

Placemaking for the pedestrian: generative design & the street

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## **Abstract**

This paper evaluates the influence of placemaking design concepts and historical development processes on the pedestrian experience of three different neighbourhood commercial streets in Toronto. Placemaking is an urban design movement that proposes walkable, pedestrian-oriented environments in reaction to Modern planning's "placeless" car-dominated landscapes. To explore if placemaking design theories relate to actual pedestrian experiences, I conducted qualitative case studies of three Toronto streets using spatial analyses, interviews, photographic observation, and archival research. I found that placemaking design concepts did correlate to positive pedestrian experiences, but the theories were lacking when it came to explaining pedestrian accounts of the age and storied character of the street. This led me to investigate the historic formation and evolution of each street, where I discovered that, more than conceptual design theories, changes in the scale of street design practices—particularly involving techniques of construction and finance—have played a key role in shaping pedestrian experiences. My findings support Christopher Alexander's process-based design theory, and the critical spatial theories of political economy. In my conclusion I suggest some ways that these theories might dovetail into a more holistic approach to design based on adaptive, egalitarian processes. My research shows that consideration of process is essential to any urban design theory that aims to account for the pedestrian experience of streets.



## Foreword

Reading the work of placemaking thinkers is what first drew me to consider graduate study in urban planning through the MES program, so it is fitting that my final paper concerns this literature. From the beginning of my time at MES, I have been interested in the relationships between place, built form, ecology, forces of urban development, and human experience. This research paper attempts to explore some of these relationships as they merge in the urban street.

This paper culminates my Plan of Study by focusing on the central inquiry of my Area of Concentration: place. It also draws together the various components related to my Area of Concentration: (1) urban and regional planning, (2) placemaking, and (3) sustainable urbanism. In examining the design and pedestrian experience of street spaces, I directly address how streets are made (1), how streets are perceived (2), and—indirectly—how streets affect the environment (3).

Detailed study of this third component was primarily pursued through coursework before I undertook this research; sustainable urbanism is not taken up directly in this paper, but it forms the impetus for my study. Courses with Laura Taylor (Landscape Ecology, Urban and Regional Planning), Kelly Snow (Environmental Planning), and Rod McPhail (Transportation Planning), fostered my holistic understanding of ecology and urban form. Each area of study reinforced the need for walkable, pedestrian streets as an alternative to car-oriented development—both as a means to reduce our carbon footprint, and as a way to re-

implace<sup>1</sup> ourselves as living, breathing creatures in a simultaneously built and natural world.

This paper directly addresses several Learning Objectives outlined in my Plan of Study. Reviewing the literature for this paper was particularly instrumental in fulfilling objectives 1.3, 2.1, and 3.1, which involved building my knowledge of urban planning and design, placemaking, sustainable urbanism, and critical approaches to these fields. My spatial analysis of the three streets in Chapter 2 involved applied research of placemaking and the built environment (2.2), and developed my practical skills in the use of visual graphics and complex datasets (3.2). In my observations of pedestrian experiences in street spaces in Chapter 3, I directly fulfilled objective 2.1. Lastly, my investigation of the historical processes that shaped each street in Chapter 4 has contributed a more critical understanding of the actual practices and methods of urban design and placemaking (1.3, 2.2, and 2.3).

I suggest in my Abstract of Area of Concentration that “the planning process can still benefit from place-based, phenomenological methodologies, which emphasize embodied sensory experience as a way of knowing.” The value of this approach is confirmed in this paper about the street and the pedestrian.

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<sup>1</sup> Casey, 1993.

## Thanks...

To Laura Taylor. Your patience, wit, and direction kept me on track with a smile on my face. I could not have written this paper without your invaluable feedback and advice.

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## Table of contents

Abstract	ii	
Foreword	iii	
Acknowledgements	iv	
<b>Introduction</b>		<b>1</b>
Research topic	3	
Research objectives	7	
Paper outline	7	
<b>Chapter 1: Study background, purpose, and methods</b>		<b>9</b>
Background	10	
Purpose	13	
Research methods	21	
<b>Chapter 2: Street design</b>		<b>37</b>
Map view	39	
Street view	59	
Summary of design evaluation	75	
<b>Chapter 3: Street experiences</b>		<b>76</b>
Context	77	
Descriptions	79	
Dundas Street	80	
Kipling Avenue	83	
Clock Tower Road	86	
Overall satisfaction with the streets	89	
Street design and experience	90	
<b>Chapter 4: Street development and evolution</b>		<b>94</b>
Early-modern: Dundas Street	96	
Modern: Kipling Avenue	103	
Post-modern: Clock Tower Road	109	
<b>Conclusion</b>		<b>116</b>
Summary of research findings	116	
Generative process and the just city	119	
<b>References</b>		<b>126</b>
<b>Appendix A: interview questions</b>		<b>134</b>

The environment—land, sea, air, and creatures—does change; and so the question arises, can the environment be changed intentionally to make it more fit, to make it more fitting for man and the other creatures of the world? Yes, but to do this one must know the environment, its creatures and their interactions—which is to say ecology. This is the essential precondition for planning.

—*Ian McHarg, Design With Nature*

## INTRODUCTION

This paper is an investigation of the environment of the street, and its primary creature: the pedestrian. Yet, this study's broader concern is about more than just the “ecology”<sup>1</sup> of the street. Our relationship with the planet we live on is changing as we become more urbanized as a human species. Our growing consumption of resources and energy—often centred in cities—is straining the ecology that sustains all life.

The form and shape of cities—and streets in particular—encourage certain patterns of consumption, especially in regard to how we move around. When cities and streets are designed for cars, people must depend on cars to get around (Beatley, 2000; Beatley & Manning, 1997; Gehl, 2010; Nolon, 2008). Automobiles release large amounts of fossilized carbon into the atmosphere in the form of CO<sub>2</sub>, a primary cause of climate change (Chester & Horvath, 2009; Glenn & Gordon, 2007). Pedestrians, on the other hand, release CO<sub>2</sub> that is already a part of the natural carbon cycle<sup>2</sup>; thus, walking has a net greenhouse gas impact of zero. The environment of the street is very much connected with the ecology of the earth.

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<sup>1</sup> Ecology is meant here in the sense of its Greek root word, *oikos*, or home.

<sup>2</sup> Human metabolism is part of the planetary carbon cycle involving living organisms, except where it includes fossil fuel based carbon emissions in agriculture.

The most basic function of a street is to facilitate travel from one place to another. But a street is also much more than a means to an end. A street can come alive as a place itself—a destination as well as part of a journey. When I think of the word “street” I picture a landscape complete with buildings, trees, people, and traffic—a place humming with the activity of everyday life. A street is not just the sum of its sidewalks and traffic lanes; it can be a place of life and belonging, acting as a sort of outdoor living room for a neighbourhood, loved and appreciated by the people who use it. I use the word “room” to describe a street with adjacent buildings or trees, which provide a sense of enclosure and definition of space. Like a room, a street can provide shelter and reflect our human identities. It may contain things to do and see, space for movement, furniture for resting, windows for views and light, doorways for entrance, and familiar people and stories. A street can become a place to *be*.

This picture is an ideal, meant to elicit what some streets are capable of. Most of the streets in our daily experiences are much more mundane; sometimes the highest function of a road is simply its utility for transport. This paper is an exploration of a certain kind of street—a neighbourhood commercial street—and how it can play an important role in the functioning of a walkable urban environment, and in the life of the people who live there. The streets I am interested in are ordinary, and yet they are vital; they are “Streets for People” (Rudofsky, 1969).

In the course of this paper, I explore the role of urban design concepts—from the placemaking movement, in particular—in shaping different streetscapes. I look

at the impact and relevance of key placemaking design ideas on the experience of street spaces, using three Toronto Streets as case studies. My research shows that while design concepts do influence the experience of each street, they do not take into account the history of a place's formation that was reflected in my interviews. I argue that the process of a street's design and construction is more relevant to the experience of the place than design intentions, and that the process is often overlooked in urban design, as the attention is on an aesthetic product rather than the ongoing shaping of the street over time. This refocusing on process also puts issues of justice back in the frame, as process is invariably concerned with the who and how of street design.

## **Research topic**

Streets are a part of urban life. Good streets come in many shapes and sizes: from grand boulevards to modest alleyways. No single type of street is ideal for all urban settings. Indeed, variety in built form is what makes wonderful cities. In this paper I focus on the more common, everyday streets of urban life: commercial streets located in residential neighbourhoods. My research looks at the role urban design plays in the experience of space by examining three case study streets in Toronto, paying particular attention to how historic processes shape places.

Prevailing ideals of street design have changed over time. For social reformers of early industrial England, good streets were clean, spacious and crime-free. For mid-twentieth-century planners and traffic engineers, good streets provided fast and efficient automobile transport. For developers and investors, good streets maximize the profitability of lot and building sales. For homeowners, good

streets boost curb appeal and property values. For car-commuters, good streets allow quick, unimpeded travel from point A to B. For pedestrians, cyclists, and drivers alike, good streets are comfortable and accessible places that serve the action of daily life.

Yet, streets may become much more than just these things: they are at times sites of celebration, spectacle, and festival, as well as sites of oppression, displacement, and inequality. While these extraordinary aspects of streets are significant, and worthy of in-depth study, they are not within the scope of my research.

Instead, the more mundane functions of a neighbourhood commercial street are explored in this paper. This kind of street is of interest to me for several reasons. First, it plays a key role in the formation of walkable neighbourhoods, which are an essential component of sustainable urbanism (Beatley & Manning, 1997; Kahn, 2006; Farr, 2007). Second, most urban human life occurs, in the words of Jan Gehl, on “an ordinary street, on an ordinary day” (1987, p. 11). Third, as a site of daily life, such a street can become a *place*, which Friedmann (2010) wonderfully defines as “a small, three-dimensional urban space that is cherished by the people who inhabit it” (p. 154).

It is this vision of the good street that I am most interested in: streets that become places “cherished” by their inhabitants. In my reading of placemaking literature, I wondered: how does design affect whether a street is cherished, and how that street is experienced as a place? Can design help make a street feel safe or comfortable? Does a sense of enclosure contribute to feelings of comfort in a street?



How does the physical layout and design affect accessibility for street users? How is such a street made in practice?

Placemaking scholars and practitioners also asked similar questions as they sought to restore human scaled design at the height of Modern urban planning and its so-called urban “renewal” of the 1950s and 1960s (Alexander, 1965; Cullen, 1961; J. Jacobs, 1961; Lynch, 1960). In this sense, placemaking is a post-modern response “to the challenge of placelessness and a need for urban community” (Ley, 1987, p. 40) caused by Modern development, which prized a functionalist separation of space (Lynch, 1981). Placemaking is concerned with the design and creation of streets for people, and is the literature in which I situate my work.

While placemaking’s intentions are praiseworthy, its proponents tend to overlook essential elements of contemporary urban reality. Matters of social justice are not given enough critical depth and are often brushed aside (Cuthbert, 2008; Ellin, 1996; Fainstein, 2000; Harvey, 1997; 2000; Knox, 2011). Some critical questions that placemaking too often fails to ask are: Who is involved in planning and development? Who benefits from its design? What social assumptions underlie placemaking design concepts? To maintain a critical perspective, I draw from critical urban theory in my research. In this way, I will bring placemaking into a necessary dialogue with critical urban theory.

This paper explores the relationship between design and experience through my own observation and research of three neighbourhood commercial streets in Toronto. In order to trace the evolution of street design and its relationship to the success of a street as a place, I chose three case studies in Toronto that I believe are

exemplary of three different eras in urban planning and development: Dundas Street West in The Junction, Kipling Avenue near Albion Road and Finch Avenue, and Clock Tower Road in the Shops at Don Mills. Dundas Street was built before the arrival of the car, when urban planning did not yet exist as an established profession. Kipling Avenue is typical of Toronto's automobile-oriented arterials designed at the height of the Modern planning era following WWII. Clock Tower Road was built in the 2000s, following recent trends in urban design. Each street has a commercial function and is located within a residential neighbourhood.

### Location of case study street sites



(S. Pypker, 2014; Map imagery: Google, 2014)

## Research objectives

The purpose of this paper is twofold. First, it is to test and evaluate the street design principles of the placemaking movement (many of which have been accepted as current best practice within the planning profession) against everyday experience of streets in Toronto; and second, to explore the role of process—as discussed by Alexander (1987; 2002; 2005)—in shaping places. Throughout, my aim is to bring the voices of critical urban theory into constructive dialogue with urban design and placemaking. To achieve my goals, I begin with examining the physical characteristics of three neighbourhood commercial streets in Toronto, then I observe the everyday experiences of pedestrians in those streets, and finally I trace the story of the planning and development processes of each street. Guiding this project is my belief that the socio-political context, the planning and development process, urban design, human experience, and the natural environment are interrelated, and must be looked at holistically from an interdisciplinary perspective.

As a student in urban planning and design, I have written this paper in order to apply some of the concepts I have studied and evaluate them in the built world. I aspire to be an urban planner who helps people shape their shared places to suit their needs, and so I set out to better understand how people experience streets shaped by the application of theories often taken for granted in placemaking literature and in planning practice. I feel that it is the responsibility of the planner to better the environment, according to the expressed needs of those who live in it.

## **Paper outline**

I have organized the chapters thematically, in order to support a comparative study of the case studies. My study background, purpose, and research methods are presented in Chapter 1. Chapter 2 contains my analysis of each street's physical environment, from its neighbourhood layout and design to its particular street furniture and architectural details. Chapter 3 presents human experiences of each street studied, drawing from on-site interviews and my own observations and experience from site visits. Chapter 4 presents a history of the specific planning and development processes leading to the creation and form of each of the three streets. The concluding chapter summarizes my research findings on street design, experience, and historical process with a critical discussion of placemaking.

For all the good intentions in much of placemaking literature, I conclude that good streets are not merely the products of "good design," but come out of an adaptive, organic process. Streets can be designed and built at a human scale, but design and scale do not guarantee they will possess human character. For streets to be places for people, and places they can call home, the built environment must adapt and change to the unique and various wishes and needs of its local users over time.

## **CHAPTER 1: STUDY BACKGROUND, OBJECTIVES, AND METHODS**

This paper arose from a deep interest in the urban design concepts of the placemaking movement of the 1960s and 1970s. Reacting against the car-oriented, functionalist landscapes of modern architecture and planning, placemaking called attention to the human experience of space, and the role of the built environment in shaping community and attachment to place. Many of these ideas have waned in popularity among academic circles since facing criticism in the 1980s for their alleged spatial determinism (Cuthbert, 2006; Ellin, 1996; Fainstein, 2000; Knox, 2011). However, I had a desire to test these ideas out for myself, to see if the design theories relate to everyday experience. I thought that placemaking would still have traction insofar as it can help understand the pedestrian experience of streets, and the process of how people can adapt the places they inhabit—including streets—to suit their needs. This paper tests these ideas by qualitatively studying how people perceive streets and urban space. As much as possible—and with a critical stance, acknowledging some of the movement’s blind spots—I have employed the observational methods described in placemaking literature in this “testing out.”

This chapter first presents some background to my interest in the topic of streets, including a brief discussion of placemaking literature and its detractors. My research purpose is laid out in the following section, where I describe the two main goals of my study. The last section of this chapter outlines the actual methods used in the qualitative case studies, including the literature review, site selection process, site visits, on-site interviews, mapping, photography, archival research, and statistical analysis.

## Study background

My curiosity about street design was first piqued when I lived near a very car-oriented commercial street during my undergraduate studies. This street was typical of most suburban shopping areas. It had wide roadways, narrow sidewalks, busy intersections with fast moving cars, and long crosswalks. Naturally, I used my car most of the time, even for very short trips. When I felt the occasional urge to instead walk to the nearby grocery store, I felt as though I was nearly risking my life each time I crossed the street. Even though the distances to the various stores were short in a strictly cartographic sense, they felt incredibly far. As a pedestrian, I did not belong in the street.

As part of a growing interest I had in the concept of “place” and cities, I began reading Jane Jacob’s *The Death and Life of Great American Cities*, Kevin Lynch’s *The Image of the City*, and Christopher Alexander’s *A Pattern Language*. These authors articulated my unease in the suburban commercial street, and they explained where this unease came from and why: the street was entirely conceived for and designed around the car; homes, shops, and workplaces were separated according to their utility, following this functionalist understanding of city space. Not only did these works explain what was wrong with modern streets, they provided alternatives. This ignited my interest in urban planning and place *making*.

“Placemaking” is the act of “creating and maintaining places” (Schneekloth & Shibley, 2000, p. 132), but it also can refer to a historical design movement (Aravot, 2002; Ellin, 1996; Knox, 2011). Following Aravot (2002), I use the term throughout this paper to refer to the movement in urban design “to re-establish quality of place”

(p. 201) in the face of “placeless” (Relph, 1976) post-WWII urban landscapes of sprawling strip malls and towering apartment blocks.

The earliest beginnings of placemaking can be found in the townscape movement of the early 1950s in Britain (Ellin, 1996). In reaction to the functionalist separation of buildings and land uses, and the associated modernist obsession with displaying “individual works of architecture like pictures in a gallery,” Gordon Cullen voiced the movement’s call to consider the sensual experience of the forgotten space between buildings—namely streets and other public places—and the “art of relationship” in the urban landscape (1961, p. 28). This “art of relationship” is created by the sequentially emerging views of someone walking down a street, or what Cullen calls “serial vision” (p. 17). Cullen was the first to articulate the spatial concept of the street as an “outdoor room,” writing that

the outdoor room is, perhaps, the most powerful, the most obvious, of all the devices to instill this sense of position, of identity with the surroundings. It embodies the idea of *hereness*” (1961, p. 29, emphasis original).

The idea that a street can be designed like a room emphasized the sensual, spatial relationship of a street’s physical environment, as experienced by someone situated in it. This townscape movement was a first attempt to steer the metrics of urban design back to the pedestrian experience.

Similar reactions to the disconnected and car-dominated landscape of modern urban development first emerged in North America during the 1960s; Jane Jacobs, Kevin Lynch, and Christopher Alexander called for a more holistic approach to urban design, which focused on the actual human experience and context of urban places. Jacobs blasted city planners in *The Death and Life of Great American*

*Cities* (1961) for their narrow-minded technocratic practice of supposed “urban renewal,” citing a blatant ignorance of how cities actually work as “organic...systems of organized complexity” (p. 442). Lynch’s *The Image of the City* (1960) echoed Jacobs’s declaration that a city is experienced at the street level, and not merely an assemblage of Le Corbusier’s so-called “machines for living.” In a 1965 article entitled “A city is not a tree,” Alexander argues that the artificial, hierarchical model of modern city building lacks room for the “patina of life,” which cities would otherwise develop organically over time.

Cullen, Jacobs, Lynch, and Alexander helped kick-start the movement to make places that account for pedestrian experiences of place, and their work is foundational to placemaking literature—and to the approach I take in my research. However, the ensuing body of placemaking literature has come under fire<sup>1</sup> for either “over-selling” the benefits of good design, or worse, for a tendency toward utopian social ideology (Cuthbert, 2006; Ellin, 1996; Fainstein, 2000; Grant & Perrott, 2009; Harvey, 2000). The deterministic claim in some placemaking literature (Duany et al., 2000; Katz, 1994; Kunstler, 1996; Schneekloth & Shibley, 1995) that the built environment can supposedly create neighbourhood cohesion and “community” is even more problematic when this design is exclusionary, only serving the ruling classes that can afford it (Grant, 2007; Harvey, 2000; Knox, 2011; Lehrer & Milgrom, 1996). Placemaking becomes ideology when physical design is seen as the cure-all for environmental, aesthetic, economic, and social ills.

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<sup>1</sup> These criticisms were especially directed at the New Urbanism, which has “become the dominant design paradigm, [reflecting] the engrained ideologies of capitalist society” (Cuthbert, 2006).



Most criticisms have focused on deconstructing these notions of “community” or “sense of place,” and the associated environmental determinism (Fainstein, 2000; Harvey, 2000; Knox 2011). However, I have not come across substantive criticism directed at placemaking’s methodological focus on the pedestrian experience of place, or of the environmental benefits of walkable streets and neighbourhoods over car-dependant ones. While these ideas can conceivably be—and have been—used as tools of ideology, I believe they can still be of value in the task of evaluating the design and experience of streets. It is these two aspects of placemaking literature—the pedestrian experience and walkable streets—that I am most interested in my research.

## **Study objectives**

This study has two objectives. The first is to test if certain placemaking design concepts correlate to pedestrian experiences as the literature claims. The second is to explore the processes and practices that create a street that is “cherished by the people who inhabit it” (Friedmann, 2010, p. 154). The following section describes how I developed these two objectives in the context of my research topic. It includes my rationale for the creation of a list of design criteria by which to organize my spatial analysis of the three street spaces, and later to test and evaluate the design theories in placemaking literature.

I initially envisioned this research paper as a practical field test of sorts for Cullen’s design concept that city streets—if shaped a certain way—can be experienced as outdoor “rooms.” I was curious to know if this spatial phenomenon could positively affect the experience of a street, thus encouraging pedestrian use of

the space. In order to observe this design concept in the built world, I decided to select three streets in Toronto for my case study that I felt (based on my informed hunches as an urban planning and design student) would demonstrate varying degrees of success as a “room.” Their empirical success as rooms would then be tested against the experience of people using each street, as observed through interviews with pedestrians.

I first thought this “streets-as-rooms” concept would be a good frame through which to compare the design and everyday experience of three different street environments in Toronto; but in the early stages of compiling my observations and interview responses, I found that only testing the “room” concept was limiting my ability to look at related design elements that interviewees talked about, so I broadened the spatial analysis. When it came time to compare the physical characteristics and experiences of each street, I expanded the evaluation criteria beyond only a room-like quality to also include other important placemaking design concepts, such as human-scale and pedestrian comfort. I kept this list as short as possible to examine the most basic street design elements that reoccur across placemaking literature. Testing these essential placemaking design concepts against my observations of experiences in Toronto formed the first major purpose of my research.

From the outset of my research I have been keenly interested in how different streetscapes are created and evolve over time. I owe this inspiration to Christopher Alexander’s more recent work on design and process (2002; 2005), which was the subject of an independent MES study I conducted prior to this paper.

As I aspire to be an urban planner who helps people shape their built environments to suit their need, I wasn't content to simply make observations about human experience and the built environment; I wanted to understand the process of how places change, and what role, if any, design and planning plays in the creation and evolution of a street.

To incorporate this central curiosity of the *how* in my analysis, I chose to tell a story of the evolving approaches to street design in Toronto (Chapter 4), which forms my second major research purpose. By examining historic design practices, I wanted to explore how different approaches, techniques, and methods of street design, financing, and construction affect streets as places. This analysis of design process follows the analysis of place and experience, and forms the secondary purpose of this paper: to explore *how* good streets—which I broadly define as streets that equitably suit local human wishes and needs, while causing the least environmental strain—are made in practice.

### *Street design criteria*

In order to accomplish the first objective of my paper—to test essential placemaking design concepts against my observations of experiences in Toronto—I decided to develop a list of design criteria (shown in the table to the right) that could be used to focus my spatial analysis of each street. I compare this analysis of the built form to the observations of people's experience in each street, in order to evaluate the criteria as design

#### **Design criteria**

- 1) Human scale
- 2) Room-like enclosure
- 3) Pedestrian comfort
- 4) Variation of uses
- 5) Accessibility
- 6) Connection to place

theory. The following sub-section further describes the purpose of this list, and where the concepts came from in the literature.

My intention in creating this list is not to merely cherry-pick criteria from key authors, but to distil and synthesize some of their most essential and shared design theories—ones which I believe are the most relevant to the pedestrian experience. To the best of my ability, this list represents for me a harmonization of the most commonly acclaimed urban street design principles in placemaking literature.

Before I delve into the literature, I want to make a few comments about this list. First, is not at all meant to be final. The whole purpose of making this list is to evaluate the validity of certain design principles based on experiences in Toronto. Second, this list is not meant to be comprehensive; however, I will give a short explanation for certain concepts that I have omitted. Third, these criteria concern neighbourhood commercial or mixed residential commercial streets; I am not suggesting that they are for all streets in all places. Fourth, I consider this to be a list of design criteria for a “good street.” I would not be making and testing out this list if I did not think it has potential merit to serve the actual practice of making streets for people.

As I know it has for many others, Jane Jacobs’ influential work *The Death and Life of Great American Cities* (1961) first drew me to the movement to take back city streets from the automobile and its army of functionalist architects and accommodating traffic engineers. This book, among others that soon followed in the same vein, railed against the modern planning establishment of the day that

privileged the car. Bernard Rudofsky similarly laments the damage caused by our “infatuation with the motorcar,” but points to places where people are “reclaiming streets for their original use” (1969, p. 20). Rudofsky’s book, *Streets for People*, is as relevant now as it was in 1969. This sentiment is the impetus for the placemaking movement—if streets are for people, they should be designed for people.

This refocus on the ordinary pedestrian brings up the first design criterion on my list: human scale. As functionalist buildings towered and streets sprawled—particularly in North America during the postwar boom of the 50s, 60s, and 70s—there was a strong consensus in early placemaking literature that the built environment needed to be re-oriented to the human person (Alexander et al., 1977; Cullen, 1961; Gehl, 1987; J. Jacobs, 1961; Lynch, 1960; 1971). This involved paying attention to the sensibilities of people in urban environments (Lynch, 1960). Based on the typical ranges of human smell, hearing, sight, and walking speeds, Jan Gehl sketched out some of the basic dimensions of human scaled design in *Life Between Buildings*, contrasting “automobile city scale” to “pedestrian city scale” (1987, p. 73). Human scale is foundational to placemaking literature, as seen in limits on building heights (Alexander et al., 1977; Gehl, 1987), small block sizes (Duany et al., 2010; J. Jacobs, 1961; Katz, 1994), narrow pedestrian streets (Alexander et al., 1977; A. Jacobs, 1993), and many others. Human scale is an overarching placemaking design principle, which encompasses all the others on this list; streets must fit people first and foremost.

The second criterion is a room-like quality, and was the design concept that initially focused my research. Cullen linked his observation of the street as an

“outdoor room” to the notion of “enclosure.” Cullen describes enclosure, where the human form is embraced by the surrounding built environment, as “the end product of traffic; this is the place to which traffic brings you. Without enclosure traffic becomes nonsense” (1961, p. 25). In addition to Cullen’s writing on outdoor rooms in *Townscape*, Alexander, Lynch, and Rudofsky also positively identify the room-like quality of an enclosed street space. Alexander and his colleagues (1977) point to a “public outdoor room” (p. 348) and “positive outdoor space” consisting of “some degree of enclosure” (p. 522) as vital patterns to urban street space. Lynch describes how enclosure is a powerful way to create “sensuous form” in an urban landscape (1971, p. 194). In praise of streets as places for life outdoors, Rudofsky writes, “the street is not an area but a volume” (1969, p. 20). Other common words and phrases in placemaking literature similarly evoke this conception of streets as rooms, such as street “walls” (Duany et al., 2010; Massengale & Dover, 2014) and street “furniture” (Duany et al., 2010; Whyte, 1980).

Pedestrian comfort is the third criterion I have drawn from placemaking literature. While pedestrian comfort could be said to fall under the categories of human scale and a room-like quality, I have added it as a separate principle, as pedestrian comfort covers qualities not necessarily addressed by the first two, and frequently comes up in the literature as a specific concern: Alexander et al., 1977; Alexander, 2005; Cullen, 1961; Duany et al., 2000; 2010; Gehl, 1987; 2010; Greenburg, 2011; A. Jacobs, 1993; J. Jacobs, 1961; Lynch, 1981; Massengale & Dover, 2014; Rudofsky, 1969; and Whyte, 1980. Rudofsky dedicates a chapter of *Streets for People* to the “The care and feeding of the pedestrian” (1969, p. 307-324) where he

praises European streets for their outdoor cafés, restaurants, and street festivals. Nearly all of Alexander's patterns for streets in *A Pattern Language* (1977) are concerned with making a comfortable human environment. Jan Gehl's *Life Between Buildings* (1987) is entirely devoted to the pedestrian experience of the street, and the influence of "physical conditions" (p. 11). While pedestrian safety is obviously a concern here, it is the most rudimentary, and does not guarantee actual comfort. A few particular design features that make a streetscape hospitable to pedestrians include limits to automobile speed and presence, adequate sidewalks, places to sit, stay and linger, and physical shelter from sun, wind, rain or snow; these design qualities are unanimously endorsed by the authors listed above.

The fourth criterion is a variation of land uses; a variety of shops, workplaces, government services, restaurants, and other ordinary amenities are what bring people to streets in the first place. Geographic separation of land uses through single-use zoning—for residential, commercial, and industrial areas—is a key tool of modern planning, and receives particular flak from placemaking advocates. Jane Jacobs spoke of the "need for mixed primary uses" in her 1961 clarion call. Alan Jacobs and David Appleyard reiterated the design significance of an "integration of activities" in "Toward an Urban Design Manifesto" (1987, p. 118). Mixed land use has been especially promoted by New Urbanists (Calthorpe et al., 1991; CNU, 1996; Duany et al., 2000; 2010; Dutton, 2000; Katz, 1994; Kunstler, 1996; Rybczynski, 1995). The success of this criterion is not strictly based on the number of different uses on a given street, but by the degree to which these uses suit the needs of the local people (Lynch, 1981).

The fifth criterion is local accessibility and concerns the design and layout of the surrounding physical context. For a neighbourhood commercial street to have a daily pedestrian presence, it must be within a short walk for local residents (Alexander et al., 1977; Duany et al., 2000, 2010; A. Jacobs, 1993; Katz, 1994). Neighbourhood design features that contribute to accessibility include small block sizes (Duany et al., 2010; J. Jacobs, 1961), pedestrian connectivity (Duany et al., 2010; Massengale & Dover, 2014), a reasonable degree of density (A. Jacobs, 1993; J. Jacobs, 1961), and a variation of local uses (criterion four). By reducing the number of automobile trips, walkable neighbourhoods can have a reduced carbon footprint compared to car-dependent ones (Beatley, 2000; Gehl, 2010).

The sixth and last criterion is connection to place, which is “the desired result of placemaking” (Aravot, 2002, p. 202). Borrowing from Heidegger’s ontology of “being,” Edward Casey defines place as the “phenomenological particularization of ‘being-in-the-world’” (1993, p. xv), which I take to mean the full-bodied experience of being situated somewhere. Place is the rich, thick intersection of human perception, experience, and memory with physical, geographic locales (Bachelard, 1964; Casey, 1993; Hiss, 1990; Hough, 1990; McHarg, 1969; Relph, 1976; Tuan, 1974, 1977). As a design criterion, connection to place is difficult to define precisely, but this is a good thing, as the kinds of connections people make to a place are countless. It is not just a subjective “sense of place” (Crewe and Forsyth, 2009), nor is it only the particular physical arrangement of objects in a landscape: connection to place as a design principle involves cultivating lived, embodied connections between people and place. Cullen calls this a “sense of hereness” (1961). Alexander



refers to places that come alive with a “quality without a name,” which he describes in a roundabout way as a sense of wholeness, created by small, selfless acts of careful repair and adaptation to a landscape or building over time (1979; 2005). The presence of historic buildings (J. Jacobs, 1961), physical evidence of the natural ecology of a place (Beatley & Manning, 1997; Hough, 1990; McHarg, 1969), and “legibility” in the built form (Lynch, 1960) can all contribute to a connection to place.

There are many other components described in placemaking literature that can contribute to good street design, which I have not included. I will, however, offer a brief explanation for two notable exclusions: complete streets and design for cyclists. The complete streets effort to make road space suitable for all users is inclusive of my design criteria—many complete streets design principles could fall under human scale, pedestrian comfort, or accessibility—but the focus is more on through-traffic and transportation modal split than the pedestrian experience *per se* (Smart Growth America, 2014; Massengale & Dover, 2014). I have not included cycling design in this list for the same reason. I consider cycling infrastructure an essential quality of neighbourhood and city design, but my focus is on the pedestrian. However, if streets are built at a human scale and afford pedestrians comfort and ease in their activity and movement, it is almost certain that cyclists will also experience some of these benefits.

## **Research methods**

To evaluate these street design principles in practice, I conducted case studies of three streets in Toronto. My evaluations of these case studies primarily

use qualitative methods—site visits, personal observations, and interviews—with some statistical analysis. I describe my findings using visual maps, photos, and graphics to provide a more thorough sketch of two- and three-dimensional spatial phenomena. Where appropriate, I have employed methods of spatial analysis and observation from placemaking literature, drawing particularly from *A Pattern Language* (Alexander et al., 1977), *Site Planning* (Lynch, 1971), and *Great Streets* (A. Jacobs, 1993). The following section outlines the various methods used in this paper, including a literature review, site selection, site visits, on-site pedestrian interviews,<sup>2</sup> mapping, photography, and statistical analysis.

### *Literature review*

I completed the bulk of the literature review prior to my fieldwork but ended up revisiting much of the literature during the writing process, particularly as I had iteratively expanded design evaluation criteria based on placemaking theories as I was conducting and compiling my research. I draw from two main currents of thought throughout this paper: placemaking and critical urban theory. (A chapter of this paper was originally going to be devoted to sustainable urbanism, and I additionally reviewed this literature,<sup>3</sup> but I had to drop this component in order to focus my research on design, process, and the pedestrian experience.) In order to build an understanding of street design and how to study it, my research began with

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<sup>2</sup> All interviews in this paper were with pedestrians in each street; near the end of my research I realized I should have also interviewed the planners and urban designers of Clock Tower Road to provide additional insight to the discussion of design process in Chapter 4.

<sup>3</sup> This literature included D. Alexander & Tomalty, 2002; Beatley, 2000; Beatley & Manning; Farr, 2007; Hough, 1990, 2004; Kahn, 2006; Leitman & Rabinovitch, 1996; McHarg, 1969; and also selected literature from landscape ecology: Cronon, 1995; Nassauer, 1995, 1997.

a review of key works on the history and theory of urban planning and design,<sup>4</sup> with a particular focus on placemaking literature that developed in reaction to the modern planning of the 1950s and 1960s.

While I wanted to use the methods and evaluate the design ideas of the placemaking movement, I did not want to do so blindly. To keep a critical perspective in my approach to urban design, I have surveyed (both before and after fieldwork) relevant works from the fields of critical urban theory, including topics of political economy, urban design, and gentrification studies (Albo, 2006; Cuthbert, 2006; Ellin, 1996; Fainstein, 2000; Harvey, 1989; 1997; 2000; 2007; Hulchanski, 2010; Isin, 1998; Knox, 2011; Lees, Slater, & Wyly, 2008; Lehrer & Milgrom, 1996; Vengroff & Whelan 2001; Walks & Maaranen, 2008). These theories helped me develop and maintain a critical stance in my research.

### *Site selection*

I chose to focus my research on main commercial thoroughfares that exist in predominately residential areas, or what Brower calls the “neighbourhood commercial street” (1996). While it was important for comparative purposes that the case study streets were of a similar use and purpose, there are many different street types I could have analyzed. What drew me to the neighbourhood commercial street as a type was both its central popularity in placemaking literature and the fact that this street type seemed to me to be among the more commonly experienced

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<sup>4</sup> Including Alexander et al., 1977; Beatley, 2000; Cullen, 1961; Duany, Plater-Zyberk, & Speck, 2000; Ellin, 1996; Fainstein, 2000; Gehl, 1987; Hiss, 1990; A. Jacobs & Appleyard, 1987; J. Jacobs, 1961; Lynch, 1960, 1981; Harvey, 2000; Katz, 1994; Relph, 1976; Whyte, 1980

pedestrians places of daily urban life (as opposed to a street in an industrial park, or a quiet residential side street).

As I am primarily interested in the pedestrian experience of streets, I decided that each case study would focus on a walkable section of the street—approximately 400-800m in length, or a five to ten minute walk (Duany et al., 2010). (Throughout this paper I use the terms “walk,” “walkable,” etc. to refer to pedestrian movement in a universal sense, inclusive of wheelchair or other assisted mobility users. I have tried to be clear where this is not realistic, in the case of stairs or other barriers.)

My initial criteria for selecting streets for the case study were urban design characteristics. I wanted to find one street that, in my judgment, felt like a room, one that did not, and one that fell somewhere in the middle. Studying Alexander’s work on the central importance of process in architecture and design (2002; 2005) moved me to also consider the historical role of the planning and construction methods involved in the shaping of each street in my site selection.

From my experience of Toronto, and my elementary knowledge of its planning history, three distinct design eras in the city’s urban form became evident to me: early-modern, modern, and post-modern. I then sought a prototypical street built during each era in planning, in order to tell the story of evolving street design practices in Toronto. Thus, selection was intended to reflect these periods and methods of development, along with existing design characteristics.

My own personal experience of Toronto came into play as I began considering actual streets for the case studies. I grew up in a rural village outside of Guelph, Ontario and lived in the city of Hamilton for four years—visiting Toronto on

occasion—prior to moving to the High Park area of Toronto. After living in this neighbourhood for three years, I began to really appreciate and spend time along Dundas Street nearby in The Junction. I soon moved into an apartment above the shops along Dundas, near Pacific Avenue, in the middle of The Junction, where I stayed for two years. Dundas Street became the first street I chose, as it is characteristic of many older Toronto thoroughfares: it was founded before the age of the automobile, it is relatively narrow, and is lined by older multi-storey buildings containing ground-level shops with walk-up apartments above.

I first visited the second street site, Kipling Avenue between Albion Road and Finch Avenue, in person during a Jane’s Walk as part of a City Institute at York University (CITY) conference on Toronto’s Tower Renewal program in 2011. I had driven on this street previously, but experiencing it on foot, as many of its local residents do, was very different. Having lived in a car-oriented suburban Hamilton neighbourhood in the past, I found the landscape familiar, yet with my emerging planning perspective, Kipling Avenue left a much stronger impression on me, especially in contrast to my experience of Dundas Street. This section of Kipling Avenue is typical of the wide arterials built during Toronto’s post-war housing boom at the height of modern urban planning.

I had considered several different streets for the third case study—the street with partial success as a room. However, none of them seemed to suit the study quite right, as a storied link between the streets was missing. Once I determined the study was developing a narrative arc based on the period of street development, it was clear the third street should ideally be representative of recent trends in street

design. This narrowed the field of options considerably. While there are many individual developments in the City of Toronto that can be classified as post-modern, there are few that include building an entire street, and even fewer outside the downtown core that could also be considered a neighbourhood commercial street. At the suggestion of my supervisor, Clock Tower Road, which is at the centre of the redevelopment of the Shops at Don Mills, seemed to fit well, as it is a retail street featuring new trends in urban design. Although the Shops are spread over a larger site with several streets, Clock Tower Road was selected for this study, being the longest and only street to span the entire development. This retrofit of a car-oriented mall at the centre of Canada's first master planned suburb represents a newly emerging form of outdoor commercial centres that attempt to recreate a walkable, downtown "lifestyle" shopping experience.

### *Site visits*

I visited each site on at least two separate occasions between September 13, 2013 and November 15, 2013, in order to observe the space, take photographs, and conduct interviews. Dundas Street was accessed on foot via two flights of stairs from my apartment door. Kipling Avenue was accessed via public transit on two occasions. Clock Tower Road was accessed once by bicycle, and once by public transit. I walked the length of each street several times, and explored some of the surrounding site context on foot to make observations. The purpose of the first visit was to familiarize myself with the physical space of each case study, make initial observations, and take photographs. Conducting interviews was the primary objective of the second visit, although I again took note of my own experiences, as

well as documenting street space and surrounding areas with some additional photographs. So as not to become too distracted from the experience of being in the streets, I refrained from taking detailed written notes until after the site visits.

### *On-site interviews*

To gain insight on the perception and human experience of the case study streets, I interviewed nine local residents and visitors at each site (a total of 27 interviews). As much as consciously possible, I attempted to include people of varying ages and visible ethnicities, including an approximately even split between male and female interviewees. Interviews were held on weekday afternoons, between 12:30pm and 5:00pm, to maintain some degree of consistency in the time of day. All were held on clear, calm, relatively pleasant fall days, with temperatures ranging from 12-25 degrees Celsius.

Each time I approached someone to request an interview, I introduced myself, my research topic, and the goal of my interviews. If someone was interested, I provided him or her with further information on my research and the nature of the interview. I explained how participation was voluntary, confidential, and anonymous. I informed them that the interview would be recorded, that they could refuse to answer any or all of the prepared questions, and were free to stop the interview at any time they wished. Before the interview, I presented the interviewee with a letter to sign that further described the nature of their consent.

Following the methods of Fontana and Frey (1994), Berg (2004), and Zeisel (2006), I conducted semi-structured, focused oral interviews. The interviews were each fairly brief (between three and seven minutes), and recorded with a digital

audio device. Ideally, longer in-depth interviews would have been done, but limited time and resources kept them short. However, the intention was to maintain the spirit of in-depth interviews as much as possible, which Seidman states is “an interest in understanding the experience of other people and the meaning they make of that experience” (1998, p. 3). I incorporated some of Lynch’s interviewing techniques—including several suggested questions, such as “What is the most outstanding feature here?” and “How do you feel here?”—in an attempt to evoke “free and open-ended description of a place” (1971, p. 107).

Interviewing strangers was a new and daunting experience for me. I like meeting new people, and am generally comfortable talking with strangers; however, asking someone for an interview initially seemed like a big request—I do not like putting people in a position of obligation. The first interview I did was on Dundas Street with someone I already knew (he was my apartment building superintendent at the time), which helped build my interviewing confidence. Whatever awkwardness I first felt toward approaching people soon dissipated. I became pleasantly surprised with how many people seemed keen to discuss their experiences of the street environments.

While I didn’t keep record, I estimate that the positive response rate to the interview request on Dundas was approximately 60%. Four interviewees were female; five were male. Several that declined showed interest in the topic, but said they were on their lunch break and didn’t have enough time. Several ignored my initial “Hello,” or weren’t interested after I introduced the interview, often stating that they didn’t have time. At Kipling, I estimate the response rate to be 25-30%.



Three interviewees were female; six were male. It was apparent to me that most people were focussed on getting to their destination as quickly as possible, or catching a bus on time. Several people expressed language barriers as an issue when they declined to be interviewed.<sup>5</sup> Being a white male, I think gender and race likely also played a role in this response rate; the response rates may have been higher had I been female, or non-white. The response rate at Clock Tower Road was highest—approximately 80%—as many people on the street seemed to be spending free leisure time on the street. Five interviewees were female; four were male.

I first asked interviewees basic introductory questions: did they live nearby, how did they arrive on the street and what brought them there that day, as well as if they had ever been to that street before. These simple questions served a dual purpose of introducing the interviewee to the subject matter and provided relevant background information and context to their experience.

The first question about the physical space was intentionally vague and open-ended: “Tell me about this space.” This request was perhaps a little too abstract; many interviewees did not know how to answer this, at least initially. I would often explain that I’m looking for a description of the physical space and its characteristics, asking them to “describe the space to a friend who’s never been here.” The rest of the interview questions were relatively straightforward, and are included in Appendix A.

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<sup>5</sup> 71% of the Kipling site population is either a first generation immigrant or a non-permanent resident, and the proportion of the population with neither English or French identified as their first language is approximately triple that of the Clock Tower or Dundas sites (Statistics Canada, n.d.)

In hindsight, I wish I had asked a more direct evaluative question, such as: Does this street help or hinder you in your everyday life? Or neither? How? This would have helped me understand how people regarded each street, and I may have even been able to gather additional insight into what people prefer in the space.

I had several unexpected experiences and notable observations during the interviewing process. One occurred on Kipling Avenue while I was interviewing a young woman. At the end of the interview she left abruptly and inexplicably. I then saw several young men heading in our direction on the sidewalk, and suspected it was out of concern for her safety (she was walking alone at the time, and she had mentioned safety as an issue during her interview). It seemed clear that she wanted to maintain her distance, as she hastily left behind a half-finished beverage she had put down on the sidewalk prior to the interview. Prior to this, I had been totally oblivious to this potential safety threat. This event was a strong reminder that people experience space and safety differently based on their prior knowledge of a place and the senses they've developed in that place over time.

On Kipling Avenue I experienced an impassioned refusal to my request for an interview. As I introduced myself, and my topic of research to a woman, she immediately replied in exasperation that "another academic" was coming to research and interview "us." I attempted to empathize with her response, as academics have a history of imposing a saviour-complex on so-called "needy" neighbourhoods, and of targeting such neighbourhoods for research in the social sciences that provides little benefit to the residents in the end. I felt uncomfortable to be perceived as another one of these academics, and though I hadn't come to

bring “solutions” or “salvation” to the neighbourhood, the fact remained that I was an identifiably white, English-speaking, male—and once I shared my research project—academic. I tried to be conscious of this and sensitive to the power dynamic at play in my research, and in the process of interviewing, yet this reality affected my experience as well as the interview process and results. (Had I more forethought and resources, I could have requested the assistance of a female MES colleague of Asian, African, or Middle-Eastern descent in the interviewing process.)

Another notable experience occurred while conducting a tenth interview on Clock Tower Road. Clipboard in hand, I was interrupted by a “Guest Services” employee of the Shops at Don Mills. He told me that I could not canvas on the property without the prior approval of management. I pointed out that the street signs were indistinguishable from City of Toronto signs, asking if the streets were not indeed public property. He told me that the Cadillac Fairview Corporation owns the entire property. (I was aware that the “urban lifestyle centre” was privately owned, but I wasn’t exactly sure that this included the street space itself.) In a stern, but polite voice, he informed me that I was “interfering with the experience of guests,” so I stopped conducting interviews and left at that point, satisfied nine interviews would suffice.

### *Mapping*

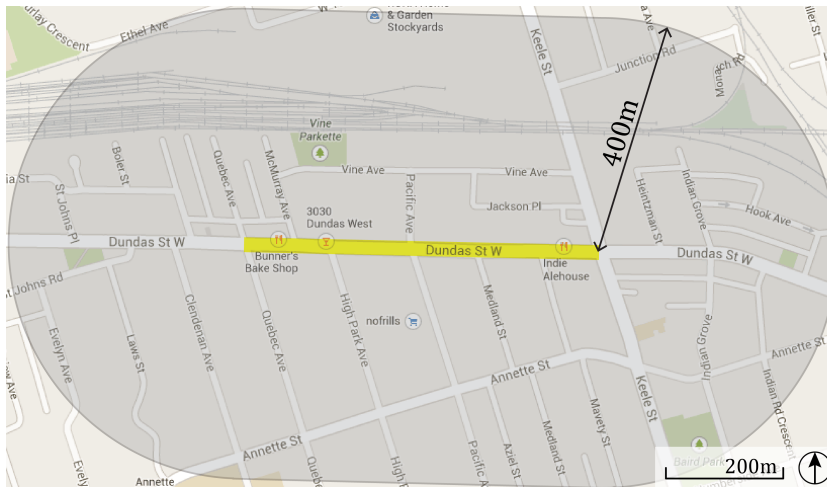
Maps and visual diagrams are used widely in placemaking literature to communicate spatial realities and concepts (Alexander, 1977; 1987; 2005; Cullen, 1961; Duany, Speck, & Lydon, 2010; Gehl, 1987; 2010; Hough, 1990; A. Jacobs, 1993; Lynch, 1960; 1971; 1981; Whyte, 1980). During my MES program, I sought

opportunities to develop my visual communication skills. Maps form a major part of my depiction and description of the case study sites in this paper, and also have a significant role in my spatial analysis. I have been particularly inspired by Ian McHarg's pioneering work in *Design with Nature* (1969); his visually illustrative maps beautifully show overlapping patterns and processes in ecosystems and cities. Particular mapping techniques I've borrowed from others include figure-ground diagrams (A. Jacobs 1993; Lynch, 1971), street cross-sections (A. Jacobs, 1993), and land use maps (McHarg, 1969; Alexander, 2005; Duany et al., 2010; Katz, 1994).

The scale of the maps—the extent and dimensions of the areas depicted—were established using the design principle of the “pedestrian shed” (Alexander et al., 1977; Calthorpe & Kelbaugh, 1989; Duany et al., 2010), determined by a catchment area radiating 400m (approximately a five-minute walk) around each studied street segment. This resulted in maps that represent the areas within a reasonably short walking distance, which are illustrated in Maps 1a, 1b, and 1c on the following page. Each street segment is highlighted in yellow, and the catchment area shaded in grey. These rectangular maps then form the boundaries of the “study sites,” and were used to calculate figures such as land cover, housing type, and density.

The maps used in the spatial analysis in Chapter 2 were created using Adobe Illustrator, with imported property line data (including buildings, streets, and individual lots) from the City of Toronto (City of Toronto Works and Emergency Services, 2007) and imagery from Google Maps. Some manual updates to the building outlines were necessary, as the city map data did not include the recent

**Map 1a: Dundas Street study site**



(S. Pypker, 2014; Map imagery: Google Inc., 2014)

**Map 1b: Kipling Avenue study site**



(S. Pypker, 2014; Map imagery: Google Inc., 2014)

**Map 1c: Clock Tower Road study site**



(S. Pypker, 2014; Map imagery: Google Inc., 2014)

construction of the Shops at Don Mills development or the Heintzman Place apartment towers (near Dundas Street). This map data was used to create the figure-ground diagrams and land use maps. Additional information for the land use map was gathered using Google Maps and Google Streetview, as well as from my own observations and photography.

The cross-section diagrams for each street were created using a combination of Google SketchUp and Adobe Illustrator. SketchUp was used to draw the scaled street dimensions and add computer imagery, while labels and text were added in Illustrator.

### *Photography*

Photography is used extensively in placemaking literature, perhaps to an even greater degree than mapping; several key works contain more pictures than words (for example Cullen, 1961; Gehl, 1987; 2010). Following this practice, I have included photos of each street taken during my site visits to visually communicate information about the context and my spatial evaluation of the criteria for each case study in Chapter 2. I have also included photographs to depict some of the street features identified by interviewees in Chapter 3, and some archival images are used in Chapter 4. Where possible, I have tried to compare similar visual perspectives and features of each site.

That being said, I am conscious of the fact that, like the maps I have produced, the visual representations I've created in this paper are subjectively constructed. The simple act of pointing the camera signifies a choice on the part of

the photographer to leave something out; photographs do not present reality in a supposedly objective sense (Emmison & Smith, 2000).

### *Archival research*

In order to conduct my research into of the historic development of each street, I consulted primary sources of old city maps, plans, and photographs at City of Toronto Archives. Goad's Atlas was vital to understanding the evolution of Dundas Street, as were historic aerial photographs for Kipling Avenue and Clock Tower Road.

### *Statistical analysis*

Statistics from the Canadian census over several years were used to determine and compare several different physical and socioeconomic characteristics of the three study sites. The physical census statistics included housing type and dwelling density collected at the smallest data level (census dissemination areas); this information was used in conjunction with mapping techniques to corroborate and fine-tune the data. Socioeconomic statistics were primarily used to understand patterns of gentrification, and were collected at the next highest data level (census tracts). Other socioeconomic information gathered at the census tract level included immigration and visible minority statistics.

Geographically located census data areas were included based on the "pedestrian shed" concept, similar to the method for determining the site maps discussed earlier. I included census dissemination areas in my statistical analysis that had at least ten dwellings within a five-minute walk from the studied street

segment (400m or less following a pedestrian route). This method of selection—“as the human walks,” instead of “as the crow flies”—kept the census data more relevant to the local areas around each street.

Following the methods used by Hulchanski (2010), and Walks & Maaranen (2008), levels of gentrification were estimated using a combination of statistics at a census tract level, including average individual incomes, the ratio of owned to rented dwellings, average dwelling values, average monthly costs for rented dwellings, occupation type, and level of education. These statistics were tracked over census years 1996, 2001, 2006, and 2011, and compared against the Census Metropolitan Area (CMA) average.

## **Conclusion**

My research in the paper has two primary purposes: to evaluate key design criteria of the placemaking movement, and to explore the influence of process in the success of the design outcomes. This qualitative evaluation will be done through my observation of sections of three different neighbourhood commercial streets in Toronto: Dundas Street, Kipling Avenue, and Clock Tower Road.



## CHAPTER 2: STREET DESIGN

This chapter presents my analysis of the physical characteristics of the three street environments, based on the design criteria developed in Chapter 1. I evaluate each street against placemaking design theories using comparative maps, diagrams, and photographs. I begin with a wide view of the street's surrounding urban context, narrowing into the particular characteristics of each streetscape. (This spatial analysis also provides important context and visual references for each place as they are discussed in following chapters.) In my assessment, I conclude that, as I anticipated, the design of Dundas Street most closely fits the placemaking design criteria, followed by Clock Tower Road, with Kipling Avenue a quite distant third.

### *Why look at built form?*

While physical space does not create a determined set of experiences, it can set certain horizons of possibility (Casey, 1993; Gehl, 1987). Think of a living room, for example. If two couches are placed too far away from each other, the arrangement may hinder conversation. To suit good conversation, seating should be close enough for a comfortable tête-à-tête, but not too close. Likewise, a street should suit the needs of its inhabitants. But there is a significant difference: buildings and roads cannot be as easily rearranged as chairs or couches. The shape of a street is largely set during the time of its construction (this process will be explored further in Chapter 4). Looking closely at the arrangement and patterns of the physical environment can show what sorts of activities are supported, and who benefits from them (Lynch, 1981; Gehl, 2010).

My evaluation of the physical form of each street throughout this chapter will be based on the design criteria for a neighbourhood commercial street that was developed in the last chapter. To review, this list includes:

- |                        |                           |
|------------------------|---------------------------|
| 1) human scale         | 4) variation of land uses |
| 2) room-like enclosure | 5) accessibility          |
| 3) pedestrian comfort  | 6) connection to place    |

In order to examine the design characteristics of the three street environments, I start at the broad physical context, progressing closer to specific details of each street environment, borrowing this methodological approach from *A Pattern Language* (Alexander et al, 1977). Comparing aspects of the three streets side-by-side, I have grouped my research findings into two simple categories that will come as no surprise to anyone familiar with Google maps: map view and street view.

The first, map view, includes both a bird's eye view and several different schematic plan views. I provide a context map for each case study, and then show maps from a closer zoom level. These include satellite imagery and plans depicting the spatial layout of case study sites. I analyze each street along with its densities, housing types, land uses, and other relevant characteristics; a partial assessment of relevant criteria will be given at this point.

The second research category is the street view, where the physical characteristics and architectural details are considered from the perspective of someone in the street. I compare these details through photos, description, and cross-section diagrams. A full assessment using the design criteria will be made after this analysis.

## Map view

Streets are not independent entities that can be studied in isolation; they exist in an urban fabric that affects the activity, accessibility, and experience of the space (Cullen, 1961; Alexander et al, 1977; Lynch, 1981). This spatial analysis examines the street sites from a plan view to better understand their urban fabric. Based on the design criteria, the physical form Dundas Street is the most human scaled, varied in land use, and accessible, followed by Clock Tower Road, then Kipling Avenue.

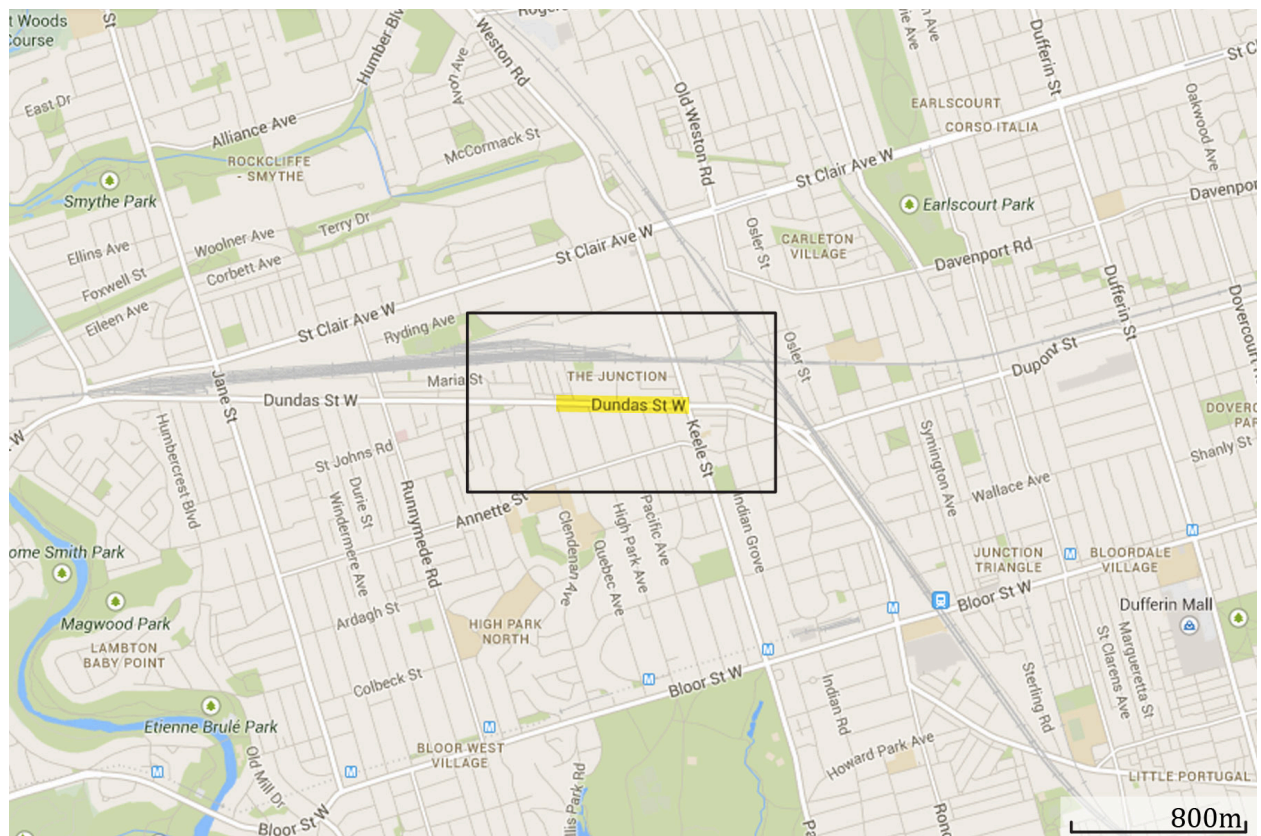
I begin this section with larger maps that I created to show the area context for each street site. Zooming into the study areas, the built form is drawn and compared using methods of spatial analysis common to urban planning, including satellite imagery, figure-ground maps, land-use maps, and housing and density statistics. I wanted to show the patterns of the street networks, building and lot sizes and distribution, and land cover, density and types of use. For accurate comparison, all maps and plans of the three streets are drawn at the same scale for each set of information.

### *Site contexts*

The environment surrounding the Dundas Street site (Map 2a) is mostly built-up urban, with small green spaces scattered throughout, as well as the larger green spaces of High Park and the Humber River Valley a few kilometers to the south and southwest. A large railway corridor runs through the black inset box of the study site (the studied section of Dundas Street is highlighted in yellow). Dundas Street is part of a grid-like street layout, with small street blocks. A relatively high

degree of permeability allows for several ways to get from one point on this map to another, even for short distances in the neighbourhood. However, there are two bisecting railway lines that limit connectivity in the area; north-south access for pedestrians and cyclists is particularly constrained by the railway yard just north of Dundas, with no crossings between Keele Street and Runnymede Road.

### Map 2a: Dundas site context

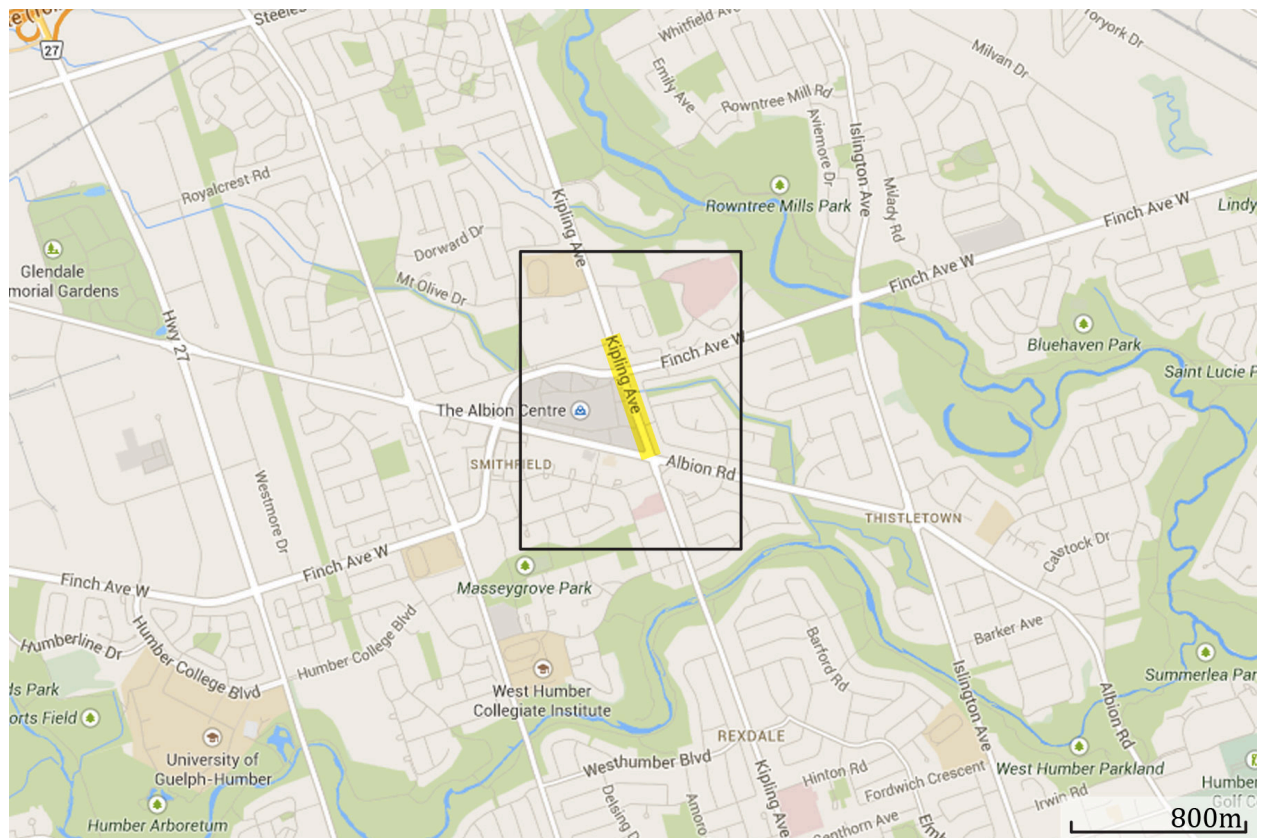


(S. Pypker, 2014; Map imagery: Google, 2014)

This contrasts to the Kipling study site (Map 2b) and the surrounding urbanized area, which follows a “super-block” street pattern, with limited-access curvilinear roads and cul-de-sacs inside each large block. There is much more green space carved out by the Lower Humber River Valley flowing southeast across the top right corner of the map, and the lower branch of the West Humber River Valley

meandering east at the bottom of the map. Albion Creek bisects the middle of the Kipling study site; it runs under the parking lot of the Albion Centre, and is visible again on the eastern side of Kipling Avenue. These river valleys limit the connectivity of many of these smaller residential streets. Through traffic is effectively restricted to the arterial roads; not only does this make it more difficult to navigate short distances on foot or bicycle, but it also makes these arterials significantly busier, faster, and more dangerous than the interior residential streets.

### Map 2b: Kipling site context



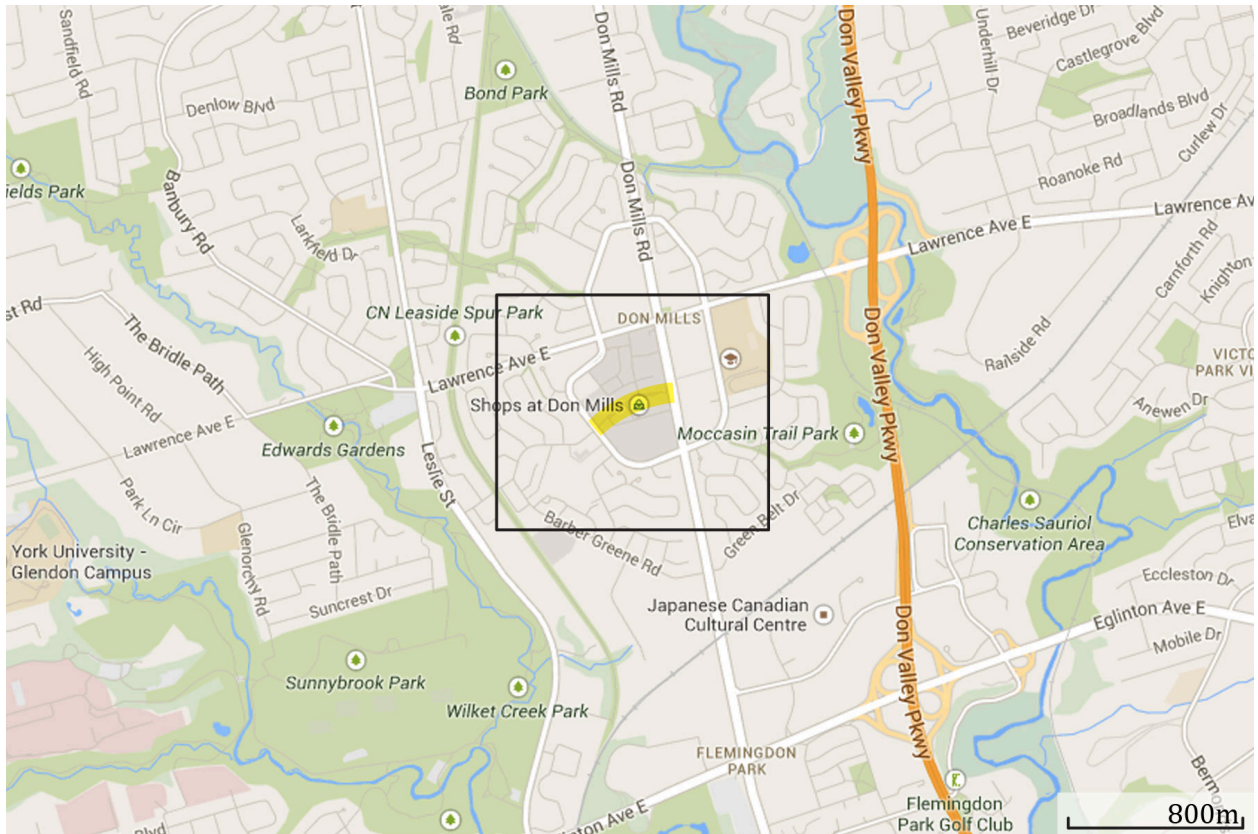
(S. Pypker, 2014; Map imagery: Google, 2014)

The area around the Clock Tower study site (Map 2c) is similar to the super-block pattern of the Kipling area, with the addition of a ring road around the intersection of Don Mills and Lawrence. Street patterns are similarly lacking in



connectivity, with detached, looping residential roads and cul-de-sacs. The study site and Don Mills neighbourhood are physically bounded (and somewhat isolated from surrounding neighbourhoods) by the East Don River valley and the Don Valley Parkway to the east, and Wilket Creek to the west.

### Map 2c: Clock Tower site context

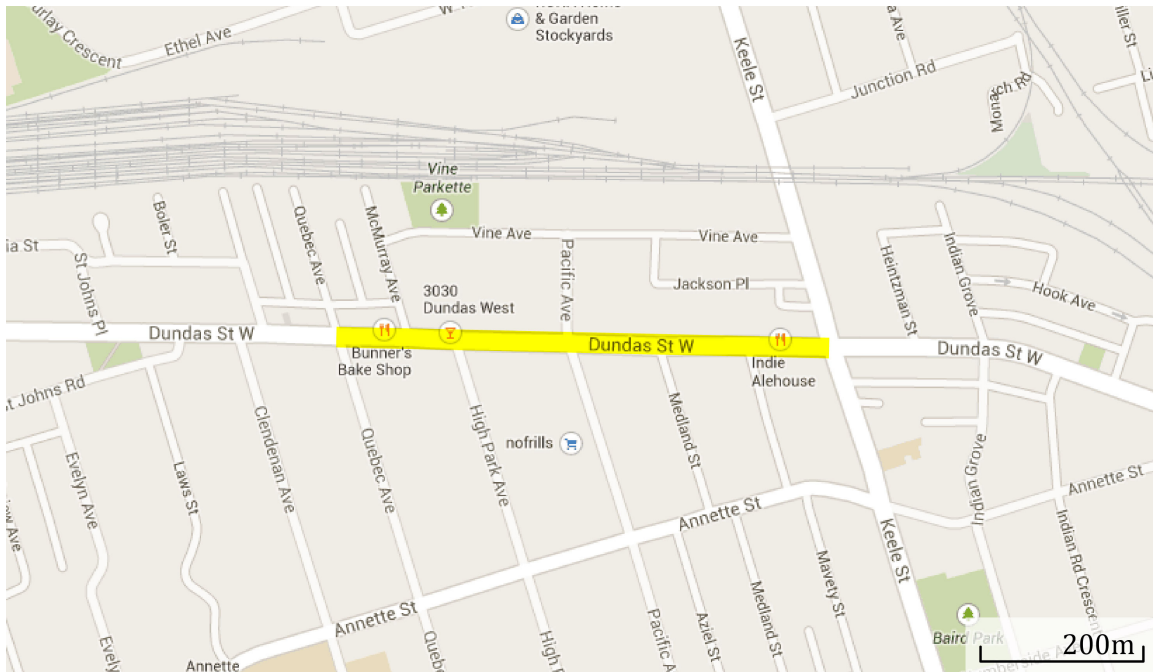


(S. Pypker, 2014; Map imagery: Google, 2014)

## *Study sites*

All the following maps in this chapter depict the study site areas contained in the black inset map frames above. Zooming into this level, the street and block patterns can be seen at a finer scale in Maps 2d, 2f, and 2e. Again, the approximate grid layout is clearly seen in the Dundas site, compared to the more curvilinear layouts of Kipling and Clock Tower.

### **Map 2d: Dundas study site**

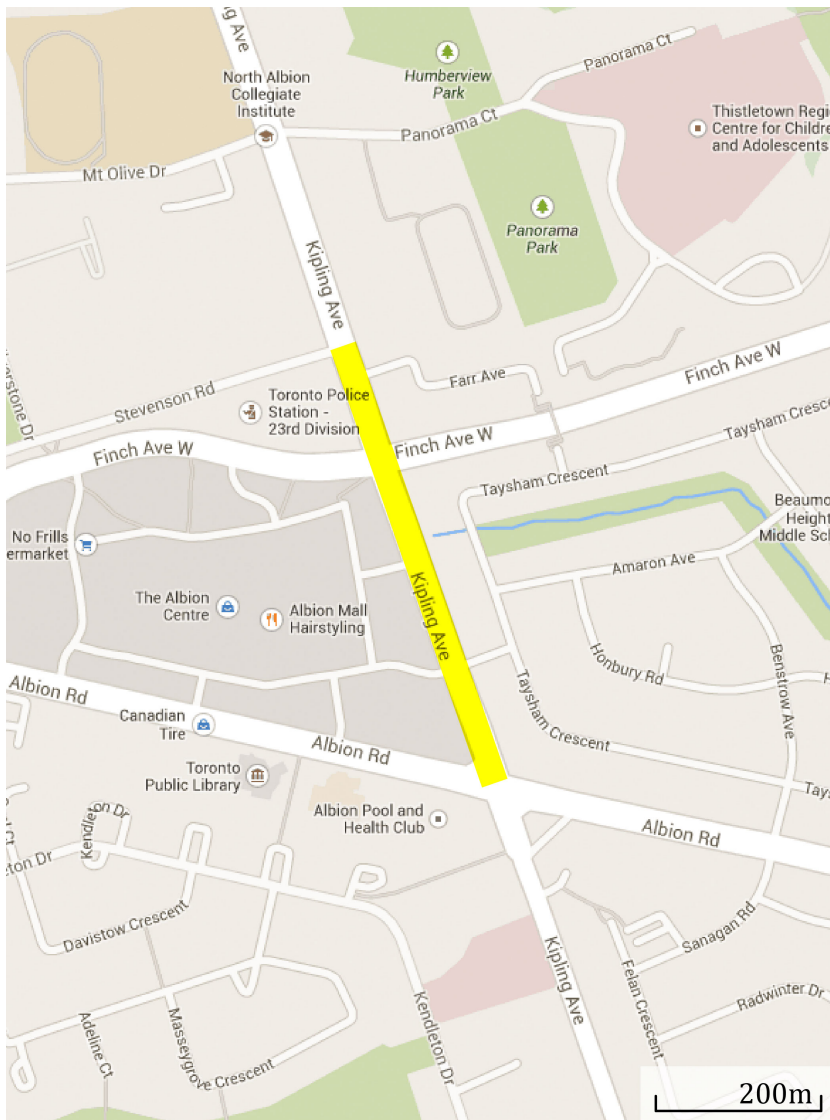


(S. Pypker, 2014; Map imagery: Google, 2014)

Another important indicator of pedestrian access and permeability is the distance between intersections and protected crossings (Jacobs, 1961; Jones, Roberts, & Morris, 2007; Duany et al, 2010). Clock Tower Road has the highest number of designated pedestrian crossings, with all-way stop signs every 50-80m along the entire length of the street. As they both carry large moderate volumes of through vehicular traffic, Kipling Avenue and Dundas Street have a greater spacing

of protected crossings, with stoplights or crosswalks every 150-300m. While protected crossings on Kipling are spaced slightly closer than on Dundas (by about 50m on average), side streets intersect on at least one side of the street more frequently along Dundas with its smaller block size.

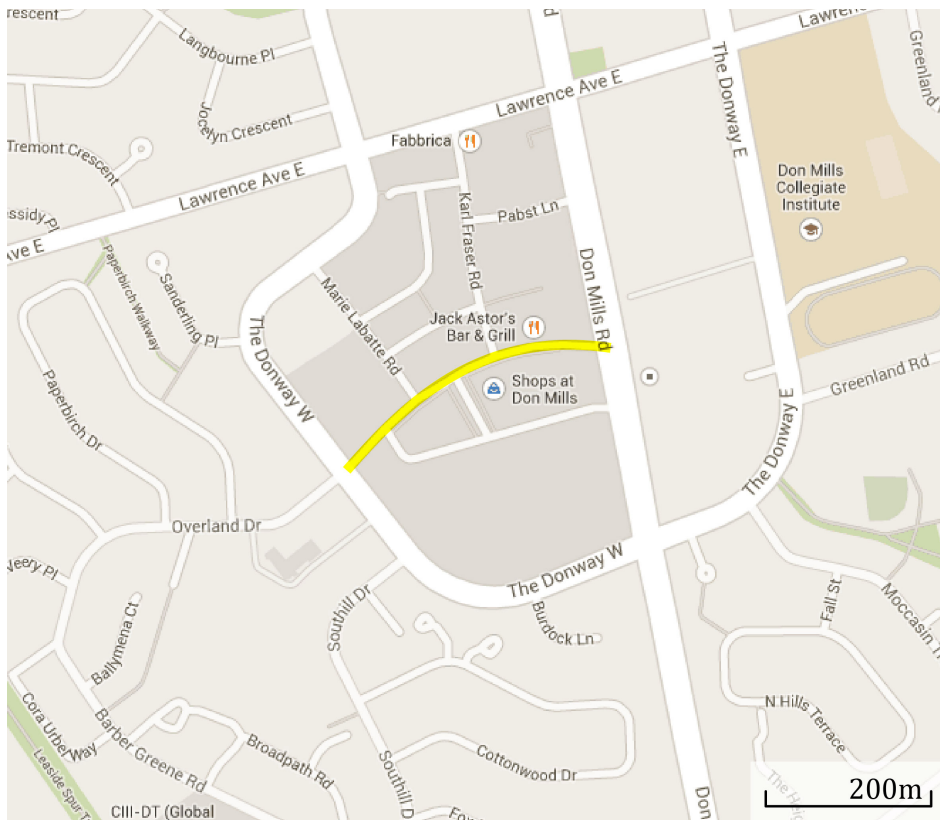
### Map 2e: Kipling study site



(S. Pypker, 2014; Map imagery: Google, 2014)



## Map 2f: Clock Tower study site

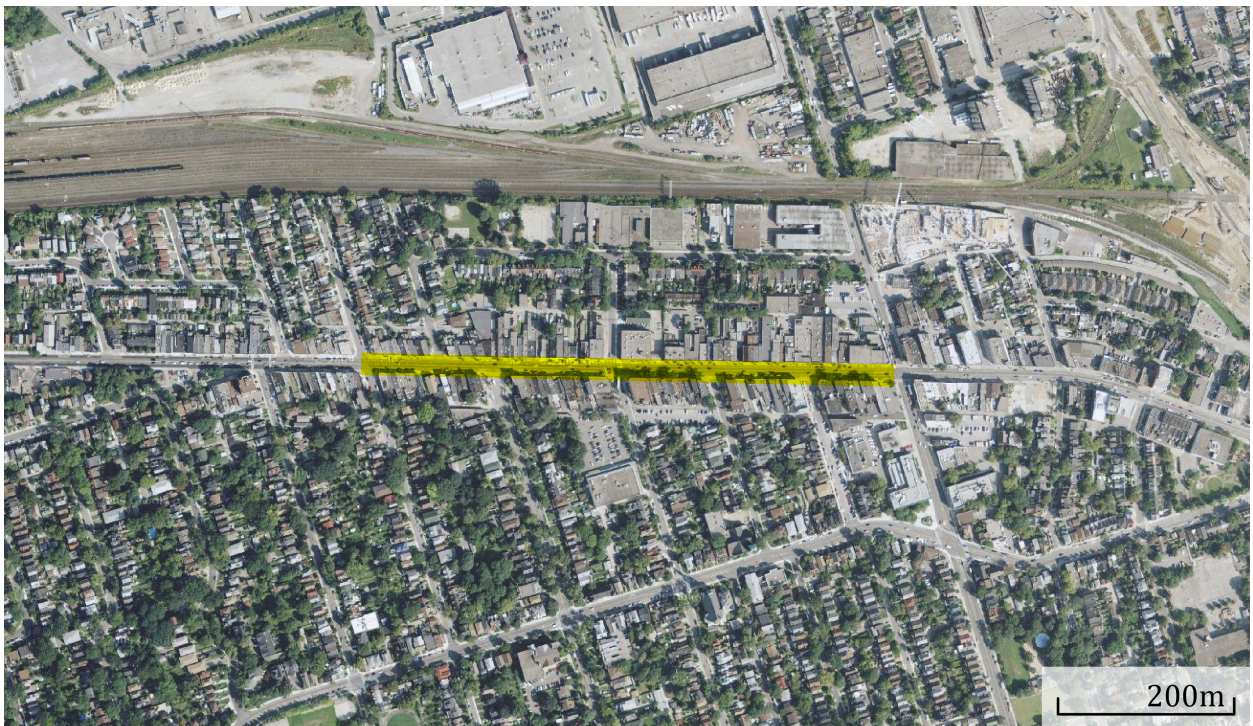


(S. Pypker, 2014; Map imagery: Google, 2014)

## *Satellite imagery*

Satellite aerial photos give an overall view of the size and distribution of buildings, roads, parking lots, trees, and green space in each study site. This provides important visual context for some of the details that will be discussed ahead.

### **Map 2g: Dundas satellite image**



(S. Pypker, 2014; Map imagery: Google, 2014)

South of the railway yard on the Dundas site (Map 2g) buildings tend to be smaller, but vary in size. There are a few small parking lots visible, with the largest ones north of the train tracks. One of Alexander's patterns for parking space in an urban area is a maximum coverage of 9% of a given site, scattered throughout the area in smaller lots (1977, p. 124). According to my calculations, Approximately 8-9% of the land on Dundas is used for parking (not including roads, private

driveways, and residential on-street parking). If the calculation is made without the rail corridor and the industrial area north of the tracks, the percentage is even less, at just under 5%. Trees appear to be spread throughout the site, often providing a canopy over the residential streets, almost hiding many of them from above, with very little open green space visible.

Dundas contrasts to the Kipling and Clock Tower sites (Maps 2h and 2i), where several large buildings clearly stand out. On the Kipling site, there is The Albion Centre to the west, and large apartment blocks to the north and south. A massive parking lot surrounds the mall, while other lots can be seen throughout the site. Space for parking accounts for 12% of the total land area; the sprawling parking lot around the Albion Centre alone covers 6% of the entire site. There are several large open green spaces (many are school fields and playgrounds), some larger treed areas, but the tree canopy overall seems to be thinner than the Dundas site (possibly due to the Kipling neighbourhood's younger age).



**Map 2h: Kipling satellite image**



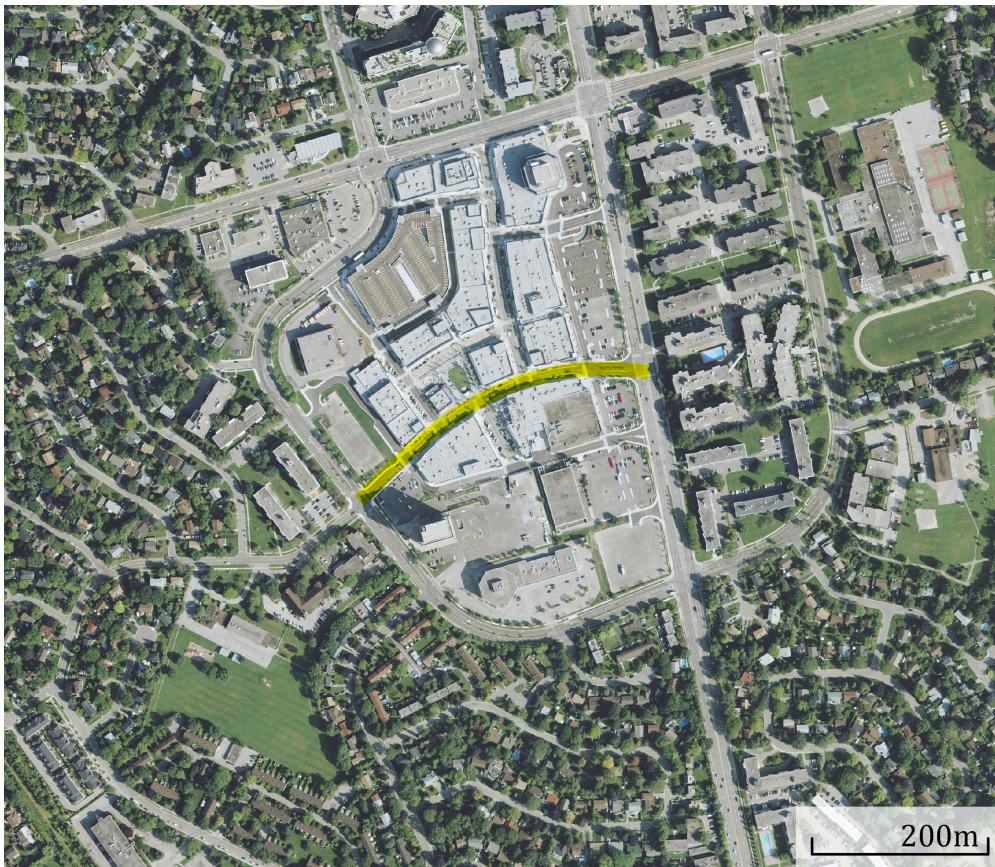
(S. Pypker, 2014; Map imagery: Google, 2014)

On the Clock Tower site, the irregularly shaped buildings of The Shops at Don Mills clearly stand out, as well as apartment buildings to the west, north, and east. Parking space covers almost 14% of the land area, the greatest proportion of the three sites. The parking space surrounding The Shops at Don Mills (bounded by Lawrence Avenue to the north, Don Mills Road to the east, and the Donway to the



south and west) is broken into smaller areas than the giant lot around the Albion mall at Kipling, but surprisingly, parking for The Shops at Don Mills still accounts for 6% of the total land area (the darker northeast building in the central cluster is a parking garage, and despite having three levels for parking, was only counted once for the land cover calculation). Like on the Kipling site, several large school fields are visible, and—aside from the grey space of The Shops at Don Mills—the tree coverage appears thickest of the three sites.

**Map 2i: Clock Tower satellite image**

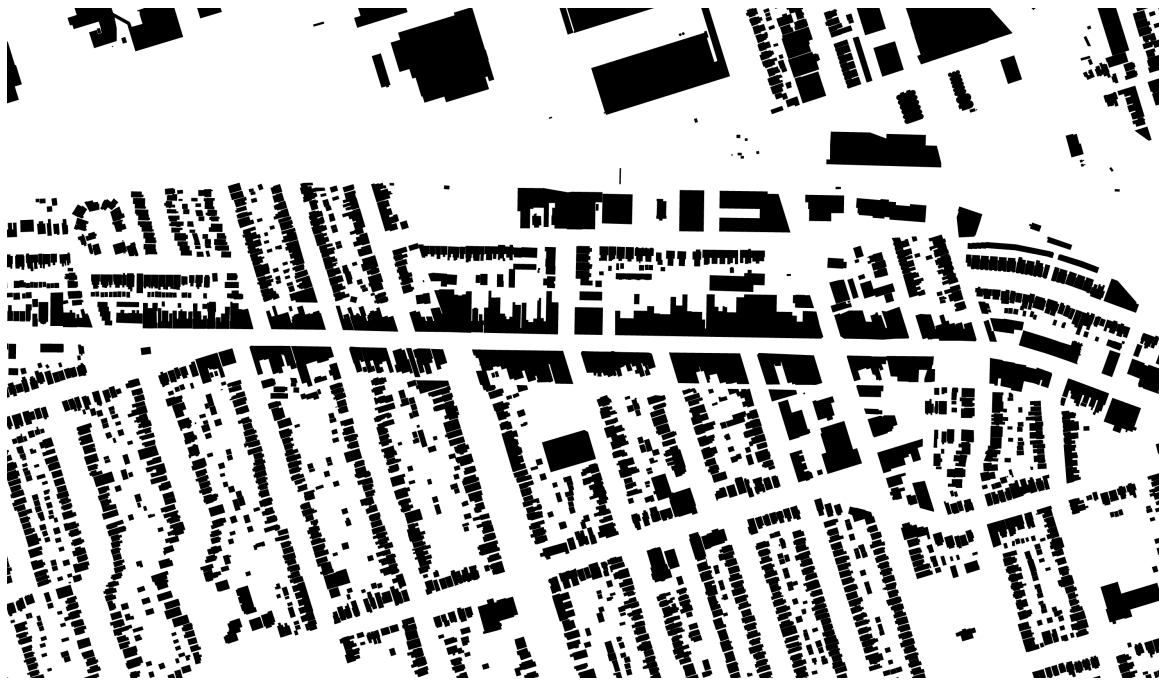


(S. Pypker, 2014; Map imagery: Google, 2014)

## *Figure-ground*

One of the simplest—and perhaps most revealing—map diagrams to compare is of the built vs. un-built space. Buildings and other large structures are represented in black; all leftover space is white (for more on figure-ground diagrams and urban streets, see Jenkins, 2008; and Jacobs, A., 1993).

**Map 2j: Dundas figure-ground**



(S. Pypker, 2014; Map data: City of Toronto, 2013)

It is striking how the street space is clearly defined throughout the Dundas site, and along Dundas Street in particular. Aside from the larger commercial buildings north of the rail corridor, the structures are relatively similar in size and shape. While the buildings themselves are fairly nondescript in their individual shapes, and cover a lot of the area (approximately 27% of the total site), they define and create positive space. The buildings along Dundas all face the street space,

forming a continuous passageway that is only interrupted by connecting side streets.

**Map 2k: Kipling figure-ground**



(S. Pypker, 2014; Map data: City of Toronto, 2013)

The space of the Dundas site starkly contrasts to the Kipling site, where Kipling Avenue does not stand out. Instead, the geometric variety of large individual buildings tends to catch the eye, including the amorphous shape of The Albion Centre and star-shaped, individual buildings. Independent clusters of buildings are

also apparent, with several small analogous groupings in the north. The most visual evidence of street space is the curving layout of the low-rise residential areas. Built structures only cover about 16% of the total land area.

**Map 21: Clock Tower figure-ground**



(S. Pypker, 2014; Map data: City of Toronto, 2013)

The Clock Tower site is an interesting blend of elements seen in both the previous images. Like the Kipling site, some large individual buildings stand out, and the arrangement of small buildings shows the curved layout of the low-rise residential streets. However, in the center of the image, there are some more clearly defined positive spaces created by the small open areas between buildings, similar to the space formed by Dundas Street. At approximately 20% of the total area, building land coverage is between the ratio of the Kipling and Dundas sites.



## Land use










The maps below show the distribution of land uses. Dundas is the only site with mixed (commercial and residential) uses on a single property, which are concentrated along Dundas Street. Notice how nearly all residences on the site are only a short walk from a variety of commercial uses.

**Map 2m: Dundas land use**



(S. Pypker, 2014; Map data: City of Toronto, 2013)

### Land use legend:

 low-rise residential	 commercial	 parks
 mid-rise residential	 institutional	 roads
 high-rise residential	 mixed-use	 rail

**Map 2n: Kipling land use**

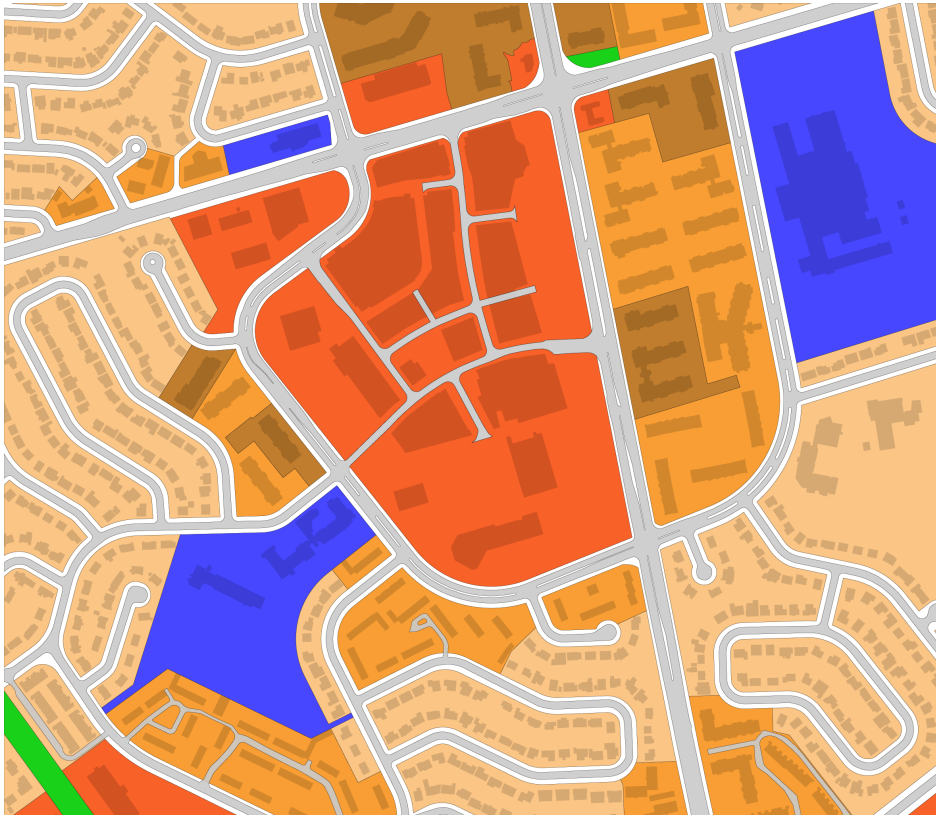


(S. Pypker, 2014; Map data: City of Toronto, 2013)

Compared to Dundas, the Kipling and Clock Tower sites have less spatial variation of uses, with nearly all of the commercial areas grouped in one place. While a good variety of stores and other retail uses are within a short walk from almost any given point on the Dundas site, a significant portion of the residences on the Kipling site are a long walk from the Albion mall—making it less accessible to local residents. Aside from several small stores on the northwest corner of Kipling

and Finch, a medical centre on Albion Road, and a used car dealership at Kipling and Albion, the mall is the only retail space in the entire site.

### **Map 2o: Clock Tower land use**



(S. Pypker, 2014; Map data: City of Toronto, 2013)

A similar clustering of retail space is seen at the Clock Tower site. However, it should be noted that planning and construction is currently underway for new residential condos south and northwest of Clock Tower Road. Of the three streets, Clock Tower is probably the closest to a version of the “shopping street” pattern, where pedestrian shopping is directly adjacent to a busier road, providing access while maintaining “quiet, comfort, and convenience” for people on foot (Alexander et al, 1977, p. 175).

## *Housing type and density*

The three study sites are primarily residential, thus the variety and concentration of the surrounding dwellings have a significant impact on the experience of the street form. The mix of housing types is reflected in the following graphs to the right (Statistics Canada, 2011).

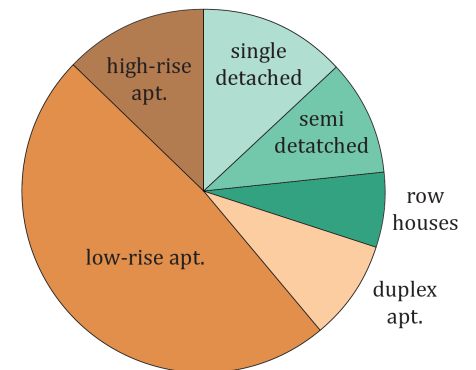
Alexander addresses building height in several ways in *A Pattern Language*, the simplest being a four-storey limit for a human-scaled street (with some rare exceptions) (1977, p. 119). All sites have some portion of high-rise housing (five-stories or more); Dundas has the least by a significant margin, while nearly two-thirds of the Kipling site's dwellings are in high-rises.

Density statistics can give further insight into the experience of the urban environment, and can be measured in two different ways for a given area: by population and dwelling counts. Due to the number of high-rise units, overall population density is highest on the Kipling site, with 78.9 people/ha, followed by Dundas with 65.1 and Clock Tower with 47.5 people per ha (Statistics Canada, 2011).

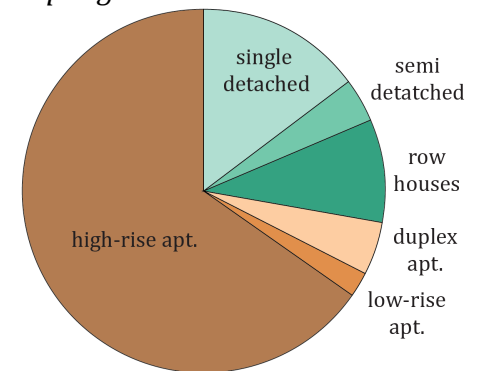
Dwelling density gives a different picture. The Dundas site has 33.4 units per ha, roughly a third more than both Kipling with 25.0 and Clock Tower with 22.8 units per ha (Statistics Canada, 2011). However, these averages are approximated

### **Distribution of housing types**

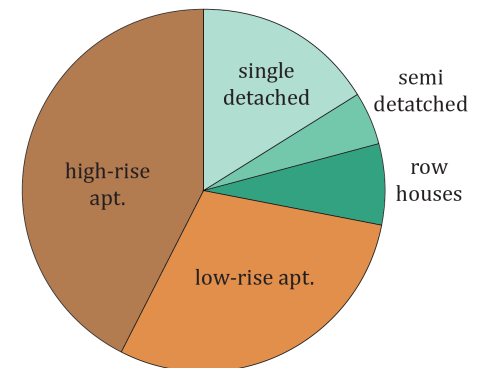
*Dundas site*



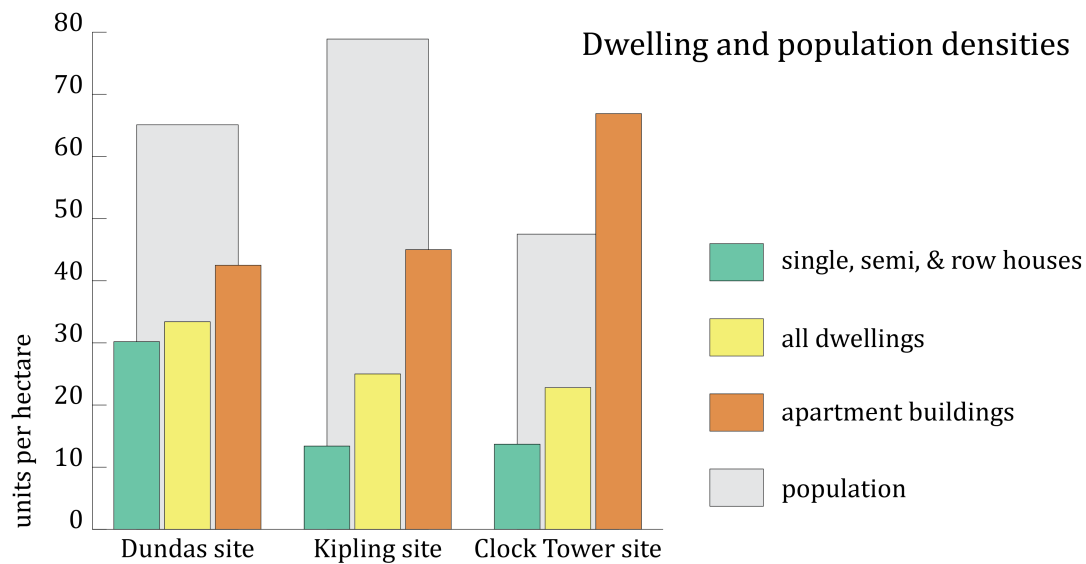
*Kipling site*



*Clock Tower site*



over a large area. In reality, houses and apartments are grouped in certain areas, making the experience of density on the ground somewhat different. Figures for the separated typical densities of low-rise (single detached, semis, and row houses) and the mid- to high-rise (apartments and condos) residential areas are slightly more representative of the built form, and are shown in the graph below (along with average dwelling and population densities for comparison). The Kipling and Clock Tower sites have significant variance in their densities, reflecting a combination of low-density development and high-rise apartment blocks, whereas density on Dundas is more consistent throughout. Distribution of density can have a significant impact on accessibility, if residences are concentrated a distance from commercial and retail areas, as a large cluster of apartment blocks on the Kipling site are.



(S. Pypker, 2014; Statistics Canada, 2014)

*Summary of map view analysis*

Through visual comparisons and analysis of the three street sites using maps and diagrams, my research shows that the Dundas Street site contains the greatest indicators of human scale, variation of land uses, and accessibility. The table below summarizes the findings of this map-based spatial analysis thus far. The other three design criteria—room-like enclosure, pedestrian comfort, and connection to place—cannot be analysed using a birds-eye view, which brings us to the next section.

**Design criteria: map view analysis**

	Dundas Street	Kipling Avenue	Clock Tower Road
Human scale	good	poor	fair
Variation of uses	excellent	poor	poor
Accessibility	good	poor	fair

## **Street view**

From storefront windows to roadway width to lamppost design, many factors can influence the experience of a street. This street view assessment begins with a look at the dimensions and cross section of each three dimensional street space considered like a room, followed with photos and discussion of the streetscape and architectural details from a pedestrian's perspective.

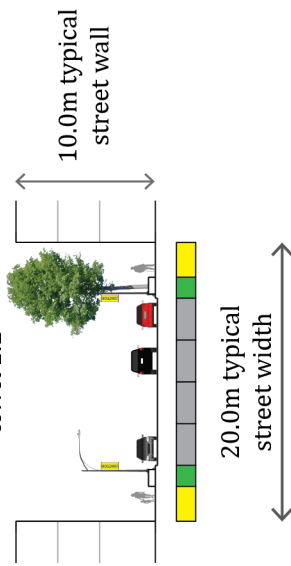
### *Room dimensions*

Like the walls of a room, structures that line a roadway can define the three dimensional space of the street. From street level, the perceived heights of building façades form the walls of the room; the distance between buildings on either side of the street defines the width of the room. A street with a 1:1 height-width ratio (HWR) is as wide as its building frontages are tall, while a street with 1:2 HWR is twice as wide as its buildings are tall. This ratio can be helpful in analyzing a street, but this number alone does not ensure that the space will be comfortable or feel like a room—it is only one design element among many.

As seen in the cross-sections on the following page (drawn to scale), the space between buildings on Kipling Avenue is significantly greater than on either Dundas Street or Clock Tower Road. The perceived space of Kipling Avenue is much wider than the unseen 36-meter right-of-way of city property, as both the houses and commercial buildings are set back from their property lines. Near Albion Centre, the west side of Kipling's streetscape is dominated by a large surface parking lot. Kipling Avenue is the only street to not follow the pattern of "building fronts" that meet the sidewalk (Alexander et al, 1977, p. 594).

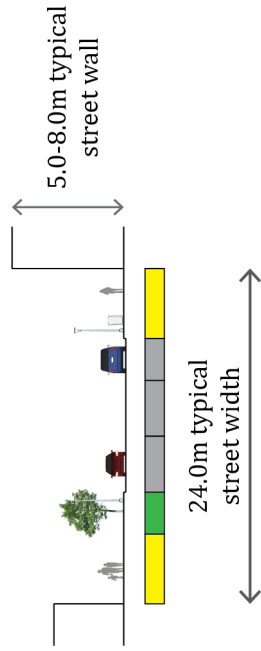
## Dundas Street

HWR 1:2



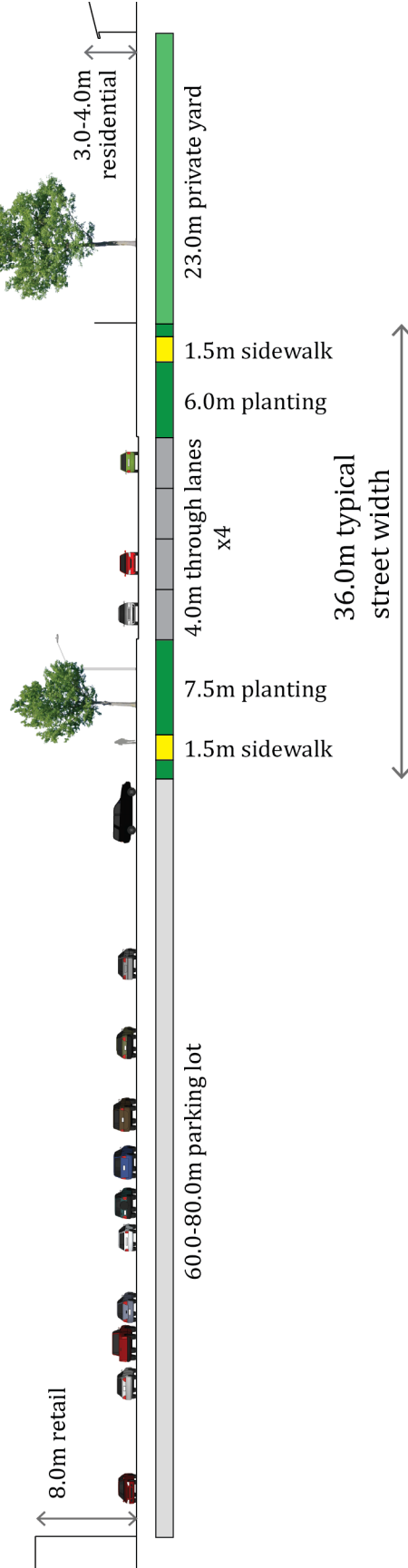
## Clock Tower Road

HWR 1:3-1:4

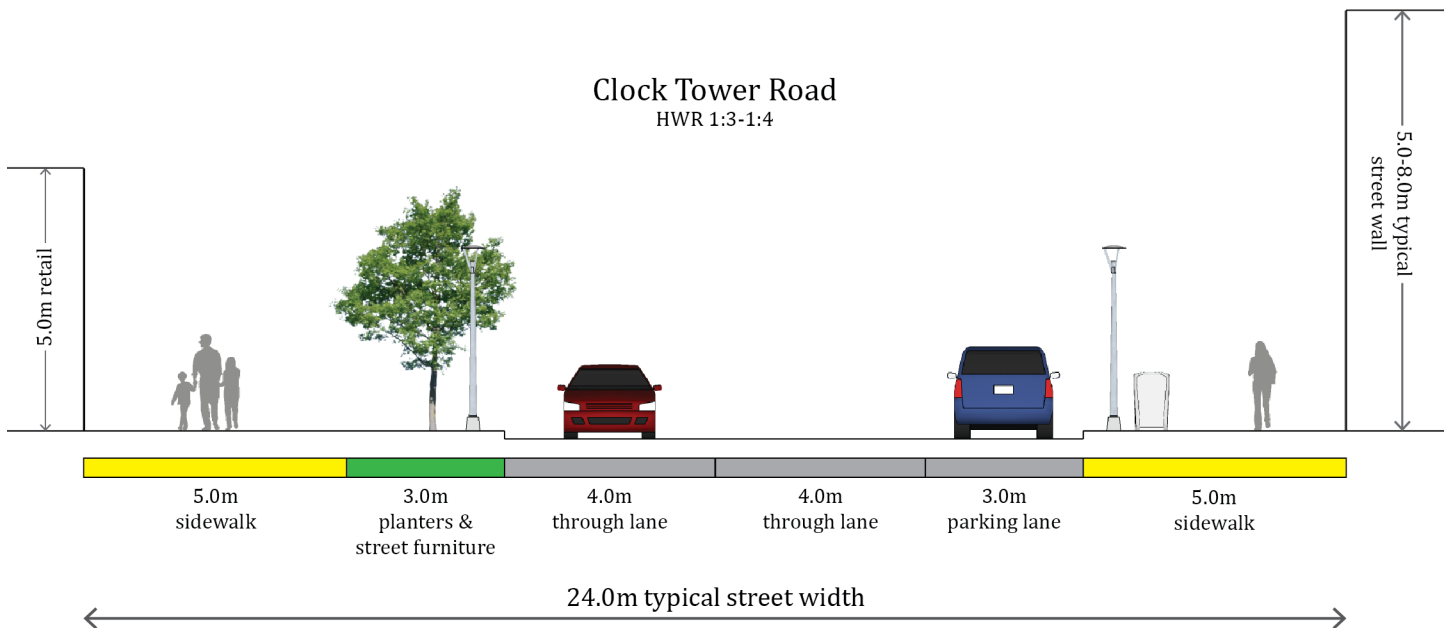
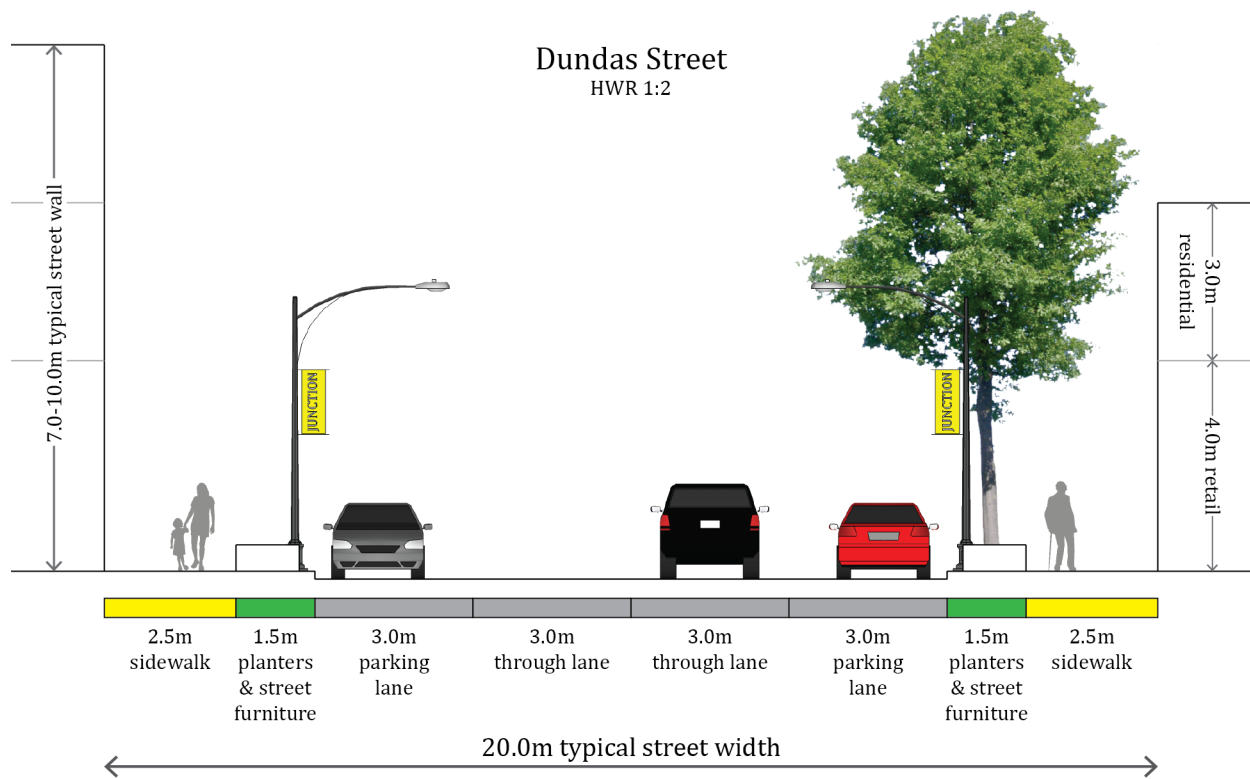


## Kipling Street

HWR: 1:15-1:20







On page 25, Dundas Street and Clock Tower Road are shown detail. Dundas is narrowest, with the tallest adjacent buildings to the street space, creating a sense of enclosure (Alexander et al, 1977; Cullen, 1961; Lynch, 1971). Clock Tower Road also has enclosure, but less so, as the street space is wider, and the buildings are shorter.

### *Roadway uses*

While buildings can shape the three-dimensional street space, the uses of the street—the road in particular—affect the experience of that space. All three streets have more road space dedicated for cars than pedestrians. A large portion of Dundas Street is dedicated for cars. The two outer lanes on Dundas Street are primarily for on-street parking. When cars are parked, they some protection for pedestrians, but during morning and afternoon rush hours when parking is prohibited on one side of the street, the sidewalk experience can be harrowing. Kipling Avenue has the most lanes for through traffic, and the most space for cars overall. The roadway width nearly doubles at major intersections along Kipling with the added turn lanes, making it more difficult to cross the street on foot, especially for those with any physical disabilities. Sidewalk space on Kipling Avenue is the narrowest, but at least it has the token accommodation of being set back from traffic with the buffer of grass and trees. The through lanes on Clock Tower Road are one meter wider than those on Dundas, but it only has one parking lane that never opens for through traffic, and far less traffic in general than Dundas or Kipling. The frequent all-way stops reduce vehicle speed enough to make it comfortable to cross the street almost anywhere, something that is not possible on Dundas Street or Kipling Avenue.

## *Dundas Street: streetscape and architecture*

From a pedestrian's perspective, Dundas Street contains many of the design criteria discussed in Chapter 1. The buildings create a human scaled streetscape by relating to the person at street level. Dundas Street has variety in its built form, owing to the small buildings and lot sizes. These small buildings have allowed their architecture to be easily adapted over time by the people that use them.



**Dundas Street** looking east toward Keele Street (imagery: Google, 2014)

### **Street wall**

The brick buildings along Dundas Street come right up to the sidewalk, providing enclosure, along with immediate access to the shops and restaurants at ground level. The individual façades of the narrow buildings provide visual interest along the street. The heights of the buildings that line Dundas are relatively



**Street walls and enclosure** on Dundas Street looking east

consistent, but they vary slightly, adding character to the room-like quality they create.

### **Microclimate**

As seen in the photos (taken on a sunny day in March), buildings shade the south side of the street and the north side is in sun due to the east-west orientation of the street. The consistent line of low buildings along the street creates a noticeable microclimate effect, particularly noticed in the sheltering from wind in cold weather (Gehl, 1987; Lynch, 1962).

### **Architecture**

While the line of multi-storey buildings is nearly unbroken along Dundas Street, most individual buildings are quite narrow. Buildings typically contain retail space on the lower floor with residences above on the second and third floors. Property lots on the south side of the street conform to a grid that is not parallel to Dundas; the irregular lot shapes lead to some interesting building types and shapes. While the Goad's Atlas confirms most buildings are about 100 years old, several have been renovated (with a more modern aesthetic. Several



**Varied heights** of the narrow building facades on Dundas Street looking southwest



**Dundas Street** looking east, contrasting shady south side with sunny north side



other buildings appear to either be complete rebuilds or added infill—both of which add variety in age and style to the street’s architecture.

### Building access

Most building fronts have large windows at street level, giving pedestrians a view of what is inside. Some have recessed storefront entrances, which serve the pedestrian by providing shelter from the elements, more display space for window-shopping (with the added benefit of not impeding sidewalk traffic), and visual breaks in the street wall. These recessed storefronts are an excellent example of human scaled design, corresponding to several of Alexander’s patterns regarding entrances (1977, p. 497, p. 548, p. 773), and Gehl’s principles of “irregular façades” and “soft edges” (1987, p. 154, p. 184).

### Shop size

Due to the small lot size and narrow frontage of the buildings on the street, Dundas appears to have a large number of individually operated shops and businesses, another of Alexander’s patterns (1977, p. 434).

Based on my informal conversations with over a dozen business owners, some shop



**Variety in the built form:** a modern style renovation, yet harmony maintained with surrounding buildings



Irregularly shaped **recessed entrance** to a print shop, residences, and a pub, aptly named “The Hole in the Wall”

spaces are rented and some are independently owned by the small businesses themselves. The average floor space of shops along Dundas is approximately 2,000 square feet (based on my calculations using property data maps), and many are much smaller. As a result, corporate franchises run a much smaller proportion of the retail space on Dundas than on Kipling or Clock Tower, as few retail spaces are big enough for large chains.

### **Street furniture**

Furniture on the street includes benches, post-and-ring bike parking, styled lampposts with



**Restored brick** building at corner of Dundas Street and Pacific Avenue

neighbourhood-themed banners, and the ubiquitous city garbage cans. There is also a train-station themed gazebo shelter in an open space just off the street (pictured on page 27); it is made for public use, but technically the space is privately owned.

### **Summary**

Many placemaking design elements are evident at street-level on Dundas. These include human scaled buildings and shops, a consistent but varied street wall that creates a room-like enclosure, some degree of pedestrian comfort, ease of access to the many shops along the sidewalk, and connection to place through the historic architecture and uniqueness of the individual shops and services.



## *Kipling Avenue: streetscape and architecture*

The streetscape of Kipling Avenue stands in complete contrast to that of Dundas Street. Gone are the human scaled qualities, the room-like enclosure, the relative ease of pedestrian access, and the variety and uniqueness in the built form.



**Kipling Avenue** looking north toward Finch Avenue (imagery: Google, 2014)

### **Street wall**

Buildings on Kipling are set back quite a distance from the street, creating a lot of open space, but no enclosure. One exception to this is the more recent development of the northwest corner of Kipling and Finch, where several retail shops were built up to the sidewalk; however, this single one-storey building is not enough to create any sense of enclosure in the street.



**One building on the street:** even with raised false façades, not enough to create human scale or enclosure

## Microclimate

Microclimate effects are quite different than on Dundas. Shadowing or wind protection from buildings is non-existent. While trees do provide some intermittent shade along the sidewalk, they are relatively immature and provide no shelter from wind, leaving pedestrians exposed to the elements.

## Architecture

Buildings near the street are single-storied, including the houses hidden behind fences to the east of Kipling, and the low commercial buildings to the west. While there are more trees and green space (by area) in the immediate street space, there is much less complexity and variation in the pedestrian's field of vision than on Dundas Street. Instead, cars dominate the streetscape. Catered to the fast moving driver, architecture is simplified, and store signs are much larger, which creates a landscape that has less character and makes distances appear larger—what Jan Gehl calls “60km/h architecture” (2010, p.43).



**Trees** but no shelter: Kipling looking south



**“60km/h architecture”**: Kipling looking north



## Building access

Distances not only appear greater. The closest store in Albion mall to Kipling Avenue (Canadian Tire) is nearly 100m from the street, and the rest of the stores are double to quadruple that distance away. From the intersection of Kipling and Finch Avenue, this walk requires crossing a parking lot without any form of pedestrian protection. The only meaningful demarcation of pedestrian access is the dirt path created by people taking the most logical path to their destination. This makes for an uninteresting, unpleasant walking experience, and it hinders accessibility, especially for those using a walker or wheelchair. Unlike on Dundas Street, store entrances do not relate to street, and aside from the large commercial signs and architecture, there are few cues as to what is contained in the buildings, or even how to enter them.

## Shop size

The average size of individual retail space on the Kipling Site is nearly 4,000 square feet, or roughly double that of shop size on Dundas Street (counting each store within Albion mall separately). However, nearly all the retail space is located



**Logical access** to the mall from Kipling & Finch



**"Welcome to Albion Centre:** please find the entrance...somewhere"

in the Albion Centre, quite a distance from the street itself, so this figure speaks less directly to the experience of the street than that of the mall, which is not within the scope of this analysis.

### **Street furniture**

There are few pedestrian amenities on the street itself. In fact, aside from the necessary bus shelters, city garbage cans are the only form of street furniture along this entire section of Kipling. A traffic guardrail (located dangerously next to the road) is the best and only option for a bench substitute.

### **Summary**

There is little evidence of the six design criteria in Kipling Avenue's streetscape. The street lacks human scale and room-like enclosure. The built environment does little to provide pedestrian comfort, variety of uses, accessibility, or connection to place.



**Albion Centre** seen in the distance from the northeast corner of Kipling and Finch

## *Clock Tower Road: streetscape and architecture*

Clock Tower Road is much more hospitable to pedestrians than Kipling Avenue, as Clock Tower was built for a walkable shopping experience. Several placemaking design characteristics can be observed, including human scaled elements and partial room-like enclosure. The street is relatively well suited for pedestrians, but the accessibility and shop variety of Dundas Street is missing.



**Clock Tower Road** looking east toward the central square and clock tower (Imagery: Google, 2014)

### **Street wall**

Stores along Clock Tower Road form street walls by closely lining the sidewalks, but these walls are not of the same quality or character as the street walls of Dundas Street. The curving street creates a constantly changing view of the street wall and an added element of anticipation. The building heights appear lower and have less



**Partial enclosure:** false façades—often with store logos—help increase perceived building heights



vertical lines or definition. False façades are added at the top of some storefronts to increase their perceived height. There appears to be less enclosure than on Dundas Street as the street wall is lower relative to the width of the street. However, the street space is certainly more defined and contained than on Kipling.

### Microclimate

Clock Tower Road has a similar—but smaller—shadowing effect to Dundas, as it is also approximately oriented east to west (shown on page 35). The microclimate effect of the buildings to shelter from wind is also similar to Dundas, but less pronounced, due to lower building heights.

### Architecture

Nearly all buildings along Clock Tower road are one-storey, and their form is fairly nondescript. Aside from some decorative postmodern design accents and the different storefront logos, the architecture is fairly similar along the street, following the recent style of the commercial “brandscape,” described by Klingmann (as cited in Knox, 2011, p. 124). None of the shops have residences above, although a new condo tower recently opened in 2013 just south of



**Anthropologie**, Banana Republic, Calvin Klein, Guess, Michael Kors, & other high-end brands call this place home



**Meaningless irregularity:** this odd corner does create shelter, but not much else for the street

the west end of Clock Tower Road (shown under construction in the background of the photo on the right). The quality of the building materials used for the sidewalk is particularly notable.

### **Building access**

While the buildings come right up to the sidewalk, they are not immediately near any residential dwellings, which—like on Kipling Avenue—reduces the local accessibility. There are also fewer individual stores, and thus fewer entrances off of the street itself. Storefronts do not have the same kind of small-scale recessed entrances as on Dundas, and most shop entrances are generally flush with the street wall. The storefronts also have fewer windows, creating blank exterior walls that face the street. This reduced building transparency and “soft edge” of the space makes the sidewalk a less visually interesting place to be than Dundas.

### **Shop sizes**

Individual shop sizes are about the same as those near Kipling (double that of Dundas), which is partly why the building fronts are not as varied as on Dundas



**Quality of materials** and street furniture



**Partial transparency**

Street. This larger shop size suits the needs of the high-end retail brands on the street.

### **Street furniture**

The street furniture on Clock Tower Road is distinctively themed for The Shops at Don Mills. Garbage bins have stylized blades of grass cut from the sheet metal; planters and street trees are well-manicured; benches, bollards, and lampposts share unique design elements; and even the bike locks differ from the standard post-and-ring (see photos on previous pages). The Douglas Coupland-



The street's **namesake public art**: a three dimensional clock of upside down houses

designed clock tower sculpture features prominently in the central part of the street, where the space opens to the square.

### **Summary**

Clock Tower Road possesses some degree of human scale and room-like enclosure (less so than on Dundas Street). Of all the three streets, Clock Tower Road seems to provide the greatest degree of pedestrian comfort (this is partly due to the fact that it also receives the least car traffic). Accessibility and variation of use are less evident, as the streetscape only contains commercial uses; these are not as varied as on Dundas Street. While unique elements in the built form might create some connection to place, this is somewhat tainted by the fact that the entire space is privately owned (more on this in the following chapters).

## Summary of design evaluation

Based on my combined spatial analysis of the map view and street view assessments, Dundas Street best fulfills the six design criteria drawn from the placemaking movement. Clock Tower Road partly fulfills some of the criteria, and exceeds at design for pedestrian comfort. The car-dominated environment of Kipling Avenue has the least enclosure, is inaccessible, and lacks human scale in its built form. The following table presents a summary of my overall evaluation of each street according to the design criteria.

### Design criteria: overall evaluation

	Dundas Street	Kipling Avenue	Clock Tower Road
Human scale	excellent	poor	fair
Room-like enclosure	good	poor	fair
Pedestrian comfort	fair	fair	excellent
Variation of uses	excellent	poor	poor
Accessibility	good	poor	fair
Connection to place	good	fair	fair

## Conclusion

This chapter has explored the physical characteristics of each street using visual information and description. According to placemaking literature, my observations suggest that pedestrians on Dundas Street should have the most positive experiences of the street space, followed by those on Clock Tower Road and Kipling Avenue. The next chapter aims to test these theories by asking people about their actual experiences.



Life between buildings is both more relevant and more interesting to look at in the long run than are any combination of colored concrete and staggered building forms.

—Jan Gehl, *Life Between Buildings*

### **CHAPTER 3: STREET EXPERIENCES**

Understanding streets requires more than just the kind of work I did in the previous chapter: I wanted to talk to people. I wanted to understand how other pedestrians experienced the street space. Would people in the street identify the design concepts observed in the previous chapter? In the interviews, some did, but most did not. Interviews seemed to suggest that, yes—design is noticed, but not necessarily in the direct ways the literature might have had me assume. At all three sites, respondents were much less outwardly critical of the physical environment than I had thought might be the case, particularly on Kipling Avenue. Most respondents appeared content adapting to the streetspace they found themselves in; bad street design was not seen as negative as much as it was neutral. The interviews confirmed my emerging conclusion that my various observations of human experience could not be explained by simple design criteria alone.

In the previous chapter, and in my research as a whole, I have not been interested in a grand architectural vision or aesthetic model of good urban design. I set out to research the role streets have in the everyday, mundane activities and experiences of their users, such as shopping for groceries, going to the bank or post office, or taking an afternoon walk.

My interview approach was to ask fairly straightforward questions about people's experience of each street in an informal way. Assuming most interviewees



would not have a background in urban design, I looked for overall themes and descriptions rather than specific language in their responses. I simply wanted to know how people felt in each street: Do they feel safe or comfortable? How would they describe their experience of the street space? Does anything stand out to them?

This chapter presents the research findings of the interviews I held at each site (see appendix for the list of interview questions). I wanted to know if others would express opinions in line with the design criteria explored in the previous chapter, and if, indeed, those criteria are at all useful for evaluating the design of the three sites. I begin with the first interview questions that set the context for the descriptive questions, which follow. These descriptive responses are grouped according to each street in turn, which are then further categorized into interviewees' 1) descriptions of space, 2) outstanding features, and 3) feelings in the street. I will then conclude by comparing these observations to the street design examined in the previous chapter.

### **Context: first interview questions**

The first several interview questions provided some basic context to each interviewee's experience, as well as some interesting points of comparison between the three streets. Had they been there before? How far away did they live? How did they arrive? What did they come to do that day? While the number of interviews conducted cannot provide the sample size necessary to make meaningful statistical comparisons, the responses offered a glimpse into the types of human activity encountered at each street, along with some background to the experiences of those interviewed.

Almost all interviewees had previously been to the street where they were interviewed, aside from two who had come to Dundas Street to canvas for a non-profit. Of the nine interviewed on Dundas Street, five stated that they lived in the neighbourhood, compared to seven of the Kipling Avenue interviewees, and three at Clock Tower road. Thus, a majority of the interviews conducted on Dundas Street and Kipling Avenue are reflective of local residents' experiences, whereas more of the Clock Tower Road interviews are with visitors from outside the immediate neighbourhood.

All interviews took place standing on sidewalks, aside from one seated at a bench. Not everyone necessarily arrived to the site on foot. Three interviewees took public transit to Dundas Street; the rest walked, their travel ranging from a 20-minute walk to a block away. Three of the nine at Kipling Avenue also came via transit, but reported roughly double the transit trip time as those on Dundas; the rest arrived on foot. At Clock Tower Road nearly all the interviewees had driven to the site: the longest distance travelled was 30 minutes, the shortest distance was from a block away; one individual took public transit, and one had a 10-minute walk. This, again, indicates more of a destination experience for those interviewed on Clock Tower Road. Dundas interviewees lived closest, while those on Kipling experienced the greatest travel times. These living and transportation patterns correspond to the urban design analyzed in the previous chapter.

The interviewees' reasons for being on each street varied, but certain activities were more common. As an indicator of the quality of the physical environment, Jan Gehl identifies three types of human activity in public spaces:

necessary, optional, and social (1987). The majority of respondents at Dundas were there for work, two were running errands, and one was doing schoolwork at a café. Aside from the café visitor, all activities can be considered necessary. At Kipling, six were running errands (from a haircut to groceries), and three were commuting to or from work or school. On Clock Tower Road, the most common activity was window-shopping and leisure, followed by two individuals who were there for errands, one for work, one for a job interview, and another for a school project. I met one elderly individual sitting on a bench. This interviewee had simply come to the street for a walk.

### **Description: interview responses**

Interviewees' descriptions of each street varied from the mood of the space, to the speed of traffic, to building character, to suggestions for street improvements. The verbal accounts of Dundas Street all favourably highlighted the age and character of the buildings that line the space, and most described it as a friendly, welcoming place with an eclectic variety of trendy small shops. Responses to the space on Kipling generally portrayed it as a nice, normal street, with most descriptions focusing on neighbourhood features, rather than the street itself. Clock Tower Road was largely described as a comfortable, mall-like place to spend free time and shop at high-end stores; many interviewees appreciated the adjacent open square with its outside seating areas.

Interviewee experiences of each street are presented in turn, organized in order of the descriptive questions posed to the interviewees: 1) Tell me about this

space. How would you describe this street to a friend who's never been here?; 2) What features of this street stand out for you?; and 3) How do you feel in this street?

### *Dundas Street responses*

#### **Descriptions of space**

Nearly every interviewee on Dundas Street highlighted the old buildings and architecture in their descriptions of the space. Several recurring themes and phrases included: “antique”, “old-school”, “eclectic”, “visually interesting”, and having an “old town feel.” One respondent remarked, “I really like all of the old buildings; I think they give a really heart-warming feel to the area.” Several interviewees also noted a juxtaposition of the old with the new, saying the space was “artistic,” “hipster,” “creative,” “trendy,” and “fun and upbeat.” One individual described it as “a fascinating contrast. ... It’s like two different time periods meshed into one, which I think is really interesting visually.” One shop owner likened the physical space to a small town, noting that,

the street is not particularly wide, and the buildings [are] pretty well the same as [they were] maybe a hundred years ago. ... The shape of the buildings hasn’t been altered all that much. The signs are different, of course, and maybe the entranceways, but for the most part the streetscape looks dated – in a good way.

Two others also compared the space to a small town, one calling the space “our own little Pleasantville,” referring to a tight-knit utopian neighbourhood in the 1998 film *Pleasantville*.

One interviewee noted that Dundas Street has “a touch of hipster, a lot of families, a lot of strollers, but at the same time there’s also ... the homeless

population here as well.” A shop owner also said that “every class” is welcome on Dundas, which offers a diverse range of shops from used furniture and dollar stores to high-end designer shops and boutiques. (One individual remarked—with joking sarcasm—that there are perhaps too many coffee shops: “There’s like 20, at least... Yeah, it’s a little nuts. Some of them gotta be crime fronts.”)



**Old brick building** with various shops at corner of Dundas Street & Keele Street

### **Outstanding features**

Each of the nine again spoke of the old architecture as an outstanding feature of Dundas, indicating a sense of identity and connection with the past. The “pretty low” building height, bay windows, and old brick exteriors were some of the more specific architectural features that stood out for the interviewees. Next to the buildings themselves, the various shops, cafes, and restaurants were the most cited features of Dundas.

The antique styled aesthetic of the lampposts was another feature of the street appreciated by three interviewees; one said of the lampposts, “I like the identity they give.” The “train culture” of the neighbourhood seen “in the murals and some of the monuments for the neighbourhood,” was also identified as a defining feature. Only one individual mentioned greenery: “there’s a lot of flowers. I like that there’s a lot of plants and nice-looking trees.”



**Train station themed gazebo** fills empty lot along Dundas Street near Pacific Avenue

### **Feelings in the street**

When it came to the question of how they felt in the street, interviewees unanimously replied that they were comfortable. Some words used to describe feelings in the street were: “welcome,” “relaxed,” “good,” “calm,” “mellow,” and “peaceful.” One interviewee said they “wanna stroll through it in an afternoon.” “I think the word ‘at home’ probably suits it very well,” was the immediate response of one shop owner, who went on to explain: “it’s because I know everybody. I’ve been in business here for eight years, so I’m familiar with a lot of the people I see on the street. I would say that I’m at home.”



**Dundas Street** looking east to Keele Street



## *Kipling Avenue responses*

### **Descriptions of the space**

When asked about the space on Kipling Ave., respondents tended to focus on broader neighbourhood characteristics. Several described it as a “pleasant,” nice neighbourhood, and a good place to live, while others said it is a “fairly average neighbourhood.” One of two individuals who identified the community as “low-income,” said, “I’ve lived here since 2004. I haven’t really had any problems, you know? It’s not as upscale as other places, but hey—it’s like almost any other neighbourhood.” Albion mall and the several neighbourhood schools were mentioned in nearly every description of the space, despite being what I considered to be considerable distances away (often 150-300 metres) or even out of sight from where the interviews took place on the sidewalk along Kipling (see map XX in Chapter 1). Two also mentioned the police station on Finch Avenue, 100 metres west of Kipling. The few interviewees who described the immediate street space had mixed things to say, with some depictions flatly contradicting each other. One described it as “pretty slow moving. It’s not a fast street,” while another said it’s “very busy.” One individual characterized the street as “a very grey area,” while another talked about how nice it is in the summertime with all the trees



**Albion mall:** just past the “grey area”

and greenery. Other observations of the space include the residential quality of the street, the presence of necessary signage, and the bike path.

### **Outstanding features**

When asked to describe the physical elements of the street, many responses focused on its



Kipling Avenue: a “**normal street**”

utility in general: “the road is good. Nothing is perfect, but we have signs everywhere, so it’s good”; “pretty standard”; and “it’s a normal street.” Three interviewees talked about the sidewalks and bike paths. One said the “wide sidewalks and crosswalks...are safe features of the street.” Another identified the “double lane sidewalk” for cyclists and pedestrians (located just north of the actual study site) as “the only real standout.” The third said, “I do a lot of bike riding during the summertime. I still believe there is a lot of space for bikes: they have the bike path and then the sidewalk for pedestrians. So, I think it’s fairly nice here.”

Other mentioned features includes “the schools, and the children playing outside,” Albion Mall, and the grocery store in the mall. The trees and greenery on the east side of the street was a favourite feature of one interviewee. It is noteworthy that three of the nine interviewees didn’t identify any outstanding features, in contrast to Dundas and Clock Tower, where all respondents identified at least one outstanding street feature.



## Feelings in the street

Kipling Avenue was the only street of the three where safety and comfort was not a unanimously expressed feeling; it appeared that these feelings had more to do with personal safety than pedestrian safety regarding the busy traffic. Seven of the nine said they felt safe, one said “it varies day to day,” and another said they felt unsafe. Some of those who said they felt safe expressed some reservation or acknowledged that safety might be an issue to others. One individual noted, “some people say that it’s quite dangerous,



**Trees** and sidewalks along Kipling Avenue

but I just feel fine. ... I feel safe; I feel normal when I walk down the street at night.” Another answered with “I’m ok. I feel safe. I don’t feel...you know...threatened or anything. I’ve never had any problems.” Yet another qualified their response by saying they feel “pretty safe. I don’t go out at night, so I don’t know what the nights are like.” The individual who felt unsafe explained that this was because of “previous stories and situations that...you know...anything could happen. ...I’m glad to leave here.” When asked later about potential changes to the street, they didn’t think anything needed to change, saying it’s a “normal street.” The safety issue had to do with “the people that live near here.” When asked if they felt comfortable, the interviewee who responded with a varied safety experience said, “Sometimes yes; sometimes no. I’ve had some incidents with some people that were unsavoury.... I

won't go walking in the forest by myself, cuz I've been followed. So, safety is an issue for a single girl walking around." Poor design can contribute to feeling personally unsafe; for one, less populated outdoor urban environments are documented as being less safe than busier place (Gehl, 2010). However, design and personal safety is far more complex, and goes beyond the scope of this paper.

### *Clock Tower Road*

#### **Descriptions of the space**

The respondents on Clock Tower Road almost all agreed that it is a good place to sit, relax, and walk around. All but one talked about the space as either being mall-like or having a shopping atmosphere. Descriptions highlighted the open-air quality, the pedestrian friendly layout, the shops, cafes and patios, and cleanliness. One person compared the experience of the space to shopping in Europe. Another individual called the street "a little piece of Vegas," citing the high-



The **mall-like** atmosphere

end shopping space and its outdoor nightlife on weekends:

There's not a lot of things going on around here [in the surrounding neighbourhood], and this is like the number one spot. ...[You] see those people coming from all over the town, just to come here and experience [it]. Cuz, you know, it's very drastic. If you go just a block away it's completely different, right? It's a different atmosphere. It's nice to relax, sit down, even just to sit at the patio and just have a few beers and enjoy the company. ... [I]t's just the atmosphere, you know? [Y]ou can enjoy yourself; you can still

let loose, but at the same time you still have that...sophistication. Do you know what I mean? You can still go out for dinner and enjoy yourself.

Someone that described the space as an outdoor mall added that it has “kind of a community feel.” Several other individuals were less positive about the space. One preferred the traditional covered mall that used to exist on the site. Another said Clock Tower Road is not as inviting as adjacent streets or the centre plaza in The Shops at Don Mills. A third felt the space is “fairly nondescript,” saying “the street itself doesn’t do much for me.”

### Outstanding features

The feature that was cited most on Clock Tower Road was the open central square. The five interviewees who talked about the square observed different features, including its outdoor seating, water fountain, green grass, planters, and a stage set-up during special events.



Clock Tower Road and its namesake sculpture as seen from the far side of the **central square** complete with outdoor café seating

The stores on the street—described as new and high-end—were another commonly mentioned feature. While most were positive about the types of shops, one individual remarked:

I find the stores in here are high-end, and the stores will have a certain group who enjoy shopping in that atmosphere, but it wouldn’t attract me. I don’t know how well the stores are patronized. I have walked around a little bit, looked in a few of the stores, and very rarely find anyone in them.



Several people particularly liked the clock tower sculpture where the street joins the square. The pedestrian-friendly layout stood out most for one individual, who went on to describe their experience: “I came an hour before my meeting, so I just kind of walked around, and it was like: zigzag, zigzag across the street and it felt comfortable doing that.” Two individuals discussed parking; one said there are “very, very rarely” spots available on the street, while the other thought there was plenty of parking. The stylized light posts, open space, and the sign at the entrance were some other features mentioned.



**Pedestrian space** put before parking space

### **Feelings in the street**

Like the responses on Dundas Street, interviewees expressed unanimous feelings of comfort in the street. Several described feeling relaxed. One individual said, “I enjoy it very much; I feel relaxed. It’s a great place to sit with your friends and talk and connect with them. I feel happy when I come here.” Another simply replied, “I feel great; I feel good.” An older man, who said earlier that he preferred the covered mall, still enjoys the new space: “I feel comfortable. I come in the summertime, sit over there, and have a coffee.” One respondent noting the reconfiguration of the old mall said,

I feel a little bit awkward because... before they built this there was nothing here, and now all of a sudden [the] population exploded, sort of. You know what I mean? There's a lot more people, and people from all over the town.

However, he went on to describe these as good changes. Another interviewee—who was otherwise very positive about Clock Tower Road—noted that in comparison to her favourite street (Roncesvalles Avenue), “this [street] still feels...it's got a lot of the big box, sort of the traditional brand names, so it still feels a little North American... clinical.”

### **Overall satisfaction with the streets**

I did not directly ask the interviewees whether they liked the street or not because I wanted their responses to be expressive in nature, not necessarily focused on an evaluation. To encourage the interviewees to descriptively share their feelings about the space, I opted for more open, non-leading questions; nonetheless, their satisfaction with the street environment often became apparent to me in the course of each interview.

As a general rule, everyone seemed fairly content with his or her street environment. This surprised me a little; I had expected a greater amount of negative feedback on Kipling Ave. in particular, which I perceived to be a relatively unsafe feeling street due to the wide roadway and busy traffic.

I have scored each street based on the degree of positive or negative language used to describe the street in each interview. Each interview scored from zero to two points. Any negative feedback score zero; a neutral or indifferent overall response scored one point; a positive response scored two points. Dundas Street

scored highest with a cumulative total of 18 points. Each interviewee's portrayal of the street was positive overall. Kipling Avenue scored lowest at 11 points. Only three interviewees were positive about the street. Most responses were neither positive nor negative about the street. However, three of these neutral responses were positive about the neighbourhood; I still scored these as neutral. One individual had strongly negative feelings about Kipling Ave., which they connected to local gang activity and personal safety, not necessarily any physical features of the street itself.<sup>1</sup> Clock Tower Road scored close to Dundas Street, with 16 points. All interviewees were positive except two. One person said the street was "fairly non-descript," stating that "the street itself doesn't do much for me"; and another person described Clock Tower Road as "just a street," with "not much going on."

## **Street design and experience**

In the course of interviewing and then in pouring over interview transcripts, the most surprising theme that arose was how little criticism was made of any of the three streets, particularly regarding the built environments. It is to be expected, I suppose, that pedestrians are not necessarily on the lookout for design problems on a street, but I had expected at least some comments along the lines of: "There aren't enough street crossings;" "The road is too wide;" "It's a long walk to the stores from my house;" or "The busy road traffic makes the sidewalks feel unsafe." Most

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<sup>1</sup> This was the interviewee who took off in haste, as described in Chapter 1; had there been more time in the interview, I would have liked to get a better sense of whether they felt the built environment had anything to do with their feelings of safety.

interviewee's responses seemed to indicate an ability to either overlook or adapt to—according to the design criteria—negative spatial elements of a street.

This doesn't mean these negative elements went unnoticed, however. While very few interviewees expressed explicit dissatisfaction with the built street space, negative design elements did affect the quality and content of their descriptions, and seem to be connected to overall levels of satisfaction. On Kipling Avenue, the majority of interviewees conveyed indifference toward the street space, corresponding to the street I hypothesized would be the least beneficial to its users in terms of its physical design. When asked about Kipling Avenue, many did speak positively about the surrounding neighbourhood, but *not* the street itself. Considered either way, Kipling had the lowest satisfaction levels. Dundas Street, which initially appears to best fit my design criteria, received unanimously positive descriptions that were focussed on the built qualities of the actual street. The descriptions of Clock Tower Road were mostly positive about the street space—particularly its pedestrian-friendly quality—with only two tepid responses out of nine.

One particular connection to design that stood out in the responses is the importance of building proximity and enclosure for a street to be recognized and described as a distinct place in and of itself. The tendency of interviewees on Kipling Avenue to avoid describing the actual street space appears connected to its physical design. Where the street space had the least physical definition and enclosure, people noted surrounding neighbourhood features, not the street itself. Without the immediate landscape of street walls formed by nearby buildings, the perception of

and connection to the street as a place diminished in the responses. Contrast this to Dundas Street, where every description of the space noted its architectural character, often positively associated with the quality of the street as a place.

While the built environment evidently affected the experiences of those interviewed, and there is a notable connection between good design and satisfaction with the street, physical design does not appear to entirely account for the different experiences on Dundas Street and Clock Tower Road. While Clock Tower has many of the design features lauded in placemaking literature, Dundas appears to possess more human scale, variation of uses, and opportunity for connection of place than Clock Tower Road. In fact, Dundas Street was built before concepts of “urban design” were formalized, or the placemaking movement even existed. If good design is all-important, how could this be possible? This brings me to the next chapter where Alexander’s work on process in *The Nature of Order* sheds an important light.

## **Conclusion**

This chapter demonstrates that placemaking criteria for street planning and design cannot alone make a street “good.” My research shows that while placemaking design concepts can positively influence the human experience of a place, there seem to be other factors that design concepts overlook. While the design of Dundas Street and Clock Tower Road both fit much of the placemaking design criteria, people tended to connect more with Dundas Street as a place. My next chapter will look into why this might be.

People experienced each street not as a sum of design features, but as a place with a history. This history has a tangible impact on the character of a place and



how it is experienced. The storied process of construction and development is not often taken into consideration in urban design, but plays a significant role in determining the shape of a place, according to Alexander's arguments in *The Nature of Order*. Human character and sense of place cannot be simply designed; neither can age or situatedness. Thus, the next chapter looks into the storied development of each street and how it may better explain the experiences I observed.

## CHAPTER 4: STREET DEVELOPMENT AND EVOLUTION

This chapter looks at the historical creation and development of each street, to explore how the processes of change have affected the physical space as well as the experience of each street examined in previous chapters. My research identifies the increased pace and scale of modern development, seen in both Kipling Avenue and Clock Tower Road, as key factors in the limited connection to place observed at these streets in Chapter 3. While some of the automobile-oriented design practices have since been restrained in favour of more pedestrian-friendly designs, as seen at Clock Tower Road, the large-scale, master-planned, corporate-driven model of development remains. According to my research, such a model has not shown itself to create a place that is, in the words of John Friedmann, “cherished by its inhabitants” (2010, p. 162).

Dundas Street has been built in a way that allows it to adapt to local need over time, creating many opportunities for human connection to place to flourish. Without processes for small-scale adaptation and variation in the built environment, “the uniqueness of people’s individual worlds” (Alexander, 2005, p. 361) that interviewees spoke of so positively on Dundas Street would be missing. I conclude that the methods and processes of a street’s development are inextricably tied to its experience; the story of a place is present in its experience.

My evaluation of these three design eras is based on their ability to adapt to suit local needs; this is drawn from the concepts of “fit” and “control,” two of Kevin Lynch’s “dimensions of performance” (1981), and Alexander’s theory of “living process” where “people themselves are in control of their environment” (2005, p.

40). Friedmann (2010) quite simply describes how this process of adaptation creates connection to place:

By being lived in, the actual physical and social spaces of an urban neighborhood come to be modified and possibly even transformed. This happens naturally through the simple fact of being lived in and the spatial patterns of social interaction that are formed over time, as newcomers arrive, old residents depart. ...[T]he neighborhood acquires particular meanings for its inhabitants, though not all of them may be shared; it thereby becomes a distinctive place (p. 154-155).

I argue that this sort of small-scale adaptation by the inhabitants of a place is related to the degree of connection interviewees expressed toward each street in the previous chapter.

The three streets chosen in this study are exemplary of three distinct eras in Toronto's development and planning over the last 150 years. The three I have identified are: early-modern, modern, and post-modern, which correspond to the development of Dundas Street, Kipling Avenue, and Clock Tower Road. Like the stories told in layers of sedimentary rock, the history of a city's development reveals the unique processes of its formation. Colonial, economic, political, cultural, and ecological forces have shaped Toronto's urban landscape over several centuries. While there is much information that could be examined here—especially regarding the details of the formal planning process—I will try to keep the discussion to the broader ideas, methods, and techniques that drove the urban development of each of the three street sites, in order to better understand how the approaches to planning and construction affect the experiences of the everyday street user.

## **Early-modern: Dundas Street**

The Toronto neighbourhood now known as The Junction was originally built without the use of master plans or land use zoning—both primary tools of modern planning. This does not mean that development occurred without design or forethought. The neighbourhood began with the survey and construction of Dundas Street, followed by the railway that brought a period of growth and the creation of a new industrial town. The street has since evolved with the growing city of Toronto, as the street experienced waves of post-war immigration, the decline of the railways, the era of the automobile, the eventual waning of local industry, and the more recent influx of global capital.

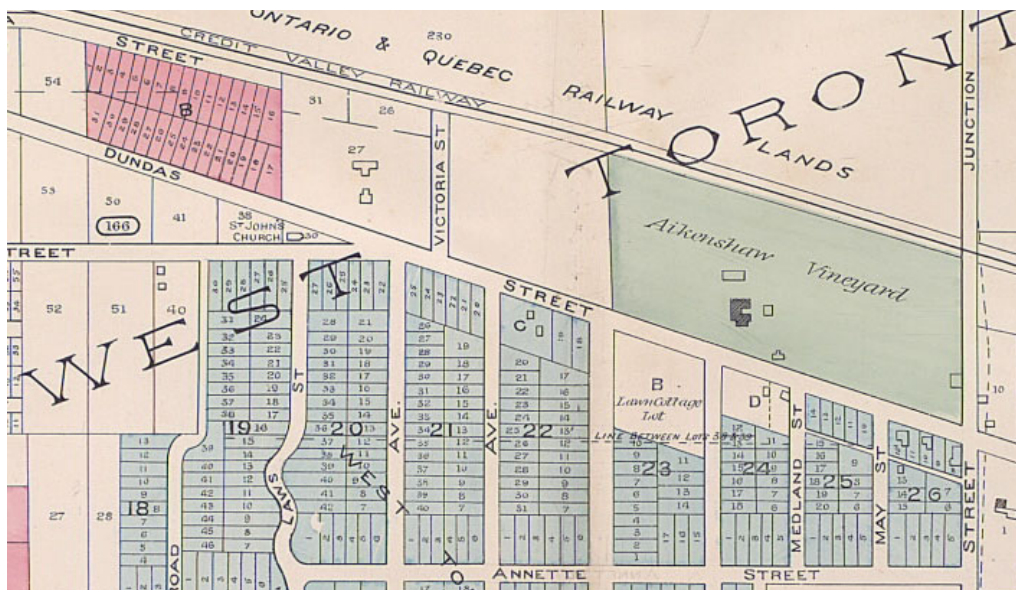
Governor James Graves Simcoe conceived Dundas Street as a military road to connect Lake Ontario westward to London, Ontario, as the town was “Simcoe’s preferred location for the capital of Upper Canada” (Marshall, 2011). Yet this was not to be; the Town of York—now Toronto—became the new colony’s capital in 1796, and the road was instead built eastward from Cootes Paradise at the western end of the lake toward York. This new road became a corridor of rural settlement, including small new villages outside of York.

The pace of development increased from slow rural growth to urban development with the arrival of the railway lines in the late 1870s. At this intersection of the CN and CP rail lines, a growing industrial centre was founded in 1884 as the Village of West Toronto Junction, remaining an independently governed city until annexed by Toronto in 1909 (West Toronto Junction Historical Society, n.d.-a). The area was surveyed in the colonial British fashion, using fixed-length

chains to measure rectilinear plots and distances (Relph, 1997, p38). The establishment of an orthogonal grid served “commercial interests,” as it “made surveying and selling of lots with clear title simple and straightforward” (Massengale & Dover, 2014, p. 8). The right-of-way width of Dundas Street was set at 66 feet (now 20 metres), or one “chain.”

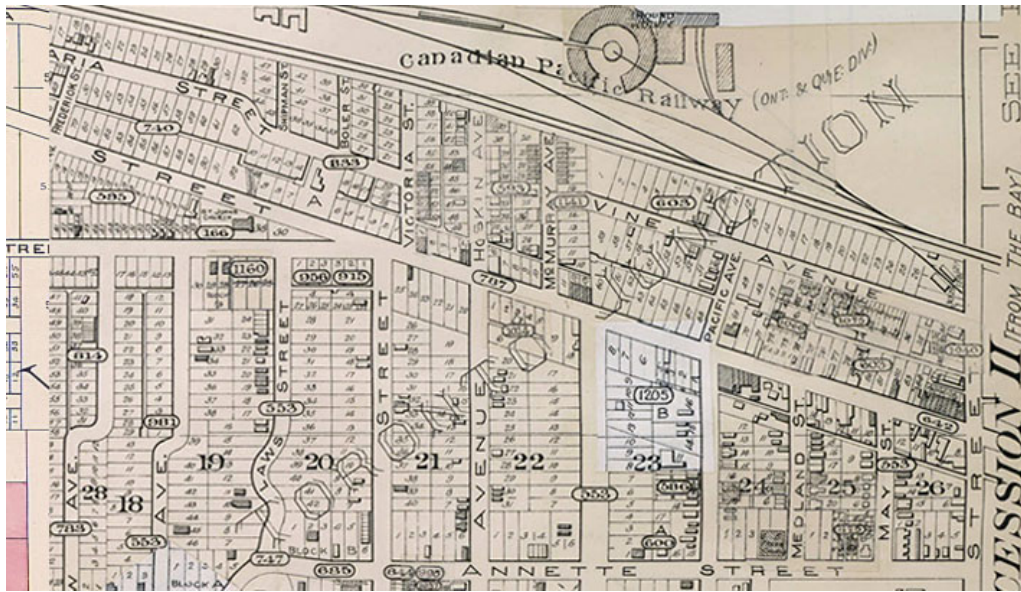
As the forty-year progression shows in Maps 4a-4c, illustrated by Goad's *Atlas of the City of Toronto* (1884-1924), development occurred in a relatively slow and incremental scale, following a piecemeal pattern of growth similar to the one Alexander propose in *A New Theory of Urban Design* (1987, p. 32). At the time of the 1884 founding (Map 4a), only a few buildings existed in the area. Growth is evident in Map 4b, but appears fragmented and seemingly random, with only a fraction of the lots built up over the span of two decades. It took yet another twenty years for Dundas Street to be fully built up, as seen in Map 4c.

**Map 4a: Dundas Street 1884**



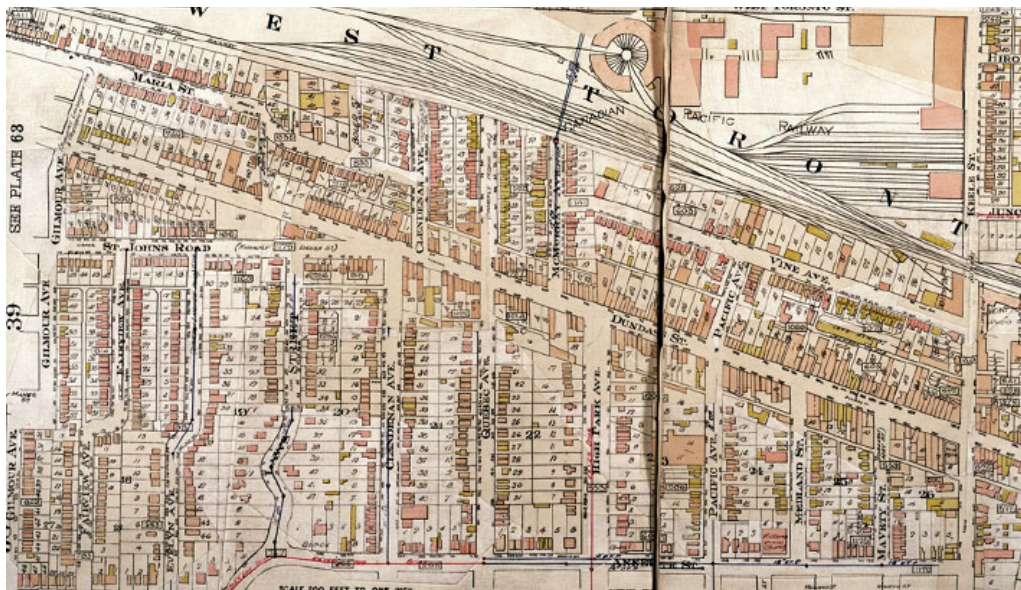
(Map imagery: Goad, 1884)

**Map 4b: Dundas Street 1903**



(Map imagery: Goad, 1903)

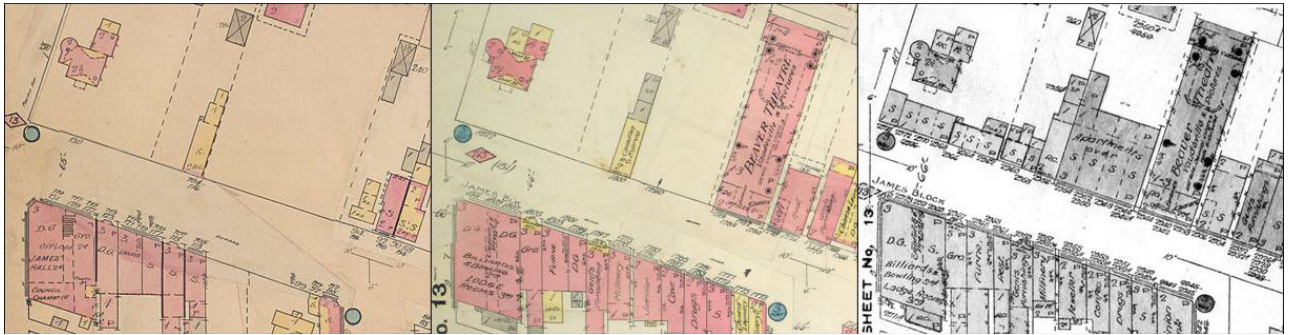
**Map 4c: Dundas Street 1924**



(Map imagery: Goad, 1924)



#### Map 4d: Dundas and Pacific development at 1892, 1912, and 1923



(Map imagery: West Toronto Junction Historical Society, n.d.-b)

The development at the intersection of Dundas Street and Pacific Avenue in the more detailed series above in Map 4d shows the incremental building construction from 1892 to 1923, a period of over 30 years.

Methods of construction and financing arrangements limited the size and scope of building projects. Based on my personal observation and assessment of buildings in the neighbourhood,<sup>1</sup> they were generally constructed of brick with wooden internal floor and wall structures (either post-and-beam or dimensional joists). This technique practically limited building height and width (as wooden beams and joists have limited spans). While some taller brick and wood structures were built elsewhere in Toronto at that time, it is likely that the amount of space available in West Toronto did not necessitate the higher cost of building greater than three stories. Due to the financing capacities of landowners and the practical limitations of the small building companies they employed, the overall scale of construction projects was also fairly small, with landowners typically building only one or several structures at a time.

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<sup>1</sup> I have over a decade of experience as a carpenter, and observed many buildings along Dundas Street from both inside and out.



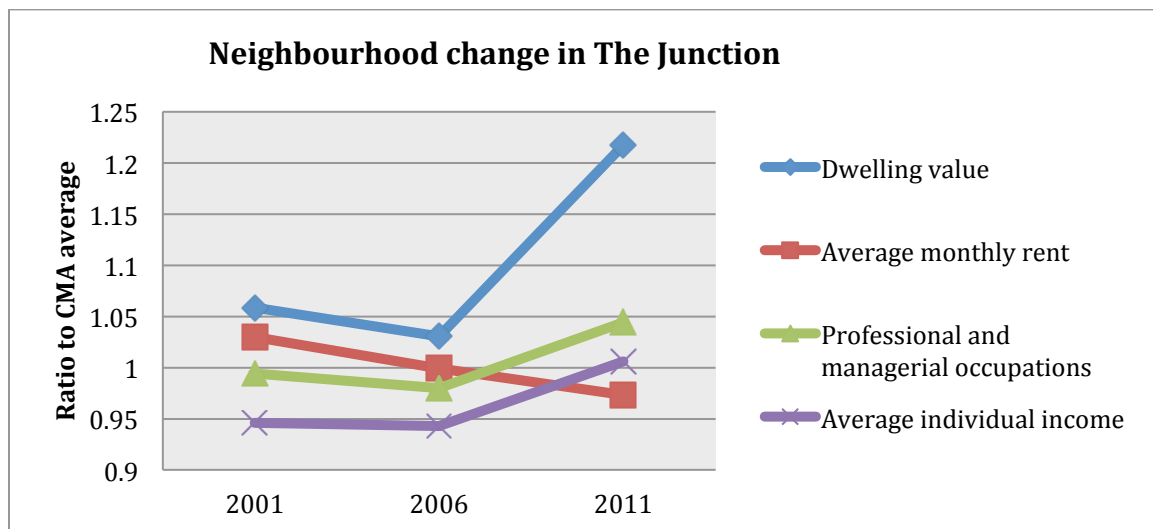


2853. Dundas looking West from Mavety St. Dec. 7/23.  
City of Toronto Archives, Series 71, s0071\_it2853

Buildings were constructed individually to suit the needs of their landlords and of small shop and business owners. Because there was no need for large parking lots before automobiles were prevalent, buildings were constructed right up to the property lines along Dundas Street to attract potential customers and clients on foot, trolley (see photo above), or horseback. The narrow lot pattern allowed a greater number of businesses direct access to the street, and space to display their wares in the windows. Residential development in the area surrounding Dundas Street was relatively modest in size (based on my observations of other neighbourhoods in Toronto), with the smallest houses for the working class between Dundas and the railway tracks to the north. Residential lots were also made long and narrow to fit more homes in a short block layout, with minimal setbacks from the streets.

Due to the transportation shift from railways to highways during the early part of the twentieth century, The Junction's regional industrial significance has waned (Relph, 1997). The neighbourhood's older buildings, warehouses, and houses have provided relatively affordable retail, commercial and residential space since this economic decline, and in the 1990s, according to research by Walks and Maaranen (2008, p. 29), this area around Dundas Street began a process of gentrification. This merits some brief discussion.

Walks and Maaranen's 2008 gentrification study covered a period from 1961 to 2001. In order to understand recent trends, I have done a simplified analysis of The Junction<sup>2</sup> up to 2011, employing their method of measuring census data gentrification indicators based on the difference between the neighbourhood percentage change and the average census metropolitan area (CMA) percentage change. The results are shown below:



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<sup>2</sup> The census tract analyzed is bounded by the railway corridor to the north, Keele Street to the east, Humberside Avenue to the south, and Quebec Avenue to the west.

As all but three categories increased relative to the CMA average over the ten-year period, The Junction seems to have continued to experience aspects of gentrification, particularly regarding ballooning house prices. Notably, 2011 was the first census year in the last several decades that average income in The Junction has been higher than the CMA average. Fortunately, relative average monthly rents have actually declined, but the increase in house values does not bode well for the future. These trends may soon force tenants out of the neighbourhood.

The relationship between the processes of street evolution and gentrification are complex. Small-scale levels of investment can create some of the positive attributes described by the interviewees on Dundas Street. However, as the scale of investment and gentrification increase, it is likely its character will also change to some degree. As the perceived stability of the area grows, larger, risk-averse developers often move in, seeking to capitalize on the neighbourhood's marketability (Walks & Maaranen, 2008, p. 4). This has already occurred in The Junction to some degree with the large-scale development of the Heintzman Place condos (one tower is 27 stories—the tallest building in the area by far), and with the Duke mid-rise condo project currently under construction.

Insofar as gentrification causes displacement, it has no place in just placemaking (Ellin, 1996; Friedmann, 2010; Lees, Slater, Wyly, 2008). Duany's "Three Cheers for Gentrification" (2001) praises market forces for dispersing the poor—un-sarcastically, I should add—which he says, "rebalances a concentration of poverty" (p. 39). Such a position ought to be categorically denounced as elitist and out of touch, as gentrification can have devastating effects that are the very

antithesis of what placemaking should be about (Alexander, 2005; Friedmann, 2010; Lees, Slater, Wyly, 2008). Yet, neighbourhood desirability is not bad in itself; the challenge is ensure that market forces do not displace vulnerable residents.

Built before the automobile, and naturally restricted by the methods of construction, the architecture and streetscape of Dundas Street were made at a human scale practically by default. As the area grew incrementally, each subsequent addition had the opportunity to adapt and fit into an existing fabric, allowing for variety in the built form while a coherent pattern and story emerged without the guidance of a master plan. Even though the area had an industrial character and function, this industrial activity was on a small enough scale that former warehouses and factories are now considered to be attractive contemporary dwelling spaces. Despite several larger-scale projects, and the early effects of gentrification, The Junction has been relatively successful in adapting to the needs of its residents, showing that the methods of its development are closely connected to the quality and character of its built form, and the experiences in the street.

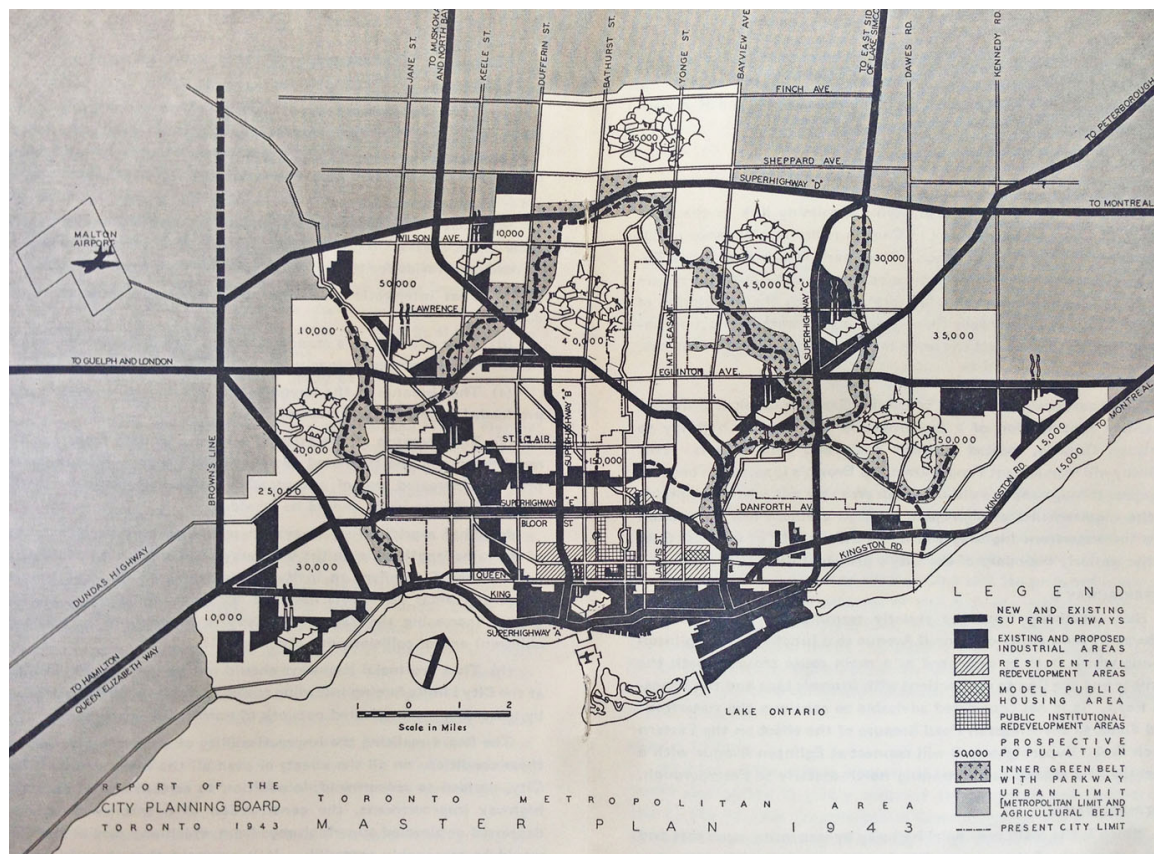
### **Modern: Kipling Avenue**

At the turn of the century, many of the ideals of the urban reformers of England caught on across the Atlantic, including initiatives for greater sanitation, parkland, and open space. The first zoning by-laws restricting certain uses in residential areas were introduced in 1904 in Toronto (Relph, 1997, 39). Several decades later, plans were made for the developments of Leaside, Thorncrest, and the Humber Valley Estates. Increasing in scale, these new projects contained the curvilinear, suburban characteristics of the Garden City and City Beautiful

movements (Sewell, 1993; Relph, 1997). Only a handful of these early planned projects were built, following the economic boom and bust cycles of the early twentieth century. It wasn't until the explosion of urban growth after the Second World War that modern planning left its mark across Toronto's landscape—the Kipling site is one of these places.

Anticipating future expansion, the newly created Toronto City Planning Board unveiled the first Master Plan for the Toronto area in 1943 (Sewell, 1993; Relph, 1997). The plan called for an ambitious network of highways, greenbelts, and low population densities, shown in Figure 4a below (Toronto Planning Board, 1943). Reflecting the new enthusiasm for the automobile, the small-scale grid street pattern was abandoned in favour of wide arterial roads that formed large neighbourhood “superblocks” (Sewell, 1993). It is worth noting that the first chairman of the planning body was also the president of Goodyear Tire and Rubber Co. Ltd. (Toronto Planning Board, 1943); this would be recognised today as a clear conflict of interest, and is indicative of growing corporate influence in planning. Metro Toronto was eventually formed in 1953 to co-ordinate this sort of regional development—roads and transportation being a primary focus—and a version of the original 1943 plan was eventually adopted in 1959 as Toronto's first official plan (Relph, 1997).

**Figure 4a: 1943 Master Plan**



(Image source: Toronto Planning Board, 1943)

In the same year that Metro Toronto was formed, construction began on Don Mills—a “new town” that exemplified many of the car-oriented principles from the 1943 master plan (Sewell, 1993). Perhaps the most pioneering aspect of the Don Mills development was its scale. Never before had such a large project been planned and built by one developer; this necessitated new methods of financing, which set strong precedents for corporate suburban development in Toronto (Sewell, 1993). Another precedent was the significant change to street patterns: the two rural concessions bisecting the centre of Don Mills were planned as wide arterials to maximize automobile traffic flow. As a result, commercial storefronts were buffered by large parking lots, while residential plots turned away from busy streets,

accessed instead from a discontinuous internal street network. These design changes had disastrous consequences for the street as a place (Relph, 1997, p66).

Following the corporate model of the Don Mills development, the scale and pace of construction rapidly increased in Toronto. By the 1950s, municipalities in Ontario “began to transfer the risk of on-site infrastructure financing to developers by requiring them to install roads, sewer and water facilities internal to their subdivisions as a condition of development approval” (Skaburskis & Tomalty, 2000, p. 304). These new financing methods liberated development from the previous, slower process whereby municipalities built infrastructure incrementally as funds trickled in from local improvement taxes (Skaburskis & Tomalty, 2000). The rhetoric that “growth pays for growth” appealed to both municipalities and the public. Without having to wait for the tedious and politically toxic municipal approval and investment procedure for new public works, many large developers significantly benefitted from increased predictability and direct control, even if they had to absorb some of the initial cost (Sancton, 2011; Skaburskis and Tomalty, 2000). This greatly inflated the required size and scope of development projects, forcing many small builders out of operation.

The urbanization of the area around Kipling Avenue exemplifies this faster pace of development. Based on my review of aerial photos, change was rapid compared to the development of Dundas Street. In the late 1950s, the first residential survey was built in the short span of only a few years, at the intersection of Albion Road and the rural concession that became Kipling Avenue (Maps 4e-4f), and by the end of the sixties, the Albion Centre and high-rise residential areas to the



west and north of Kipling and Albion were constructed (Map 4g). In little over a decade, the area went from open farmland to a completely built-up suburban neighbourhood.

**Map 4e: Kipling 1957**



(Map imagery: City of Toronto, 2014)

**Map 4f: Kipling 1962**



(Map imagery: City of Toronto, 2014)

#### Map 4g: Kipling 1971



(Map imagery: City of Toronto, 2014)

Urban form followed the new automobile-oriented model for development originally outlined in the 1943 Master Plan, and later embraced by Metro Toronto's traffic planners and engineers. Wide arterials were designed to maximize automobile traffic flow for the superblock neighbourhood layout, following the prescribed right-of-way widths of 36m from the 1959 Metro Transportation Plan (Metropolitan Toronto Planning Board, 1959). The mall and its commercial storefronts retreated from the street, surrounded by large parking lots. Residential plots grew in size, while turning away from Kipling Ave. and other busy streets. In order to create quiet residential environments, dwelling access was through the least trafficked streets in the functionalist road hierarchy (Massengale & Dover, 2014). In addition, apartment buildings went skyward following the CIAM model of "towers in a park," effectively distancing and isolating residents from the street.

Now engineered for the car, the wide arterial—along with the related forms of urban development—ended the human scaled streetscape. With greater distances

between home, work, school, and shops, walking was much less convenient or practical on Kipling Avenue. The street environment also became a much less interesting place to be in, as it lost much of the sidewalk life and activity formerly provided by immediate shops and buildings on the street. This large structure and scale of development was very resistant to incremental change and evolution. Gone was a sense of enclosure and human scaled architecture, as streets were engineered merely for the purpose of vehicular travel. The street was no longer made for the pedestrian—nor could it easily adapt to suit the pedestrian.

### **Post-modern: Clock Tower Road**

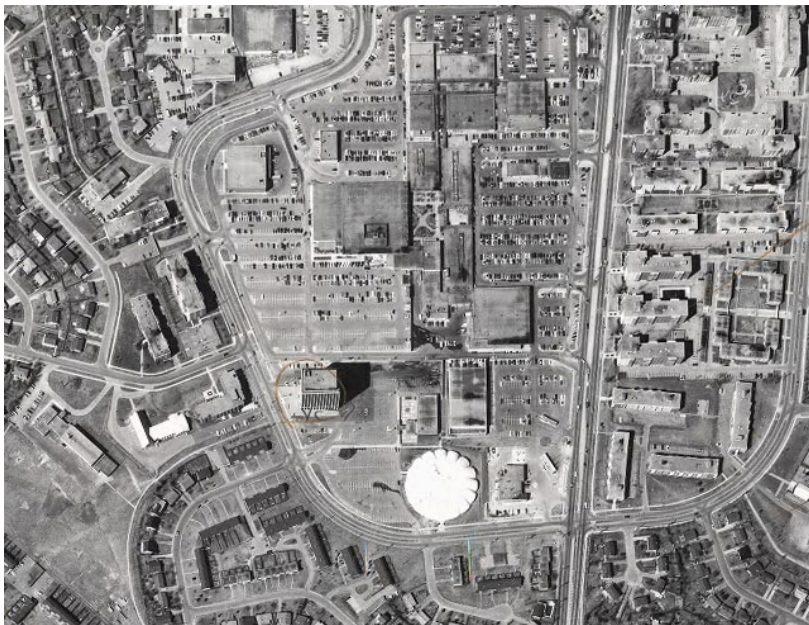
The functionalist modern vision of the city did not last, however. After the public outcry that led to the cancellation of the proposed Spadina Expressway in 1971, ambitious highway expansion was curbed in Toronto, and planning aims became more modest. The 1976 Metroplan had removed all plans for new expressways, and height restriction by-laws for existing neighbourhoods were introduced (Relph, 1997, p43). Toronto's large-scale experimentation with the CIAM dream of modern towers and expressways seemed to be ending. By the late 1980s, few undeveloped green fields remained in Metro Toronto, and planning in the city shifted to infill and intensification.

The Shops at Don Mills redevelopment exemplifies this push for re-urbanization. Formerly known as the Don Mills Centre, the retail space first opened in the mid-1950s to serve the new suburb. As the shopping plaza expanded, covered outdoor walkways were erected to connect the stores (Map 4h). The plaza evolved into a traditional enclosed shopping mall later in the 1970s (Marshall, 2009). Then,



in the late 1990s, the arrival of the “big box” retail format threatened the commercial viability of the Don Mills Centre. In 1999 Don Mills’ primary tenant, Eaton’s, vacated after declaring bankruptcy. Two years later, the Cadillac Fairview Corporation initiated a redevelopment master plan for a totally new outdoor shopping mall with residential infill (Cadillac Fairview, 2011).

#### **Map 4h: Don Mills Centre 1971**



(Map imagery: City of Toronto, 2014)

The master plan was met with opposition from the local community throughout the planning and design process. Despite Cadillac Fairview’s attempts to assuage potential concerns by conducting “an advertising campaign and an extensive survey...to test interest in the redevelopment and the addition of a residential component to the shopping centre area” (Cadillac Fairview, 2011), local residents were not keen to lose their mall, and they were concerned about the proposed high-rise condos, which included two 32-storey towers (Don Mills Residents Inc., 2014). Discord over the development was nearly taken to the Ontario

Municipal Board, but the Don Mills residents association agreed to a negotiated settlement before the hearing date, based on the assumption that the OMB would rule in favour of Cadillac Fairview, and any other previously negotiated concessions from the developer might be lost (Don Mills Residents Inc., 2014). In the end, Cadillac Fairview received the necessary by-law changes from the city in 2011 for the development of 1,300 residential units—a whopping 40% increase to total dwellings in the site study area—including two 26-storey towers (shown in Figure 4b) over four times higher than the tallest existing buildings in the area (Don Mills Residents Inc., 2014). This process was very oppositional, leaving residents feeling defeated in the face of corporate developers.

**Figure 4b: Shops at Don Mills development plan**



(Image source: City of Toronto, 2009)

Billed as “Ontario’s first urban village,” the first phase of redevelopment involved demolishing the existing covered mall in 2006 to create a new “open-air” shopping centre (Cadillac Fairview, 2011). Several design principles from the placemaking movement were incorporated to in an attempt to create a pedestrian-friendly, urban-feeling atmosphere. Three years after construction started, the Shops at Don Mills opened to the public in 2009 (Cadillac Fairview, 2011a). The new retail space has a fine-grained network of parallel streets, a “town square” complete with outdoor cafés and patios, public art, stylized street furniture, and on-street parking. Boasting the arrival of many global brands, such as Anthropologie clothing, and McNally Robinson bookstores, Cadillac Fairview markets the retail development as “a hub of cultural and community life for the neighbourhood’s residents and businesses,” with “street names and heritage plaques [that reflect its] rich history” (Cadillac Fairview, 2014a). As several interviewees noted, all this smacks of corporate branding; it is not genuine community of and for the inhabitants, it is sold “community” (Ellin, 1996; Grant, 2007; Knox, 2011).

The second, residential phase of redevelopment is now underway, with construction completed on the first 12-storey condo in late 2013 (Live at the Shops, 2013), and the second condo scheduled for completion in fall 2014 (Cadillac Fairview, 2011b). There are plans for at least six more residential high-rises on the former parking lots of the Don Mills Centre, as shown in Figure 4c above. As the highest condos are slated for construction immediately south of Clock Tower Road, it is likely that they will have a significant shadowing effect on the street. It remains

to be seen how these tower developments will integrate with the streetscape and wider neighbourhood.

**Figure 4c: Redevelopment plan for the “urban village”**



(Image source: Flaire Condos, 2014)



The Shops at Don Mills redevelopment appears to me to be a post-modern attempt to reproduce older patterns of urban form for the purpose of corporate marketing, where “form follows finance” (Ellin, 1996, p. 182). Cadillac Fairview is one of the largest owners and developers of commercial real estate in North America, with assets valued at over \$24 billion (Cadillac Fairview, 2014c). While the company had the stated intention to create a “mixed-use,” “pedestrian-friendly” “urban village” (Cadillac Fairview, 2014a), the vision for the place ultimately reflects that of a singular, profit-driven corporation. The small-scale, incremental planning and construction process that generate human scale and connection to place were missing. Development occurred based on the speculative impulse of the company; it did not reflect the needs of local businesses or residents. Instead of multiple small projects arising from inhabitants various needs that change and evolve slowly over time, a singular corporation has designed a monolithic master plan that is realized within a very short timespan.

## **Conclusion**

The practices and techniques used to plan and construct street spaces have changed significantly over the last one hundred years in Toronto, with increasing project scale and pace being the major theme. A building project dominated by large corporate developers is highly unlikely to produce the authentic small-scale features many urban design theorists argue are necessary for a human scaled environment (Alexander, 1987; Friedmann, 2010; Gehl, 2010; Jacobs, 1961); instead, the size of construction projects has inflated, which pushes aside small builders, and piecemeal opportunities of growth, resulting in development patterns with uniform,

monolithic characteristics. Employing conceptual master plans, a select few individuals imposed their visions on the Kipling and Clock Tower sites. No matter how well intentioned or thought out, such development does not reflect the various and emerging needs of a local community. Even if plans contain human-scaled components, human character is lost when so few have real opportunity to influence the design and construction process.

## **CONCLUSION**

In this paper I have explored the connections between physical design, human experience, and the historic development and evolution of three different streets in Toronto, testing the design theories and employing the methods of the placemaking movement. My research has shown that design concepts, particularly regarding the scale and immediacy of built form, do influence the experience of each of the three streets. However, the process of design—not conceptualized design—is ultimately what shapes this immediacy and human scale. Who is involved and how is of greater significance than any design concept in creating streets for people.

Following a summary of my research findings, I will draw some connections to the literature on placemaking and critical design theory. I suggest that Christopher Alexander’s writings on generative process (1987; 2002; 2005) afford an opportunity for renewed academic discussion of a more holistic design theory, which concerns socioeconomic justice and good design for people.

### **Summary of research findings**

I began this study as an analysis of streets-as-outdoor-rooms—a concept discussed in placemaking literature. I wanted to test the validity of the “room” concept for contemporary design, and as a way to compare the historic evolution of street design practices and their impacts on everyday experiences in Toronto. During the course of site visits and closer study of the literature in the early stages of my research I realized that a wider spatial analysis would be more useful for this historic comparison, and so instead of simply looking at the room-like quality of the

three chosen street spaces, I widened my design criteria to also include human scale, pedestrian comfort, varied use, accessibility, and connection to the street as a place. Based on Christopher Alexander's more recent work on generative process in urban planning and design (1987; 2002; 2005), I was particularly curious about the way in which historical design methods and construction techniques in Toronto may have shaped both the physical spaces, and their experiences.

As my examination of their physical design in Chapter 2 shows, Dundas Street and Clock Tower Road possess some of the characteristics lauded in placemaking literature, while Kipling Avenue does not. Instead, Kipling Avenue typifies the kind of "placeless," car-oriented modern urban planning and design that inspired the reaction of the placemaking movement. Designed to maximize car traffic flow, Kipling Avenue is a wide roadway; it lacks enclosure and street level activity, as sidewalk storefronts have been exchanged for parking lots and backyard fences. Despite these negative design features, the street has the most greenspace, which affords connection to place.

Built before the automobile and the advent of modern, mass-produced construction, Dundas Street has the smallest-scaled design elements, including a fine-grained mix of smaller residential and commercial buildings that support activity on the street itself. Dundas had the strongest sense of enclosure, along with a great deal of temporal and aesthetic variety that provides connection to place. Despite these human-scaled features, the street also functions as a busy arterial road, and cars thus retain a strong presence in the space.

Clock Tower Road is the only street of the three without arterial car traffic, making the sidewalks safer and more comfortable for pedestrians. A room-like quality created by buildings that face the street and positively defined outdoor space also adds to the pedestrian-oriented environment. The only uses along Clock Tower Road are commercial, and the shopping centre exists within an otherwise car-dominated landscape.

The role of street design in people's experience of the three sites was examined in Chapter 3. While I do not claim there is a simple causative relationship, it seems evident that the more immediate and human-scaled the streetscape was, the more positive the experiences of interviewees tended to be. On Dundas Street, descriptions of the space focused on the meaningfulness of the street itself. Most descriptions on Kipling Avenue addressed general neighbourhood features located outside and beyond the physical street space; when pressed to describe the experience of the actual street space, most responses could be characterised as indifference or mild satisfaction. On Clock Tower Road most descriptions were positive about the shopping atmosphere, but some noted that the environment had a sterile, corporate feel to it. My observations mostly corroborated with the design criteria I developed from placemaking literature, but these design criteria did not fully account for the history of a place and how this history influenced interviewee experiences.

Alexander argues in *The Nature of Order* that the quality of an environment is a product of the historical processes that created it. The results of my research in Chapter 4 confirm this. As Kipling Avenue shows, if the methods of planning and

development are top-down and do not account for the local experience, the resulting environment will embody this disconnection. In the same way, Clock Tower Road feels like a corporate environment made for shopping, because it was designed and built by a shopping mall development company. Dundas Street was built over a longer period of time in a relatively incremental fashion by multiple, smaller-scaled landowners; this process generated the most storied, diverse, eclectic, and human-scaled street. Each street environment has been more influenced by the landowners and methods of controlling the space than the intended design outcomes.

### **Generative process and the just city**

My research in Toronto supports the connection of positive pedestrian experiences to good physical street design as described in placemaking literature, but it also confirms arguments against a fixation on design outcomes in planning made by Alexander (1987), Cuthbert (2006), Fainstein (2000), Harvey (1987), and Knox (2008). The underlying political-economic systems of control, to which critical urbanists have called attention (Cuthbert, 2006; Harvey, 1987; Knox, 2008; Lefebvre, 1991), loomed large in the course of my research, as landownership and control of space has had—and still does have—a central role in shaping the three street environments. This section explores the relevance of this study to the literature in suggesting possible opportunities for a more holistic urban design theory based in Christopher Alexander's third volume of *The Nature of Order* (2005) and Fainstein's model of the just city (2000); together, these theories account for the experience of place and the control of space.



Based on my reading of the literature, the academic debate between placemaking advocates and critical urbanists reached an impasse, and has waned in the last several decades. Critical urban theorists rightly pointed out that placemaking literature presents a utopian picture of the world, based in a universalized modernist ideology that can—and should—be deconstructed. Aravot (2002) recounts this criticism,

Examination of urban space in the light of critical theory—the production of space (Lefebvre, 1991) and political economy (Habermas, 1987)—relegated the discussion of urban form to the sidelines of urban design discourse. Following Doreen Massey (1994), Richard Sennet (1990) and others, urban design should aspire to open-ended meaning, accommodation of changing use, and multiple and context-sensitive relations in space and time. All this left ‘old’ placemaking, with its emphasis on the urban artefact, as a sort of suspicious residual from an obsolete [modernist] narrative (p. 207).

As placemaking fell out of vogue in academia, critical dialogue about placemaking as a design theory has died down; many placemaking concepts have been absorbed into conventional urban planning and design practice (evident in professional discourse on mixed-use, walkable neighbourhoods, Smart Growth, Complete Streets, etc.), while critical urban design theory generally remains confined to academic circles (Aravot, 2002; Cuthbert, 2006).

My findings suggest that more work could be done to bring these two fields back into a more constructive conversation about urban design where the importance of pedestrian-scaled design as well as underlying systems of power and control are equally acknowledged. In this holistic vein, Aravot (2002) acknowledges the legitimate criticisms of placemaking as a normative model and its tendency to be exploited “in the service of power structures” (p. 204). She writes,

Criticism of universals is plausible, but everyone eats, breathes, loves and thinks, nonetheless. There are some shared needs, beyond all differences. Having a sense of place may be used as an ideologeme<sup>1</sup> but it is also a need. A concept does not have to be either a need or an ideologeme. ‘Either–or’ attitudes may be useful for analytical constructs, but everyday life phenomena are frequently sensed as hybrids (p. 208).

In her conclusion, Aravot makes the case for “phenomenological placemaking” as a “guiding principle” or ideal (2002, p. 209). Good design does not necessarily preclude having parallel ideals of social and economic justice, provided that design is not given ideological weight. Placemaking can be incorporated into theories of critical urban design if its limits are acknowledged, and overly zealous claims about the physical environment kept in check.

Alexander’s writing on generative design processes forms a potential stepping-stone toward a more holistic theory of urban design (1987; 2002; 2005). Unlike the problematic traditionalist streetscape aesthetic championed by New Urbanism (Duany et al, 2000; Katz, 1994; Kunstler, 1996), which Alexander criticizes for its emphasis on the “fake-traditional character [of buildings], not on their inner life” (Alexander et al., 2005, p. 5), Alexander’s theory of design is open ended, and does not propose any formal style (1987; 2002; 2005). In a draft document proposing “Generative Codes” for neighbourhood design, Alexander and his associates at Berkeley’s Centre for Environmental Structure explain their different tack from New Urbanism’s development of a form-based SmartCode:

we, like Andrés Duany and his colleagues, also took off from our own findings in *A Pattern Language*. But the directions we took were different. The form-

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<sup>1</sup> “Ideologeme” refers to a tool of discourse used to prop up an ideology in the Marxian sense. Aravot cites Jameson’s *Is Space Political?* (1995) in her use of the term.

based codes made the attempt to codify and require that pattern-like entities be embodied in the geometry of the design, in the form of simply expressed and enforceable rules, while leaving the process of procurement largely unchanged. In our work, we paid as much attention as possible to the process, and tried to create (new) formal ways of supporting a more humane and more involved process which included the inhabitants and neighbors of the project in hand, and which had the intrinsic quality that it would heal the surroundings and heal the community itself. Thus, we consciously focused on the process that would generate the deep structure of the world we were responsible for, and it was this generative emphasis that gave our work its meaning and result. Hence the term *Generative Codes*, which has gradually emerged as the best descriptor of all the work we have been doing (Alexander et al., 2005, p. 8).

Disparaging conceptual master plans, Alexander writes that “rules, laws, restrictions, are too exact, too restrictive. Instead we ask that each individual actor think about [the growing whole], work within it, contribute to it” (2005, p.97).

To bring in the voices of the inhabitants of a place, Alexander argues that the generative design of any neighbourhood must begin with dialogue, where all are present to share and develop a collective vision for a place. This must be an ongoing *process*, by which the current inhabitants of a place—as they come and go over time—are able to adapt and change this vision bit-by-bit. This is the process that generates a place that is whole; Alexander and colleagues write that vitality of place

does not come from the style of the buildings; it comes from the way people feel ownership of the place, and that in turn comes *from the way the place has been generated*, and by the way that it is continuously being generated as its life goes forward (Alexander et al., 2005, p. 6).

The process is spatial as well as temporal: it maintains the unique and dynamic history of a place; it reveals its present activity and life; and presents opportunity for the next-generation to make the place their own.

By putting the *who* and *how* of the design process front-and-centre, Alexander and colleagues (Alexander et al., 2005; Mehaffey, 2008) share a fundamental concern with critical urban planners and scholars. While the stated purposes are different—Alexander’s vision is of a “living world” and Fainstein’s vision is of a “just-city”—these paradigms are not mutually exclusive. The generative neighbourhood design process Alexander proposes in *A Vision of a Living World* (volume three of *The Nature of Order*, 2005) involves giving people meaningful control over the built places they inhabit. Alexander describes how

We must learn how to make a city where each one of us feels at home, whether it is yours, mine, his, hers. ...whether we experience it as ours, whether each bit of the city, of the neighbourhood, *each door, building, fence, garden*, actually reflects individuals, families, passions, reality (2005, p. 36).

Alexander suggests a small-scale, egalitarian process whereby people might discuss “a collective vision for a neighbourhood” (2005, p. 260). As part of this visioning process, Alexander exhorts the community leader or urban planner to “make sure you ask each person, always, what is the deepest feeling you have about life, and what does *that* dictate” (2005, p. 273). This kind of process dovetails with critical planning literature (including Fainstein, 2000; Sandercock, 1998) that seeks “to build inclusiveness, incorporate difference, reach out to marginalized groups, and sensitize planners to a wide variety of viewpoints and alternative ways of knowing” (Mehaffey, 2008, p. 72). In these ways, Alexander and some of his critics share common ground, and I see that these ideas could be more potent when brought together to make just, whole places.

Alexander's design theory certainly is idealistic; critical urban scholar Alexander Cuthbert has bluntly asserted that "Christopher Alexander's ideas are utopian, utterly impractical, and require society to be reinvented," despite his "laudable" motivations (2006, p. 20; p.226). Alexander does indeed seem to have a "disregard for social reality" (Cuthbert, 2006), and even his more recent writings (2002; 2005) tend to ignore contemporary issues of urban planning. However, this does not mean his theory cannot be critically adapted.

I certainly agree that Alexander's version of a world where small groups of people freely create shared visions for their places—places that come alive with a deep sense of belonging imbued from the uniqueness of every individual—is highly aspirational, and will not likely ever be reached in any complete or perfect sense.<sup>2</sup> But is this any less idealistic or utopian than David Harvey's complete reimagining of a post-capitalist world at the end of his *Spaces of Hope* (2000), which paints a fanciful picture of entirely new social, economic, cultural, political, and spatial arrangements based on total equality and personal freedom? Yet, we as planners and urban designers must strive to engender a more just society, even through very small steps—what Sandercock calls "a thousand tiny empowerments" (1998, p. 128). Alexander's vision of a world with "living processes repeated ten million times" is idealist in the same proximate, stepwise manner: each adaptive transformation slowly unfolds space according to human need.

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<sup>2</sup> In this study Dundas Street is the closest approximation, but is still a far cry from Alexander's vision. Despite the positive effects of adaptive process, and the street's relative ability to serve pedestrians, it is still a car dominated space.

A synthesis of generative process and the just city might look something like the following vignettes. A neighbourhood planner meets with a small district's inhabitants to understand and distil their vision of a place *far before* plans are suggested by a developer or a wider city-planning department. Whenever possible, large lots in a city are taken back from the corporate opportunist, and incrementally divided into smaller properties to encourage small-scale builders to make housing that actually suits people's needs and budgets, using repurposed local materials. The ecology of place is not only "preserved," but celebrated in the unfolding of a neighbourhood; the uniqueness of each site, its creeks, its native and migratory birds, its four-legged inhabitants, its earth, its air, are given room to be alive in the landscape—and even in the streetscape!—alongside creatures that walk on two legs. There are many ways that these two theories could be joined to breathe life and justice into the world. My hope is that this research will spark interest in such a dialogue and toward this kind of change.

## **Conclusion**

I set out to test street design concepts in the everyday world, to see if people's lived experiences matched up to the claims of placemaking design theory. My research has shown that design ideals partially correlate to the pedestrian experience, but the greatest factor is the role and influence of the actual process of street design and development. Based on this research, I have identified and suggested some possible ways that Alexander's generative design process might be synthesized with critical design theory, in order to fasten together the ideal of a just and equitable society with the vision of whole places and streets for people.

## REFERENCES

- Albo, G. (2006). Neoliberal Urbanism and the New Canadian City. *The Bullet no.34*. Retrieved from <http://www.socialistproject.ca/bullet/bullet034.html>
- Alexander, C. (1965). A city is not a tree. Retrieved January 17, 2013, from <http://www.rudi.net/books/5613>
- Alexander, C. (1979). *The timeless way of building*. New York: Oxford University Press.
- Alexander, C. (1987). *A new theory of urban design*. New York: Oxford University Press.
- Alexander, C. (2002). *The nature of order: An essay on the art of building and the nature of the universe* (Vols. 1-2). Berkeley, California: Center for Environmental Structure.
- Alexander, C. (2005). *The nature of order: An essay on the art of building and the nature of the universe* (Vol. 3). Berkeley, California: Center for Environmental Structure.
- Alexander, C., Ishikawa, S., & Silverstein, M. (1977). *A pattern language: Towns, buildings, construction*. Center for Environmental Structure Series, v. 2. New York: Oxford University Press.
- Alexander, C., Schmidt, R., Alexander, M.M., Hanson, B., Mehaffy, M. (2005). Generative Codes: The Path to Building Welcoming, Beautiful, Sustainable Neighborhoods: Version 17 DRAFT. Retrieved October 21, 2014, from <http://www.livingneighborhoods.org/library/generativecodesv10.pdf>
- Alexander, D. and Tomalty, R. (2002). Smart Growth and Sustainable Development: Challenges, Solutions and Policy Directions. *Local Environment*, 7(4), 397-409.
- Aravot, I. (2002). Back to Phenomenological Placemaking. *Journal of Urban Design*, 7(2), 201-212.
- Bachelard, G., Jolas, M., & Gilson, E. (1964). *The poetics of space*. Boston: Beacon Press.
- Beatley, T. (2000). *Green urbanism: Learning from European cities*. Washington, DC: Island Press.
- Beatley, T., & Manning, K. (1997). *The ecology of place: Planning for environment, economy and community*. Washington, DC: Island Press.
- Berg, B. (2004). *Qualitative research methods for the social sciences* (5th ed.). Boston: Allyn and Bacon.
- Birch, E. (2009). *The urban and regional planning reader*. London: Routledge.
- Brower, S. (1996). *Good neighborhoods: A study of in-town and suburban residential environments*. Westport, CT: Praeger.



- Cadillac Fairview. (2011a ). Retail development. Retrieved September 12, 2014, from <http://www.shopsatdonmills.ca/en/centreinfo/Pages/RetailDevelopment.aspx>
- Cadillac Fairview. (2011b). Residential plan. Retrieved September 12, 2014, from <http://www.shopsatdonmills.ca/en/CondoLiving/Pages/default.aspx>
- Cadillac Fairview. (2014a). Shops at Don Mills – Ontario’s first urban village – opens its doors. Retrieved February 14, 2014, from [http://www.cadillacfairview.com/notesdata/hr/cf\\_lp4w\\_lnd\\_webstation.nsf/page/Shops+at+Don+Mills+%E2%80%93+Ontario%E2%80%99s+first+urban+village+%E2%80%93+opens+its+doors](http://www.cadillacfairview.com/notesdata/hr/cf_lp4w_lnd_webstation.nsf/page/Shops+at+Don+Mills+%E2%80%93+Ontario%E2%80%99s+first+urban+village+%E2%80%93+opens+its+doors)
- Cadillac Fairview. (2014b). Shops at Don Mills launches urban community living. Retrieved March 1, 2014, from [http://www.cadillacfairview.com/notesdata/hr/cf\\_lp4w\\_lnd\\_webstation.nsf/page/Shops+at+Don+Mills+launches+urban+community+living](http://www.cadillacfairview.com/notesdata/hr/cf_lp4w_lnd_webstation.nsf/page/Shops+at+Don+Mills+launches+urban+community+living)
- Cadillac Fairview. (2014c). Our Business / About Us. Retrieved February 14, 2014, from [http://www.cadillacfairview.com/notesdata/hr/cf\\_lp4w\\_lnd\\_webstation.nsf/page/Our+business](http://www.cadillacfairview.com/notesdata/hr/cf_lp4w_lnd_webstation.nsf/page/Our+business)
- Calthorpe, P. & Kelbaugh, D. (1989). *The Pedestrian Pocket Book*. New York, NY: Princeton Architectural Press.
- Calthorpe, P. et al. (1991). Ahwahnee Principles. *Local Government Commission*. Retrieved October 28, 2010, from <http://www.lgc.org/ahwahnee/principles.html>
- Casey, E. (1993). *Getting back into place: Toward a renewed understanding of the place-world*. Bloomington: Indiana University Press.
- Chester, M., Horvath, A., UC Berkeley Center for Future Urban Transport., & University of California, Berkeley. (2009). *Life-cycle energy and emissions inventories for motorcycles, diesel automobiles, school buses, electric buses, Chicago rail, and New York City rail*. Berkeley, Calif: Institute of Transportation Studies, University of California, Berkeley.
- City of Toronto. (2009). Staff report – Request for Direction – 939 Lawrence Ave E., 1090 Don Mills Road and 49 & 75 The Donway W. Retrieved August 15, 2014, from <http://www.toronto.ca/legdocs/mmis/2009/ny/bgrd/backgroundfile-22203.pdf>
- City of Toronto. (2014). Toronto Aerial Photos. Retrieved February 18, 2014, from [http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=fb38757ae6b31410VgnVCM10000071d60f89RCRD&vgnextchannel=7cb4ba2ae8b1e310VgnVCM10000071d60f89RCRDToronto Archives \[photo of junction\]](http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=fb38757ae6b31410VgnVCM10000071d60f89RCRD&vgnextchannel=7cb4ba2ae8b1e310VgnVCM10000071d60f89RCRDToronto%20Archives%20photo%20of%20junction). <http://gencat.eloquent-systems.com/torontodetail.html?key=38696>
- City of Toronto Works and Emergency Services. (2007). *City of Toronto property data map 2007 (DWG Version)* [digital resource: vector]. Toronto, Ontario: City of Toronto Works and Emergency Services.

- Congress for the New Urbanism. (1996). Charter of the New Urbanism. Retrieved October 28, 2010, from <http://www.cnu.org/charter>
- Collier, J., & Collier, M. (1986). *Visual anthropology: Photography as a research method*. Albuquerque: University of New Mexico Press.
- Crewe, K. and Forsyth, A. (2009). New Visions for Suburbia: Reassessing Aesthetics and Placemaking in Modernism, Imageability and New Urbanism. *Journal of Urban Design*, 14(4), 415-438.
- Cronon, W. (1995). The trouble with wilderness; or, getting back to the wrong nature. In Cronon, W. (Ed.), *Uncommon ground: Rethinking the human place in nature* (pp. 69-90). New York: W. W. Norton & Co.
- Cullen, G. (1961). *Townscape*. New York: Reinhold Pub. Corp.
- Cuthbert, A. (2006). *The form of cities: Political economy and urban design*. Oxford: Blackwell.
- DPZ & Co. (2008). *SmartCode: version 9 and manual*. Ithaca, NY: New Urban News Publications.
- Don Mills Residents Inc. (2014). Don Mills Centre Redevelopment. Retrieved August 15, 2014, from <http://donmillsresidents.ca/don-mills-centre/>
- Duany, A. (2001). Three cheers for gentrification: It helps revive cities and doesn't hurt the poor. *The American Enterprise*, April, 38-39.
- Duany, A., Plater-Zyberk, E., & Speck, J. (2000). *Suburban nation: The rise of sprawl and the decline of the American dream*. New York: North Point Press.
- Duany, A., Speck, J., & Lydon, M. (2010). *The smart growth manual*. New York: McGraw-Hill.
- Dutton, J. (2000). *New American urbanism: Re-forming the suburban metropolis*. Milano: Skira.
- Ellin, N. (1996). *Postmodern urbanism*. Cambridge, Mass: Blackwell.
- Emmison, M., & Smith, P. (2000). *Researching the visual: Images, objects, contexts and interactions in social and cultural inquiry*. London: SAGE.
- Farr, D. (2007). *Sustainable urbanism: Urban design with nature*. Hoboken, NJ: Wiley.
- Fainstein, S. (2000). New Directions in Planning Theory. *Urban Affairs Review*, 35(4), 451-476.
- Flaire Condos. (2014). Retrieved August 15, 2014, from <http://www.flairecondos.com/img/area-map.jpg>

- Fontana, A., & Frey, J. (1994). Interviewing: The art of science. In Denzin, N., & Lincoln, Y. (Eds.), *Handbook of qualitative research* (pp. 361-76). Thousand Oaks: Sage Publications.
- Friedmann, J. (2010). Place and place-making in cities: a global perspective, *Planning Theory & Practice*, 11(2), 149-165.
- Gehl, J. (1987). *Life between buildings: Using public space*. New York: Van Nostrand Reinhold.
- Gehl, J. (2010). *Cities for people*. Washington, DC: Island Press.
- Glenn, J. C., Gordon, T. J., World Federation of United Nations Associations., American Council for the United Nations University., & UN Millennium Project. (2007). *2007 State of the future*. Washington, D.C: World Federation of United Nations Associations.
- Goad, C. E. (1884). *Atlas of the city of Toronto and suburbs*. Retrieved January 16, 2014, from <http://goadstoronto.blogspot.ca/2012/03/goads-atlas-1884-toronto-fire-insurance.html>
- Goad, C. E. (1903). *Atlas of the city of Toronto and vicinity*. Retrieved January 16, 2014, <http://goadstoronto.blogspot.ca/2012/05/1903-toronto-fire-insurance-map.html>
- Goad, C. E. (1924). *Atlas of the city of Toronto and vicinity*. Retrieved January 16, 2014, <http://goadstoronto.blogspot.ca/2013/01/1924-toronto-fire-insurance-map.html>
- Google Maps. (2014). [Street map]. Retrieved October 28, 2013, from <https://www.google.ca/maps/@43.7126779,-79.3774861,11z>
- Grant, J. (2007). Two sides of a coin? New Urbanism and Gated Communities. *Housing Policy Debate*, 18(3), 481-501.
- Grant, J., & Perrott, K. (2009). Producing Diversity in a New Urbanism Community: Policy and Practice. *The Town Planning Review*, 80(3), 267-289.
- Greenburg, K. (2011). *Walking home*. Toronto: Random House.
- Harvey, D. (1989). From Managerialism to Entrepreneurialism: The Formation of Urban Governance in Late Capitalism. *Geografiska Annaler*, 71B(1), 3-17.
- Harvey, D. (1997). The New Urbanism and the communitarian trap. *Harvard Design Magazine*, Winter/Spring, 68-69.
- Harvey, D. (2000). *Spaces of hope*. Berkeley: University of California Press.
- Harvey, D. (2007). Neoliberalism as creative destruction. *Annals, American Association of Political Science Society*, 610, 22-44.
- Hiss, T. (1990). *The experience of place*. New York: Knopf.

- Hough, M. (1990). *Out of place: Restoring identity to the regional landscape*. New Haven: Yale University Press.
- Hough, M. (2004). *Cities and natural process: A basis for sustainability* (2nd ed.). New York: Routledge Press.
- Hulchanski, John David. 2011. *The three cities within Toronto income polarization among Toronto's neighbourhoods, 1970-2005*. Toronto, Ont: Cities Centre, University of Toronto. Retrieved October 5, 2014, from <http://www.urbancentre.utoronto.ca/redirects/3citiesDec2010Report.html>
- Isin, E. (1998). Governing Toronto without government: Liberalism and neoliberalism. *Studies in Political Economy*, 56(Summer), 169-191.
- Jacobs, A. (1993). *Great streets*. London: The MIT Press.
- Jacobs, A. and Appleyard, D. (1987). Toward an Urban Design Manifesto. *Journal of the American Planning Association*, 53(1).
- Jacobs, J. (1961). *The death and life of great American cities*. New York: Random House.
- Jenkins, E. J. (2008). *To scale: One hundred urban plans*. Abingdon, Oxon, England: Routledge.
- Jones, P., Roberts, M., & Morris, L. A. (2007). *Rediscovering mixed-use streets: The contribution of local high streets to sustainable communities*. Bristol: Published for the Joseph Rowntree Foundation by The Policy Press.
- Kahn, M. (2006). *Green cities: Urban growth and the environment*. Washington, D.C: Brookings Institution Press.
- Katz, P. (1994). *The New Urbanism: Toward an architecture of community*. New York: McGraw-Hill.
- Knox, P. L. (2011). *Cities and design*. London: Routledge.
- Kunstler, J. (1993). *The geography of nowhere: The rise and decline of America's man-made landscape*. New York: Simon & Schuster.
- Kunstler, J. (1996). *Home from nowhere: remaking our everyday world for the twenty-first century*. New York: Simon & Schuster.
- Langdon, P. (1995). *A better place to live: Reshaping the American suburb*. New York: HarperCollins.
- Live at the Shops. (2013). Reflections September construction update. Retrieved September 12, 2014, from <http://liveattheshops.com/2013/09/05/reflections-september-construction-update/>
- Lees, L., Slater, T., & Wyly, E. K. (2008). *Gentrification*. New York: Routledge/Taylor & Francis Group.

- Lefebvre, H. (1991). *The production of space*, D. Nicholson-Smith (Trans.) Oxford: Blackwell.
- Lehrer, U. and Milgrom, R. (1996). New (sub)urbanism: Countersprawl or repackaging the product. *Capitalism Nature Socialism*, 7(2), 49-64.
- Leitman, J. & Rabinovitch, J. (January 01, 1996). Urban Planning in Curitiba. *Scientific American*, 274(3), 46.
- Ley, D. 1987: Styles of the times: liberal and neoconservative landscapes in inner Vancouver, 1968–1986. *Journal of Historical Geography* 13, 40–56.
- Lynch, K. (1960). *The image of the city*. London: The MIT Press.
- Lynch, K. (1971). *Site planning* (2nd ed.). London: The MIT Press.
- Lynch, K. (1981). *A theory of good city form*. London: The MIT Press.
- Malpas, J. (2006). *Heidegger's topology: Being, place, world*. Cambridge, Mass: MIT Press.
- Marsh, W. (2010). *Landscape planning: Environmental applications* (5th ed.). Hoboken: John Wiley and Sons Inc.
- Marshall, S. (2009). Shops at Don Mills: The Newest Grey Space. *Spacing Toronto*. Retrieved February 10, 2014, <http://spacing.ca/toronto/2009/04/30/shops-at-don-mills-the-newest-grey-space/>
- Marshall, S. (2011). The many streets of Dundas. *Spacing Toronto*. Retrieved January 28, 2014, from <http://spacing.ca/toronto/2011/10/15/the-many-streets-of-dundas/>
- Massengale, J. M., & Dover, V. (2014). *Street design: The secret to great cities and towns*. Hoboken: John Wiley and Sons Inc.
- McHarg, I. (1969). *Design with nature*. Garden City, N.Y: Natural History Press.
- Mehaffy, M. W. (2008). Generative methods in urban design: a progress assessment. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* 1(1), 57-75.
- Metropolitan Toronto Planning Board). (1959). *The official plan of the Metropolitan Toronto planning area*. Toronto: Metropolitan Toronto Planning Board.
- Nassauer, J. (1995). Culture and changing landscape structure. *Landscape Ecology*, 10(4), 229-237.
- Nassauer, J. (1997). *Placing nature: Culture and landscape ecology*. Washington, D.C: Island Press.
- Nolon, J. R. (2008). Shifting ground to address climate change: the land use law solution. In E. Birch (Eds.), (2009), *The Urban and Regional Planning Reader* (pp. 60-66). London: Routledge.

- Noskiewicz, M. and Bronskill, D. (2005). *Financing of municipal infrastructure and services: Development charges and cost sharing arrangements*. Retrieved November 23, 2013, from <http://www.goodmans.ca/pdfs/lorman.pdf>
- Relph, E. (1976). *Place and placelessness*. London: Pion.
- Relph, E. (1997). *The Toronto guide: The city, metro, the region*. Toronto: Centre for Urban and Community Studies, University of Toronto.
- Rudofsky, B. (1969). *Streets for people: A primer for Americans*. New York: Doubleday.
- Rybczynski, W. (1995). *City life*. New York: Simon & Schuster.
- Sancton, A. (2011). *Canadian local government: An urban perspective*. Toronto: Oxford University Press.
- Sandercock, L., (1998). *Towards cosmopolis*. Chichester (UK): Wiley.
- Schneekloth, L., & Shibley, R. (1995). *Placemaking: The art and practice of building communities*. New York: Wiley.
- Seidman, I. (1998). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (2nd ed.). New York: Teachers College Press.
- Sewell, J. (1993). *The shape of the city: Toronto struggles with modern planning*. Toronto: University of Toronto Press.
- Skaburskis, A. and Tomalty, R. (2000). The effects of property taxes and development cost charges on urban development: Perspectives of planners, developers and finance officers in Toronto and Ottawa. *Canadian Journal of Regional Science* 23(2), 303-325.
- Slack, E. (2002). Municipal finance and the pattern of urban growth. *CD Howe Institute Commentary* 160, 1-25.
- Smart Growth America. (2014). National complete streets coalition. Retrieved October 30, 2014, from <http://www.smartgrowthamerica.org/complete-streets/>
- Statistics Canada. No date. *CANSIM*. Using CHASS. Retrieved November 5, 2013, from <http://dc1.chass.utoronto.ca.ezproxy.library.yorku.ca/>
- Talen, E. (1999). Sense of Community and Neighbourhood Form: an Assessment of the Social Doctrine of New Urbanism. *Urban Studies*, 36(8), 1361-1379.
- Toronto Planning Board. (1943). *Annual report of the City Planning Board, Toronto*. Toronto, Ont.: The Board.
- Tuan, Y. (1974). *Topophilia: A study of environmental perception, attitudes and values*. Englewood Cliffs, New Jersey: Prentice - Hall Inc.
- Tuan, Y. (1977). *Space and place: The perspective of experience*. Minneapolis: University of Minnesota Press.

- Unwin, R. (1994). *Town planning in practice: An introduction to the art of designing cities and suburbs*. New York: Princeton Architectural Press.
- Vengroff, R. and Whelan, R.K. (2001). Canadian municipal government in an age of neoliberalism. *International Journal of Public Administration*, 24(6), 503-510.
- Walks, A., and R. Maaranen. (2008). The Timing, Patterning and Forms of Community Gentrification and Neighbourhood Change in Montreal, Toronto and Vancouver, 1961-2001. Toronto: Center for Urban and Community Studies.
- West Toronto Junction Historical Society. (n.d.-a). Junction History. Retrieved Oct. 2, 2014, from <http://wtjhs.ca/junction-history/>
- West Toronto Junction Historical Society. (n.d.-b). Window Shopping History: An historical promenade along an ever-changing Dundas Street in the Junction. Retrieved October 3, 2014, [http://web.archive.org/web/20110303133627/http://www.wtjhs.ca/wtjhs-2b\\_files/frame.html](http://web.archive.org/web/20110303133627/http://www.wtjhs.ca/wtjhs-2b_files/frame.html)
- Whyte, W. (1980). *Social life of small urban places*. Washington, D.C.: The Conservation Foundation
- Zeisel, J. (2006). *Inquiry by design: Environment / behaviour / neuroscience in architecture, interiors, landscape, and planning* (revised ed.). New York: W.W. Norton and Co.



## **APPENDIX A: INTERVIEW QUESTIONS**

### **Introduction and Approach**

Hi. My name is Steven Pypker. I'm conducting a study of the urban design of this street for my Master's degree in Environmental Studies at York, and I'd like to hear from people who use this street. Would you be willing to respond to several questions about your experience here today? It should take around 5-10 minutes. You are not obligated to answer any or all of the questions, and your responses will be anonymous and confidential.

### **Interview Questions**

- 1) Do you live in the neighbourhood? If not, how far have you come?
- 2) How did you get here? (Walk, bike, drive, transit?)
- 3) Why did you come here today? Have you been here before? Often?
- 4) Tell me about this space. (How would you describe this street to a friend who's never been here?)
- 5) What features of this street stand out for you? (physical elements?)
- 6) How do you feel in this street? Do you feel comfortable? Do you fit in, or are you glad to leave?
- 7) Do you have a favourite street (here in Toronto or anywhere in the world)? How does this street compare to it?
- 8) What would you change about this street, if anything?