understand the modern/postmodern distinction? The reason I undertook this topic was because I was intrigued by the urban form of recent developments across Canada. During my undergraduate and graduate studies, I felt there was no decent explanation as to why cities look the way they do today. The traditional analysis of urban history seems to break down urban development into three phases: pre-industrial (pre-1800), early industrial (1800-1900), and modern industrial (since 1900). We are taught that cities moved from a medieval, town-like setting to chaotic, disease-prone, poverty-stricken conditions that prevailed in industrial cities of the nineteenth century. Then, in the early part of the twentieth century, the advent of urban planning and the popularization of the automobile created a completely new urban form characterized by distant suburbs, urban expressways and a central city that was 'dead' after business hours. Unfortunately, very little time is spent in planning
education discussing the fact that North American society seems to have moved beyond this latter phase of urban development into a new era. In essence, planners are taught urban history stopped with this suburb, automobile-oriented phase. It is precisely for this reason that I am intrigued with Square One in Mississauga: I had not yet found an adequate explanation for its existence and design in what I have been taught in university since I began to study urban planning in 1985.

The main contribution of this thesis is thus a revision of urban history in the second half of the twentieth century. In his 1990 article, Barry Goodchild suggests that "the modern/postmodern distinction can generate a new representation of the history of town planning", (Goodchild, 1990: 119). I wholeheartedly agree. I think planning history will eventually include the period since 1970 as a different urban era in Canada. This reinterpretation of urban history, in turn, will help planners shape Canadian cities more effectively because they will have a better understanding of the existing planning context. Robert Beauregard suggests that "planning seems to be suspended between modernity and postmodernity, with practitioners and theorists having few clues as to how to (re)establish themselves on solid ground", (Beauregard, 1989: 392). Examining the modern/postmodern distinction from a planning perspective is therefore a useful exercise in order to establish an effective role for planners in today's new context.
CHAPTER 2:
LITERATURE REVIEW

This chapter will examine key readings on the modern/postmodern distinction in the fields of planning, geography, and architecture. The purpose of this chapter is to give background information on the modern/postmodern distinction, and to identify the modern and postmodern design principles that are contained in the literature.

Five authors will be summarized in this chapter: Jencks, Holston, Relph, Ley and Mills. They have been chosen because they discuss in detail modern and/or postmodern design principles. Each book or article will be summarized and important passages will be quoted. At the end of the chapter, an analysis of the literature will be carried out to flesh out some of the design principles, and to organize them into categories.

2.1 A brief history of postmodernism

The word "postmodern" was used as early as the 1934 to describe a condition perceived to be different than the modern (Jencks, 1989: 8), but it only became a common term from the 1970s onward (ibid: 17). In the late 1970s and early 1980s, postmodernism was

2 The spelling of the word "postmodern" varies a lot: some authors use "post-modern", some use "Post-Modern", others use "Postmodern". In this thesis, the preference is to spell it "postmodern". In a quote, the original author's spelling is used.
discussed, debated and sometimes defined in the fields of literary criticism, arts, philosophy and architecture. A host of writers during this period presented their views as to what postmodernism meant, and how it related to modernism. Berman (1982), Lyotard (1979), Hassan (1982), Huyssem (1984), Jencks (1977), and Jameson (1984) were but a handful of the more prominent voices in academic literature. For some it meant "anti-modernism", for others "beyond-modernism", and, still for others, it meant very little other than "neo-modernism".

The debate broadened to encompass the fields of geography and urban planning in the mid to late 1980s. This was probably due in part to an increase in the popularity of "postmodern" buildings, the swelling numbers of homeless in North American city centres, and the gentrification of numerous working class neighbourhoods in older cities, all of which became more apparent as the decade reached its halfway mark. Geographers and planners like Dear (1986), Beauregard (1989), Ley (1989), Harvey (1989), Relph (1987), and Castells (1989) have all attempted to construct theories that would explain the changing nature of North American cities. In some cases, these texts reflected earlier writings in philosophy, arts, and literary criticism. Dear, for instance, adopted a "deconstructivist" stance in his article entitled "Postmodernism and Planning", an approach first utilized in the early 1980s. Others like Jencks and Relph have tried to develop their own ways of analyzing postmodernism, and have generally
avoided appropriating methods from other disciplines.

2.2 Charles Jencks, architect

Jencks is recognized as one of the leading voices in the world on issues relating to postmodernism. He has written prolifically for the last decade, and his books are very fashionable. Jencks is generally credited with popularizing the word "postmodern" outside academic circles, and viewed as a strong proponent of postmodern architecture. The book summarized in this chapter is his 1989 work entitled *What is Post-Modernism?*

Jencks breaks down twentieth century architecture into three phases: the modern, the late-modern, and the postmodern. He defines "modern architecture as the universal, international style stemming from the facts of new constructional means, adequate to a new industrial society, and having as its goal the transformation of society, both in its taste and social make-up", (p.28). By providing "technical solutions to social problems" (p.16), modernists believed that people would be transformed if their surroundings were radically modified. Key to the inner workings of modernism were the concepts of industrial production and mass democracy (p.27). A new style developed based on machine aesthetics (see figure 2.1). According to modern principles, "all forms of decoration and historical references were declared taboo", (p.28).
According to Jencks, modern architecture divided into two branches sometime during the 1960s or 1970s: late-modern and postmodern architecture. Late-modern architecture, in much the same fashion as modern architecture, revels in the worlds of technology and machinery (see figure 2.2). It is "pragmatic and technocratic in its social ideology and from about 1960 takes many of the stylistic ideas and values of Modernism to an extreme", (p.32). The Pompidou Center in Paris is often quoted as an example of late-modern architecture: it captures the "extremist" approach by externalizing the innards of the building (ventilation, structural joints, pipes, etc.).

The second current is postmodern architecture. Jencks refers to postmodernism as "double-coding: the combination of Modern techniques with something else (usually traditional building) in order for architecture to communicate with the public and a concerned minority, usually other architects", (p.14). It is a reaction to Modernism and its social failure. "Modern architecture failed to remain credible partly because it didn't communicate effectively with its ultimate users ... and partly because it didn't make effective links with the city and history", (p.14). Flowing from this critique of modernism, "post-modernists tend to emphasize contextual and cultural additions to their inventions", (p.22).

Jencks points out that postmodernism does not completely rid
Figure 2.1  Modern landscape according to Jencks
(Hallfield Estate Housing, London, U.K.)
Figure 2.2 Late-modern landscape according to Jencks (Hong Kong Shanghai Bank, Hong Kong)
Figure 2.3 Postmodern landscape according to Jencks (Neue Staatsgalerie in Stuttgart, Germany)
itself of its modernist roots. In fact, he argues that postmodernism is "the continuation of Modernism and its transcendence", (p.7). At the heart of postmodernism are selected modern principles and practices: "all the creators who could be called Post-Modern keep something of a Modern sensibility", (p.14). As a result, the combination of "new techniques and old patterns" (p.14) permits postmodern buildings to be "beautiful like the Acropolis or Pantheon, but ... also based on concrete technology and deceit" (p.19). The addition to the Staatsgalerie in Stuttgart, Germany is a good example of this combination (see figure 2.3): the exterior of the building appears to be made out of blocks of stone, similar to a century old building, but, in fact, the wall is only several inches thick and the whole of the building is supported by a steel frame. On one of the sides of the building, several blocks lay on the grass and there is a hole in the wall: this appears to be a contemporary replica of rubble that has crumbled from an old castle; however, the reality of this construction is that it acts as an airvent to the parking garage located beneath the museum.

There is not "one" postmodernism; rather, there are many different strands that are departures from modernism. Jencks has identified six loose groupings: historicism, straight revivalism, neo-vernacular, ad hoc urbanist, metaphor metaphysical, and post-modern space (p.23). The first two relate to the reincorporation of history into contemporary architecture,
while the next two reflect an effort to contextualize architecture into the existing fabric of the city. Jencks feels that classicism is the dominating force behind postmodern architecture today.

Jencks argues that many academics confuse late-modernism with postmodernism (Hassan, Lyotard, etc). They seem to interpret any departure from modernism as postmodern. However, Jencks suggests that late-modernism has more common points with modernism than differences. This confusion as to the meaning of postmodernism is perhaps the reason why it is often misunderstood and "seen as progressive in some quarters, [while] it is damned as reactionary and nostalgic in others", (p.8). Amidst this confusion, Jencks vigilantly upholds projects that match his definition of postmodernism, and generally condemns those that he understands to be late-modern.

In the final two sections of the book, Jencks examines various issues that have been ushered in by the globalizing effects of technological innovations, such as instant communication, economic restructuring, post-industrialism, and post-Fordism. He discussed how they all revolve around the concept of postmodernism.

Postmodernism is thus a pluralistic departure from modernism that attempts to reconnect meaningful communication with the users of
a building and also with other architects. It is partly based on modern technology and ideas, partly grounded in traditional notions, and partly derived from completely new ideas. Historicism and contextualism seem to be the important strands that help to weave postmodern architecture into a semi-cohesive body of thought and practice.

2.3 James Holston, urban sociologist

Holston's 1989 book, entitled The Modernist City: An Anthropological Critique of Brasilia, is an in-depth analysis of modern architecture and planning, both in its theory and in its practice. He recounts the history and design theory of CIAM, the Congres Internationaux d'Architecture Moderne, which was led by pioneering architect-planner Le Corbusier from the 1930s to the 1950s. Holston then uses Brasilia, probably the purest modern city in the world, as his case study to examine: a) how modernist theory was applied in the Brazilian capital, b) how the inhabitants (Brasienses) reacted to living and working in a modern city, and c) how these reactions pushed them to "refamiliarize" Brasilia. His book is divided into three parts, reflecting these three broad areas of investigation: The Myth of the Concrete, The City Defamiliarized, and The Recovery of History.

Holston introduces Brasilia in a startling way:
As one travels across the desolate plateau toward the new city, the landscape abruptly changes about 40 kilometers from the capital. The highway widens. Billboards announce lots for sale in future residential havens with names like New Brazil, New World, and New America. A gigantic, modern sculpture appears out of nowhere to suggest that something is about to happen. Still without visible signs of settlement, one is suddenly swept into a cloverleaf intersection of superspeedway proportions. At one carefully orchestrated moment, Brasilia begins: a 14-lane speedway roars into view and catapults the traveler into what is hailed as 'the New Age of Brazil'.
(Holston, 1989: 3).

Built during the late 1950s by architects Costa and Niemeyer under the presidency of Kubitschek, Brasilia's central area, known as Plano Piloto, has a population of approximately 250,000 (1980), and the Federal District about 1,200,000. It is located in the interior of Brazil, unlike most other urban settlements, which were developed along its coast.

In the first part of the book, Holston analyzes the work and ideas of CIAM. He discovered that modern planners began to "treat the new city itself as a machine, that is, to plan it as an engineer plans an industrial process by conceiving of the city as an industrial product", (p.51). This new mentality led to the notion that "the keys to city planning are to be found in the four functions: housing, work, recreation and traffic ... [and that] they should be organized as mutually exclusive sectors within the city", (p.31-32). "In this organization ... [the] essential functions would be taylorized, standardized, rationalized, and assembled as a totality ... For a machine is
never partially designed or partially constructed; only its completeness guarantees its functional, working order"), (p.51). Holston demonstrates quite convincingly that modernists truly believed that the ills of the pre-modern city (inequity, disease, inefficiency) could be solved by building the city as a machine. By creating a new totality that decontextualizes the past and defamiliarizes the residents of the city, modernists thought that their visionary urban order could be achieved. Holston describes in detail several aspects of this modern model: its egalitarian basis, the machine metaphor, the development of building typologies and planning conventions, the reliance on state authority, and the use of shock techniques to convey the modern message.

Brasilia provides an excellent example of this type of mechanistic planning and architecture: Brasilia's model is a crucifix shape made up of two traffic arterials, housing located on one and work located on the other (see figure 2.4). There are only four basic types of housing in the city, the principal one being the 'superquadra' (the superblock), which consists of about 10 six-storey apartment buildings in an area of about 15 acres, that house 2000 to 3000 people (see figure 2.5). Local commercial sectors, support services and open spaces are integrated into the design of the superquadra developments. The circulation system for pedestrians is totally segregated from automobile traffic, though unimpeded flow is given to the car,
Figure 2.5  Superquadras in Brasilia.
not the pedestrian: "neither axis has a single traffic light or stop-and-go intersection", (p.138). There are even two Entertainment Sectors for exclusive entertainment uses. In Brasilia, forms and areas of the city are predetermined by what uses will dominate that area. The only place in Brasilia where there appears to be hustle and bustle is at the transit exchange, but even there, "[the] conversations take place between buses ... users [of the bus terminal] never go there except to take a bus or to sell something to someone taking a bus", (p.162). The modernist idea of monofunctional zoning leads Holston to conclude that: "sectors at the center of the city have only instrumental value in the organization of space in Brasilia", (p.162).

In the second part of the book, Holston examines how people reacted to the modern city. He concludes that Brasilienses were generally "defamiliarized" in this modernist setting, unused to the "inversions" created by modernists, such as the inexistence of streets, monofunctional zones, and the superquadra as the basis for residence and community. He refers to a term created by Brasilienses to describe this feeling of defamiliarization: "they used the term 'brasilite' [i.e. brasilia-itis] to refer to their feelings about a daily life without the pleasures - the distractions, conversations, flirtations, and the little rituals - of the outdoor public life of other Brazilian cities", (p.24).

With regard to the street, Holston argues that "the corridor
street ... constitutes the architectural context of the outdoor public life of Brazilian cities", (p.104). However, in Brasilia, modernists designed roadways exclusively for cars and pathways exclusively for pedestrians. As a result, there are no "streets" in Brasilia. This "produces profound disorientation ... [and] tends, simply, to eliminate the pedestrian: everyone who can drives", (p.101). Referring to his former town of residence, one resident of Brasilia described street corners as the place to go whenever he wanted to meet a friend, pass the time, find a neighbor, or hear the news. This corner was his neighborhood's information nexus, its outdoor living room. In Brasilia, however, he found that the lack of corners (i.e., of the street system of public spaces) had an interiorizing effect; it forced people to remain in their apartments and replace the spontaneity of street encounters with the formality of home visits. (Holston, 1989: 105-107).

In addition, "store entrances and display windows are to front onto the superquadras and not the accessway", (p.138), which eliminates the possibilities of having commercial streets. Ultimately, the street no longer exists in Brasilia: "the pedestrian is engulfed by the car, the sidewalk is transformed into an internal corridor, and commerce itself redirected toward the interior of the superquadras or internalized into shopping malls", (p.311). Because of the modernist philosophy, "streets have become entirely identified with the functions of transport and supply; distribution with detached buildings", (p.139), (see figure 2.6).
Figure 2.6 Commercial street in Brasilia.
Figure 2.7 Monumental Axis in Brasilia.
With regard to monofunctional zoning, Holston argues that it is also "unfamiliar" (p.145) because "fundamental to preindustrial urban organization is the heterogeneity of functions, activities, and institutions in all areas of the city", (p.146). In Brasilia, work is concentrated along the Monumental Axis (see figure 2.7) and housing dispersed along the Residential Axis. This leads to an "empty city center during off-work hours", (p.161). Precisely because of its functionalism, the city center is "without a single place that could be characterized as a domain of off-work conversation and public opinion, a space for the noninstrumental gathering of citizens, in short, a public square", (p.161). Even the Entertainment district is not "anything other than an instrumentally used space ... it is therefore no surprise to find that, as realized, the Entertainment Sectors are not 'little Venice' but two shopping malls on either side of a highway", (p.161). Thus, the isolation and concentration of activities into mutually exclusive sectors creates another layer of defamiliarization in Brasilia. "Lacking 'public encounters of the third kind', social life oscillates unremittingly between work and residence", (p.163).

With regard to the superquadra, Holston argues that it also created defamiliarization. The standardization of superquadras in the city (a total of 120), their modernist architecture, their relationship to the road and other buildings, their transparent facade, and the internal floor plans of the units led most
Brasilienses to dislike this type of housing. "Out of 24 residents interviewed for extended life histories ... 21 stated unequivocally that they did not consider the superquadra to be a 'bairro', a neighborhood, or a city block", (p. 171).

In the third part of the book, Holston examines how Brasilienses reacted to this defamiliarization: he calls it "the Brazilianization of Brasilia" (p. 289), which means that the residents rejected Brasilia's design and are trying to refamiliarize the city.

Brasilienses manifest their rejections of Brasilia's utopian design by reasserting familiar values, conceptions, and conventions of urban life. The reassertions surface in many ways ... By putting shop entrances on the curb rather than on the proposed garden side of buildings, Brasilienses attempted to reconstitute the life of the market street where it had been architecturally denied. Similarly, they rejected the transparent facade of the apartment blocks not merely by putting up curtains and blinds but by demanding a return to an opaque wall architecture in later constructions ... In sum, both those who remained in the Plano Piloto and those who moved to its lake residences rejected the city's utopian design. (Holston, 1989: 309-310).

Two points are worth mentioning as concluding remarks. Firstly, "modernist architecture and city planning not only failed in their subversive aims, but often strengthened what they challenged", (p. 7). Brasilienses, rather than living under a new order in Brasilia, have reacted by rekindling traditional ways of life that modernists were trying to eliminate. Secondly, though the modernist program alienated the average person in Brasilia,
Holston soberly points out that "in people's evaluation, its [Brasilia's] practical advantages [economic opportunity and higher standard of living] come to outweigh its defamiliarizations", (p.27).

Holston ends with some general comments, one of which relates to postmodernism. "[A] postmodern critique has emerged in recent years, one that uses an image of the preindustrial city as its inspiration. It draws precisely on those features that modernism overturned: ... the treatment of streets and squares as figural, roomlike spaces; the celebration of the outdoor public nature of these spaces at a pedestrian and not an automotive scale ...; nontotalizing, heterogeneous typologies of form and function; and the use of historical quotation in ornament to suggest a layering of historical context", (p.316-317).

2.4 Edward Relph, geographer

Relph's book, The Modern Urban Landscape, published in 1987, is one of the more complete overviews of the history of North American landscapes since the turn of the century. His objective is to understand "how modern cities and the new parts of towns have come to look as they do by tracing the separate yet interconnected changes which have occurred in architecture, planning, technology and social conditions since about 1880", (p.i). Relph adopts a generalist's perspective for his analysis and approaches his research in a multi-faceted way: "I prefer to
start with the totality of what I see, and to try to puzzle out its appearance by following several directions more or less at once", (p.5). Though he has read a lot of books, plans and articles, he argues that "the best source of information about landscape[s] are landscapes themselves", (p.5).

Relph breaks down twentieth century landscapes into two categories: modern and postmodern. Basically, he argues that modern landscapes were designed as functional spaces: "most buildings and their environments should have an industrial, technical, mass-produced character, reflecting the ideal of designing for a machine age", (p.115). Relph suggests that postmodern landscapes definitely represent a new trend in the city building process: "about 1970 a deep change of heart seems to have passed through the design and planning professions [resulting in] a quiet revolution in how cities are made and maintained", (p.213). No longer is the ideal to build a purely functional city; rather, "architecture, planning and business corporations have all moved in a similar direction by encouraging greater variety, old as well as new styles, and responsiveness to public opinions in landscape making", (p.236), (see figure 2.8).

With regard to modern architecture, Relph sees the invention of the elevator, the light bulb, the car, structural steel, revolving doors, central heating, and the telephone as key elements that have permitted the creation of new building forms
Figure 2.8  Modern and postmodern landscapes according to Relph.
at the turn of the century. "By 1910 ... classical styles had, in effect, already become no more than superficial ornament, columns were no longer needed to hold buildings up, they just looked nice and conveyed the right suggestions", (p.33). These technological innovations permitted modern architects to create a new style of architecture known as the International Style: "the simpler the lines and forms were, the better they were held to symbolise the modern machine world. This was the style of modernism", (p.107).

In modern planning, which was "invented" in the early part of this century, the notion of functionalism was also present: "town planning looks as though it is an attempt to make cities function as efficiently as factories", (p.49). Zoning became the planner's principal instrument for achieving functionalism. "The result on the ground is segregated landscapes - here a zone of high-rise apartments, there a zone of detached houses, beyond a zone of retailing revealed as a plaza", (p.69). Relph likens modern planning with "planning by numbers: identify the problem [and] match it to an appropriate planning device", (p.141).

"By the end of the 1960s a significant body of opinion had emerged which held, in essence, that modern landscapes didn't look good and probably didn't work well either", (p.211-212). Critics realized that the bland style of architecture and the repetitive style of planning had major negative impacts on
cities. For instance, "[the] unfortunate consequence [of modernism] is the elimination of uncertainty and excitement from the urban scene, and the simultaneous imposition of inflexible forms and standards", (p.247). In reaction to this trend, postmodernism "is creating buildings and townscapes which are pleasanter to be in and of far greater visual interest than those infused with plain modernism" (p.229). Relph suggests that historicism is at the heart of postmodernism: "the newest urban landscapes are not modernist but quaint, stylish and decorated. The old, it seems, is new again", (p.215). This new attitude to the physical design of the city has permeated the whole of the city building process: "post-modernism is not just an architectural style, but an attitude which has infused almost every aspect of urban landscape making", (p.213).

Relph sees five general components of postmodern practice: commercial and residential gentrification, heritage planning and preservation, postmodern architecture, urban design, and participatory community planning. The first, gentrification, is postmodern because it recycles older parts of the city for new uses (usually for the upwardly mobile and to the dismay of working class residents), and attempts to generate "ambiance" by recreating older styles of urban landscapes (antique store signs, brick sidewalks, bollards, sandblasted brickwork, etc.). "Process of ambiance creation have been at work in city centres, where old warehouses and markets, or entire streets of formerly
run-down stores, have been reclaimed for boutiques and cafes, and
given an appropriate street decor of interlocking brick, old-
fashioned lights, bollards and signs", (p.218).

The second, heritage planning and preservation, is postmodern
because of the high value placed on historic buildings and sites.
"Old buildings and districts have ceased to be considered simply
as impediments to rational planning, and are regarded now as
invaluable components of the post-modern landscapes of cities",
(p.221). Heritage planning has swiftly swept across the globe:
whereas in 1959 there were only 20 heritage districts in the
world, over 200 cities in 1975 had designated such areas (p.221).
Most legislation of historic districts does not have many "teeth"
and, as a result, heritage preservation is not guaranteed to be
successful in all cases. Nevertheless, it represents a complete
turnaround from the "futurist philosophies associated with
modernism [under which] the preservation of things historical was
reduced to the tokenism of fencing off places thought to be
vested with political or historical importance, such as the
birthplaces of presidents", (p.221).

Relph views the third component, postmodern architecture, as an
important element of this new style of landscape making because
"it [has become] fashionable and acceptable for architects to
borrow consciously from past styles", (p.224-225). Historicist
postmodernism, as Relph calls it, usually entails the
incorporation of several of the following features: brickwork, half-rounded arches, polychromy (use of several colours), round columns, gables and mansards. Relph, however, is quick to point out that "post-modernism is receptive to historical references of all sorts, but is not much concerned with accurate reproduction", (p.225). Relph also notes two other trends in postmodern architecture: the first is contextual postmodernism, which encourages "new buildings [to] replicate the main features of the surrounding structures without reproducing them exactly, [by] maintaining rooflines, fenestration patterns, setbacks and so on", (p.227); the second is debased postmodernism, which "attempts to transcend modernism by exaggerating, decorating and even ridiculing it", (p.227). Relph concludes that postmodern architecture, though "half rooted in the decorative qualities of the past", is nevertheless "materialistic, superficial and arbitrary", (p.229).

The fourth component, urban design, "emerged in the late 1960s as a branch of planning which was concerned with giving visual direction to urban growth and conservation", (p.229). It is postmodern because it is interested with small-scale improvements to streets and the visual quality of spaces, especially from a pedestrian's point of view. These features have "been almost completely ignored in planning since the days of the City Beautiful movement at the beginning of the century", (p.229). Urban design usually promotes wide sidewalks, benches, attractive
street furniture, provisions for outdoor cafes, trees and landscaping (p.229). Relph thinks that the impact of urban design is underestimated because, in addition to promoting attractive settings, urban design regulates new projects and prevents them from being too "individualistic"; thus, the impacts of urban design are not always visible in the urban landscape.

The fifth component, participatory community planning, is postmodern because it involves the citizenry in the city building process. "The relatively authoritarian, planning-by-numbers approaches, which had been in use since the late 1940s, were joined by a community planning process aimed at developing solutions through consultation and neighbourhood workshops", (p.233). Community planning is usually locally-based, and its landscapes are "rarely exceptional", (p.234). This trend has been pervasive all across North America and has resulted in the fact that "some degree of community involvement in planning is now commonplace, and indeed the opportunity for it is now legally guaranteed in most municipalities", (p.233).

In the final chapter of the book, Relph describes and contrasts the features of modern "cityscapes" and postmodern "townscapes". Modern cityscapes "have rational not sensuous form, street spaces are deep and straight, individual buildings are designed without concern for context, their surfaces are barely decorated, there is little texture, visible activity has for the most part
retreated inside the buildings, and serial vision is primarily that of a driver - with all that entails about reduction in details and shifts in scale". (p.241). In contrast to modern cityscapes, postmodern townscapes have bits of streets reclaimed for pedestrians (p.241), there is a revival of interest in character (p.241), there is a deliberate attempt to create diversification (p.252), quaintness is the overriding characteristic of postmodern spaces (p.253), they are rich in the details of signs, materials and decorations (p.255), and there is a reconnection with the local setting (p.257).

In several parts of the book, Relph argues that postmodernism is superficial and contrived, and suggests that it is perhaps deceiving us, i.e. making us believe that it is a wholesale change from modernism when it may be little more than "a disguise for ever more subtle and powerful types of rationalistic organisation by corporations and governments alike", (p.259). He rebalances this statement by suggesting that "to the extent it is a lie, though it is a pretty lie and one that seems thus far to have been successful in attracting pedestrians, revitalising decaying districts and contributing to the creation of differentiated urban landscapes", (p.259). The postmodern urban landscape, superficial as it may be, is still significantly different than the modern urban landscape.
2.5 David Ley, geographer

In his 1989 article, "Modernism, Post-Modernism and the Struggle for Place", Ley attempts to "trace the relations of place and space to the discourse of modernity over the past 100 years", (p.44). He analyzes the production of space in the city as a sub-component of culture, and writes the article in such a way that interplay is created between these two spheres. Ley focuses on the "design professions" (p.44), but sets this discussion in a broader context that includes sociology and philosophy.

Ley begins with a discussion on Vienna in the late nineteenth century. He suggests that there was a gradual dissolution of "entrenched bourgeois culture" (p.45), a void that was later on filled with modern notions. The breaking down of pre-modern values was epitomized by Otto Wagner's critique of the Ringstrasse, which was built during the 1860s: "Wagner was unimpressed by the classicism of the Ringstrasse which seemed a false historical metaphor for the age of iron and steel", (p.45). In addition, the exotic and decadent lifestyle of the bourgeoisie - "the butter knife is a Turkish dagger, the ash tray a Prussian helmet, the umbrella stand a knight in armor, and the thermometer a pistol", (p.46) - was seen as "a conglomeration of useless and disparate objects", (Le Corbusier, 1927, quoted in Ley, 1989:46). Ley suggests that eventually "the integrative values of middle class culture had come unstuck" (p.46), and led to "the
pursuit of a serious utilitarian rationalism, the spirit of the modern movement, which substantially removed the intangible, the metaphysical, even (or so it seemed) culture itself in favour of an objective and functional logic, the spirit of progress, a spirit of 'sincerity and purity' in its relations to the modern era", (p.47).

The transition to the modern era can also be traced to Vienna. Adolf Loos published a book entitled *Ornament and Crime* in 1908, which attacked "the continuing privileged status of ornament in the work of the reformers of the Vienna Secession, a status he saw as regressive if not criminal", (p.47). Rather, Loos argued that "design [should] be purely objective and functional, purely utilitarian", (p.47). His phrase "the meaning is the use" says a lot about modern notions of design, which are clearly seen "in the bare, unadorned and geometric structures built by Wagner and Loos in Vienna during the first decade of the 20th century", (p.47). This new philosophy was imported into other countries and into other fields such as planning. "Meaning in objects, in the built environment, was defined in utilitarian terms, so that a functional and uniform aesthetic became the appropriate expression of a machine-based mass society", (p.47).

Ley thus makes a strong case for equating modernism in planning and architecture with functionalism. "The honest relationship between form and function [was] exemplified in the industrial
machine, a truer metaphor for the contemporary age", (p.45). Its role could not be understated in the rise of modernism: "the machine or magic! These were the provocative metaphors separating the modern from the pre-modern mind", (p.51). Ley suggests that this modern metaphor filled the metaphysical void created by the transition to a new secular society: "one senses the paeans, a Hegelian synthesis where the machine is the incarnation of geist, the world spirit of the new age", (p.49). As a result, the machine, its design and its inner workings permeated the minds of architects and planners. Le Corbusier, for instance, argued that the house was "a machine for living in" and the street "a factory for producing traffic", (p.48). This mentality was also to be applied to the city as a whole: "through simple repetition, with some consideration of density and (always) transportation needs, the design solution for the individual household was extrapolated into a series of urban plans: the city of towers (1920), the Ville Contemporaine (1922), the Ville Radieuse (1930) from Le Corbusier, Broadacre City (1932) from Wright, each of them egalitarian, repetitive and functional", (p.50).

Unfortunately, this "utilitarian rationalism" (p.47) was translated in a "logic [that] created spaces not places, masses not meanings", (p.47). Modern landscapes were "devoid of historical and regional references" (p.48) since the machine metaphor could be applied across the world, regardless of the
historical and local context. "The planning and design of the modern city was a blueprint for placelessness, for anonymous, impersonal spaces, massive structures, and automobile throughways", (p.51-52). Once again, Ley suggests that social values were crumbling, and that a cultural vacuum set in: "the metaphor of the void is remarkably persistent in accounts of 20th-century culture", (p.52). The 1960s transitional period is comparable to that of the turn of the century Vienna, where thinkers, unsatisfied with current philosophies, were searching for new cultural meanings. This void has been filled with what we now call postmodernism.

Ley argues that modernists' basic premise was wrong: "Reality, it turns out, is not like a machine after all", (p.52). In direct contrast to modernism mechanistic mindset, postmodernism is a counter-current that tries to produce "sensitive urban place-making" (p.53). It attempts to rebalance the fact that modernists "overlooked the existence and the needs of individuals and minorities", (p.56). Ley portraits Jane Jacobs as being one of the leading voices in this new movement, and her ideas paved the way for postmodernists: "in opposition to the segregated land uses of existing plans, diversity of people and land uses [became] a cardinal principle", (p.56). Ley explains the essence this new philosophy: "Post-modern space aims to be historically specific, rooted in cultural, often vernacular style conventions, and often unpredictable in the relation of parts to the whole."
In reaction to the large scale of the modern movement, it attempts to create smaller units, seeks to break down a corporate society to urban villages, and maintain historical associations through renovation and recycling. The post-modern project is the re-enchantment of the built environment", (p.53).

Ley wonders as to the nature of this re-enchantment. How can we re-enchant a modern secular society? He sees three possibilities that may tentatively represent postmodern inspiration: a) nationalism; b) pop culture; c) nature. None have grasped society in any comprehensive manner. Nationalism, in the eyes of Ley, even has a negative impact on society, and should be avoided as a source of inspiration. Postmodernism thus seems in a "crisis of content", (p.53), and leads Ley to propose: "while its questions are pertinent, there is limited indication that post-modern design has yet arrived at fully convincing cultural solutions", (p.55).

Even amidst this cultural confusion, Ley argues that there have been important successes that were spearheaded by postmodernists: the stopping of urban renewal and urban expressways, the emergence of heritage planning, the downzoning of neighbourhoods, traffic diversion, and greater pedestrian access. "One by one planning goals set out by Jacobs were adopted and the initiatives of the corporate city were resisted", (p.57). The modern machine metaphor appears to have given way to human analogies: "people
places, vital, animated, settings were being destroyed by detached, rational planning; the answer was to plan at a human scale, to build an environment which in its landmarks, folk allusions, and meeting places would sustain intersubjective associations and a sense of place", (p.56).

However, "while post-modernism is convincing as a critique, its design solutions as yet fall short of the ambitious emancipatory program laid out for it", (p.55). He refers to "the often muddled project of post-modernism" (p.44), to the fact that postmodern "solutions are primarily aesthetic", (p.55), and to the realization that "neighborhood preservation in the inner city have often displayed an unintended elitism" (p.57). In addition, the communal spirit of the 1960s has been superceded by the individualism of the 1980s, which seems to be another barrier to achieving the postmodern goal of re-enchanting the built environment. His article, though, falls short of suggesting solutions to this behaviour.

Ley's article makes a clear distinction between modern and postmodern philosophies. Though each have their own internal problems, they nevertheless represent two basically different perspectives on the production of space in the city: modernists who believed that form should follow function, and postmodernists who desire to add cultural meaning to urban landscapes in a sensitive, human manner.
2.6 Caroline Ann Mills, geographer

Mills' 1989 doctoral dissertation, entitled *Interpreting Gentrification: Postindustrial, Postpatriarchal, Postmodern?*, examines in great depth the gentrification of Fairview Slopes, an inner-city neighbourhood in Vancouver. Chapter 8, "Fabulous Fairview: The Making of a Postmodern Text", was utilized as the basis for this literature review. Her approach is to read and deconstruct landscapes as layers of texts, following some of the notions suggested by Dear in his 1986 article. The chapter includes most of the key authors on postmodernism, but they are juxtaposed and weaved in a complex manner.

Mills' view of modernism is based on the concept of functionalism and scientific rationalism. "In architecture specifically, [modern] ideology centres on the redeeming qualities of technology married to aesthetics, the purity of form which follows function, and the purge of ornament", (p.405). From a slightly different angle, modern planning "encompassed a particular ideal of the city as efficient and functional", (p.407). She applies these notions to the city too: "if the modern building was a machine for living in, so too was the city, and its success would depend on the expert application of technology and the principles of scientific management", (p.407).

In contrast, "postmodern practice in design is comprised of attempts to reassemble what has previously been disassembled", 

In this "attempt at reconstruction" (p.405), Mills argues that there is "a new ideal for the city - not as [an] efficient machine, but as the home of people", (p.408). She finds that Granville Island is a case in point because "it plays havoc with the modernist assumption that productive efficiency is paramount", (p.410).

She suggests that False Creek South is a landscape that incorporates "very modest postmodernism", (p.408). Even though "sensitive urban place-making" and a resistance to a high-rise environment were basic guiding principles in the development of False Creek South that led to medium densities, housing enclaves, landscaped settings, and pedestrian friendly environment, Mills argues that "the double coding which is definitive of postmodernism is very understated", (p.408). There is little reference to Vancouver's rich cultural heritages, little incorporation of past architectural styles, and little interaction with the neighbourhood immediately to the south, Fairview Slopes. On the other hand, regional themes, ecological landscaping, views, and site characteristics "resulted in a sensuous and picturesque landscape", (p.409). Mills concludes that False Creek South "seems a rather conservative landscape, self-consciously idyllic and nostalgic", (p.409).

"A more deliberate expression of postmodern deconstruction and reconstruction is found on Granville Island", (p.409). Mills
states that the mix of commercial, industrial and recreational uses, the references of the island's industrial past, and the incorporation of architectural symbols familiar to the public at large contribute to making Granville Island a clearer postmodern landscape. "This landscape is ... thick with multiple layers of meaning ... it disputes the distinction between work and play, between innocent recreation and commodified spectacle", (p.410).

Mills' interpretation of Fairview Slopes is that "the early phase of its redevelopment ... shared many design features with the residential planning of False Creek", (p.410), while "the later Fairview projects display a more pointed postmodern sensibility", (p.411). The early phase was characterized by a rejection of high-rise development, a "compatible mixture of commercial, residential and ancillary uses" (p.410), compatibility with neighbouring buildings, infill, preservation, a variety of facades, landscaped courtyards, roof lines, doorway details, "built-in vernacular and historical allusions" (p.411), and a harmony with their built and natural context. The later phase was characterized by a more conscious application of colours and materials, architectural elements such as porches and gables, and an architectural vocabulary that drew both from "the vernacular and from other times and places" (p.411), such as San Francisco, the Mediterranean area, and Boston.

Mills examines the issues of superficial and structural
postmodernism, and argues both are present in Fairview Slopes (p.425). Superficial postmodernism "is deeply implicated in the consumption ideology", (p.425), and is closely associated with "affirmative postmodernism" and "postmodernism of reaction". It essentially provides stylish architectural elements that contribute to buildings being simple commodities on the market. It is often criticized because the architectural element are only skin-deep. One developer argued in an interview: "I strictly cater to a commercial need and I only design what sells, I don't build monuments", (p.426). In contrast, structural postmodernism is "motivated by a reaction against the elitism of modernist design and the destruction of the city fabric", (p.425). It is related to the concepts of "critical postmodernism" and "postmodernism of resistance". It basically attempts to incorporate postmodern principles, not just on the surface of the building, but throughout the building and the city. Mills states that "assessments ... pivot around the question of whether postmodernism has lost the political critical edge of modernist aesthetics", (p.424).

Mills' evaluation of Fairview Slopes is insightful, but appears to overlook some important elements. She argues that the planning of the Slopes is basically superficial postmodernism because it catered to the needs of developers, who built to the maximum allowed under the zoning bylaw (p.426). However, she does not evaluate the fact that the planning of the area avoided
modernistic high-rise development, nor that Fairview Slopes blends in much more into the fabric of the city than False Creek South, qualities that seem to fit the label of structural postmodernism. With regard to architecture, she argues that many of the recent projects in Fairview Slopes "exemplify how developers are grasping to capitalize on available symbolic systems which will give their product a special allure", (p.425). In essence, she is claiming that they should be considered as superficial postmodernism. Yet, earlier in the chapter, she suggested that these same recent projects displayed "a more pointed postmodern sensibility", (p.411), which seems to be closer to structural postmodernism than superficial postmodernism. Thus, though her description of Fairview Slopes' landscape is very detailed, her analysis and evaluation are incongruous. Further, in her discussion of the categories used as labels, she acknowledges that "oppositional categories cannot capture the subtleties of a fluid reality", (p.444). The evaluation of the "depth" of a postmodern project is therefore much more than the use of a black and white system of analysis.

Mills also comments about the social inequality of most postmodern projects, especially relevant to this gentrified area, which once used to be a working class district just south of the False Creek industrial lands: "postmodernism may mean a small victory for the quality of the urban environment, but it is one which can confound the assault on social injustice, except in
those cases where it was wedded to bold programmes of equitable housing allocation", (p.430). In sum, the 'victory' is that "the landscape of postmodernity resurrects those principles exorcized by modernism - stimulation, difference, distinction, the individuality of separate entrances, and the sensuality of texture and colour", (p.446). But the defeat is at the hands of social inequality, an important critique in the political evaluation of postmodernism.

2.7 Analysis of literature
Based on this literature review, there seems to be evidence supporting the distinction between modern and postmodern design principles. There appears to be a strong inclination towards associating modern planning and architecture with functionalism, scientific rationalism, industrial production, and the city as a machine. Planning "is an attempt to make cities function as efficiently as factories", (Relph, 1987:49); design is based on "machine aesthetics", (Jencks, 1989: 28); "design [should] be purely objective and functional, purely utilitarian", (Ley, 1989: 47); planners "treat[ed] the new city itself as a machine", (Holston, 1989: 51); and the "ideal of the city as efficient and functional", (Mills, 1989: 407). The notion that form follows function summarizes this modern mindset. Based on the literature, functionalism seems to be the overriding design principle guiding modern architecture and planning.
With specific regard to planning, there was strong attempts to separate incompatible land uses by segregating urban functions into mutually exclusive sectors of the city. The literature suggests this quite clearly: Ley refers to "the segregated land uses", (p.56); Relph uses the term "segregated landscapes", (p.69); while Holston talks about "mutually exclusive sectors within the city", (p.32). A modern design principle is thus the creation of segregated and homogeneous zones within the city.

Another area in planning that seems important is the type of transportation system that is promoted in the modern city. From the readings, it seems clear that the modern city was made for automobile travel, and that pedestrian needs were subservient to those of drivers. The result is twofold: firstly, "everyone who can drives" (Holston, 1989: 101), and secondly, "visible activity has for the most part retreated inside the buildings" (Relph, 1987: 241). This type of transportation system causes what I shall call an "interiorization" effect: "one is either outside in a car or inside on foot", (Relph, 1987: 252, emphasis added). Holston describes how this is apparent in Brasilia: "the pedestrian is engulfed by the car, the sidewalk is transformed into an internal corridor, and commerce itself redirected toward the interior of the superquadrads or internalized into shopping malls", (Holston, 1989: 311). Thus, another modern design principle is this tendency to interiorize spaces for pedestrians.
In architecture, several trends are apparent. Firstly, modern buildings are devoid of ornamentation, decoration and symbolism. The International Style built "unadorned and geometric structures", (Ley, 1989: 47); "all forms of decoration ... were declared taboo", (Jencks, 1989: 28); "[modern] ideology centres on ... the purge of ornament", (Mills, 1989: 405); the International Style "consisted of undecorated surfaces", (Relph, 1987: 98); and "the elimination of ornament from the facade", (Holston, 1989: 184). Thus, it seems clear that undecorated architecture is another modern design principle.

Secondly, modern architecture strived to be futuristic and devoid of any historical references. The ideal was to reflect the image of the machine age, not past urban eras. Modern architecture was "devoid of historical ... references", (Ley, 1989: 48); "historical references were declared taboo", (Jencks, 1989: 28); "the new architecture attacked the styles of the past", (Holston, 1989: 95); and "the different sources of modernism ... had in common a rejection of traditional styles", (Relph, 1987: 102). Thus, the rejection of historical references in architecture is definitely a fundamental design principle in modernism.

Thirdly, modern architecture designed buildings in an mechanistic manner, which has led to many structures being out of context in the area surrounding the site. "Individual buildings are designed without concern for context", (Relph, 1987: 241);
"modernist architecture ... refuses any accommodation whatsoever to existing urban and social conditions", (Holston, 1989: 53); "modern architecture ... didn't make effective links with the city", (Jencks, 1989: 16); and "city-building was a technical problem of clearance and construction", (Ley, 1989: 51). Thus, concern for context was not a priority for modernists, and can be interpreted as a design principle.

Finally, there is a characteristic that seemed to affect both modern architecture and planning: the scale of development. Modernists generally thought in grandiose ways, and their plans were consequently large-scale and/or comprehensive in nature. "The design of the modern city was a blueprint for ... massive structures", (Ley, 1989: 52); "scale [is] questionable" in large public housing projects, (Jencks, 1989: 16); "the totalizing scope of modernist planning", (Holston, 1989: 51); and "modernist built forms are ... bigger, taller, wider, than almost all their predecessors. They are, in fact, megastructures", (Relph, 1987: 243). It thus appears quite clearly that a final modern design principle was related to large scale development.

If we now examine postmodern design principles, we discover a vastly different set of ideas. As a general guideline, the principle of functionalism and of viewing the city as a machine is no longer applicable in postmodern times. "Reality, it turns out, is not like a machine after all", (Ley, 1989: 52); rather,
there is "a new ideal for the city - not as [an] efficient machine, but as the home of people", (Mills, 1989: 408). Postmodernism thus becomes "the re-enchantment of the built environment", (Ley, 1989: 53); postmodernists are "creating buildings and townscapes which are pleasanter to be in and of far greater visual interest", (Relph, 1987: 229); ultimately, the postmodern project is involved in "sensitive urban place-making", (Jencks, quoted in Ley, 1989: 53). Therefore, the design guideline that seems to encompass the intent of postmodernism is both a rejection of the machine mentality and an appropriation of the idea that the city should be an environment sensitive to human needs and sensibility.

With regard to planning, there is an attempt to avoid the repetitive, homogeneous landscapes produced by modernism; postmodernists try to instill projects with diversity by promoting mixed land uses instead of separating land uses. Granville Island, for instance, has "commercial and recreational uses ... interleaved with new and existing industrial activities", (Mills, 1989: 409); postmodernism tries to create "nontotalizing, heterogeneous typologies of form and function", (Holston, 1989: 316); "in opposition to the segregated land uses of [modern] plans, diversity of people and land uses [is] a cardinal principle", (Ley, 1989: 56); "since about 1970 architecture, planning and business corporations have all moved in a similar direction by encouraging greater variety", (Relph,
1987: 236). It is obvious that a postmodern design principle is the desire to infuse landscapes with diversity, variety, and heterogeneity.

With regard to transportation, postmodernism tries to plan the city with pedestrians, as well as drivers, in mind; thus, the city is not given over to the automobile, and, as a result, pedestrians are not forced to remain inside buildings. The walking street is thus revived, and streets are shared by cars, buses, bicycles and pedestrians. Postmodernists thus counter the interiorization effect of modernism by exteriorizing pedestrian activity onto the street and in public spaces. "Postmodern townscapes go some way to redressing this imbalance ... [that] put the automobile before people", (Relph, 1987: 257); postmodernists promote "the celebration of the outdoor public nature of these spaces [streets and squares] at a pedestrian and not an automotive scale", (Holston, 1989: 316); postmodern projects include "greater pedestrian access [and] livable streets", (Ley, 1989: 57); and False Creek South and Fairview Slopes both show signs of "pro-pedestrian values", (Mills, 1989: 411). Therefore, a postmodern design principle is the incorporation of the pedestrian as an important component in the transportation system of the city.

There seems to be a third planning principle in postmodernism: greater incorporation of nature into the city. An effort is now
placed upon harmonizing urban development with nature, or perhaps more to the point, of adapting urban development to be more "natural" and less artificial. "Many post-modern townscape re-establish contact with rivers [and] lakefronts ... these are being reclaimed, canals are landscaped, riverside and lakefront walks are created", (Relph, 1987: 257); in False Creek South, "housing enclaves [are located] in landscaped settings" and "there is a good sense of connection with the geographical context", (Mills, 1989: 408-409); and in Fairview Slopes, "the best ... developments emphasized a harmony with their ... natural context ... with structures clustered organically around landscaped courtyards", (ibid: 411). Though only two of the five authors picked up on this element, their arguments seem to support the incorporation of nature as a postmodern design principle.

With regard to architecture, there are three trends that are obvious. First is the reintroduction of decoration in the architecture of buildings and public places. Though many times, the decoration is only skin-deep, it nevertheless represents a break with the unadorned philosophy of the International Style. "Post-modern townscape are rich in the details of signs, materials and decorations", (Relph, 1987: 255); in Fairview Slopes, there is a "conscious application of colours and materials", (Mills, 1989: 411); and Ley refers to "the rediscovery of cultural symbols in the built environment", (Ley,
Thus, the reintegration of decoration in architecture is one of the design principles in postmodern architecture.

Second, postmodern architecture reconnects with the past to borrow historical elements and styles in new buildings. As pointed out in the literature review, the borrowing from the past is often selective, and different styles are pasted together in an eclectic mixture. Thus, postmodern architecture does not have to totally reproduce old styles; rather, it imports what the architects consider to be useful to their projects. Relph claims that in postmodernism, "the old, it seems, is new again", (Relph, 1987: 215); Jencks defines postmodernism as "the combination of Modern techniques with something else (usually traditional building)", (Jencks, 1989: 14); Holston suggests that postmodernism encourages "the use of historical quotation in ornament to suggest a layering of historical context", (Holston, 1989: 316-317); Ley argues that postmodernism attempts to "maintain historical associations through renovation and recycling", (Ley, 1989: 53); and Mills proposes that False Creek South is mildly postmodern partly because there is not "much incorporation of past urban architectural styles in the city", (Mills, 1989: 409), that Granville Island "recaptures, with irony, an industrial past and juxtaposes it ... with an industrial present", (ibid: 410), and that several projects in Fairview Slopes drew "both from the vernacular and from other times and places", (ibid: 411). The recapturing of urban
history in selective manner seems to be another postmodern design principle.

Thirdly, postmodern architecture tries to contextualize buildings into the local and regional setting, thereby avoiding as much as possible the modernist method of building structures in total isolation of the surrounding area. Postmodern projects are therefore much more sensitive to what surrounds them, and often this implies the incorporation of some form of local architectural elements and styles, materials and scale. Jencks proposes that two of the postmodern departures from modernism relate to context: "neo-vernacular and ad hoc urbanist", (Jencks, 1989: 23); Relph argues that there has been "a reconnection with the local setting", (Relph, 1987: 257); Ley suggests that there is "a renewed interest in the specificity of regional ... styles", (Ley, 1989: 53); and Mills states that several projects in Fairview Slopes responded "to adjacent older buildings with sensitivity and inspiration", (ibid: 411). Based on the literature review, it seems clear that contextualism is a postmodern design principle.

Finally, as with modernism, there is something to be said about the scale of development in postmodern planning and architecture. Generally, it tries to avoid the large-scale and comprehensive nature that characterized modernism. Instead, it advocates small-scale and more localized planning, and for a general
reduction in scale in the size and bulk of buildings. Postmodernism "attempts to create smaller units [and] seeks to break down a corporate society to urban villages", (Ley, 1989: 53); Relph suggests that participatory community planning, a feature of postmodernism, is "small-scale [and] local", (Relph, 1987: 233), and that in a postmodern townscape, "surrounding buildings are likely to be of pre-megastructural dimensions", (ibid: 255); in False Creek South, "scale became one of the most important considerations, leading to medium densities", (Mills, 1989: 408), and many projects in Fairview Slopes have a "human scale", (ibid: 411). Thus, a postmodern design principle is firstly the rejection of modernistic large-scale, high-rise development, and secondly the introduction of smaller scale units of development (plans and buildings) that are more in line with what people consider to be human scale.

To summarize the analysis of the literature, it appears that there is a fairly significant difference in the design principles guiding modernists and postmodernists. Modern planning and architecture was on the whole functional and large-scale in nature. More specifically, in planning, there was an attempt to segregate the city into mutually exclusive, homogeneous zones, and priority was given to the automobile, which forced the pedestrian to take refuge inside buildings. In architecture, the International Style promoted functionalism by eliminating decoration and historical references, and built with very little
concern for the local context. In contrast, postmodern planning and architecture refute the notion that the city is a machine, and try to replace this metaphor with human ones: "people places" and "home of people" are two examples. In line with this concept is the attempt to build and plan at a more human scale. In planning, there is a push to promote diversity in the people and land uses in different parts of the city, to recreate outdoor street life by planning for pedestrians, and to incorporate nature in the way cities are designed. In architecture, there has been a recovery of decoration and history, and a sincere attempt to incorporate urban development into the local setting. The design principles that have been derived from the literature have been summarized in Table 2.1.
TABLE 2.1
DESIGN PRINCIPLES DERIVED FROM THE LITERATURE

A. MODERN DESIGN PRINCIPLES

General principle: - functionalism
Planning principles: - segregation of land uses
                  - priority given to automobiles
                  - large-scale and comprehensive
Architectural principles: - absence of decoration
                          - no historical references
                          - little concern for context
                          - large-scale

B. POSTMODERN DESIGN PRINCIPLES

General principle: - planning for people, not machines
Planning principles: - diversity of land uses
                     - higher status given to pedestrians
                     - incorporation of nature
                     - avoids large-scale planning
Architectural principles: - reintroduction of decoration
                         - historical references
                         - contextualism
                         - human scale
CHAPTER 3
OBSERVATIONS FROM CANADIAN URBAN LANDSCAPES

This chapter examines the modern/postmodern distinction by observing and analyzing urban landscapes across Canada. The intent of this exercise was to get "hands on" experience on modern and postmodern projects, i.e. to see in person the differences in the design of these spaces, to get a feel for them, and to take photographs to capture the various design elements in each project. This exercise was undertaken by visiting several hundred landscapes, buildings, and streets in seven major Canadian cities. These visits were completed as part of three bus rides across the country, from Montreal to Vancouver, between September 1990 and June 1991. During these trips, I took close to five hundred photographs, some of which have been included in this chapter. The ultimate purpose of these observations is to derive a set of design principles for both modern and postmodern landscapes.

3.1 Methodology
When I undertook to travel across Canada in September 1990, I had a vague idea of what I was supposed to look for in urban landscapes. Gradually, this became clearer as I travelled the second and third time. I was essentially searching for various modern and postmodern landscapes in order to seek out what were their design principles - i.e. the features that make them
typically modern or postmodern. Unfortunately, buildings and streets do not have signs describing their design philosophy as "modern" or "postmodern", or for that matter, "pre-modern" or "late-modern". Thus, my visits were basically "search and discover" missions: they consisted of wandering around downtowns, neighbourhoods, and suburbs, mostly on foot, and sometimes on bicycle or in a car. I looked at buildings, walked into many of them, strolled along the sides and backs of these buildings, sat in plazas, looked at those who frequented these spaces, examined the architecture, walked up fire escapes, along expressways, in pedestrian tunnels, down alleys, and in parks, listened to noises and voices, read billboards and posters, touched wall materials and plants to see if they were real, and clicked my camera as often as I felt like it. In essence, I gathered as much information on the landscapes I visited as I possibly could during the time I was there.

This type of "search and discover" method of examining landscapes is not uncommon. We all, in some way, get information about landscapes by experiencing them first hand. And there is no doubt that they shape our perception and interpretation of these landscapes. A lot of Edward Relph's book, The Modern Urban Landscape, is based on this type of random observations in many cities across the world. The photographs in the book attest to that: most are taken by him and span the globe; one photograph from Toronto here, one from Radburn there, another one from
Melbourne, and finally one from Amsterdam. The random nature of his photographs seems to provide a healthy cross-section of landscapes across the world. Relph comments on his approach to examining landscapes:

While books about architecture, planning, technological developments and social history have valuable details, the best sources of information about landscape[s] are landscapes themselves. Accordingly, I have spent several years looking closely at the modern parts of towns and cities I have visited, most of them in North America and Britain, some in Europe and Australia and New Zealand; I have attended both to their obvious forms and their enigmatic features, and I have wondered about what they reveal of the people who chose to give them this appearance.

Someone, and I regret I cannot remember who since the term seems so appropriate, calls this approach simply 'watching', watching for unusual details, for new developments, for insights into what lies behind recent fashions, for ironic juxtapositions of signs... I have sketched fragments of plazas, explored outside stairways that apparently lead nowhere... I have taken photographs of city skylines while driving on expressways, and I have walked and watched where most people are content only to drive... My attention has been directed mostly to the widely seen forms of the built environments of cities - their structures, their streets and their spaces... My main concern is to describe the broad outlines of the development of modern urban landscapes. (Relph, 1987: 5-7).

My approach in examining Canadian urban landscapes was not unlike that of Relph. It is a generalist's view of the city, and one that is grounded in random field observations. Though the scientific validity and objectivity of this method can be questioned (perhaps resulting in biased and atypical information), this type of exercise nevertheless provides a wealth of useful information. The advantage of this type of analysis is that by collecting many bits of information from many
different sources, the abundance of information generally compensates for any abnormal or biased observations and findings.

3.2 Field observations

Most of the observations were collected during three cross-Canada bus trips, and in cities with populations greater than 500,000. The first, in September 1990, included visits to Toronto, Montreal, Ottawa, Winnipeg, Calgary and Vancouver. The second, in January 1991, included visits to Montreal, Quebec City, Toronto, Calgary and Vancouver. The third, in June 1991, included visits to Toronto, Montreal, Ottawa, Winnipeg, Calgary and Vancouver. Thus, observations for this chapter have been collected from a total of seven cities (Quebec City, Montreal, Ottawa, Toronto, Winnipeg, Calgary and Vancouver). Because I have lived in both Montreal and Vancouver, and because I only travelled through the other cities, my experiences in Montreal and Vancouver are richer. In the five other cities, my stay varied from a period of 24 hours (Quebec City) to a week (Calgary). My observations in these five cities consist mainly of landscapes in the downtown and the inner-city (travelling on a bus, and only having my feet as locomotion in these cities meant that my study area had to be limited). In contrast, my observations in Montreal and Vancouver include suburbs, as well as the inner-city. During the last two years, I have also visited a number of smaller cities such as St-Sauveur, Quebec, Thunder Bay, Ontario, Banff, Alberta, Kamloops, British Columbia,
and Whistler, British Columbia. They too have contributed to understanding modern and postmodern landscapes. I am disappointed with not having been able to travel to the Maritimes to examine urban development in Halifax, St. John's and other cities. Hopefully, their absence from this thesis will not result in a serious gap of information.

3.3 A selection of Canadian urban landscapes
As it is impossible to recount all of the visits (I, myself, cannot remember every time I went out and examined landscapes), I have chosen to present a selection of Canadian landscapes in order to give the reader an idea of what I observed throughout these visits. I have chosen projects I know ahead of time are modern and postmodern so that a cross-section of landscapes are presented. This selection was based on two factors: a) the date of construction of the project, and/or b) the general appearance of the landscape (modern landscapes usually stick out like a sore thumb, and are easily recognized). So I have selected several projects that fit the description of modern landscapes, one that represents late-modernism, and about half a dozen that are postmodern in nature. For each, I will describe the physical design of the landscape, and include a photograph. Later in the chapter, I will extract modern and postmodern design principles that derive from these landscapes.
a) Place Ville-Marie, Montreal: modern and postmodern

Built during the early 1960s by architect I.M. Pei, Place-Ville-Marie is a commercial and office complex in the heart of Montreal's downtown (see figure 3.1). The crucifix shape of the 45-storey tower is considered to be one Montreal landmarks, as it is easily recognizable and very visible from afar. The complex was built on three city blocks bounded by Rene-Levesque Blvd, Mansfield St, Cathcart St, and University Blvd. It consists of four office towers, two of eight storeys, one of fifteen storeys, and one of forty-five storeys. An underground shopping plaza was built and connected to Central Station. The buildings were all built along the lines of the International Style (straight lines, concrete, steel and glass, and no decoration). Access to the building by foot is either by going down several steps to the underground plaza, or by climbing a staircase to the open, windswept plaza above the underground shopping. There are no shops that face onto the street. Car access is provided by an underground parking lot that accesses onto McGill College Avenue.

Place Ville-Marie was renovated during the mid-1980s (see figure 3.2). This is what I consider to be its postmodern component. I will describe some of the renovations. As originally built, some of the accesses to the underground shopping mall were virtually hidden behind a wall that served no other purpose than to mask the entrance; these walls were removed during the renovations,
Figure 3.1  Place Ville-Marie, Montreal, Quebec.
Figure 3.2  Place Ville-Marie's plaza after renovations, Montreal, Quebec.
making these access points more visible. The concrete plaza was refurbished with landscaped areas that include grass and trees; the intent was twofold: to make the plaza more pedestrian friendly, and to reduce the wind-tunnel effect. Inside in the underground plaza, they created large skylights where no sunlight had ever been seen; they are located in the food court areas where people eat their lunches. The interior of the mall was renovated: the flat ceiling was replaced with one that arches, and the floor was upgraded with a material that looks like marble. The exterior and the siting of the buildings have not been altered, and still no shops face onto the street.

b) Residential plan for Cartierville, Montreal: modern
Cartierville is a residential neighbourhood in the north end of Montreal, located north of the Canadian National Railway and south of Riviere-des-Prairies, just to the west of Autoroute des Laurentides. Its location is similar to that of Marpole in Vancouver. Cartierville was planned and laid out during the 1950s. It is essentially a dormitory suburb, feeding workers to downtown by subway or via the commuter train. I will examine the land use patterns in the area bounded by Highway 15, the railway, Laurentian Blvd, and de Salaberry Blvd (see figure 3.3). The density varies from large single-family dwellings to four-storey apartments. The apartment buildings are located along arterial streets such as Dudemaine St, Grenet St, and de Salaberry Blvd. The large single-family dwelling area is located in the middle of
Legend

I = Institutional (school, church, hospital)
P = Park
C = Commercial
LSFD = Large Single Family Dwellings
SSFD = Small Single Family Dwellings
D = Duplexes
SAPT = Small Apartment buildings (6-10 units)
MAPT = Medium Apartment buildings (10-30 units)

Figure 3.3  Land use map of Cartierville, Montreal, Quebec.
Figure 3.4 Apartment zone in Cartierville, Montreal, Quebec.
Figure 3.5 Single family zone in Cartierville, Montreal, Quebec.
Cartierville, in an area that has partly curvilinear streets and cul-de-sacs. The smaller single-family dwellings, the duplexes and the small apartment buildings are generally laid out to provide a gradation going from lowest density to highest density.

There are three types of commercial zones in Cartierville. Firstly, along Laurentian Blvd is what is considered "strip malls" or "ribbon development"; Laurentian Blvd is a primary arterial, is not pedestrian friendly, and all businesses along this street have parking lots in front or at the side of the building. Secondly, there are small shopping malls such as the one at the corners of Laurentian/Louisbourg and de Salaberry/Grenet. The area was also planned with a major shopping mall just to the east of the expressway on de Salaberry Blvd. Thirdly, part of de Salaberry Blvd, near O'Brien Blvd, is a walking commercial street, but it is small in comparison to other commercial development. There are two corner stores that are not located in these commercial sectors.

The landscape of Cartierville is one of neatly zoned areas, both residentially and commercially. Both the land use pattern (separation of commercial and residential) and the transportation system (parking lots at malls, some curvilinear streets) favour the car as the preferred mode of transportation, though the presence of many lower-income apartment dwellings in the neighbourhood increases the use of transit. The architecture is
generally simple and functional, especially in the apartment areas (see figure 3.4). In the single-family dwelling area, there has been a strong effort to keep, not only the houses, but also all the trees the same height and shape (see figure 3.5).

c) Autoroute Ville-Marie, Montreal: modern and postmodern

L'autoroute Ville-Marie was planned as a major east-west expressway in the network of highways in Montreal. It was designed to connect the Decarie Expressway with downtown, and the east side with downtown. The portion between Turcot Interchange and the downtown was built during the early 1970s. It was constructed as an eight-lane expressway, with access limited to vehicles. The western section between Turcot Interchange and Guy Street was built on the sloping hill that separates Westmount from working class St-Henri as an elevated expressway, the westbound lanes just slightly more elevated than the eastbound ones (see figure 3.6). The portion between Guy Street and Bleury Street, just south of the central business district, was built as a six-lane tunnel. Thirty foot high airvents pepper the landscape where the tunnel was built. The eastern portion between Bleury Street and Berri Street was built as a depressed ten-lane highway that connects with the Bonaventure Expressway. Overpasses for cars and for pedestrians were built to connect Old Montreal to the south with the downtown to the north, as the Ville-Marie has created a major gash in the urban fabric of the central city. Construction was halted at Berri Street, even
Figure 3.6  Autoroute Ville-Marie, elevated portion, Westmount, Quebec.
Figure 3.7  Boulevard Ville-Marie, Montreal, Quebec.
though land was expropriated further east.

In the early 1980s, construction resumed and a three kilometer section was opened between Berri Street and Frontenac Street in the mid-1980s. The landscape of this section is completely different than those built during the early 1970s (see figure 3.7). The eight lane highway is at grade, and there are sidewalks on both sides of the roadway, thus eliminating the exclusionary rights given to the automobile. A bicycle path was even built on land left over from expropriation. There are intersections, not interchanges, along this portion of highway because there is a traffic light at about one kilometer intervals. Further, trees and lampposts line the highway, and a berm was built between the bike path and the highway to reduce the noise impacts on the adjacent neighbourhoods. There is even interlocking brick on the median separating eastbound and westbound traffic. This new section was not baptized "expressway" by the Ministry of Transport; rather, they refer to it as the Boulevard Ville-Marie.

d) The New City Hall, Toronto: late-modern
Built in the 1970s, Toronto's new city hall is composed of two thirty-storey towers that, taken together, form the shape of a half-cylinder (see figure 3.8). The intended message to Torontonians is that municipal government is open to citizens, the buildings reaching out to you like welcoming hands. The
Figure 3.8  New City Hall, Toronto, Ontario.
architecture, other than the semi-circular aspect of the main buildings, basically follows the principles of the International Style. The buildings and the plaza are built of concrete, so too are some of the benches, the surfaces of the buildings are undecorated, the elevated plaza is simply a large void with a structure that looks more like a spacecraft than anything else (it is in fact the council chamber), and forms, such as windows, are repetitive. The only colour is provided by the vegetation; otherwise everything is greyish. There are plants and flowers on the lower plaza, but their impact is diminished because they are planted in bland concrete beds. Further, it is difficult to "read" the building: one expects an entrance on the level of the elevated plaza, but when you walk up, empty space with blank walls greets you. The main entrance to the building is on the ground level and is very ordinary in appearance. And once in the building, you feel as though you are underground because of the elevated plaza built above this level. Finally, the scale of the project is substantial: the city hall complex covers approximately three city blocks.

e) Ottawa-Carleton Regional Government Building: postmodern

Recently built and opened in 1990, the Ottawa-Carleton Regional Government Building is located in the heart of Ottawa, beside the provincial courthouse on Elgin Street. The architecture is the first thing to catch the eye (see figure 3.9). The building's exterior appears to be built out of stone, green and bright red
Figure 3.9  Ottawa-Carleton Regional Government Building, Ottawa, Ontario.
Figure 3.10  Pedestrian bridge, Ottawa-Carleton Regional Government Building, Ottawa, Ontario.
Figure 3.11  Atrium, Ottawa-Carleton Regional Government Building, Ottawa, Ontario.
Figure 3.12  Corridor and marble floor, Ottawa-Carleton Regional Government Building, Ottawa, Ontario.
metal are used as railings and the frame for staircase, there is a circular, rotunda-like structure at the top of the six storey building, and a green clock-tower-like structure at northern entrance. The fenestration pattern varies a lot, the surroundings of the buildings are essentially grass fields (not a concrete plaza), the entrances and exits to the underground parking lot are not too obtrusive, an arcade was built on the north side of the building, and the columns in the arcade have sculpted faces that are very eye-catching, even decorative. Bronze-coloured circular columns were installed at the western entrance along with old-fashioned lampposts. Though it is not apparent at first glance, the new building is sited beside an old school, made of stones and other classical architectural elements. There is a strong interplay between the two buildings. On the south side of the new building, there is a window on one of the upper floors that resembles one of the windows on the old school — it is not so much the windows that are the same, but how they are framed on the exterior wall. A pedestrian bridge was built between the two buildings, and it is enclosed and shaped in the form of an arch, replicating this familiar form on the old school (see figure 3.10).

The inside of the Ottawa-Carleton Regional Government Building is no less impressive. In the atrium, there is plenty of sunlight that pours because a large empty corridor has been created from ground level to the fourth floor (see figure 3.11).
element forges a sense of openness once inside the building. The materials used inside are very diverse: the floor, for instance, is made out of marble-like material, and different patterns have been created throughout the building (see figure 3.12). The lighting is ornamental, public art is displayed in the atrium, and one of the staircases, rather than being tucked away near the elevator, is out in the open near the south entrance. The Ottawa-Carleton Regional Government Building is definitely a refreshing structure, in the sense that it stimulates many of the senses because of its forms, materials, colours, patterns, light, etc.

f) Eau Claire YMCA, Calgary: postmodern

Built during the late 1980s, the Eau Claire YMCA is located just north of downtown Calgary, on the bank of the Bow River. The architecture of the building is very intriguing. The exterior is composed of various shapes including a cylinder, a pitched roof, curved walls, and boxy spaces. This eclectic mixture of volumes, combined with a two-toned brick pattern, creates a busy, and visually interesting structure (see figure 3.13). The main entrance is easily visible, as it is located beside a giant "Y" etched into the wall. The window pattern is not homogeneous, but creates an interesting effect from afar. Inside the building, the atmosphere is not claustrophobic. The pool is simply enclosed from the atrium with a window panel, and, in addition, windows surround the pool where the main exterior wall is
Figure 3.13
Eau Claire YMCA, Calgary, Alberta.
located; this effectively creates a very open atmosphere, where the space is wide open, and there is natural light pouring in from the pool area. There is also an open area in the central part of the building, where the pitched roof is located, and a staircase to the upper floors becomes the centre of attention as one passes by. The seating is comfortable, and vegetation adds to the peaceful atmosphere of the building. There is a wall in the atrium on which is etched the names of all the individuals and groups that donated money for the building. The overriding quality of this building is its coziness and serene ambiance, not unlike that of a living room.

g) Sinclair Centre, Vancouver: postmodern

The Sinclair Centre, in the heart of downtown Vancouver, is one of the major office complexes for the federal government in the city core. Bounded by Granville St, Hastings St, Howe St, and Cordova St, it was created as part of the renovation of four early twentieth-century buildings during the mid-1980s. The four structures were basically kept unchanged (see figure 3.14), both on the outside and on the inside. The complex has kept a strong heritage ambiance, even if most of the offices, elevators, plumbing and ventilation were upgraded to contemporary standards. An indoor atrium was built near the north-eastern end of the complex. The atrium is enclosed with glass panelling (see figure 3.15) that permits sunlight to pour into this commercial section (food court and shops). Materials and details are rich
Figure 3.14 Sinclair Centre, Vancouver, British Columbia.
Figure 3.15  Skylights in atrium, Sinclair Centre, Vancouver, British Columbia.
Figure 3.16  Atrium, Sinclair Centre, Vancouver, B.C.
in the atrium: railings are made of cast-iron and painted green, the floor is made of marble that has an interesting pattern, lighting is ornamental, flags line the glass ceiling, small vegetation is tucked into appropriate corners, and a colourful statue of two office workers adds life to the atrium (see figure 3.16). A piano sits at the edge of the indoor plaza: the Sinclair Centre management organizes various music and entertainment performances during the day, which creates a captivating atmosphere in this already charming atrium. The Sinclair Centre has thus combined the old with the new: heritage with contemporary office standards, and outdoor public life in an quasi-indoor setting. I find it to be a truly charming place.

h) Houses at Stephens/West 2nd Avenue, Vancouver: modern

On the 2600 block of West 2nd Avenue in Kitsilano, Vancouver, there are five residential buildings that are built along modern lines (see figure 3.17): they are simple boxy structures, the exterior made of stucco, with no decoration, flat roofs, a repetitive fenestration pattern, plain entrances, and uniform, greyish colours. In a neighbourhood of early twentieth-century converted houses, most of which have pitched roofs, wood siding, porches, and stained glass, these five buildings stand out from the surrounding landscape. Whatever vegetation existed was eliminated, so that today, there is not a single mature tree on either of these five properties. This contrasts with the abundance of trees, hedges, plants, and flowers that
Figure 3.17 Houses on West 2nd Avenue, Kitsilano, Vancouver, British Columbia.
characterize old houses in Kitsilano. Except for roughly similar density, there is nothing in common between these buildings and the duplex area in Kitsilano.

i) House at 2358 West 6th Avenue, Vancouver: postmodern

This three-unit house on West 6th Avenue in a duplex area in Kitsilano was built during the late-1980s (see figure 3.18). It blends with the traditional housing in the neighbourhood because it has duplicated some of the features of older homes: first of all, the scale of the building is the same as adjacent homes; secondly, architectural elements such as the pitched roof, the wood siding, the colours of the building, the porch, the staircase, the windows, the location of the main door, and the bay window have all been sensitively used in the new construction; and thirdly, once the house was built, the property was once again landscaped, thereby keeping similar to adjacent properties. This type of building did not prevent the developer from including contemporary features such as an underground, three-car garage, and skylights. In fact, the garage door is neatly tucked away in one corner of the property, well hidden behind landscaping; this gives a message that the house was designed with pedestrians, not automobiles, at the forefront - otherwise, the garage door would be more prominent. The house effectively combines new needs and standards, such as concrete foundations and automobile access, with traditional techniques, such as porches, pitched roofs, and
Figure 3.18  House at 2358 West 6th Avenue, Kitsilano, Vancouver, British Columbia.
wood siding. The result is very pleasing.

j) **False Creek South, Vancouver: postmodern**

Planned during the early 1970s and built mainly between 1975 and 1985, False Creek South is an inner-city neighbourhood in Vancouver located on former industrial lands (see figure 3.19). The area bounded by Burrard Bridge, False Creek, Cambie Bridge and West 6th Avenue consists of several clusters of medium-density buildings, varying in style and height, with a small commercial area at the eastern end and a large park in the centre of the development.

The layout was based on a segregated pedestrian circulation system, including a seawall walk along False Creek - cars have been relegated to the perimeter of the neighbourhood, where most of the parking lots are located. There are no streets per se in the residential area; rather, the housing is clustered along the neighbourhood's windy pathways in well landscaped settings. Each cluster has its own distinctive architecture and density: the western portion west of Granville Bridge consists of four to eight storey apartment buildings that incorporated a lot of brickwork; the central area is built along the lines of a townhouse development, with buildings not higher than three storeys, and the architectural style is new and bold (some buildings have bright orange roofs); and the eastern portion is composed of three and four storey apartment buildings whose
Figure 3.19  False Creek South, Vancouver, British Columbia.
architecture is reminiscent of past styles. A consistent feature throughout False Creek South is the attention paid to the landscaping: all developments include a generous amount of trees, bushes, lawns, and flower beds.

False Creek South is generally cut off from the rest of the city, especially from the neighbourhood to its south, Fairview Slopes: only one pedestrian overpass was built between the two communities (though three were proposed), and the railway and West 6th Avenue act as another major barrier. The pedestrian bridge, however, is extremely well designed from the point of view of the pedestrian: it is about twenty feet wide, its surface is made of interlocking brick, and vegetation was planted on the deck of the bridge. Though False Creek South does not interact meaningfully with Fairview Slopes to the south, it does relate well to False Creek to the north. There is a strong sense of being close to the water, as all pathways lead to the seawall and most apartments are designed to provide a view of the body of water and the downtown core. Finally, it is worth mentioning that the population of False Creek South is diverse, as planners aimed to reproduce the same socio-economic profile of that of the region.

3.4 Analysis of Canadian urban landscapes
The analysis in this chapter reveals many parallel findings to those in Chapter 2. This should be no surprise, because much of
the information contained in the books and articles in Chapter 2 comes from observing landscapes. Holston, Mills, Relph, and Jencks based many of their arguments on what they saw and interpreted in the landscape. I will briefly review some of the design principles that have already been outlined in Chapter 2, and include additional ones that I have derived from my examination of Canadian urban landscapes.

The general design principle that modernism is directly related to functionalism has been supported by the evidence found in Canadian landscapes. The layout of Cartierville, the design of the Ville-Marie Expressway, the architecture of Place-Ville Marie and of the dwellings on West 2nd Avenue in Vancouver all show signs of being functional and no more. The Ville-Marie Expressway's function is to move many vehicles at high speed from Decarie Expressway into the downtown core, and that is about all that can be said about it - all its design features work to that end: no pedestrians, no sidewalks, the grade separations, and no interruptions such as traffic lights or intersections. The housing on West 2nd Avenue is simply designed to house people; here too, little else can be said about it: all aesthetic and pleasurable elements such as colour, landscaping, and architectural details have been purposefully eliminated - nothing is left but the housing function. Thus, observations from Canadian urban landscapes support functionalism as the basic design principle of modern planning and architecture.
The examples of the layout of Cartierville and the design of the housing on West 2nd Avenue suggest that modern planning promoted homogeneity. Nowhere in Cartierville is there any mix of activities: the uses have been neatly segregated according to their function and their density. I can only think of a handful of buildings that have a business on the ground level and housing on the second floor. Otherwise, the mutually exclusive zones prevails, and within each zone, homogeneity reigns. The image of all houses and all trees looking alike (figure 3.5) exemplifies this homogeneous landscape. The small apartment buildings on West 2nd Avenue in Kitsilano show no signs of diversity: they all look alike and are all shaped like boxes. The only noticeable feature that distinguishes them is the colour tone of the buildings (it varies from an off-white to a pale grey). Homogeneous landscapes therefore appears to be a design principle in modern planning.

Modern planning seems to favour the car as the preferred mode of transportation, relegating the pedestrian to a lower priority. This led to what I call interiorization into cars and buildings. The Ville-Marie Expressway is a case in point: the Ministry of Transport spent hundreds of millions of dollars to give uninterrupted downtown access to drivers. Nowhere in that project was there any improvements for pedestrians: in fact, pedestrians are prohibited from entering onto the expressway by
law. The "street" (if we can call the Ville-Marie Expressway a street) has been given over to the car. The design of Place Ville-Marie provides a more subtle example of the streets being designed for cars only. The only friendly pedestrian environment created was on the inside of the complex; no shops face onto the street, so pedestrians have no reason to walk along the street - except to get into Place Ville-Marie's underground mall. Because the street for pedestrians was architecturally denied, it conversely implies that it was designed for cars. Both the Ville-Marie Expressway and Place Ville-Marie suggest quite strongly that pre-eminence was given to the car, and as a result interiorization is a modern design principle.

There is a third planning feature that I derived from modern landscapes, which did not appear in the analysis of the literature. Modern landscapes were generally artificial and devoid of natural elements. If we examine the landscapes of Place Ville-Marie, the housing on West 2nd Avenue and the Ville-Marie Expressway, we find very few signs of nature: both the office complex and the expressway are built out of concrete and nowhere is there any vegetation; there are simply no trees, grass or flowers in these projects. This is probably why they are considered "hard" landscapes. The houses on West 2nd Avenue also make the point: there is very little vegetation other than the lawn - everything else was removed during construction. Further, in Place-Ville Marie, the pedestrian is forced
underground where all light and air is artificially produced. Thus, I suggest that one of the modern design principles was a desire to build artificial, and not natural, environments.

In architecture, the modern design principles of undecorated surfaces and no historical references are present in the observed landscapes. The architecture of Place Ville-Marie, the housing on West 2nd Avenue and the apartments in Cartierville are all built with undecorated facades and with no historical references. The only decorative features on the apartment buildings in Cartierville is the colour of the railing on the balconies. The Ville-Marie Expressway's design is no different: all surfaces are bare concrete, and there is nothing to suggest anything from Montreal's urban past. Thus, these two features, undecorated surfaces and the absence of historical references, are supported as modern design principles.

The third architectural design principle related to contextualism and suggested that modern landscapes integrated very badly into the urban fabric. The Ville-Marie Expressway is a perfect example to support this principle. It does an incredibly poor job of integrating into the natural and built landscape: many houses were expropriated for its construction, land in the downtown core was dug up to build the tunnel, and, near Old Montreal, there is now a fifty meter wide gap in the fabric caused by the depressed portion of the expressway. The traffic
engineers completely failed to incorporate the existing urban environment while they were assessing this project. The houses on West 2nd Avenue do a poor job at blending with the surrounding neighbourhood: in fact, they stand out from the landscape in a very pointed manner. No architectural features from traditional Kitsilano homes made it into the architecture of the boxy structures. And though it may not be apparent today, Place Ville-Marie was completely out of context when it was built in the early 1960s. Though part of the complex covered unsightly railway tracks, other parts were built where victorian houses stood. In fact, the whole of the new downtown in Montreal used to be a "suburb" at the turn of the century. Thus, Place Ville-Marie was not sensitive to the uses, scale and architecture of what surrounded it 30 years ago. Today, the complex seems more in context because many new office towers have been built in adjacent areas. Therefore, it is clear that there is a lack of concern for the context in the examples observed, and that this feature is a modern design principle.

Finally, two of the modern projects show sign of "megastructural bigness": the Ville-Marie Expressway and Place Ville-Marie. It is impossible to live in Westmount, St.Henri or Little Burgundy without noticing the expressway: its impacts (noise, vibration, air pollution, expropriation, and sheer size) are incredible. The scale of building a five kilometer stretch of freeway in an existing urban setting is enormous. One simply has to walk under
the elevated portion of the expressway to get an idea of its incredibly large size. Place Ville-Marie is perhaps not as massive, but its scale is also very large: the complex covers three city blocks, and the buildings are imposing. The underground mall is so large that disorientation is a common problem with tourists and those who only shop there occasionally. These examples demonstrate that the large scale of modern projects is indeed a design principle.

Thus, there are many parallels between modern design principles derived from Canadian urban landscapes, and those derived from the literature. The overall feature of modern landscapes is their functionalism. In planning, the results of modern design principles were homogeneous landscapes, large scale projects, automobile-oriented spaces that were unfriendly to the pedestrian, and artificially designed spaces. In architecture, the principles often led to the construction of large-scale buildings that had no decoration, no historical references, and little concern for context. The only design principle that I suggest in this chapter that was not found in the literature is that modernism bore little relationship to nature, and instead created artificial landscapes. All other design principles suggested in this chapter are present in the literature.

With regard to late-modernism, Jencks' description provides a good starting point. The new city hall in Toronto seems to have
a lot in common with modernism - the machine mentality still seems present - but, at the same time, there appears to be a small step towards more humanistic architecture: the symbolism of the open arms as expressed in the curvature of the buildings. This theme is drowned in the modern aspects of the project, and thus is a weak attempt to reconnect meaningful communication with citizens of Toronto. On the other hand, it is possible to interpret city hall as an example of "Modernism [taken] to an extreme", (Jencks, 1989: 32). Maybe the curvature of the buildings is simply a demonstration of high technology and machine aesthetics of a new age. From my examination of Canadian urban landscapes, it is indeed difficult to interpret late-modern projects: some, like the municipal hall in Calgary and the law courts in Vancouver, seem to be examples of weak attempts to move away from modern design principles, while other projects like the Palais des Congres in Montreal appear to be extreme examples of modern design principles. There thus appears to be two types of late-modern landscapes: one trying to make a leap to postmodernism, and one trying to take modernism to an extreme.

With regard to postmodern design principles, there is a lot in common between the findings of this chapter with those of Chapter 2. The general design principle that seems to guide postmodernism is an attempt to move away from functionalism, and to incorporate some humanistic elements into Canadian landscapes. All seven postmodern projects examined in this chapter - the
renovations to Place Ville-Marie, the Boulevard Ville-Marie, the Ottawa-Carleton Regional Government Building, the Eau Claire YMCA, the Sinclair Centre, the house at 2358 West 6th Avenue in Vancouver, and False Creek South - incorporate non-functional elements that contribute to creating a richer landscape. The Boulevard Ville-Marie is perhaps the most vivid example of this trend: it is essentially functions as a mover of vehicles at relatively high speeds (perhaps 80 km/h rather than 100 km/h), but it does so in a sensitive manner. The project recognizes the needs of pedestrians, cyclists, and adjacent communities, and further, it tries to create a softer atmosphere by landscaping the sides of the boulevard and by using materials such as interlocking brick to add colour and texture. The renovations to Place Ville-Marie make the point clearer. The renovations did not improve the functioning of the building per se (office work and shopping), but rather made the environment of the complex more pleasant for pedestrians. The renovations to the ceiling, and the floor, the building of skylights, and the introduction of landscaping on the plaza, have all helped to improve the visual quality and ambiance of Place Ville-Marie. Thus, Place Ville-Marie still functions as a major office and commercial complex in downtown Montreal, but it does so in a more sensitive manner. It therefore seems that the move away from functionalism and the inclusion of non-functional and humanistic elements is at the basis of what constitutes postmodernism.
In planning, there is an attempt to instill diversity into landscapes. False Creek South is a perfect example of this trend. In contrast to most neighbourhoods, which generally have a homogeneous population, False Creek South was deliberately planned as a diverse neighbourhood. The idea was to have a mix of families, seniors, single people, and couples of all income brackets. Further, because the site was broken into smaller planning units, there are many distinct areas within False Creek South: the density, the height of buildings and the architecture vary from one cluster to the next. Therefore, False Creek South turns out to be a very diverse neighbourhood, both physically and socially. Planning for heterogeneous, not homogeneous, landscapes is thus a postmodern design principle.

With regard to transportation planning, there is an effort to give more emphasis to pedestrians than was the case during modern times. Planners have therefore not relegated the pedestrian to be inside buildings all the time; there is now a conscious effort to exteriorize the pedestrian by making outdoor spaces - especially streets - more pedestrian friendly. In fact, this is sometimes done by taking away space from cars. The layout of False Creek South is an example where it was decided that the neighbourhood would not be designed for the car; rather, the design is mainly for pedestrians, relegating streets and parking to the perimeter of the neighbourhood. The Boulevard Ville-Marie is another example of a landscape not completely given over to
the car, where pedestrian needs are incorporated into the design. The simple fact of building the highway at grade and including sidewalks, intersections, and traffic lights has created an environment where the pedestrian is not excluded, as was the case with the Ville-Marie Expressway. This does not mean that there are many pedestrians who walk along the boulevard (it is still an unpleasant experience to walk along an eight lane road), but they, at least, they have a choice. Thus, there is a trend to incorporate the requirements of pedestrians in outdoor settings, rather than forcing them to take refuge inside buildings. Exteriorization and the taming of the automobile represent another postmodern design principle.

There is also an effort to incorporate more natural elements into urban landscapes. Modern landscapes are artificial, and there is very little in them that suggests anything about nature. Postmodernism, however, tries to rebalance this by adding natural elements or by making reconnections with nature. Part of the renovations of Place Ville-Marie included the landscaping of the concrete plaza, and the construction of large skylights to let sunlight into the underground plaza. Both these changes brought those who work and shop in Place Ville-Marie closer to nature. At the Ottawa-Carleton Regional Government Building, the architects designed the surroundings of the building, not as a concrete plaza, but as an open green space with lawn and trees. The Ville-Marie Boulevard is lined with trees and a grassy berm
was built on the north side of the road, which is in marked contrast to the totally concrete portion built in the early 1970s. And the reclaiming of industrial waterfront land such as False Creek South is an additional example of the reintroduction of natural elements into urban development. It is clear from these examples that a postmodern design principle is the creation of more natural, and less artificial, environments.

In architecture, there is a tendency to decorate buildings by adding colour, using different materials, avoiding simple geometric shapes, and incorporating artistic element in the architecture. The Ottawa-Carleton Building has many examples of decoration. For instance, there are four basic colours on the outside of the building: red, green, grey and bronze, which add visual interest. There is also an effort to emphasize the doorways by adding columns at each entrance. Within the arcade along the north side of the building, there is a sculpted figure on each column. Within the building, there is an art display, ornamental lighting, and an artistic marble floor pattern. All these create a decorative building, much more so than modern architecture.

The decoration on Eau Claire YMCA is provided by incorporating a traditional material like brick, using two different colours of brick, and varying the shape of the building. Inside Sinclair Centre, the use of traditional materials, the multiplicity of
colours, the flashy floor pattern, and the statue all contribute to a decorative environment. These examples demonstrate that decoration is no longer taboo, and that postmodern architecture attempts to create decorative buildings and landscapes.

In contrast to modernists who decided to build without any historical references, postmodernists try to reintroduce urban history at different levels. The Ottawa-Carleton Building, constructed beside an old school, uses the school as a source of inspiration for certain architectural elements. The pedestrian overpass is the most obvious example: its arching roof reflects the arches in the fenestration pattern of the old school. There is also a window on the south side of the building that is a modest reproduction of a window on the school. Further, the Ottawa-Carleton Building utilizes other classic elements such as the arcade, columns, the tower, the rotunda, stone and marble. They are probably not replicas of traditional architecture, but they do evoke notions of pre-modern architecture.

The Sinclair Centre is a different example of the use of urban history. The federal government decided to preserve the four turn-of-the-century buildings and incorporate them into the project, rather than demolish them. It is an example of heritage preservation and renovation, in which part of the history of Vancouver was preserved. Both the exterior and the interior of the office buildings have kept their historical
ambiance; and in the atrium where the shops and restaurants are located, the space was designed to look aged and pre-modern - traditional lampposts, the use of cast-iron and marble, and the greenish colour of oxidized copper.

At the house at 2358 West 6th Avenue in Kitsilano, the incorporation of history takes on a new meaning. Here it is the use of traditional building elements that have created the impression that this completely new structure is perhaps not new. The use of the pitched roof, the porch, wood siding, exterior staircase, and main door are all examples of traditional architectural techniques that have been imported in this new construction. The result is that the building appears to be old, when in fact, is brand new. Urban history, which, as shown in several Canadian landscapes, can have different layers and meanings, has been recaptured by architects, and can be considered a postmodern design principle.

Postmodern projects across Canada show a degree of concern for the urban context: most projects try to fit in without visually or physically intruding or imposing on neighbouring buildings. The Boulevard Ville-Marie demonstrates this integrative attitude quite well: it does not stand out as much as the portion built as an expressway. Rather it blends in as much as a highway possibly can: the Ville-Marie Boulevard looks more like a wide arterial street than an expressway, simply because it is at
grade, it is not fenced off, has intersections and sidewalks. It also attempts to take into account the fact that residential neighbourhoods are located on the north side by building a berm to minimize the visual and noise impacts on these communities. The Boulevard is thus much more sensitive to its surroundings. The Ottawa-Carleton Building is not out of scale compared to the neighbouring old school, and neither is its architecture out of context with that of the school - in fact, there is an attempt to make connections with the old school, both physically and architecturally. The attitude not to demolish the four old buildings that now form part of Sinclair Centre, and their renovation, is an example that demonstrates care and respect for what already exists on the site. Modernists, as was the case with the building of Place Ville-Marie, often demolished what was on the site, and built anew. Finally, the house at 2358 West 6th Avenue is perfectly in context, both in scale and style, with the surrounding neighbourhood of duplexes. Thus, these examples show quite clearly that concern for context is a postmodern design principle.

The final design principle relates to scale. Postmodernists avoid large-scale and comprehensive projects in architecture and in planning, though this does not mean that large projects are no longer built. Rather, it turns out that postmodernism promotes a variety of scales from small projects to very large ones. False Creek South, on one hand, is a very large project: it was the
creation of a completely new neighbourhood in the inner-city. The scale of this development rivals modern "megastructural bigness". Yet, False Creek South was planned in smaller neighbourhood units, and was also built incrementally over a decade. Thus, False Creek South provides an example of both the small-scale and the large-scale that accompanies postmodern planning.

In architecture, there is a tendency to get away from always building high-rises. The Ottawa-Carleton Building and the Sinclair Centre are two examples of modestly scaled office buildings. There are still numerous large-scale buildings being constructed today (Place Montreal Trust in Montreal, the Canada Trust Building in Toronto, the Canterra Building in Calgary, the Bank of Hong Kong in Vancouver), but many of them are designed to create the impression of a smaller scale. This is often done by setting the tower away from the street and incorporating a two or three-storey entrance and atrium (Montreal Trust and the Bank of Hong Kong Building). Thus, both in planning and in architecture, there is a tendency to avoid large-scale projects; instead, the trend is to build structures and to plan areas in many sizes and scales.

All of the postmodern design principles suggested in this chapter were also observed in the literature. The principle that seems to hold postmodernism together is the simultaneous rejection of
functionalism and its replacement with non-functional, humanistic elements. This principle is applied in planning in various ways: there is a desire to have heterogeneous landscapes, to create outdoor public areas for pedestrians, to incorporate nature into the design of spaces, and to plan at a small, as well as a large, scale. In architecture, the principle is applied by creating decorative buildings, by recapturing urban history, by being sensitive to the surrounding urban context, and by building at a variety of scales. These postmodern design principles and the modern ones that were derived from Canadian urban landscapes are summarized in Table 3.1.
| TABLE 3.1 |
| DESIGN PRINCIPLES DERIVED FROM CANADIAN URBAN LANDSCAPES |

A. MODERN DESIGN PRINCIPLES

| General principle: | - pure functionalism |
| Planning principles: | - promotion of homogeneity |
| | - interiorization of pedestrians |
| | - absence of nature |
| | - large-scale and comprehensive |
| Architectural principles: | - absence of decoration |
| | - no historical references |
| | - no integration into the fabric of the city |
| | - large-scale |

B. POSTMODERN DESIGN PRINCIPLES

| General principle: | - avoids pure functionalism and incorporates humanistic elements |
| Planning principles: | - instills diversity |
| | - emphasis on outdoor pedestrian life |
| | - incorporation of nature |
| | - avoids large-scale planning |
| Architectural principles: | - reintroduction of decoration |
| | - historical references |
| | - contextualism |
| | - human scale architecture |
The intent of this chapter is to synthesize the information gathered in the literature review and the observations from Canadian urban landscapes, and to incorporate it into a systematic framework. It is hoped that, by the end of this chapter, it will become clear how to distinguish a modern landscape from a postmodern one. I will also try to offer hints on how to recognize a late-modern landscape.

4.1 Development of a framework

Based on the information collected, it is possible to group it into several basic categories, as I did in a general manner in the analysis of the literature and of Canadian urban landscapes. I suggest using four broad categories: a) a general design criterion; b) planning criteria; c) architectural criteria; and d) criteria that applies to both architecture and planning. In the first category, I identify a general design guideline that will sum up in a broad fashion the nature of modern and postmodern practice. In the second and third categories, I present more specific planning and architectural principles that define modern and postmodern design. In the fourth category, I determine principles that apply to both architecture and planning.
### TABLE 4.1
**DEFINITION OF CRITERIA INCLUDED IN FRAMEWORK THAT WILL HELP TO DISTINGUISH MODERN AND POSTMODERN DESIGN PRINCIPLES.**

<table>
<thead>
<tr>
<th>PRINCIPLE</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. GENERAL CRITERION:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Level of functionalism</td>
<td>The relationship between form and function: the extent to which functional qualities dominate the design.</td>
</tr>
<tr>
<td><strong>B. PLANNING CRITERIA:</strong></td>
<td></td>
</tr>
<tr>
<td>2. Level of diversity</td>
<td>The amount of order or diversity in various aspects of urban landscapes, both small-scale and large-scale.</td>
</tr>
<tr>
<td>3. Level of exteriorization</td>
<td>The emphasis placed upon creating outdoor environments for pedestrians.</td>
</tr>
<tr>
<td>4. Relation to nature</td>
<td>The incorporation of natural elements into urban landscapes (light, air, water, vegetation, wildlife, geomorphology, etc.).</td>
</tr>
<tr>
<td><strong>C. ARCHITECTURAL CRITERIA:</strong></td>
<td></td>
</tr>
<tr>
<td>5. Level of decoration</td>
<td>The amount and variety of details, ornamentation, colour, and shape on buildings, streets, and in other public spaces.</td>
</tr>
<tr>
<td>6. Relation to urban history</td>
<td>The interest placed upon incorporating element of the urban past.</td>
</tr>
<tr>
<td>7. Relation to urban context</td>
<td>The interest placed upon incorporating new urban landscapes into the existing urban fabric or the regional context.</td>
</tr>
<tr>
<td><strong>D. CRITERIA APPLICABLE TO BOTH ARCHITECTURE AND PLANNING:</strong></td>
<td></td>
</tr>
<tr>
<td>8. Scale of development</td>
<td>The general size and scale of buildings, streets, projects, and plans.</td>
</tr>
</tbody>
</table>
It is possible to further refine some of these categories. In the planning category, I suggest using three sub-categories: the level of diversity, the level of exteriorization, and the relation to nature. In the architecture category, I propose the following three sub-categories: the level of decoration, the relation to urban history, and the relation to urban context. I have included the size and scale of development in a separate category, as it applies to both architecture and planning. The result of this analysis is shown in Table 4.1, where each category and sub-category and their definition is displayed.

The design criteria in Table 4.1 are neutral in the sense that they do not suggest any specific urban form per se. It is only when modern and postmodern design philosophies are applied to these criteria that they are translated in physical form. For instance, "the relation to nature" is a neutral statement; it only takes form in the city when modern and postmodern design philosophy is applied to it. In the next sections, I will describe modern and postmodern practice based on the eight criteria described in Table 4.1.

4.2 Basic distinction between modernism and postmodernism
In Table 4.1, I have described the general criteria that will help to distinguish modernism from postmodernism as "level of functionalism". Based on the findings in Chapter 2 and Chapter 3, I suggest that the largest change from modernism to
postmodernism is the shift away from "pure functionalism" to "functionalism with a human face". Urban landscapes, rather than being ingrained in mechanistic terms, are now conceived in a humanistic manner. In contrast to building landscapes where "form follows function", I suggest a revision of Louis Sullivan's phrase (Ley, 1989: 59): in postmodernism, "form follows function and funk". The notion that postmodernism is associated with "funk" was derived from the writings of planner Alan Duncan (Duncan, 1990: 148).

In Chapter 2, most authors suggest a correlation between modernism and the machine metaphor. The city was conceived as a machine by planners, and the machine was generally glorified by those who designed cities: "time will come when cities will conform to a plan as comprehensive and intelligent as the plan for a modern factory...", (Commission of Conservation, October 1918: back cover). The reason for this is quite simple; Le Corbusier explained it most succinctly: "where order reigns, well-being begins", (Le Corbusier, 1927: 54). Modernists wanted to clean up, organize, and order the chaotic conditions of pre-modern cities. The machine metaphor allowed them to do that because the machine is an ordered and predictable entity.

3 Funk is a colloquial term derived from the work "funky": "young people describe things as funky when they thought they were good or enjoyable", (Collins Cobuild Dictionary, 1987); "down-to-earth and uncomplicated", (Oxford English Dictionary, 1989); "characterized by self-expression, originality, and modishness; trendy and unconventional", (American Heritage Illustrated Encyclopedic Dictionary, 1987).
Therefore, modernists applied machine principles to the city. The most obvious is the notion of functionalism, i.e. that form should follow function. Anything that did not contribute to the functioning of the machine, or for that matter, of the city, would be eliminated. That is why modern landscapes generally have the bare minimum: any extra aesthetic treatment of landscapes would contravene this fundamental design principle. Streets, whose purpose was to move cars, were designed to meet that function. Buildings too were designed to meet their primary function, whether housing, work, or shopping. The modern city ultimately became a factory-like city, a product of the industrial, mass-production age.

Postmodernists reacted to the functionally-designed city. Lost were its energetic, unpredictable, chaotic, amusing, colourful, and decorative elements. This, in Holston's words, "defamiliarized" people to a great extent. The reaction since has been to refamiliarize the city by re-incorporating some of the features that were eliminated when functionalism became the dominant philosophy in planning and architecture. In his 1986 article entitled "Postmodernism and Planning", geographer Michael Dear had few kind words to say about postmodern architecture, and lamented that "to a critical but uninitiated outsider, postmodern architecture seems on occasion to be fun, sometimes clever, and even attractive", (Dear, 1986: 372). The interpretation that landscapes are now fun and attractive is precisely what I see as
being fundamental and positive about postmodern design: in my view, postmodern buildings, postmodern spaces, postmodern streets, postmodern neighbourhoods, and postmodern cities are meant to be fun and attractive. Functional spaces are boring, as Robert Venturi suggested when he reworded Mies van der Rohe's "less is more" to "less is a bore". Postmodern practice is thus involved in avoiding the pure functionalism, that accompanied modernism, by the reintroduction of non-functional elements into the landscape. The importance of these non-functional, comfortable, and attractive features is demonstrated in a study conducted by Thomas Muller. In a study of resident satisfaction in Toronto, Montreal and Vancouver, he concluded that "there is a strong indication that satisfaction with a city's recreational amenities and its climate [weather] have a strong influence on whether or not residents will find happiness in the city they live, work and play", (Muller, 1990: 6). This demonstrates that it is not just the functional elements that create satisfaction amongst residents; rather, Muller seems to arrive at the result that it is precisely non-functional elements that will make residents feel happy. Planners and architects have begun to respond to these needs, as there are already many Canadian landscapes that are infused with this new philosophy. Thus, the non-functional, and what I call "funky" elements that modernists eliminated are now at the heart of postmodern design principles. Postmodernists are, in the words of Berman, giving "the old moving chaos a new lease on life", (Berman, 1988: 171).
4.3 Modern and postmodern design principles

I will briefly discuss each of the seven specific design criteria listed in Table 4.1, and contrast how modernists and postmodernists have adapted each to complement their basic views of the city - how modernists adapted the criteria to meet their functional perspective of the city, and how postmodernists are doing the same to achieve their objective of reintroducing "funky" elements into the urban landscape.

a) Level of diversity: This criteria relates to the relative order and homogeneity in the landscape. Modernists, on the whole, promoted very little diversity in the city: this is most evidently seen in the mutually exclusive zones in all major Canadian cities. Modern planning discouraged any land use mix, other than the occasional mix of office and commercial or residential and commercial in large projects like Place Ville-Marie and Westmount Square in Montreal.

Postmodernists, on the other hand, generally try to promote diversity where it is felt that it will be beneficial to the city. The largest example of this trend is to encourage housing in the downtown core of major cities, which in modern times was designated for the most part for commercial, office and sometimes industrial uses. There is also a trend in Toronto,
Montreal and Vancouver to encourage the creation of regional town centres or satellite cities in several suburban locations, which contrasts with the notion of the modern dormitory suburb. Thus, with land use mixes in downtowns and the suburbs, postmodern practice tries to introduce some diversity into the traditional homogeneous modern landscape.

b) Level of exteriorization: This criteria relates to the level of outdoor public space given to the pedestrian. Modernists, because they redefined the street and basically gave it to the automobile, relegated pedestrians to wander around inside buildings, or in unfamiliar surroundings that were either enclosed (pedestrian bridges and tunnels, underground parking lots, etc.) or wide open (parking lots, plazas, along highways, etc.). Since these unfamiliar surroundings were not appealing, they were usually devoid of pedestrians; thus, pedestrians in the modern city remained as much as possible inside buildings. This scenario creates what I call "interiorization". Ultimately, modernists designed indoor space for pedestrians, as was the case with Place Ville-Marie in Montreal.

In contrast, postmodernists have begun to redefine the street once again: the street is not for the sole use of cars, but a whole gamut of transportation modes including cars, buses, bicycles, and pedestrians. As a result, outdoor space is being reclaimed and enhanced for pedestrians. This leads to what I
call "exteriorization". Sometimes, this implies improvements to the visual quality of the street (brick sidewalk, ornamental lighting, hanging plants, banners, etc.), or the reintroduction of on-street parking on commercial streets, or the requirement that buildings front onto the sidewalk, or the creation of a pedestrian mall where cars are not permitted. Whatever solution is adopted, it is an attempt by postmodernists to create outdoor space for pedestrians.

c) The relation to nature: This criteria relates to the incorporation of natural elements into the urban landscape. Modernists generally built artificial environments that bore little relation to the natural environment, and incorporated few natural elements such as trees, water, light and air. The modern city is often characterized as being a "concrete jungle". If trees were provided, they were often displayed in planters; many of the interior pedestrian spaces had no direct sunlight; and most buildings were hermetically sealed. Nature, for all intents and purposes, was non-existent in the modern city.

Postmodernism has generally introduced limited natural features into the city. There is a trend to reclaim waterfronts for public purposes, permitting people to be closer to the water. More trees are provided in the city (both inside complexes and along streets), and they are planted in a setting that appears to be more natural. There is an attempt to bring more sunlight into
buildings by creating both small and large skylights. Further, the trend to recycle and be environmentally-friendly can be interpreted as a move to harmonize urban development with nature. Thus, rather than creating completely artificial environments, postmodernists try to introduce natural elements into the urban landscape.

d) The level of decoration: This relates to the amount of decorative elements in the urban landscape. Modernists built spaces and buildings that had practically no decoration, other than the occasional display of public art on the office building plaza. The buildings per se were devoid of decoration; their aesthetic value is in fact derived from the minimalist treatment of the building surface. There are few colours, details, shapes, and sizes in modern landscapes. The level of decoration is very basic and simple.

In contrast, postmodernists emphasize decoration in landscapes. Buildings often have colours - sometimes very vivid colours - on their facades. Windows and doorways have more detailed treatment than the plain ones built along modern lines. The shape and size of buildings varies, which sometimes contributes to the decoration of the building (e.g. Eau Claire YMCA and Shell Building in Calgary). Streets have also become more decorative in postmodern times because street furniture and sidewalks usually have colour and often a historical touch to them.
Postmodern landscapes are thus richly textured in comparison to their modern counterparts.

e) The relation to urban history: This criteria relates to the level of incorporation of urban history into the landscape. Modernists generally rejected the urban past for inspiration; instead they were forward-looking because they were entrenched in a machine age mindset. Their design of the city reflected this outlook: modern landscapes are devoid of historical references and indeed seem to be associated with no other period than that of the present.

Postmodernists have revived the notion of importing styles, names, features, and traditions from the past in current landscape-making. Heritage buildings are preserved, renovated and recycled. Sometimes old parts of heritage buildings are preserved (e.g. statues on Cathedral Place in Vancouver); sometimes the facade of buildings are preserved and the remaining portion of the building is demolished (e.g. extension of the Montreal Museum of Fine Arts); sometimes new construction imitates (often several) old styles (e.g. commercial development on West 1st Avenue (near Burrard St) in Vancouver). Though often limited in scope, there is nevertheless a trend to use the urban past as a source of inspiration for current landscapes.

f) The relation to urban context: This criteria relates to the
level of sensitive incorporation of new development into the existing urban fabric. Modern development generally neglected the existing urban fabric. Modern structures, whether because of their architecture, their use, or their size, never seem to be in context with what already exists around the site. In Ottawa, there is a spiral ramp to a multi-level parking lot which was built adjacent to a Victorian three-storey building near Byward Market. In Kitsilano in Vancouver, the apartment towers (6 to 10 storeys) built around 1970 were totally out of scale with the low-rise neighbourhood. In Winnipeg, the architecture of the addition to the University of Winnipeg during the 1960s is completely out of context with that of the main building (traditional architecture with stone facade).

Postmodernists now advocate that fitting into the surrounding area is a key component to landscape-making. Being sensitive to neighbouring buildings, their scale, their materials, and their architecture is very important. The house at 2358 West 6th Avenue in Vancouver is perhaps one of the better examples of contextualizing new development in an already built-up area. And whether or not the aesthetic is approved, the Cathedral Place in Vancouver does incorporate itself into the context of both the Cathedral and the Vancouver Hotel, in contrast to the Burrard Building across the street. Thus, rather than neglecting what surrounds the site, postmodern buildings attempt to relate to the urban context in a sensitive manner.
g) The scale of development: This criteria relates to the size and scale of buildings and plans. Modern buildings and plans favoured a large scale. The highways, the shopping malls, the suburban tracts, the downtown office towers, and the public housing projects are all examples of the "bigness" of modern development. In addition, most modern projects were out of proportion with human scale: many office buildings, plazas, parking lots, and shopping malls simply dwarfed people who used these spaces.

In contrast, postmodernists, while they also build and plan at a large size (sometimes larger than modernists), build at a more human scale. Not all buildings in the downtown core are high-rise towers (e.g. the Law Courts in Vancouver); high-rise public housing is now avoided and has been replaced to a great extent by medium-density housing cooperatives; and massive urban freeways are generally no longer built in the inner-city. There is also an attempt to make large-scale office towers look less imposing by altering the scale or massing of the building (e.g. Bank of Hong Kong Building in Vancouver). Postmodern developments thus avoid large scale, sometimes by reducing the size of a project and sometimes by modifying the scale to better suit human proportions.

Table 4.2 summarizes modern and postmodern design principles.
This table is a synthesis of the information collected from the literature and Canadian urban landscapes. It sums up in a few key concepts the nature of modern and postmodern design. This table can be used as a basis for interpreting landscapes and for determining whether they are modern or postmodern.

4.4 The continuation of modernism and its transcendence

Modern and postmodern design principles should not be interpreted simply in black and white terms. One is not the diametrical opposite of the other. Rather, a more balanced view is to contextualize postmodernism as a partial — and therefore not complete — departure from modernism. In the words of Jencks, postmodernism is "the continuation of Modernism and its transcendence", (Jencks, 1989: 7). Architect Heinrich Klotz explains it more colloquially by stating that "the protest against modernism is not a determinate and rigid 'No'; rather it is a 'Yes, but'", (Klotz, 1988: 128). This basically means that not all modern design principles are rejected and replaced by totally new ones. Instead, what seems to have occurred is a partial deconstruction of modern design principles and their subsequent reconstruction as postmodern design principles. In practical terms, the "pure functionalism" of modern times has not been totally rejected and replaced with "pure funk"; rather, functionalism has been retained by postmodernists as a basic principle, but they have introduced some funk to accompany the functionalism. I have tried to visually describe this concept in
<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>MODERN DESIGN</th>
<th>POSTMODERN DESIGN</th>
</tr>
</thead>
<tbody>
<tr>
<td>General statement</td>
<td>Functional</td>
<td>Functional &amp; Funky</td>
</tr>
<tr>
<td>Level of diversity</td>
<td>Homogeneous</td>
<td>Heterogeneous</td>
</tr>
<tr>
<td>Level of exteriorization</td>
<td>Indoor space</td>
<td>Outdoor space</td>
</tr>
<tr>
<td></td>
<td>for pedestrians</td>
<td>for pedestrians</td>
</tr>
<tr>
<td>Relation to nature</td>
<td>Generally non-existent</td>
<td>Limited, but generally present</td>
</tr>
<tr>
<td>Level of decoration</td>
<td>Simple</td>
<td>Textured</td>
</tr>
<tr>
<td>Relation to urban history</td>
<td>Non-existent</td>
<td>Limited, but generally present</td>
</tr>
<tr>
<td>Relation to urban context</td>
<td>Non-existent</td>
<td>Generally present</td>
</tr>
<tr>
<td>Scale of development</td>
<td>Generally large</td>
<td>Small to large</td>
</tr>
</tbody>
</table>
Figure 4.1. In the upper portion of the figure is a diagram showing that modern design was grounded in "pure functionalism", i.e. functionalism dictated practically 100% of what form should look like in the city. In the lower portion of the diagram, I have depicted postmodern design as being based on a majority of functionalism and a minority of funk. The graph at the bottom of the page offers a rough description of trade off between functionalism and funk. Brasilia, on the one hand, built on the concept of pure functionalism, would be plotted at the top of the curve (total functionalism, no funk); Disneyland, on the other hand, would be located near the lower end of the curve as it is grounded in practically pure funk and fantasy. I suggest most postmodern developments, like False Creek South, are located somewhere in the upper half of the curve, as it is based more on functionalism than funk.

This type of juxtaposition of functional and funky design leads to most postmodern structures having a large component that is modern. This is evident in the landscape. The Ville-Marie Boulevard, though it is "funky" in the sense that it includes sidewalks, trees, interlocking bricks, a bike path, and intersections, still acts as a highway simply because its main function is to move a large number of cars at relatively high speeds. Thus, though it is not based on "100% functionalism" like the Expressway portion, the Ville-Marie Boulevard's design nevertheless has a large component of functionalism. And though
FIGURE 4.1

THE CONTINUATION OF MODERNISM AND ITS TRANSCENDENCE

MODERN DESIGN PRINCIPLE

FUNCTIONALISM

POSTMODERN DESIGN PRINCIPLE

FUNCTIONALISM + FUNK

FUNCTIONALISM

MODERN (e.g. Brasilia)

POSTMODERN (e.g. False Creek)

DISNEYLAND

FUNK
the Cathedral Place in Vancouver has many funky elements such as colour, a pitched roof, an articulated entrance, a landscaped plaza, statues from the old Georgia Medical Building, and elements that relate to the Vancouver Hotel and the Cathedral, it is nevertheless based on modern building technology, which makes most of these "funky" elements only surface changes. The heart of the building is modern while its appearance is postmodern. These two examples demonstrate that functionalism is still a large component of postmodern design, and that many funky elements are design features on the surface of postmodern projects.

Postmodernism has come under criticism (Dear, Mills, Harvey, Bourassa, and others) precisely because the "funky" elements are usually superficial, aesthetic treatment that only contribute to a project's appearance. Critics argue that postmodernism should be deeper and more meaningful. The term "postmodernism of resistance" is often used to express this idea (Bourassa, 1989: 295). For example, with respect to heritage preservation, there is disappointment with the postmodern practice that saves the facade of a heritage building and rebuilds what lies behind it (there are many examples of this in Montreal: the extension to the Museum of Fine Arts, the World Trade Centre, the downtown library for Concordia University, the Queen's Hotel project, etc.). The critics argue this is superficial preservation and that "such treatment desecrates a building", (Wolfe, 1989: 168).
Heritage preservation, and other aspects of postmodern practice, should go further than surface changes. Perhaps the critics are right. However, I have come to the conclusion that having some funk in a project is better than having none at all. Saving the facade of a heritage building, in my mind, is better than tearing it down with the rest of the building. Over the last two years, I have come to appreciate the inclusion of funky elements — even if they are minor and superficial — in various projects across Canada. I think it would be beneficial to include even more funk in projects, but I also acknowledge that having a bit of funk is better than having none at all.

4.5 Additional guidelines to distinguish modern from postmodern

Even if we know that projects require some funk to be postmodern, how much funk is enough to call it postmodern? I will examine examples from Canadian urban landscapes and try to determine some type of "threshold" for calling a project postmodern. By the same token, I will try to define modern and late-modern landscapes, so that distinctions between the three types of landscapes are made possible.

The difficulty in categorizing arises when we examine a landscapes such as False Creek South in Vancouver. A first glance at this landscape suggests that it is postmodern. However, if we analyze the neighbourhood based on the seven specific design criteria in section 4.1, we realize that it is
not that simple. With regard to planning issues such diversity, exteriorization of the pedestrian, and nature, it seems that False Creek South provides what is characteristic of these postmodern design principles. However, with regard to architectural questions such as urban history, there is very little that evokes Vancouver's urban past, other than the names of the streets and pathways. With regard to urban context, does False Creek South fit into what surrounds the site? It does relate to False Creek, but it does not interact meaningfully with Fairview Slopes. Further, the contextualization of False Creek South within the city is poor: the neighbourhood is cut off from the rest of the city, and with the exception of the pedestrian bridge at Laurel Street, there is little attempt to connect it with Fairview Slopes. In addition, the fact that the road and pathway pattern are windy and its boundaries are defined by bridges and arterial streets (West 6th Avenue) makes False Creek South resemble more a suburban pattern in Richmond than an urban pattern in Vancouver. Finally, with regard to size and scale, False Creek South was planned both at the large scale and at the small scale. Do all these features, some which are distinctly postmodern while others are seemingly modern, create a postmodern landscape? That is the type of question that I will try to answer in this section.

I suggest starting with several Canadian landscapes and deriving information from them. I have created a matrix in Table 4.2,
TABLE 4.3
COMPARISON OF MODERN, LATE-MODERN AND POSTMODERN PROJECTS

<table>
<thead>
<tr>
<th>Design criteria</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Includes funky elements</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Planning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Promotes diversity</td>
<td>0</td>
<td>nr</td>
<td>nr</td>
<td>nr</td>
<td>nr</td>
<td>nr</td>
<td>nr</td>
<td>1</td>
</tr>
<tr>
<td>3. Promotes exteriorization</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4. Includes nature</td>
<td>0.5</td>
<td>0</td>
<td>0</td>
<td>0.5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Architecture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Promotes decoration</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.5</td>
<td>0.5</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6. Relates to urban history</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>7. Relates to urban context</td>
<td>nr</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.5</td>
<td>nr</td>
<td>1</td>
</tr>
<tr>
<td><strong>Planning and architecture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Avoids large scale</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>nr</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL SCORE:**

|               | 0.5| 0 | 0 | 1 | 4 | 3.5| 7 | 6 |

Notes:
A = Cartierville
B = Autoroute Ville-Marie
C = Place Ville-Marie
D = City Hall, Toronto
E = Boulevard Ville-Marie
F = Pl. Ville-Marie (renovations)
G = Ottawa-Carleton Building
H = False Creek South

0 = feature not in landscape
0.5 = part of feature in landscape
1 = whole feature in landscape
nr = not relevant to landscape
with eight Canadian urban landscapes listed on the top, and with
the eight design principles listed along the side. I have chosen
three modern landscapes (Cartierville, the Autoroute Ville-Marie
and Place Ville-Marie), one late-modern landscape (city hall in
Toronto), and four postmodern landscapes (the Boulevard Ville-
Marie, the renovations to Place Ville-Marie, the Ottawa-Carleton
Regional Government Building, and False Creek South). I have
scored each project based on each design criteria. I have
specifically detailed the criteria so that they are stated as
postmodern design principles, which makes the scoring easier to
accomplish. There are four possible scores: a) a "0" when there
is no such feature in the landscape; b) a "0.5" when there is
some elements of the feature in the landscape; c) a "1" when the
feature appears to be fully apparent in the landscape; and d) a
"n.r." to indicate when the feature is not relevant.

In this exercise, the modern projects scored the lowest, the
late-modern had a low score and the postmodern had the highest
scores. This was to be expected. What can we learn from this
exercise? I think that the scoring is useful in providing a
rough quantification of what constitutes a modern, a late-modern
and a postmodern project. The exercise seems to suggest that, if
the design criteria described in this chapter is utilized in an
analysis of landscapes, modern landscapes will have scores below
1, late-modern projects will have scores between 1 and 2, and
postmodern projects will have scores between 3 and 8. Thus, this
exercise leads me to suggest that a project is postmodern when it has a minimum of three postmodern design principles. Since not all projects will have all eight design principles, this rough "threshold" is useful in qualifying whether a landscape is modern, late-modern or postmodern. The findings of this exercise, however, must be treated with caution, and should be used solely as a yardstick for evaluating landscapes.

4.6 Summary
In this chapter I has proposed first of all a framework for analyzing modern and postmodern landscapes. It is based on eight design criteria: a general statement of intent, the level of diversity, the level of exteriorization, the relation to nature, the level of decoration, the relation to urban history, the relation to urban context, and the scale of development. I suggest that these design criteria are useful when evaluating modern and postmodern landscapes.

I then argue that modern landscapes were grounded in pure functionalism, and that postmodern landscapes avoid pure functionalism and incorporate funky elements. I examine how each of the seven specific design principles are applied by modernists and postmodernists, and how they all ultimately promote their basic approach of providing either totally functional landscapes or partly functional, partly funky landscapes.
I suggest that it is important to recognize that, even if postmodern landscapes include funky elements, they are still grounded in functionalism. This often leads postmodern projects to have a modern core and postmodern surface. This split, in turn, has been the focus of numerous criticisms that argue postmodernism should be deeper in its reworkings of urban landscapes.

Finally, I have tried to determine some rough guidelines or thresholds that will help to describe whether a landscape is modern, late-modern or postmodern. The exercise undertaken suggests that a project is modern when not more than one of the eight postmodern design principles are present, a project is late-modern when one or two postmodern design principles are present, and a project is postmodern when three to eight postmodern design principles are present.
A case study is included in this thesis in order to compare and test the findings of Chapter 4. I have chosen to examine and analyze four planning documents related to the central business district in Vancouver, two of which were written pre-1970 (and therefore in the "modern" era) and two post-1970 (and therefore in the "postmodern" era). The intent is to derive an independent set of modern and postmodern design principles from the case study, and to then compare the findings of this chapter with those of Chapter 4, which represent a summary of the findings from the literature review and my observations from Canadian urban landscapes. The case study will either support or disprove or be inconclusive with regard to the findings in Chapter 4.

5.1 Methodology

The first step taken was to decide what would constitute an appropriate case study. After considering several alternatives, I decided to compare plans for downtown Vancouver from the 1950s and 1960s with those from the 1970s and 1980s. I settled on this because research material was readily available, because I am most familiar with downtowns (as opposed to suburbs), and because it was assumed that design principles would be clearly articulated in the plans.
The next step was to decide which planning documents would be part of the case study. I discussed the issue with Ann McAfee (Associate Director, Planning Department, City of Vancouver), Ron Youngberg (former Associate Director, Planning Department, City of Vancouver) and Brahm Wiesman (former professor at the School of Planning, U.B.C.). Four documents were finally chosen as part of the case study: a) *Downtown Vancouver 1955-1976* (1956), b) *Redevelopment in Downtown Vancouver Report No.5* (1964), c) *Downtown Vancouver: Report for Discussion* (1974), and d) *Central Area Plan* (1991). These reports represented the dominant philosophy guiding the planning profession when they were written, and that is why one document representing each decade was chosen. It is important to note that these reports were not necessarily approved by City Council.

The reports were read and analyzed independently of the findings in Chapter 4 - i.e. I did not use the criteria in Chapter 4 to examine the four reports. Rather, the reports were examined with one objective in mind: what the design principles were explicit and implicit in the reports. The reports were carefully read twice. I took notes and photocopied graphic material when appropriate. I then summarized the planning reports, mostly along the following lines: what the reports recommended as the land use plan for downtown, what they proposed as the transportation plan, and what design recommendations were
advanced. Once all the reports were summarized, I analyzed and compared them in an attempt to identify trends and shifts over time. Based on this analysis, I derived a set of design principles. Once complete, these findings were then compared to those of Chapter 4, and conclusions based on this comparison are put forth at the end of this chapter. Ultimately, the findings from this case study of plans for downtown Vancouver since the 1950s will help to support, disprove or be inconclusive with regard to the findings of Chapter 4, especially the notions summarized in Table 4.2.

5.2 Downtown Vancouver, 1955-1976
The report entitled Downtown Vancouver 1955-1976, in association with Report on the Downtown Parking Problem, formed the first master plan for the downtown area in Vancouver in the post-war period. The two reports were published by the Technical Planning Board in the summer of 1956. The boundaries of the study area cover the entire downtown peninsula minus the industrial waterfronts, the West End and Stanley Park. Taken together, these two reports form a land use and transportation strategy for the downtown area for the 1955-76 period. As the report states, it is "a Development Plan designed to meet the needs of the City for a period of approximately the next 20 years", (Technical Planning Board, 1956b: i). Some mention is made with regard to the appearance of the downtown area, but the recommendations are minor in comparison to land use and transportation
recommendations.

a) Land use recommendations

It is important to understand the context of the zoning recommendations. Prior to 1956, there was basically only one "commercial" zoning district in the downtown area: "a large proportion of the Downtown Area was governed by regulations for the 'General Business District' under Zoning By-law No. 2516. Under this By-law all types of commercial uses, warehousing, and many types of industrial uses were allowed throughout the whole district as a matter of right", (ibid: 8). The thrust of the recommendations contained in the report suggest a "division into more precise zoning districts", (ibid: 9). The intent is to separate uses into specific zones, and further to concentrate these uses into these zones. "It is ... considered desirable to break down the present overall zoning in the Downtown Area into districts for specific uses, with very selective regulations", (ibid: 5). The report recommends six zoning districts in the downtown area: a) a high density office zone, b) a high density retail zone, c) an "amenity commercial" zone (see below), d) two separate medium commercial zones, and e) a manufacturing zone (see Figure 5.1).

Conceptually, the report recommends three major zones for the downtown area. The first is a high density core, consisting of the major office, retail and public amenity uses [zones (a), (b)
and (c)], and located in the area "bounded by Burrard, Cordova, Main, Pender, Beatty, Robson, Richards and Nelson Streets with a spur westward along Georgia Street as far as Nicola Street", (Technical Planning Board, 1956a: 3). This core contains the main office building district (bounded by Burrard, Cordova, Seymour and Pender), the main shopping streets (Granville and Hastings Streets), and the prestige streets with many public buildings (Georgia and Burrard Streets). The report recommends a diverse core that will be attractive to pedestrians:

The core area should contain a large amount of floor space, with a large variety of types within the general category of offices and stores. This is a main reason for downtown's existence and its attractiveness increases in proportion to the volume and variety of these services. But the core should also be compact so that pedestrian movement, which has been shown to be the most important, is made easy and walking distances kept short. It follows therefore that building density in the core should be high. (TPB, 1956b: 5)

The second area to be created is a medium density commercial zone surrounding the high density core. Districts included in this area are the "Golden Triangle", the western portion of the Downtown South (between Burrard and Granville), and the area bounded by Smythe, Richards, Robson and Beatty. They are meant to be commercially oriented, but not compact like the core area. The third area is the manufacturing zone that consists of the eastern portion of the Downtown South, Yaletown, Gastown, and land below the Georgia Viaduct. They are planned in such a way as to be on the fringes of the downtown peninsula.
There are no provisions for any residential uses in the downtown area, other than as a conditional use in the "Golden Triangle" west of Burrard and north of the West End: in this district, "residential use is permitted with safeguards on density and the access of light and air", (TPB, 1956b: 11).

b) Transportation recommendations

The report recommends the creation of a two-tier system of transportation: inside the high density core, pedestrians and transit take priority, whereas outside the core, vehicles and transit take precedence over pedestrians. Measures are proposed to promote pedestrian activity in the core: above ground multi-level parking lots are generally not permitted in the core (TCB, 1956b: 9-10); and in the retail district, "safeguards would be required to ensure a predominantly retail use on the ground floor", (TCB, 1956b: 10). To encourage the use of transit in the core, the report suggests that all bus routes be located on Granville and Hastings Streets, and that consideration be given to the idea that these two streets be "reserved for transit only", (ibid: 16). In order to discourage through traffic in the core, the report recommends the creation of a ring-road around the core (ibid: 11). The transition from cars to pedestrian movement is facilitated by the creation of parking in locations on the fringe of the high density core (ibid: 12). Further, large parking lots are recommended for workers in locations near
the access points to the downtown area (e.g. near the south end of Burrard, Granville and Connaught Bridges), (ibid: 13). Figure 5.2 summarizes some of these proposals.

c) Other recommendations

There is a short section on "civic design", in which there seems to be a strong effort to bring "visual coherence" (ibid: 14) to the downtown area. The report states that "Vancouver's business streets did not have the good fortune to be designed by one architect, like Regent Street [in London]", (ibid: 14). Store signs seem to be of great concern, because "competitors [try] to out-do each other" (ibid: 14). Regulations to tame "the overall chaotic effect" (ibid: 14) are strongly recommended. It is suggested that surface parking lots be designed with some type of visual "screening" (ibid: 14) in order to avoid gaps in the commercial street frontage. The report seems to support wide building setbacks on commercial streets - they "form a valuable contribution to civic design", (ibid: 14) - as it praises an example in Knoxville, Tennessee where a department store is set back by some 40 feet from the street. And since Victory Square is the only open public space in downtown Vancouver, they recommend that small parks and open spaces be created in the downtown area. With regard to parking garages in the fringe locations around the high density core, the report states:

It is felt that parking structures of three to four levels as
envisaged in this report could make their own distinctive contribution to the streets on which they are proposed, provided they are carefully designed and the ultimate appearance of the whole project area proposed for parking is considered from the outset. (TCB, 1956a: 8).

There is a section on "public improvements" in which three major civic projects are set out. The first is the development of a "comprehensively designed" civic centre near Georgia and Hamilton. The second is the redesign of Victory Square as "a suitable prelude to the approach to the Civic Centre", (TCB, 1956b: 17). The third is the creation of an open space at the southwest corner of Georgia and Granville.

The report also recommends that certain districts are ripe for "comprehensive redevelopment" (ibid: 15), including parts of the "Golden Triangle" and the western portion of the Downtown South between Burrard and Granville. A "Downtown Development Corporation" is suggested as the report notes that many cities have come "to the realization that large-scale united action in accordance with a comprehensive redevelopment plan is necessary for the survival of downtown", (ibid: 15).

d) Summary

The 1956 reports basically recommend land use and transportation strategies for the next twenty years. A high density core in which priority is given to transit and pedestrian is suggested. Medium density commercial areas with parking facilities would
surround the high density core. Manufacturing areas are consolidated in the fringe areas of downtown, including the waterfronts. No provisions for housing are included in the plan, other than as a conditional use in the "Golden Triangle". Uses are thus segregated into specified areas of the core. Though the report recommends a high amenity pedestrian core, it puts emphasis on automobile travel to access the downtown area. Some effort is placed on creating visual coherence out of the chaotic appearance of downtown, and on improving public facilities (parks and civic buildings) in the core. Finally, as part of the rehabilitation of downtown, two areas are slated for "comprehensive redevelopment".

5.3 Redevelopment in Downtown Vancouver, Report No.5, 1964

This report proposes the revitalization of the core of downtown Vancouver in order "to retain its position as the shopping, working and entertainment hub of the metropolitan area", (City Planning Department, 1964: 1). The report focuses on the Georgia and Granville axes, with particular attention being paid to the area in the immediate vicinity of the Georgia-Granville intersection. It is recommended that the City takes an active role in instigating the redevelopment of this area: "the key to such improvements lies within the two sparsely developed City blocks adjacent to the [Georgia-Granville] intersection", (ibid: 1). Though the report does not constitute a master plan for the downtown area as a whole, it nevertheless corresponds to a
comprehensive plan for the core of the downtown area, and the impacts of such improvements will spill over to most of the downtown peninsula.

a) The comprehensive plan

"The intersection of Georgia and Granville Streets has been the focus of downtown Vancouver for many years... Close at hand are some of the City's best shops, hotels, theaters, offices, open spaces and parking facilities - but new development is being attracted to other parts of downtown ... [consequently] its general amenity must be improved", (ibid: 1). The report proposes a series of well coordinated actions in the area bounded by Burrard, Smithe, Cambie and Dunsmuir Streets to achieve this goal of revitalizing the core of downtown (see Figures 5.3 and 5.4).

The scheme consists of four principle [sic] co-ordinated developments:

1. A Provincial Government complex centred on the present Court House, and including a Court House extension.

2. A new T. Eaton Co. department store and related development on property owned by that company.

3. A commercial complex including offices, shops and parking on Block 42, following acquisition by the City.

4. A multi-purpose Coliseum on Georgia Street, opposite the Queen Elizabeth Theatre.

The key to the entire project will be the lowering of Granville Street between Robson and Dunsmuir Streets. Georgia Street will bridge over the lowered Granville Street.
The general amenity of downtown can be improved by this redevelopment scheme — and this is more than merely ordering the clutter of signs or planting trees. It is rather a co-ordination of major building elements; the creation of an attractive environment; the separation of vehicular and pedestrian traffic, and the provision of attractive open spaces in the right places. (Ibid: 7).

Thus, the thrust of the report suggests major modifications to Granville and Georgia Streets (see details below) in order to create a new environment that will regenerate a decaying downtown core. With the revitalization of the Court House area and the creation of an entertainment hub near Queen Elizabeth Theater, Georgia Street is to become a street with prestige and culture. For its part, Granville Street, with the creation of a new shopping environment, is to recapture its past role as the most thriving commercial street in Vancouver. The benefits of these two interrelated projects will spill over to the rest of the downtown area.

b) Granville Street

A completely new shopping environment is planned for Granville Street. "With the lowering of the street, two shopping levels will be possible", (Ibid: 11). The upper level, which will be at the same level as the main floor of the Hudson's Bay Co. store, is designed with "sky-walks" (pedestrian bridges) that "will enable people to cross Granville Street at this upper level", (Ibid: 11). The lower level, which will be at the same level as the basement of the Hudson's Bay Co. store, "will be in the form
of an open mall", (ibid: 11). Sidewalks will be widened and the street would be reserved for buses. "Vertical connection between the two shopping levels will be by speedramps, escalators and stairways", (ibid: 11). Figure 5.5 gives an idea of what the designers had in mind for this area.

c) Georgia Street

The redevelopment of the Court House complex has two main components: the building of a new Court House south of Robson Street, and the refurbishing of the old Court House on the north side of Robson Street. With regard to the former, "the completed project should be one of imposing buildings on a large site", (ibid: 23), and with regard to the latter, the report suggests that "the forecourt on the north side of the present Court House should be opened up for better public use", (ibid: 23).

The Coliseum complex would be located further east along Georgia Street. It would consist of a 16,000 seat hockey coliseum, an outdoor skating rink for public use, a hotel and convention centre complex, and commercial development. The development would be spread over four blocks from Seymour to Cambie Streets, and would complement the Queen Elizabeth Theater at Georgia and Hamilton Streets.
LOOKING NORTH ON GRANVILLE STREET AFTER REDEVELOPMENT
THE GEORGIA STREET OVERPASS CAN BE SEEN IN THE BACKGROUND
d) Interaction

"The success of the overall scheme will depend on the effective interaction of its parts", (ibid: 8). Two key interactive elements are parking and pedestrian routes. The report states that "the main interaction between the Coliseum complex and the commercial development on Granville Street will be from the shared car parking facilities", (ibid: 8). Parking will be located in intermediate areas and access will be from streets adjacent to Granville and Georgia. Their location must be close enough for people to walk to their destination.

The pedestrian system is designed to separate pedestrians from cars, while connecting the different elements of the plan together. The pedestrian system includes the two-tiered Granville Street pedestrian mall, "a low-level pedestrian right-of-way connecting Granville Street with the Coliseum-Queen Elizabeth complex and the Court House", (ibid: 14), "a pedestrian route under or over Robson Street" to connect the old and new Court House (ibid: 23), and an overpass to connect the Coliseum and the Queen Elizabeth Theater. The pedestrian system and parking facilities are shown in Figure 5.6.

e) Summary

Redevelopment in Downtown Vancouver Report No.5 is a comprehensive program to revitalize the core of the downtown area by initiating major redevelopment. The shopping area along
The Pedestrian Plan

The Parking Plan

Figure 5.6  Pedestrian and parking plan, 1964 report.
Granville Street is radically changed into a two-tiered pedestrian-oriented environment; and Georgia Street is developed as an impressive sector of cultural facilities, with a hockey coliseum, a hotel-convention centre complex, and commercial development. Parking facilities are strategically located to serve the facilities, and the pedestrian is segregated from moving traffic by creating an above- and below grade pedestrian environment.

5.4 Downtown Vancouver: Report for Discussion, 1974
This document, made available for public discussion in September 1974, is a master plan for the downtown area with three broad areas of policy: land use, transportation and design. Its outlook covered "growth and change to the year 2000", (Downtown Study Team, 1974: 3), and the authors assumed that "Regional Centres in the Lower Mainland will not grow enough to compete with Downtown Vancouver for certain types of uses and activities", (ibid: 11). The study area covered the downtown peninsula with the exception of Stanley Park, the West End, False Creek North and the Burrard Inlet waterfront. However, there are a number of recommendations in the report that incorporate these areas as part of the plan (e.g. waterfront access).

a) Goals
The report states very clearly the goals to be achieved in the plan, which were partly derived from citizen input. They are:
1. to improve pedestrian amenity in all Downtown development;

2. to improve the human environment in Downtown [mixture of activities, natural features, views, building height, pollution, etc.];

3. to encourage further growth in appropriate Downtown activities;

4. to improve mobility of people and goods to and within Downtown;

5. to require private development to meet community goals;

6. to conserve and develop different character areas in Downtown.

(ibid: 12-15).

A number of sub-goals were also presented to support these six broad goals, but are too long to detail in this section. Nevertheless, the six goals listed here give a good indication of the orientation of the report.

b) Land use plan

There is one fundamental concept driving the proposed land use plan in this report: "to keep Downtown 'alive' for more of the day than just the normal working period", (ibid: 3). The concentration of work related activities and the absence of housing in the core has created a 'dead' period after business hours. In order to reintroduce life into the core, "a mixture of land uses and activities is recommended for Downtown", (ibid: 3). Central to achieving this objective of diversity of uses is the introduction of housing in the downtown area. The report thus recommends that the City "provide and permit housing throughout
the whole peninsula", (ibid: 16). With regard to office development, the report recommends actions to "contain existing high density employment core" (ibid: 16) in the area bounded by Burrard, Cordova, Seymour and Georgia. The report also recommends action to "provide medium density employment ... around the edges of the peninsula" (ibid: 16), such as along False Creek and the Burrard Inlet waterfront. This situation of combining home and work would therefore create an 'alive' downtown over a 24-hour period (see figure 5.7).

c) Transportation plan

The basic concept driving the transportation plan is the taming of the automobile and the promotion of transit and pedestrian travel. The report recommends three "rapid transit service corridors": Hastings, Kingsway and Arbutus (ibid: 16) that would shuttle people in and out of the core (see figure 5.8). A "secondary transit system to serve the False Creek Basin and the Burrard Inlet Basin" is proposed to complement the main transit system (ibid: 16). Further, the report proposes a "linked system of pedestrian movement" throughout the whole of the downtown (ibid: 17), that would connect with major shopping areas, transit facilities and open spaces. Some of the pedestrian improvements would involve increased separation of pedestrians and vehicles or perhaps even "traffic-free zones". In addition, it suggests actions to "improve pedestrian amenity on all streets", (ibid: 18). The report recommends deemphasizing traffic in the core of
Figure 5.7 Land use map, 1974 report.
Figure 5.8 Transit map, 1974 report.
Figure 5.9  Ring road map, 1974 report.
downtown by "enabling traffic to circumnavigate the core" (ibid: 18). An inner-ring route is proposed (see figure 5.9), in which a system of one way streets are combined to create two routes in opposite directions. The following streets are suggested for this inner-ring road: Cordova/Pender, Bute/Thurlow, Smithe/Nelson, and Homer/Cambie. With regard to parking, the report recommends "no further construction of parking facilities in the core" (ibid: 19), the creation of more park-and-ride facilities in the suburbs, and the creation of parking on the fringes of downtown (False Creek and Burrard Inlet waterfronts). The transportation recommendations, taken as a whole, thus try to manage and curb the growth of automobile traffic, and generally to promote movement by foot or transit within the downtown peninsula.

d) Design

A major component of the report deals with design guidelines for development in the downtown area. The report states: "regulation now exists for Floor Space Ratio (FSR), for uses on the site, etc. Most aspects of control, however, will continue to be discretionary ... guidelines are needed for the exercise of discretion", (ibid: 21). Nineteen categories of urban design guidelines are presented in the report and a summary of the orientation of each guideline is provided:

1. Rain/snow: provide continuous protection at least on one sidewalk.
2. Wind: minimize wind tunnel effect.
4. Colour: "building surfaces up to approximately three storeys should have coordinated but varied colour and contrast", (ibid: 21).
6. Natural land form: architecture and urban design should reflect changes in natural land form.
7. Air quality: reduce air pollution, and avoid exposing pedestrians to high pollution areas.
8. Introduction of nature: protect mature trees, and promote natural elements (vegetation, water, birds, etc.) in urban development.
10. Art: promote temporary and permanent art work.
12. Relationship to immediate area: "ensure new development contributes ... to the public amenities of the area; to the differentiation and interest of the area ... New development should respect the scale of its neighbours", (ibid: 22).
13. Streets: streets for people, not only for cars.
14. Trucks and emergency vehicles: special priority in traffic management.
17. Mixed uses: base uses on character of the area, and avoid automobile oriented uses at ground level.
18. Street design: design facades with variety of treatments and continuity; design streets with adequate seating and lighting; facades and streets should complement each other.
19. Public and semi-public open spaces: variety of sizes, access to transit users and handicapped.

As this list demonstrates, the issues raised in the report are incredibly varied. Several deal with the creation of an attractive pedestrian environment (art, views, sunlight, air quality, noise, street design, etc.); some reflect a concern for the existing context (the social/ethnic, natural, and built environment); and some deal with basic issues such as emergency vehicle access and timing of new construction. The report states
that most of these guidelines will hopefully be "drafted as legal text for further study and evaluation", (ibid: 21).

e) Summary

_Downtown Vancouver: Report for Discussion_ placed three broad planning issues in the forefront: the creation of an 'alive' downtown (by introducing housing into the core), an emphasis on pedestrians and a strong deemphasis on cars, and a desire to shape the micro-environment in an attractive and sensitive manner. Though the report analyzed many issues in very broad terms like a policy plan, it also grounded them in the context of the downtown peninsula, thereby creating a comprehensive land use, transportation and design plan for the downtown area.

5.5 Central Area Plan, 1991

This report published in May 1991 deals with land use issues and some design considerations in what is now called the "central area", which covers the whole downtown peninsula (except Stanley Park) and the Broadway Corridor between Burrard and Main Streets. This report is the first of a series of documents on the central area to be published over the next few years. It is important to note that, although transportation issues had an impact on the land use policies in the report, there is no transportation plan per se in the document. Though the report is structured based on five major issues raised (office development, support services, housing, livability and retail), for clarity I
have chosen to break it down into a land use section and a design section.

a) Goals

The proposals contained in the Central Area Plan are based on seven goals that were partly derived from citizen input. They are:

1. Provide a focus for the region's special economic growth ... associated with the centre of a major metropolitan area.
2. Create a central area that has a mix of activities.
3. Ensure that the central area is a place to live and visit for all people.
4. Strengthen the unique qualities and symbolism of the central area.
5. Ensure a central area reflecting nature, with a strong connection to the magnificent natural setting.
6. Enhance the central area as a place where pedestrians move safely, easily, and comfortably on all streets.
7. Enhance the accessibility of the central area.

(Planning Department, 1991: 5).

The report indicates an important feature of these goals: "what is striking about these goals is how similar they are to the values that motivated the plans of the early and mid-70s", (ibid: 5). However, the context of these goals have changed: the development of the Broadway Corridor, the decentralization of offices to regional town centres, the abandonment of industrial lands on the downtown peninsula, the building of rapid transit, etc. have all impacted the downtown area since the mid-1970s.
b) Land use plan

There are four basic objectives to the land use plan. The first is to promote diversity in the central area, by combining office, commercial and residential development. However, unlike the 1974 report, which advocated housing throughout the peninsula, the 1991 plan recommends "clustering most housing in areas designated as primarily residential", (ibid: 10), and avoiding the "mix of offices and housing", (ibid: 33). Similarly, the report suggests action to "reshape downtown peninsula major office zoning into a compact, high amenity central business district", (ibid: 16). The report bases these recommendations on the finding that offices and housing do not mix very well in small quantities. Rather, neighbourhood quality and district amenity are achieved partly by separating these uses and clustering them into compact areas. Thus, though the report calls for diversity in the central area, it is careful about advocating a complete mix of uses. Instead, the mix of activities and uses is achieved by having several specialized zones located beside each other.

The second important policy relates to office development. The report recommends action to "reduce office zoned capacity outside Central Business District and Uptown", (ibid: 6). The principle reason for deleting some office zoning from the downtown peninsula is to try to rebalance office capacity with transportation capacity; currently, the former is much higher
than the latter. Office development is to be concentrated in the area bounded by Bute, Cordova, Richards, Pender, Cambie, Nelson, Burrard and Georgia (see figure 5.10), where it is easily serviceable by rapid transit. Areas currently zoned for office development outside this area (e.g. south of Nelson, west of Bute, and near Victory Square) are to be rezoned for other uses. The reason to delete most of the offices potential in the Uptown (Broadway Corridor) is to promote the decentralization of offices to the regional town centres; the Broadway Corridor is currently attracting offices that would otherwise locate in the town centres. The Uptown is to be consolidated near Cambie Street, based on the traditional civic and health functions of that area.

The third important issue is to develop more housing in the central area. This is to be achieved by promoting housing in the areas formerly zoned for office development (e.g. Downtown South, Broadway Corridor, Triangle West of Bute Street), and on some industrial lands (e.g. False Creek North, Burrard Slopes, Southeast False Creek, Coal Harbour). The new housing (see figure 5.11) will partly offset the demand for new transportation facilities, as new residents in the central area will be more likely to walk, cycle or take transit than to drive.

The fourth area relates to retail development. "Whereas the mid-70s plans for the central area provide for unlimited retail"
Figure 5.10 Office zoning map, 1991 report.
Map F: PROPOSED POLICY - HOUSING

Established housing areas
New housing areas recently supported
Additional housing areas desired

"Choice of use" areas desired
(H=Heritage)
Housing or "choice of use" possible

Notes: These areas are generalized. There may be individual sites or portions of areas which vary from the generalization. This will become evident in detailed planning. Retail, parks, and institutions are not included on this map.

This map does not represent City policy.

Figure 5.11 Housing zoning map, 1991 report.
(ibid: 11), the 1991 plan recommends a more cautious approach. It advocates that new commercial development must build upon, and not detract from, existing commercial districts in the central area. The plans calls for "limiting retail concentration" (ibid: 47), "reinforcing existing and desired retail districts" (ibid: 47), and "ensuring that retail contributes primarily to street activity" (ibid: 50).

The land use plan therefore shapes the downtown into a diverse area, where housing and office activities coexist and where more people live closer to where they work. The negative impacts on the city caused by commuters (neighbourhood disruption, pollution) are to be mitigated by the orientation taken in this land use plan.

c) Design
There are several design elements that become obvious as the report is read. Just by reading the goals, it is possible to detect orientations that will affect the central area's micro-environment: a) a "walkable" central area implies that a lot of emphasis will be placed on pedestrian facilities and improvements; b) a "central area in nature" suggests an effort to link urban development with Vancouver's natural context, and to "maintain and improve environmental quality", (ibid: 5); and c) a "spirit of place" encourages the retention and enhancement of elements of Vancouver's past and present that are highly
valued by residents of the city.

The emphasis on pedestrians is supported in several parts of the report. The whole notion of encouraging more housing downtown makes it possible for more people to think about walking to work. The orientation given to future retail development is geared to be pedestrian-friendly, and not car-friendly: the report suggests action to limit "shopping malls and underground retail links", (ibid: 11), and to "develop a network of street-oriented shopping districts", (ibid: 11). On non-retail streets, the report encourages action to "pay particular attention to the design of the lower pedestrian levels of developments", (ibid: 52), and to enhance the pedestrian environment by providing "interesting building detailing, fine materials, windows into offices or residential amenities, weather protection, and streetscaping and landscaping", (ibid: 52).

With regard to "a central area in nature", the report suggests that "special opportunities may exist at unique waterfront locations to bring public activities close to the water", (ibid: 50). The land use plan of locating more housing close to work will enhance the quality of the environment by reducing the need for automobile transport, the cause of 80% of the region's air pollution (ibid: 12).

Finally, a strong emphasis is placed upon preserving heritage
buildings and areas. "In areas with heritage character, permit a mix of land uses that can be easily accommodated in existing buildings or in new buildings of a compatible scale, to help preserve and revitalize these areas", (ibid: 11). The deletion of offices from the north eastern portion of the Central Business District will permit the character of the Victory Square area to be protected (ibid: 16). Further, "there are opportunities for retail to facilitate the retention of heritage buildings", (ibid: 50), as was the case with the Sinclair Centre and City Square.

d) Summary
The Central Area Plan's May 1991 document focuses on land use issues, but not to the exclusion of certain design considerations. The basic thrust of the land use plan is to rebalance the office capacity with transportation capacity "by consolidating major office development in a defined central business district and Uptown office district where it can be most easily served by transit; by reducing the overall central area office zoned capacity; and by identifying new housing areas", (ibid: 57). Within the central area, special consideration is given to promoting pedestrian activity on streets, promoting the retention of heritage buildings, and making connections between urban development and Vancouver's natural surrounding.

5.6 Design principles derived from case study
I have analyzed this case study of planning documents by
distinguishing three broad categories of planning: land use, transportation and design. For each I will discuss and compare the four reports, and derive design principles from this analysis. It should be noted that since the reports analyzed are planning documents, it will come as no surprise that there are few direct references to architectural design principles, although there may be indirect references, principally through discussions about urban design.

a) Land use analysis

The basic land use issue that stands out from the four reports is related to housing in the downtown area. The 1956 report excludes housing from downtown by zoning it for either office, commercial or industrial uses, all of which are work activities. The 1964 report makes no mention at all of housing other than suggesting that the convention centre/hotel complex could include a "site for 'prestige' apartments", (City Planning Department, 1964: 26). In contrast, both the 1974 and 1991 documents strongly recommend that housing should be permitted in the downtown area. Thus, there is a stark contrast between the "modern" plans and the "postmodern" plans: both the 1956 and 1964 reports propose the separation of work from housing, while the 1974 and 1991 documents try to combine both within the confines of the downtown. It therefore follows that the 1956 and 1964 plans generally promoted homogeneous landscapes, whereas the 1974 and 1991 reports encouraged greater diversity in the
downtown area.

b) Transportation analysis

There are three separate transportation issues to be analyzed: pedestrians, transit and automobiles. With regard to pedestrians, there seems to be a consensus throughout the four reports that pedestrians are a very important component to the vitality of downtown Vancouver. However, having said that, the reports follows very different directions in the way they try to achieve this goal of a pedestrian-friendly city core. The 1956 report generally encourages the separation of pedestrians and vehicles by dedicating certain streets for pedestrian and transit use (Granville and Hastings). The 1964 report favours a complete separation of pedestrians and vehicles by creating two distinct transportation systems: a street and parking system for cars, and an above- and below grade system of pathways and corridors for pedestrians. It is quite interesting to compare the pedestrian environment in the 1964 proposal with Holston's analysis of the pedestrian environment in Brasilia. There are some striking parallels: the absence of intersections and street corners (Georgia would bridge over Granville), the internalization of the pedestrian (the east-west below grade corridor between the Court House and the Coliseum complex), and the creation of "unfamiliar" pedestrian environments (the two-tiered shopping district along Granville). The 1964 report, however, does not achieve anything near the scale of separation
of cars and pedestrians that characterizes the city of Brasilia. The 1974 report advocates separated spaces for pedestrians, but generally along existing streets: certain streets would become pedestrianized. Finally, the 1991 plan simply encourages the revival of the street as the domain for pedestrian activity, without really mentioning the separation of cars and pedestrians. Instead, the attitude seems to be that streets are to be shared by all, and that separated facilities like underground retail and interior shopping malls should be avoided. In the 1991 report, the pedestrian environment is improved by making the streets more pedestrian-friendly: street frontage, interesting facades, pleasant street furniture, etc.

The 1956 and 1974 reports seem similar in the sense that they recognized that streets are the principal venue for pedestrians, and that improvements should occur by eliminating cars from spaces where pedestrian activity is high. The 1991 report shares a similar view, but advocates that improvements should occur by creating an intimate and pedestrian-friendly environment on the street, and by not giving over the street to the car (though not eliminating it either). The only report that advocates a completely new and segregated environment for the pedestrian is the 1964 report. In this plan, the pedestrian is located in above- and below grade situations, or, when the street is kept for pedestrians, it is completely redefined in such a way that it no longer looks or feels like a street. Thus, it appears that
the 1956, 1974 and 1991 reports all try to keep pedestrians on the streets, whereas the 1964 plan creates either an interiorized environment or one that is completely different than the traditional street in Vancouver.

All four reports generally promote transit, though there seems to be greater emphasis on transit in the 1974 and 1991 reports. In the 1956 report, it is suggested that Granville and Hastings Sts. should be for buses. Similarly, the 1964 report encourages the use of Granville Street for buses only. The 1974 document advocates improvements to three rapid transit corridors, and an internal distribution system within the core. And the 1991 plan recommends that the central business district be centred and consolidated around existing and future rapid transit lines.

There is wide divergence with regard to automotive travel. The 1956 and 1964 reports generally cater to automobile demand, while the 1974 and 1991 plans try to manage car traffic. For instance, both the 1956 and 1964 plans encourage the construction of parking lots near the core of the central business district, whereas neither the 1974 nor the 1991 reports suggest such measures. Further, in the 1974 and 1991 plans, the introduction of housing into the central area is intended to cut down on the number of people who commute from far away. Though both the 1956 and 1974 plans advocate a ring-road around the central business district in order to decongest the core of downtown, their
motivating factors seem slightly different: the 1956 plan appears to propose the ring-road for distribution purposes as well as for decongestion reasons, while the 1974 report seems to recommend the ring-road simply to take cars out of the high density core area.

What design principle is to be derived from this analysis? It appears that "modern" documents generally catered to the needs of cars, and relegated the pedestrian to either localized areas or to non-street terrain (usually indoors). This rule is truly applicable to the 1964 report, but less so to the 1956 plan, which advocated outdoor spaces for pedestrians along streets. In contrast, "postmodern" plans seem to make few concessions to the car, while making fairly major improvements to the outdoor, street-oriented pedestrian environment. The use of transit seems to be constant as a design principle.

c) Design analysis
In addition to comments made about pedestrians, there seems to be two design elements that are obvious in analyzing the four reports. The first relates to heritage buildings and areas. Whereas there is absolutely no mention at all of heritage in the 1956 and 1964 documents, the 1974 and 1991 plans advocate the preservation of historic structures. This seems to indicate that capturing and preserving some form of urban history is part and parcel of the "postmodern" planning reports, while we can
speculate that such a desire was not a "modern" design principle. In much the same fashion, the 1974 and 1991 documents both set out to connect with (e.g. access to waterfronts), protect (e.g. reduce air pollution) and enhance (e.g. 'green' the downtown) the natural environment in the city, whereas neither the 1956 and 1964 documents touch on these subjects. This suggests that the incorporation of nature is a "postmodern" principle and not a "modern" one. There are other design issues that are included in the reports, but it is difficult to compare them because many of them are only included in one or perhaps two of the four reports (e.g. regulating signs in the 1956 report, the civic centre in the 1964 report, public art in the 1974 report, density and livability in the 1991 report).

d) Summary

The case study seems to suggest that the modern plans for downtown Vancouver (1956 and 1964) promoted land use segregation (and therefore homogeneous zones), generally catered to the needs of car drivers, sometimes created unfamiliar pedestrian environments away from the street, and neglected heritage and nature issues in urban development. Further, the case study indicates that postmodern plans for downtown Vancouver (1974 and 1991) encouraged diversity of uses and activities in the central area, tried to manage (rather than cater to) the automobile, confirmed that pedestrians belong outside along streets and that streets should be designed for them, promoted the preservation of
heritage structures and areas, and encouraged the introduction of nature and ecological thinking into urban development. These are the basic design principles derived from the case study.

5.7 Comparison of design principles

How do the design principles derived from the case study (Chapter 5) compare with those derived from the literature and from Canadian urban landscapes (Chapter 4)? Of the seven specific shifts in design principles identified in Chapter 4, four are apparent in the case study: they include the shift related to the level of diversity, the level of exteriorization, the relation to nature, and the relation to urban history. The correlation with regard to the level of diversity is very good: the literature and my observations led me to conclude that modern landscapes were generally homogeneous, whereas postmodern landscapes are on the whole heterogeneous; in the case study, the reintroduction of housing in the downtown area, not apparent in the 1956 and 1964 plans, is the critical element in creating a diverse land use pattern in the central area plans of 1974 and 1991. The correlation with regard to the level of exteriorization is strong, but not perfect: though the 1964 plan follows many of the trends suggested in Holston's writings, and though the 1974 and 1991 plans promote outdoor pedestrian environments, the 1956 plan, which strongly encourages pedestrian activity along streets is slightly out of line with the general orientation of most modern plans. Nevertheless,
there seems to be a general consensus in the literature, in my observations of Canadian urban landscapes, and in the case study with regard to how planners treated the pedestrian in the modern and postmodern city. Finally, there is practically a perfect correlation with regard to the relation to nature and the relation to urban history. The fact that modern planning and architecture was devoid of natural elements and urban history, and that postmodern planning and architecture has reintroduced these two notions into urban development, is supported by all three sources: the literature, my observations in Canadian cities and the case study.

It is no surprise to find that architectural oriented design principles like the level of decoration and the relation to urban context did not surface in the case study, since the reports were basically planning documents. However, if the reports were examined specifically for these features, there is evidence to suggest that they probably could be substantiated as design principles in the case study. For instance, the 1991 Central Area Plan recommends that buildings fronting onto streets should have "interesting building detailing [and] fine materials", (Planning Department, 1991: 52), thereby suggesting that decoration of landscapes is an important feature. If we compare this to the models and diagrams of the revitalized Granville Street included in the 1964 plan, we discover that all buildings and spaces seem to be designed in the International Style with
practically no decoration at all. Thus, perhaps these two design principles are implied in the four planning reports, but further research would be required to fully justify this claim.

With regard to scale of development, there is little in the case study that supports or denies the finding in Chapter 4. There are some passages in the 1956 and 1964 plans that discuss "comprehensive redevelopment" and "comprehensive design", but this does not constitute enough evidence to support the findings from the literature and my observations of urban landscapes.

Therefore, the case study supports quite strongly four of the seven specific design principles summarized in Chapter 4. The shift from the modern to the postmodern city includes the shift from homogeneous to heterogeneous landscapes, from interior to exterior pedestrian environments, from the absence to the inclusion of natural features, and from no urban history to the incorporation of some urban history. It is possible to infer elements of the three other design principles in the case study, but further research is required before a solid conclusion can be made. On the whole, the case study supports the analysis contained in Chapter 4, and leads me to suggest that the findings in Table 4.2 are a good starting point if one is to understand the modern/postmodern distinction.
CHAPTER 6
CONCLUSIONS

6.1 Summary

My intrigue with recent urban landscapes in Canada has led me to examine design principles of two seemingly different urban eras: the 1950-70 era characterized by dormitory suburbs, 'bland' architecture, urban expressways, and 'dead' downtowns, and the period since 1970, in which the dominating features seem to be suburban office centres, lively architecture, livable streets, and 'alive' downtowns. I used two sources of information (available literature and observations from Canadian urban landscapes) as the basis for my analysis of what I have called the modern/postmodern distinction. The intent was to discover whether there is a significant difference between modern and postmodern design principles, and further, to determine the nature of the distinction, if it does in fact exist.

These two sources of information both point to the same conclusion: that there is a significant difference between modern and postmodern design principles. Both the literature and my observations of urban landscapes across Canada suggest that modern landscapes were conceived, built and managed as "functional" landscapes, where "form follows function", "the meaning is the use" and "less is more". This notion of functionalism emerged parallel with the concept that the city was
a machine or a factory. As a result, spaces and activities in
the city were separated, simplified, consolidated and
reintegrated in an efficient and ordered manner, so that the
modern city ultimately became a well-oiled machine or; from a
slightly different perspective, a scientifically-managed factory.
Modern practices of zoning and comprehensive planning epitomized
this effort to create a functional city: separate incompatible
uses and organize them in exclusive zones that are ordered in an
efficient manner. Brasilia, as Holston's book clearly shows, is
an extreme example of this style of planning: work and residence
are completely separated from each other, each having their own
clearly defined space in the city, without interaction except
during commuting hours. The International Style in architecture
also contributed through the design of functional buildings that
were devoid of non-functional elements: ornament, historical
styles, artistic window patterns, colours, detailed treatment of
materials, etc. Both modern planning and architecture, by
creating functional spaces, eliminated elements that were non-
conforming, chaotic, malleable, unpredictable, historic,
decorative, detailed, and mythic. A machine would have no such
elements; neither should the modern city.

The literature and my observations from Canadian urban landscapes
suggest a new approach to landscaping-making since the 1970s.
Postmodernists do not view the city as a machine; rather, they
perceive it to be related to people, not abiotic entities. And
accompanying the downfall of the machine mentality is the move away from the purely functional design principles that characterized modern planning and architecture during the 1950s and 1960s. The pure functionalism "defamiliarized" city dwellers to such an extent that the prevailing notion is to "re-enchant the built environment". I argue that this is accomplished by injecting "funk" into the functional planning and architecture. By this, I mean the reintroduction of non-functional elements that contribute to creating an attractive human environment. Less, indeed, was a bore. Very often, this has been translated into the incorporation of traditional practices in planning and architecture. In many ways, it is "the recovery of history", as Holston suggests. Diversity, colour, texture, decoration, shape, and other features which people considered "familiar" elements in the city have all been re-appropriated by postmodernists. The result in the city is one where form follows function and funk.

In Chapter 4, I identified seven specific shifts that accompany the move from modernism to postmodernism, i.e. from pure functionalism to functionalism and funk. Three relate to urban planning: a) the incorporation of diversity into land use planning, b) the exteriorization of pedestrian activity onto the street, and c) the introduction of natural elements into the city building process. Three shifts relate to architecture: a) a renewed desire to decorate buildings and landscapes, b) the
reintroduction of urban history into architectural design, and c) a growing concern for being sensitive to the existing urban context. Finally, there was one shift that related to both architecture and planning: an effort to avoid building and planning at a large scale. I argue that these seven shifts in design principles are the basic features of the modern/postmodern distinction.

My understanding of these shifts leads me to conclude that postmodern design principles are not complete reversals of modern planning and architectural principles. For instance, functionalism has not been completely replaced by funk, nor has land use segregation given way to total land use diversity, nor has urban history been completely recaptured and incorporated into every postmodern project. Postmodern landscapes, rather than being the antithesis of modern landscapes, are instead composed of a large modern part, with postmodern elements added usually as surface changes. As Jencks suggests, it is "the continuation of modernism and its transcendence". Some postmodern landscapes may have a minority of their elements as funky, while the majority is still based on functional design principles. This proportion of postmodern elements varies from project to project, but what is consistent about postmodernism, and what distinguishes it from modernism, is the fact that functionalism does not constitute 100% of the project's design.
In practical terms, this partial redefinition of design principles means that postmodern landscapes do not always have all of the seven specific design principles listed above. The exercise conducted in Chapter 4 seems to suggest that projects incorporating three or more postmodern features are postmodern landscapes. Projects with one or two postmodern features seem to fit the bill of late-modernism, while those that have no postmodern features can be viewed as modern landscapes. I stress that these "definitions" are very rough, and should act more as guidelines to interpret landscapes. My experience in evaluating Canadian landscapes suggests that such guidelines are useful tools because they help to focus one's attention on the important features that separate modern landscapes from postmodern ones.

The case study of plans for downtown Vancouver since the 1950s seems to uphold the findings in Chapter 4, particularly the information contained in Table 4.2. Four out of the seven characteristics (the level of diversity, the relation to nature, the level of exteriorization and the relation to urban history) are clearly supported in the case study, and a further two (the level of decoration and the scale of development) seem to be inferred, but more research would be required to verify this claim. Thus, on the whole, the case study supports the findings derived from the literature and my observations from Canadian landscapes.
I suggest that the understanding of the modern/postmodern distinction helps to reinterpret urban history since World War II, and, as a result from the analysis in this thesis, I argue that there have been two urban eras since 1945: a modern era and a postmodern era. Current interpretations of urban history do not generally recognize that postmodernism has been a force shaping Canadian urban landscapes since about 1970. Whether the analysis is couched in terms of a shift from mechanistic planning to a more humanistic approach to planning, or in terms of a shift from purely functional planning to "functional and funky" planning, I feel that this reinterpretation provides a useful backdrop for understanding the current state of planning. In my view, this new interpretation of urban history is just at the point of making its way into academic literature in a consistent fashion, but it has not yet filtered into planning education, even though many of the "funky" postmodern features are already present in the Canadian urban landscape. Once it is included in academic education, I suggest that planners will have a better grasp on the current planning context, and consequently, will be better suited to plan in an effective manner once they start practicing in today's "postmodern" world.

6.2 Postscript

Having concluded the study as set out in the introduction, I will take this occasion to elaborate on certain ideas that fall beyond
the scope of this thesis. First, I will contextualize this thesis in an even larger framework that includes changes in technology and global economic structure. Then, I will discuss issues related to the overall value of the shift from modernism to postmodernism. I will end with some suggestions about future research with regard to the modern/postmodern distinction.

The shifts in design principles outlined in this thesis did not occur in a vacuum. There were many other forces at play as these design shifts occurred gradually over time. In this thesis, the force that is evident is a dissatisfaction with modern, functional landscapes, thereby laying the foundations for richer landscapes to be created in postmodern times.

There are, however, other influential factors such as changing technology and new products. For instance, new bicycle technology has permitted cycling to become an alternative to the automobile for an increasing number of people, and this is influencing how landscapes are built: bicycle paths along waterfronts, street space dedicated for bicycles, bicycle racks and lockers, etc. Another example is recent building technologies that permit new materials to give the appearance that they are old (some metals look like oxidized copper) or even natural (some concrete surfaces look like wood). Even magnetic bank cards are modifying the urban landscape as bank machines are cropping up everywhere. All these changes in the level of
technology are altering the nature and design of landscapes.

Perhaps an even more important impact on landscapes has been caused by improvements in telecommunications, which affect where urban functions are located within the city and across the world. Today, distance is becoming practically a neutral factor in the location of many firms, as fax machines, computers and satellite communication have extended the boundaries of business activity. Firms are not constrained to remain where they have traditionally been located. Inner-city industrial activity is a perfect example of how this newly found mobility alters landscapes. Factories once located in areas like False Creek in Vancouver are now located either in suburban industrial parks, or perhaps even in a "Newly Industrializing Country". Thus, technological change has permitted firms to become "footloose", and contributed to the economic restructuring of metropolitan areas and also of the global economy.

It is commonly perceived that North American cities are gradually moving from an industrial base to a post-industrial or information base economy. This shift in the type of economy has paralleled in many ways the shift from modern to postmodern design principles. And there are some points at which there is definite interaction between these two shifts: the demise of False Creek South as an industrial zone has permitted Vancouverites to reconnect with the water by means of a public
waterfront seawall in the new residential neighbourhood. Thus, the postmodern design principle of creating a closer link with nature is partly set amidst a newly defined economy that does not require industrial lands along waterfronts. Another example is the creation of land use diversity in the suburbs with the arrival of new office areas in newly created "town centres" or "satellite cities". This design principle that advocates a mix of land uses is partly connected to the changing nature of the economy, because the existence of these suburban downtowns is facilitated by the development of telecommunication tools such as computers and fax machines.

Therefore, it is important to understand that the shift in design principles examined in this thesis is not simply due to one single factor. Though I have presented the point of view that this shift has been generated by a dissatisfaction with purely functional landscapes and a desire to live, work and play in richer, more human landscapes, there is nevertheless an abundance of other influences that have acted either as causal mechanisms, constraining factors or parallel shifts in society.

The question of whether the shift from modernism to postmodernism is a positive or negative shift is hotly debated in academic literature. I believe it is important to set parameters before such an evaluation can take place. Is the shift being examined solely from a design perspective? or is it combined with other
points of view, such as accessibility to landscapes, ownership of property, artistic meaning in landscapes, etc.? or from an even larger perspective, such as income distribution, level of public input, ecological integrity, etc.? The original question therefore deserves more than one answer.

If we examine the modern/postmodern distinction from a design point of view (as I have attempted to accomplish in this thesis), I believe that the shift is positive because of the findings suggested in this study: modern landscapes were purely functional and postmodern ones are functional and funky, i.e. the latter are more human, livelier, and richer. I am convinced that I would prefer to live, work and play in partly functional-partly funky landscapes rather than in purely functional ones; postmodern landscapes are more comfortable, friendly, attractive, and stimulating than modern ones. In my view, the choice is simple. However, this assessment does not prevent anyone who values purely functional landscapes to arrive at a different conclusion. Further, it is important to refine my evaluation by pointing out that not all modern landscapes are boring (e.g. Academic Quadrangle at Simon Fraser University feels very comfortable), and conversely that not all postmodern landscapes are satisfying (e.g. Jericho Village at 4th/Alma). Nevertheless, the general trend, as I see it, is that the design of postmodern landscapes is richer than that of modern landscapes, and this is their advantage.
There are other issues to be examined when evaluating the shift from modernism to postmodernism. For instance, many critics of postmodernism suggest that there is little artistic meaning inherent to postmodern design; rather, it is simply a superficial collage of "faddish" architectural and planning trends. Examples that are often cited as excessively-used, over-processed features include pitched roofs, bright pastel colours, brick cladding, old style lampposts, and banners on commercial streets. One often finds that these elements are skin-deep transformations of urban landscapes. The green pitched roof atop Cathedral Place in Vancouver serves no other purpose than that of decoration. Features like this simply convey the right message to those who follow these architectural fads. There thus seems to be a lack of artistic meaning in postmodern landscapes; indeed some critics suggest that they are more the products of pop culture and consumerism rather than of thought-provoking and artistic architecture. Modernism, even if one considers the products to be dull and unfriendly, nevertheless managed to mesh its artistic logic (less is more) with practical considerations throughout many of its projects. From this perspective, is it possible to conclude that the shift from modernism to postmodernism is a negative one?

Some critics raise the issue of equity in design by arguing that access to postmodern landscapes is becoming increasingly
controlled. Gates, video cameras, security guards, magnetic and laser devices all provide technological mechanisms for guaranteeing that certain landscapes are available to well-defined segments of the population. This often translates into landscapes that are inaccessible or unwelcoming to the poor. The "public" plaza at the rear of Cathedral Place in Vancouver gives an indication of what is suggested here: the plaza is not visible from Georgia Street; a quasi-wall was built along Hornby Street to separate the sidewalk from the plaza; to access the plaza from Hornby Street, a pedestrian must climb a staircase which further separates plaza and street; finally, once in the plaza, one is constantly being videotaped by two or three cameras discreetly tucked away in the landscape. These features definitely contribute to the fact that the plaza is designed for a specific clientele, and not for everyone. From a more general perspective, there is even speculation that the postmodern city will be much more segmented between rich and poor than the modern city (see Castells, 1989). Taking this position, is the shift from modernism to postmodern positive?

Unfortunately, most of this discussion is speculative in nature. Much more research is required on the reasons why the shift from modernism to postmodernism occurred, what type of impact technology and economic restructuring are having on the quality of the urban environment, and methods to evaluate the shift from modernism to postmodernism (quality of design, access to
landscapes, etc.). This thesis has simply tried to answer one question within the whole modern/postmodern debate, that of describing the shift in design principles from the modern to the postmodern era. Research on related areas of the modern-postmodern distinction, and interweaving ideas together may prove to be an exciting area of planning research in the years to come.
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