THE IN-BETWEEN: THE ARCHITECTURE OF SURFACE
DEFINING CIVIC SPACE IN TORONTO'S CORE

by

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Author's Declaration

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The In-Between: The Architecture of Surface

Defining Civic Space in Toronto's Core

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Abstract

Many North American cities are experiencing an intensive re-urbanization of their central cores. In Toronto, this phenomenon is at an extreme: rampant private development, and weak public authority, is shaping many communities. The mediocre civic spaces and infrastructure to support this burgeoning pedestrian, live-work population has predictably been addressed through the incremental integration of public spaces into individual architectural projects. This ad hoc strategy does not offer the breadth or consistency of language to create a clearly identifiable or contiguous public realm. If we cannot depend on architecture's vertical plane to define public spaces, we need to reaffirm the domain over which the public has control — the *horizontal* — streets, sidewalks, and the existing but residual public spaces in-between. This thesis posits that within the existing public spaces of the city's core we can expand the quality, continuity and accessibility of the public domain by the way we manipulate its surface.

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Dedication

For my parents, Arasteh and Sepehr.

Table of Contents

iii	Author's Declaration
v	Abstract
vii	Acknowledgements
ix	Dedication
x	Table of Contents
xii	List of Figures
xvii	List of Appendices
1	1.0 Spaces in the Public Domain: Thoughts on the Past, Present, and Future
16	2.0 On The City and Its "Public-ness"
17	2.1 Beyond the Physical Realm
	2.1.1 Citizenship vs. Individualism
	2.1.2 The "Un-Public Public" and the "Un-Private Private"
25	2.2 Scale and Site
	2.2.1 City Streets, Squares, and an Interconnected Pedestrian Landscape
	2.2.2 Toronto's Downtown Core
40	3.0 Landscapes, Infrastructures, and Architecture
41	3.1 Landscape's Apparent Operation
45	3.2 Infrastructure Beyond Service
48	3.3 The In-Between: The Potentials of Architecture as Surface

54	4.0	Precedent Review: Architecture as Surface
56	4.1	Material Consistency: Yokohama International Port Terminal
59	4.2	Unity: Simcoe Wavedeck
61	4.3	Scale: Superkilen Urban Park
63	4.4	Continuity of Surface: Exhibition Road
66	5.0	A Re-Imagined Public Space
67	5.1	Design Principles
69	5.2	David Pecaut Square: Site Analysis
	5.2.1	Wellington Street Corridor
83	5.3	David Pecaut Square: Project
102	5.4	Moving Forward
104		Appendix
138		Reference List

List of Figures

Figure 1.0 Source	Paris/Plan Voisin Overlay http://www.flickr.com/photos/20651839@N05/2005115028/
Figure 1.1 Source	Plan Voisin Model http://www.flickr.com/photos/glenhsparky/3513641393/
Figure 1.2 Source	Toronto's Population Growth Figure by Author; information from the City of Toronto's "Living Downtown" survey
Figure 2.0 Source	Piazza San Marco http://www.sacred-destinations.com/italy/venice-san-marco-photos/slides/aerial
Figure 2.1 Source	Piazza Navona http://mydigitalcarpet.com/italy07/rplaza04.htm
Figure 2.2 Source	Robin Hood Gardens http://projectsreview2011.aaschool.ac.uk-units-SUSTAINABLE-ENVIROMENTAL-DESIGN
Figure 2.3 Source	Central Park http://www.wallsfeed.com/aerial-view-central-park-new-york-united-states/
Figure 2.4 Source	The High Line http://www.metropolismag.com/pov/20090609/on-the-high-line-at-last
Figure 2.5 Source	Toronto's Existing Conditions Diagram by Author
Figure 2.6 Source	Toronto's Parks and Open Spaces Diagram by Author
Figure 2.7 Source	Wellington Street Google Maps
Figure 2.8 Source	Wellington Street – David Pecaut Square Google Maps
Figure 2.9 Source	Wellington Street Corridor – 1890 Diagram by Author

Figure 2.10 Source	Wellington Street Corridor – 1954 Diagram by Author
Figure 2.11 Source	Wellington Street Corridor – 2012 Diagram by Author
Figure 2.12 Source	Roy Thomson Hall – Parking and Service Access Photo by Author
Figure 2.13 Source	Roy Thomson Hall – Sunken Courtyard Photo by Author
Figure 2.14 Source	Toronto’s Surface Parking Diagram by Author
Figure 2.15 Source	Toronto’s Future Development Diagram by Author
Figure 4.0 Source	Yokohama International Port Terminal http://www.archiduchesse.com/blog/2010/4167/gagnant-chaussette-superstar-03/
Figure 4.1 Source	Yokohama International Port Terminal http://www.archello.com/en/project/yokohama-international-port-terminal/image-1
Figure 4.2 Source	Simcoe Wavedeck http://www.west8.nl
Figure 4.3 Source	Spadina Wavedeck http://www.west8.nl
Figure 4.4 Source	Superkilen Urban Park Site Plan http://www.big.dk
Figure 4.5 Source	Superkilen Urban Park - Objects http://www.big.dk
Figure 4.6 Source	Superkilen Urban Park http://www.big.dk
Figure 4.7 Source	Exhibition Road – Site Plan http://www.architecture.com/LibraryDrawingsAndPhotographs/Albertopolis/ExploringSouthKensington/SouthKensingtonFromAbove/2012Map.aspx

Figure 4.8 Source	Exhibition Road – Shared Space http://www.e-architect.co.uk/london/exhibition_road_project.htm
Figure 5.0 Source	David Pecaut Square – Context Diagram by Author
Figure 5.1 Source	David Pecaut Square – Site Plan Drawing by Author
Figure 5.2 Source	David Pecaut Square – Photo Photo by Author
Figure 5.3 Source	David Pecaut Square – Photo Photo by Author
Figure 5.4 Source	David Pecaut Square – Photo Photo by Author
Figure 5.5 Source	David Pecaut Square – Building Types and Entrances Diagram by Author
Figure 5.6 Source	David Pecaut Square – Sun/shade Study Diagram by Author
Figure 5.7 Source	David Pecaut Square – Traffic Study Diagram by Author
Figure 5.8 Source	David Pecaut Square – Natural Topography Diagram by Author
Figure 5.9 Source	David Pecaut Square – PATH Access Diagram by Author
Figure 5.10 Source	David Pecaut Square – Pedestrian Access Diagram by Author
Figure 5.11 Source	Wellington Public Space Corridor Diagram by Author adapted from Cheryl Atkinson
Figure 5.12 Source	Project Site Plan Drawing by Author
Figure 5.13 Source	Project Section Drawing by Author
Figure 5.14 Source	Project Section Drawing by Author

Figure 5.15 Source	Project Key Plan Drawing by Author
Figure 5.16 Source	Project Render Drawing by Author
Figure 5.17 Source	Project Key Plan Drawing by Author
Figure 5.18 Source	Project Render Drawing by Author
Figure 5.19 Source	Project Render Drawing by Author
Figure 5.20 Source	Project Render Drawing by Author
Figure 5.21 Source	Project Render Drawing by Author
Figure 5.22 Source	Project Key Plan Drawing by Author
Figure 5.23 Source	Project Render Drawing by Author
Figure 5.24 Source	Project Key Plan Drawing by Author
Figure 5.25 Source	Project Render Drawing by Author
Figure 5.26 Source	Project Key Plan Drawing by Author
Figure 5.27 Source	Project Render Drawing by Author

List of Appendices

104	Appendix A David Pecaut Square: Existing Conditions
110	Appendix B Design Exercise 1
114	Appendix C Design Development
122	Appendix D Substantial Completion Review
136	Appendix E Final Design Model

1.0

SPACES IN THE PUBLIC DOMAIN

Thoughts on the Past, Present, and Future

Public space is never interstitial, marginal, or leftover. It is contested, always and everywhere, because identity is ever a matter of finding out who we are in the crucible of perspective-reciprocity. Public space is not a public good so much as an existential one – one without which democratic politics is impossible...

Cultural critic Mark Kingwell (2009, p. 19) made the above conclusion in regards to the conceptual underpinnings of public space and its importance to cities and their citizens. The poetics of this theory are polemical, and suggest a strong social, political, and cultural affiliation. More specifically, the statement suggests that those involved in the conception and ultimate manifestation of the “identity” of the built environment – and, according

to Kingwell, public space – must revisit the notion of the public realm as one that is not “leftover” or forgotten. It can be argued that this is a direct plea to architects, and their designation as city-builders.

Traditionally, architecture has been closely involved in a multitude of large-scale issues that contain social, political, and cultural implications: issues that range from disaster relief efforts, to politically driven world expos, to environmental stewardship, and so on. At a micro level, Alberto Perez-Gomez (2009) suggests, “While the definition of architecture has shifted historically...its main interests have always related to the configuration of public space” (p. 47). This opinion – that architecture fundamentally aims to define public space – together with Kingwell’s opinion regarding the accessibility of the public domain provide the basis for this thesis.

It is important to first understand the history and context within which the notion of public space has developed, and how its history has been manifested in the contemporary city. Contrary to Perez-Gomez’s belief, public space has not been the primary concern for architecture since, arguably, the modern period. Modernism’s distaste for history and context, coupled with its view of architecture as an efficient and functional object in space, is the reason for the period’s retreat from the public realm. Charles Waldheim (2006) cites modernism’s “failure to come to terms with the city as an historical construction of collective consciousness” (p. 38) for its inability to produce an evocative or

accommodating public realm. The Athens Charter of 1933, one of the chief documents from the modern era, called for the elimination of the complex and historic public street and thus, the division of city functions into four isolated and compartmentalized zones: living, working, recreation, and circulation, demonstrated in

Figures 1.0 & 1.1

Le Corbusier's representations for Plan Voisin (1925) overlaid onto Paris's existing condition. This proposal called for the complete destruction of central Paris. Plan Voisin illustrated many of the themes, including that of the four distinct city functions, which were later to be published as part of the 1933 Athens Charter.

Figures 1.0 and 1.1. Thom Mayne (2011) argues that this approach to urbanism, one of compartmentalization, makes citizens and the spaces within which they reside

and interact “atomized particles that respond only to themselves and are left to negotiate a world without the connective tissue that weaves individual buildings into a collective” (p. 31). Mayne’s argument is based on the analysis and understanding of modern cities as a collection of autonomous and platonic solids in pre-determined patterns with little ability to change or adapt to the dynamic forces that are prevalent in contemporary society. A network of infrastructures then connects these solids, or objects, and is considered separate and independent from the built form. This view of architecture is a lasting ideology from the modern period that continues to affect contemporary cities, specifically those in North America.

The world is now over a decade into the twenty-first century – eight decades after the Athens Charter – and has already witnessed major cultural and political milestones that have had severe global impact. While globalization and digitization are a part of the contemporary city’s norm, thus suggesting a closely linked and connected society, and the exchange of information electronically is constant and ever-present, these major events have made surveillance and security seemingly vital to personal and public health. As a result, citizens have become further atomized; despite global connectivity, the general public has become progressively and cautiously introverted. Digitization has further severed the value of architectural involvement within the public realm, which in turn has increasingly been manifesting itself in the virtual, cyber world. As such, the city has become a collection of

submissive “civic” zones for the twenty-first century person, who is predominantly concerned with safety and individual wealth, and is now largely immersed within the virtual as opposed to the physical. Winy Maas (2003) asks, “...When urbanism has lost its allure [to designers] and architecture encounters its limits, to what should a new generation [of architects] dedicate itself?” (p. 14).

The views expressed above relating to the demise of the value of physical public space to citizens have gradually come to be as a result of the ideals that began to develop in the early twentieth century, coinciding with the Modern era. In North America, industrialization has resulted in the progressive upsurge in the predominance of the market society, consumerism, consumption, and ultimately what Frank Cunningham (2009) cites as possessive individualism: “The key components of a possessive-individualist culture are self-centredness, fixation on private ownership, consumerism and greed” (p. 93). Possessive individualism has also led to the expansion of North American cities into vast suburban developments, personal ownership of land, increased reliance on the automobile, and thus a perceived lack of care for the public domain. Maas summarizes this contemporary urban reality strongly, and makes reference to the modernist framework of compartmentalization. Maas (2003, p. 14) states,

...Collective efforts are countered or even
replaced by individualism...politics are
uncertain and the swings of unpredictable
economies discourage communal

investments, overall planning has become an activity for hobbyists, a dress code for politicians, and a last resort for stuck idealists. Amid these shifting certainties, urbanism has become a haven for resistance and protectionism, a question of creating zones rather than possibilities.

With these aforementioned trends, there has been scepticism with regards to the ability of public space to be successful in the contemporary city. George Baird (2011) has listed a number of written works from the American architectural community that lament the demise of public space and further question the involvement of the architect in conceiving any such space. These include Michael Sorkin, an architectural critic, who in 1992 edited a collection of essays with the overarching title “Variations on a Theme Park: The New American City and the End of Public Space”. Sorkin’s collection criticizes the prevalence of elitists in influencing and ultimately shaping various urban phenomena of the time – ranging from mega-malls to the gentrification of cities – and thus creating homogenous and easily consumable urban landscapes. Moreover, in an interview with Michael Speaks, cultural critic Frederic Jameson claimed an “end of civil society” (1992) as a result of the privatization of public spaces. In other words, what was once in the control of the government has shifted ownership under the influence of what Jameson called the “faceless forms of private control.” Jameson argued instead for architecture’s need to culturally detach itself

from this privatization in order to manifest formally in a civic sense. Finally, Baird cites an essay published by Aaron Betsky entitled “Nothing but Flowers: Against Public Space” (1994) in which Betsky claims that the loss of order and public authority in North American cities has led to the downfall of public space. While Sorkin and Betsky criticize what has come of the public domain in the contemporary city, only Jameson advocates the necessary culture shift that could alter these perceptions amongst the architectural profession.

Surely, the current state of many North American cities feeds the aforementioned appeal with possessive-individualist consumerism. There is a strong belief that current economic and social trends are moving towards a neoliberal society, where a rearrangement of the relationships between government, civil society, and citizens is underway. Peter Aeschbacher and Michael Rios (2008) claim, “This trend toward neoliberalism is characterized by an embrace of market forces and private enterprise; the dismantling of democratic structures and public investment; deregulation that externalizes environmental and social costs; and the privatization of state-owned enterprises and services” (p. 85). The trend becomes most problematic when what was once a public amenity (through ownership or funding) turns private and public access becomes increasingly limited, costly, and potentially competitive. Dana Cuff (2010), director of UCLA’s think-tank cityLAB, asserts, “When our sewers, roads, parks, schools, and Internet are provided by private entities, the problem is not that the quality isn’t

high enough; in fact, the quality is generally better than that of our publically provided spaces. The problem is one of social justice: equal access, cost, and distribution” (p. 20). Because of this, the importance of truly public spaces in these highly privatized environments becomes more valuable.

Ultimately, the realities of public space in North American cities produce a harsh counter-argument to the poetic theories of democracy and inclusion previously presented by Kingwell. What is generally deemed as an essential quality of public space today, accessibility and public ownership for example, is actually a temporary and ever-changing occurrence (Miller, 2007). Beyond being merely a physical manifestation, there exist constant challenges from economic, political, technological, and social forces that pose obstacles in realizing and maintaining purposefully built public spaces in North American cities. Incidents that include economic turmoil and political transitions, as well as the phenomenon of the virtual cyber-world, increased security in a globalized world, and growing privatization are a few of the challenges that threaten the vitality of the public domain (Greenberg, 2009).

Despite years of growing estrangement between the architectural profession and the public realm, today’s hyper-modern epoch is slowly witnessing a shift in the role of architects (as individuals, as well as a set of practices), and architecture (as a profession) to investing increased interest in the development of cities beyond the

scope of the profession's traditional boundaries. Those who participate in the creation of projective (physical or theoretical) architectural works must work towards taking a pro-active role in critically analysing, addressing, and reinforcing the urban fabric through architectural projects. Architects must continue to take responsibility for the spaces in which society interacts, including the public realm; further to this, architects ought to begin to hold themselves accountable towards addressing the areas of the built environment that are considered secondary and/or infrastructural, for a city is composed of far more than the sum of its individual buildings and infrastructural networks. At a local scale, architects must take responsibility and leadership in addressing their city's neglected urbanism: the underutilized, under-served, and unattractive urban spaces that are part of all major urban centres.

In the recent past, there has been reinvested concentration in the downtown of cities, in the form of increased human and financial capital. This has been evident in a number of metropolitans, including the City of Toronto. Ken Greenberg (2009) refers to this revalidation of cities as "immigration and in-migration – young people and empty nesters (and increasingly now young families)... are repopulating city centres and older neighbourhoods, seeking what cities have to offer: convenience, urbanity, cultural life, sociality and so on" (p. 32). Greenberg goes on to note that most economists agree that cities are primary generators of wealth, and as such have the ability to attract a great deal of investment. In Toronto, this

Figure 1.2

Toronto's population growth in the downtown core since 1976.

has most notably come in the construction of massive private residential developments as a result of increasing demand (Figure 1.2). In 2011, the City of Toronto's planning department issued a "Living Downtown Survey" that analysed the increase in residential development between the years of 1976 and 2011. The survey found that the population of those living in downtown Toronto increased roughly by 80% in the thirty-five year span, from 100,000 residents in 1976 to just under 180,000 in 2011; this number continues to increase, as noticed by constant high-rise residential development in Toronto's core.

However, this in-migration and ultimate revitalization has not come without its own set of challenges, mostly with regards to the public realm. In Canada, the respective economic recessions of the early 1990s and late 2000s saw severe cutbacks to the funding of Canadian provinces from the federal government. As a result, funding for public works in cities was significantly decreased. These

cutbacks “in turn were reflected in even more drastic erosion of support to cities.... The destructive collapse of support for urban infrastructure and public space has been one of the key areas of collateral damage” (Greenberg, 2009, p. 33). Undoubtedly, these financial cutbacks have further severed the involvement of design, with respect to the architectural profession, in the conception of public spaces. Alternatively, private developers have become responsible for providing public space within their developments. However, the resulting projects pose questions regarding general accessibility and connectivity. In this regard, the banal realities of the public domain, and infrastructure, in cities like Toronto have weakened any notion of civic identity.

The term “infrastructure” has gradually gained an elusive meaning, specifically in the contemporary discourse of architects, urban planners, policy makers, and so on. Cuff (2010) argues that the term can be “applied to phenomena ranging from sewers and highways to the underpinnings of economics and social networks” (p. 19). Infrastructure is intrinsically tied to civil society; in contemporary cities around the world, infrastructure is the basis from which urban life operates and is served. In cases where infrastructure fails or is neglected – whether it is the demise of public transportation or severe damage to roadways and sewer systems as a result of a natural disaster – a city has difficulty maintaining its order and social norms. Moreover, Haussmann’s rebuilding of Paris in the late nineteenth century was primarily an infrastructural revitalization. Therefore, it is clear that

infrastructure's close relationship to the foundations of city building makes it an important public amenity and a vital component in a city's overall fabric. Not surprisingly, the past two decades have witnessed a shift in mentality in the realm of contemporary practice, referred to as landscape urbanism, that "establishes the significance of infrastructure and its associated landscape...in the generation of public space" (Mossop, 2006, p. 165). Theories developed through landscape urbanism's framework provide a basis from which architecture can affect the public sphere beyond the objectification associated with architecture-as-building.

Charles Waldheim (2006, p. 11), defines landscape urbanism as the

...Disciplinary realignment currently underway in which landscape replaces architecture as the basic building block of contemporary urbanism. For many, across a range of disciplines, landscape has become both the lens through which the contemporary city is represented and the medium through which it is constructed.

Surely the architectural profession can see the polemic in Waldheim's statement, and understand the critical need to expand beyond traditional boundaries; It is not enough for architecture to be widely considered a commodity. However, Cuff (2010) laments, "The pursuit of disciplinary autonomy...shook [architecture's] material bonds with the public sphere. [...] Without imagining that architects should dive into the political arena or

reclaim urban design as a legitimate practice, many of us [professionals] sense that architecture is ready to be contaminated by the world that originates outside our borders with all its messy problems” (p. 18). This autonomous architectural culture is prevalent in North America from the modern era through to the work of the avant-garde: architecture as an object with pre-determined social implications, and further, architecture as a closed system focused on form and aesthetic (Hays, 2010). As cities continue to be re-populated, both physically and economically, the urban realm must also be revitalized.

This thesis aims to contribute to the discourse of re-instilling architecture back into the collective urban realm of public space through theories developed by a range of disciplines. Contemporary architectural practices have already moved away from the profession’s perceived desire for autonomy by including urban work into their practice at scales ranging from individual buildings to master plan proposals. Thom Mayne, principal of Morphosis, explains the need for contemporary architectural practices to navigate between scales, stating that the “physical scale [of urbanism] exceeds architecture but [its] manifestation still requires architectural qualities in order to make sense in its context” (2011, p. 10), referring to this form of practice as combinatorial urbanism, or architectural urbanism. Architecture has an inherent critical human factor; therefore, for any public space to be successful in its manifestation – forms, materials, details, and so on – human scale is vital. Human scale in the context

of the city is a concept that has all been abandoned in the practice of modern city planning and development. Perhaps an architectural framework, when applied to the manifestation of public space, can re-validate the “human-ness” of the contemporary city.

By situating the thesis project in the historic industrial core of the City of Toronto, the aforementioned concerns can be addressed with an understanding of, and engagement with, local architectural and urban dialogue(s). The immense private development that has occurred in Toronto has produced a struggle between the ideals of the public realm (accessibility, quality, and character), the city’s planning and urban design departments, the city’s existing infrastructural networks, as well as the economically driven desires of most private developers. If the public domain can no longer rely on architecture-as-object to define it (because of ad-hoc private development) and further cannot rely on overly congested networks, this thesis proposes to situate and manifest public space strictly on the ground plane. The focus on the horizontal surface allows possibilities of a re-imagined pedestrian realm in the city’s downtown, an area that today has been largely overtaken by various high-rise buildings, automobile dependence, and a lack of pedestrian-scale public-ness. By operating between traditional architectural and urban scales in the context of the surface, the hope is that the thesis begins to shape contemporary downtown Toronto as a space of interconnected public flows between and within complex networks, as opposed to a system of places made of

autonomous buildings and developments (objects), where infrastructure (network) is merely used for mobility.

The practice of architecture, which has traditionally been aligned with permanence and stability, must change to accommodate and take advantage of the rapid changes and increased complexities of contemporary reality.

The true territory for innovation in urban architecture, then, is not in the production of platonic solids, but rather in the design of operational strategies that deal with the multiple and overlapping forces of a highly complex and entirely uncertain “collective form”.

(Mayne, 2011, p. 29)

2.0

ON THE CITY AND ITS “PUBLIC-NESS”

2.1 Beyond the Physical Realm

While the physical attributes of urban public space are vital to its success – its materiality, form, details, and so on – it is important that the non-physical and ever-changing characteristics are also understood. It is these characteristics that, despite their elusive nature, affect public space far beyond the scope and definition of a traditional architectural project. However, an understanding of these abstract and unpredictable conditions, including cultural, economic, and political forces, is necessary in order for a purposefully designed public space to be proposed. It is these ideas and actions, part of a larger civic identity molded over time, that then require a physically manifested space in order to operate. In turn, a physically realized public space has the ability to contribute to, and ultimately shape, similar ideas and actions over a greater duration of time. Kristine Miller

(2007, p. xi) argues,

To tie public spaces [physical places] to public spheres [non-physical characteristics] we must investigate the constantly changing intersections of physical places, the laws and regulations that govern them, the people who claim them through their use or demands, and the actions of government officials to answer these demands.

It is important in this thesis to reject the concept of an idealised public space – in other words, spaces that are designed largely with physical characteristics in mind, allowing little change and/or growth in relation to its boundaries. Changing characteristics (economic, political, social) are what more often than not limit the quality of public spaces to a specific instance along its operation. James Corner (2006, p. 32) explains the need to work beyond physical characteristics and understand the deeper roots of public spaces:

Public space in the city must surely be more than mere compensation or vessels for this generic activity called “recreation.” Public spaces are firstly the containers of collective memory and desire, and secondly they are the places for geographic and social imagination to extend new relationships and sets of possibility. Materiality, representation, and imagination are not separate worlds....

How can architecture demonstrate itself in the public realm while accommodating the constantly changing nature of contemporary cities? How does design accommodate the contemporary individual in the greater context of collective memory? How can design as an operational framework begin to influence, and be influenced by, social, political, and economic policies? By architecturally defining public space as the horizontal surface of our cities, formal manipulations to the surface – however subtle – have potential to affect uses, flows, and concentrations by and of people.

2.1.1 Citizenship vs. Individualism

As discussed earlier, the notion of individualism in the North American psyche continues to dominate through mass consumerism, consumption, and strong societal beliefs in private enterprise. Private development in cities, specifically in the high-rise residential market, has weakened the idea of the collective with respect to the public realm. There is a fine line that exists in the critique of individual success versus collective identity. For the purposes of this thesis, the opinion is that architectural urbanism can shape a collective civic identity while allowing for individual engagement and enjoyment. It is the belief that individuals who belong to a larger collective can gather strength and create an identity through ideas and actions of varying scales.

The concept of public involvement (or active citizenship)

in the decision-making processes of the built environment needs to be sustained in order for meaningful public spaces to be conceived and maintained. Only then does architecture have the ability to influence policy through its processes. Miller (2007), through referencing Lynda Schneekloth and Robert Shibley, says the role of the design professional, beyond conceiving the physical elements of public space, is to “emphasize the process of building relationships among public, private, and not-for-profit entities to overcome the fragmentation of official agency” (p. xv). Further, public involvement also evokes the notion of citizenship – a term that is difficult to define at best, specifically in a contemporary, globalized urban setting. Many have attempted to define the term, including Peter Aeschbacher and Michael Rios, who claim, “Active citizenship begins with the recognition that the public realm is a political and physical terrain of struggle that is produced contextually, relationally, and through dialogue; that is incrementally negotiated over time through democratic participation; and that is manifested in material form” (2008, p. 85). To be more specific, active citizenship, in the Arendtian sense of action (not strictly polite engagement, but sometimes uncomfortable interaction), understands the collective public domain as an arena of constant change and transition, grounded in place (context and form) and open speech (dialogue). This undoubtedly produces a sense of uneasiness to the North American psyche; with a culture that is as invested in individualism as North America’s is, this definition of citizenship is perhaps unwelcome. As such, the retreat from the public realm is not surprising; this can be

seen through the lack of public government funding, the increase in private development in cities, the sharp distinction between architecture, urbanism, infrastructure, and the confusion that results in the public realm.

Civic identity, then, is intrinsically linked to the idea of active citizenship. If the values of citizenship in a city, region, town, and so on are strong, then that place has a strong sense of its identity (whether that identity is linked closely to history/memory, future potentials, or both). Conversely, if a place has a weak sense of citizenship, then it is more likely to be an individualist society. I would argue that the Toronto of every day falls into the latter category. Through the dominance of the private sector, a weak municipal government, and poor public funding, the notion of active citizenship struggles to manifest itself in the city's daily conscience. As such, the majority of the city's "citizens" have retreated to individualism, and civic action is minimal and almost unwelcome. It is no wonder that public spaces in Toronto have been mediocre through the city's history: "In the collective unconscious, public space is leftover space, the margins that remain between private holdings and commercial premises..." (Kingwell, 2009, p. 16).

Finally, the distinction between single versus multiple publics is important to explore, specifically with respect to the notion of a single idealised public space. Perhaps the idea of multiple publics lends itself closely to multiple identities as well, and ultimately multiple types of public spaces. Differences found at a very superficial level reveal

separations among the public; divisions that include gender, race, and class promote different sets of ideals. Aeschbacher and Rios (2008) claim, “The recognition of multiple publics challenges us to dispense with the convenient myth of a unified, liberal public...” (p. 90). Design should not seek to introduce an authoritarian or overwhelming object-space into the urban fabric of cities, but instead should act as a platform from which civic identity (identities) can emerge and become active. This aforementioned platform (surface) begins and can be defined as the city’s landscape, both at micro and macro scales. Further, the concept of a single solution or formula for public spaces is non-existent; while site matters, context (historical as well as physical) is just as valuable.

2.1.2 The “Un-Public Public” and the “Un-Private Private”

The distinction between public and private spaces and their varying degrees of accessibility is not as clear as one would initially assume. There exists a gradient scale between the two, and a fine line that differentiates what is generally deemed public versus private. Kingwell (2009) describes the transitions between private and public as “never a simple or linear threshold, but...a staggered, funnelled, or terraced series, with step-downs and in-between areas...that complicate, stutter, and please our movement between realms” (p. ix). This transition becomes more complicated with public spaces

that are privately owned. Examples of these transitions include the atrium or food court of a public building, one that is closed past operating hours by the physical boundaries its architecture creates. Another is the university campus, a publically accessible institution that is part of the greater city fabric but is often gated with reserved access. The question, then, revolves around the actual accessibility of designated public spaces in cities. However, physical boundaries (or lack thereof) are not the only obstacles in determining the accessibility (public-ness) of a given space. Digital surveillance, global connectivity, and instant access to information are some of the transient elements that affect the role of an individual in the collective conscience.

Interestingly, the contradictions involved in the discourse on public surveillance recall the famous Jane Jacobs phrase, “eyes on the street” (1961). Though Jacobs was referring to people keeping an eye out for their neighbours and their shared public space, the term can be applied to today’s digitized city. George Baird (2009) also sees this similarity, recalling that Jacobs “argued that neighbourhoods with the kinds of close social bonds that perpetuated the presence of such ‘eyes’ were safer than those that did not.” Baird continues to ask, “Does this not suggest the possibility that even so controversial a topic as electronic surveillance in the public realm might productively be discussed in terms of the operative mechanisms of social and political control that govern that surveillance, rather than the basic condition of surveillance itself?” (p. 59). Baird’s

argument for addressing surveillance from a different lens raises the question of why such a fear of the subject exists among the general public. Perhaps it is a question of public and/or social decorum that affects the very personal anxiety that comes from the idea of “being watched” (electronically or in real-time), as well as a misrepresentation of public space as an extension of private space. This potentially suggests a lack of respect for one’s urban surroundings, either in the form of existing public spaces or infrastructural networks. Limited public funding and authority, and the resulting lack of design and maintenance of these public spaces, squares, and infrastructural webs, can be argued as the cause of the aforementioned neglect and disrespect. If the architectural profession was able to interject purposefully designed public spaces and networks into the city’s urban fabric, this attitude from the public towards the city’s landscape may change, and may bring a sense of care and general public investment and interest with it. Ultimately, it is the public domain and its physically manifested public spaces that allows identity and care to exist and mature in the conscience of the general public.

2.2 Scale and Site

2.2.1 City Streets, Squares, and an Interconnected Pedestrian Landscape

Jan Gehl (2010) has observed that contemporary cities continue to be constructed and maintained for a speed of sixty kilometres-per-hour, for the automobile, as opposed to five kilometres-per-hour, for the pedestrian. The role of the street and its associated surface infrastructure has long been seen as primarily for mobility, servicing, and/or pre-designated recreation. Streets and their sidewalks have traditionally served the purpose of moving pedestrians, automobiles, and/or public transportation from point 'A' to 'B'. On the other hand, they also act as destinations for the parked car, locked-up bicycle, and various services: garbage pick-up, product delivery, and so on. Sidewalks have become contested space between pedestrians, storefront marketing and spill-out, patio seating, and garbage disposal, to name a few. In Toronto, a large percentage of the downtown

core's sidewalks are overly congested, not just with people but with information as well. This congestion will continue to intensify with the city's on-going high-density developments. Aaron Betsky (1994) has observed the shift in the "street" from the grand boulevards of Paris to the modern strip in North America, where the street has lost its ability to act as a platform for an engaged and active public. This, along with the experience of architecture as routine and everyday, has resulted in the development of the "distracted" citizen, as explored by Walter Benjamin in the 1960s. While it is impossible and immoral to argue that people can become engaged with the architecture of the everyday, as not all works of architecture can be defined as iconic artefacts, architectural urbanism can promote a platform for social engagement, ultimately facilitating the interaction between individuals as well as between a collective and their context.

Figures 2.0 & 2.1

Piazza San Marco in Venice (top) and Piazza Navona in Rome (left). These figures illustrate the condition of traditional public spaces in historic Italian cities where a consistent and dense built urban fabric defines an open and hardscaped central square (outlined in red).

While street infrastructures (networks) provide mobility towards and between built form (objects), the surface infrastructure of public spaces and squares (the in-between – more discussion on this in following chapters) must play a pivotal role in the operation of architecture and urbanism. Traditionally, public spaces have been defined in two ways. The first is typical of Italian cities where dense built form frames a void in the urban fabric – such as Piazza San Marco in Venice or Piazza Navona in Rome as seen in Figures 2.0 and 2.1. The other comes in the form of the picturesque or landscaped mound, such as Robin Hood Gardens in London or Central Park in New York City (Figures 2.2 and 2.3). In the most urban sites of contemporary cities, where the dominance of the automobile (and thus street networks), and ad-hoc high-rise private development has impaired the ability for built form (architecture as consistent fabric) and constructed ground (landscape as green space) to create successful

Figures 2.2 & 2.3

Robin Hood Gardens in London, England (top) and Central Park in New York City, USA (right). These two figures illustrate traditional interpretations of constructed ground, where public space appears as a natural landscape, even though it is as man-made as its surrounding built form.

public spaces, how can the horizontal surface, or ground plane, of the city be designed and manipulated to create new spaces that enhance the public realm?

As previously mentioned, there has recently been a shift in the mentality towards the ground plane, coming most notably in landscape urbanism theory. James Corner (2006) explains one of the guiding themes of landscape urbanism as concerning itself “with the phenomenon of the horizontal surface, the ground plane, the ‘field’ of action. These surfaces constitute the urban field when considered across a wide range of scales, from the sidewalk to the street to the entire infrastructural matrix of urban surfaces” (p. 30). This shift in the conceptual underpinnings of architectural discourse has been noted, but very few “architectural” practices have observed this shift in their work. A number of the projects that have exercised these concepts will be discussed in a later portion of this thesis (refer to Chapter 4). While many North American cities, Toronto included, continue their vertical growth and intensification, surface infrastructure has received little attention in terms of accommodating the increased population in any meaningful way. Congestion and mobility in a distracted manner continue to dominate contemporary city infrastructural networks.

In opposition to pedestrian segregation (such as the High Line in New York City – Figure 2.4), the manipulation of surface infrastructures allows for a dynamic and interconnected pedestrian realm to be architecturally strengthened, one that can be woven more fluidly

Figure 2.4

The High Line in New York City, USA. This project presents the removal of public space, and thus the pedestrian, from the city's natural landscape or ground plane. As a result, the project's immediate adjacencies (for instance, underneath the raised platform) become new derelict spaces.

into existing transportation and building systems. Stan Allen (2010) states, “The infrastructural elements of the modern city, by their nature linked together in open-ended networks, offer another example of field conditions in the urban context” (p. 119) in his argument for transitioning from a focus on architectural object to architectural field or surface. Surface infrastructures, by their nature accessible, public, and connected through a larger network, provide an opportunity in establishing a significant and critical public realm. Allen (2010) continues, “Field conditions offer a tentative opening in architecture to address the dynamics of use, behaviour of crowds, and the complex geometries of masses in motion” (p. 129). Because architectural (surface) infrastructure has the ability to promote a dynamic landscape, it has the potential to host unpredictable crowds, as well as flexible and unintended uses, as opposed to prescribing program and operation.

2.2.2 Toronto's Downtown Core

To be able to project a vision that improves the accessibility and public-ness of Toronto's downtown core, through the re-imagination of public spaces that in contemporary dialogue and culture are both under-designed and under-utilized, one must understand why the city and its public spaces have developed the way they have, and what factors have sparked the city's evolution. Toronto, like many North American port cities, experienced early settlement in the eighteenth century and rapid industrialization and growth in the early nineteenth century. Today, Toronto is undergoing unprecedented re-urbanization and immense high-rise residential development. With regards to public space and infrastructure, Toronto's history is not strong; through mapping, it can be seen that any formation of public space was linked closely to institutions (mainly church) or private estates. Mapping also expresses the dominance of the built form over these public spaces. The following series of diagrams explores Toronto's downtown core through various layers of existing and proposed building and infrastructural components. The downtown core, as referred to in this thesis, is the area of the city defined by Queen Street to the north, Lake Ontario to the south, Bathurst Street to the west, and Jarvis Street to the east, as shown in Figure 2.5. The same figure depicts conditions, as they exist, including built form and transportation infrastructure.

Figure 2.6 adds a layer of existing parks and open

Figure 2.5

Defining Toronto's downtown core.

Figure 2.6

Toronto's existing network of parks and open spaces, as defined.

spaces to the city's built fabric. These precincts range from green space to paved open areas, and are either publically owned and operated or belong to a private institution. Through the quantity of public spaces appears high, it is their lacking quality or character (design) and accessibility (public-ness) that contribute to their underutilization. Historically, Toronto's public parks were designed to have clear visual and physical access to one another. This is particularly evident in the case of Clarence Square and Victoria Square Memorial Park, where Wellington Street was meant to act as a corridor between the two green spaces. However, the development of the area over time has severed the potential of this public corridor. Spadina Avenue has become a major north-south arterial road, with high-speed automobile traffic and public transit; Wellington Street itself is a two-lane street, with space for parking along the street's edges; the built form along this portion of Wellington Street maintains a consistent low-rise industrial fabric – used today as commercial office space – and surface parking dominates the streetscape at grade, as seen in Figure 2.7.

Figure 2.7

Wellington Street. The connecting corridor between Clarence Square and Victoria Square Memorial Park is dominated by surface parking.

Further, many of the older parks that once dominated the streetscape of historic Toronto have been overshadowed by the immense residential and commercial development the downtown core has experienced. David Pecaut Square and Simcoe Park, once a part of Ontario's administrative and institutional lands, have both been compromised not only in scale, but also in their accessibility and character. Enormous developments such as Metro Hall and the CBC office have dwarfed the physical size of the parks, and present boundaries and harsh edge conditions with regards to physical and social accessibility. Wellington Street, the street threshold between the two parks, has been bordered by high-rise private development and provides no continuity in accommodating the public at-grade (Figure 2.8).

Figure 2.8

Wellington Street, south of David Pecaut Square and north of Simcoe Park. This portion of Wellington Street is defined by four lanes of one-way traffic and private development built to the edge of site boundaries.

Figures 2.9 to 2.11 portray the historical development of the King Street West/Spadina Avenue area spanning from Victoria Square Memorial Park to David Pecaut Square. The physical and visual connection between the three parks has been compromised through the development of built form, as expressed above. More specifically, what is now David Pecaut Square has been hugely negotiated in its physical size and accessibility. While landscape

Figure 2.9 (top)

A diagram of the condition of public spaces in the city in 1890 when landscape dominated Toronto's urban fabric.

Figure 2.10 (above)

A diagram of the condition of public spaces in Toronto in 1954, when infrastructure dominated.

dominated the city's surface at the end of the nineteenth century (Figure 2.9), infrastructural developments were the governing features by the mid-twentieth century (Figure 2.10). Today, the ad hoc collection of private development has overtaken the square and has ultimately created a disjointed void space (Figure 2.11). To the square's south, Wellington Street faces numerous underground parking

lot and service entrances, while King Street to the north is disconnected as a result of the sunken courtyard in front of Roy Thomson Hall (Figures 2.12 – 2.13).

Another common occurrence of surface infrastructure in the downtown core comes in the form of surface parking, as seen in Figure 2.14. This form of open space presents opportunities for potential future development; in Toronto's recent past, those lots have usually been taken over by private developers whose main concerns revolve around financial profit. As such, future development planned in the downtown core greater than thirty storeys is shown in Figure 2.15. These developments are all either under construction, or in various stages of planning – however, they are all scheduled to be completed within the next decade. The prominence of architecture-as-object prevails in the conception and construction of all of these developments. The accommodation of this new pedestrian live-work population will be vital to the city's

Figure 2.11 (above)

This diagram illustrates the condition of public spaces in the city in 2012. Ad hoc private development has overtaken the city and the public spaces have become scattered voids.

Figure 2.12

This image, taken in the southeast area of David Pecaut Square, demonstrates the immensity of service entrances that access their destinations from Wellington Street (outlined).

Figure 2.13

This image depicts the sunken courtyard condition between Roy Thomson Hall and King Street. Outlined in red is the PATH walkway that looks onto the courtyard. Though it was designed to be used as a skating rink in the winter, the courtyard is closed to the public throughout the year, and only serves as a reflecting pool in the summer months.

operational interests.

The existing congestion of people, services, and automobiles in the core is undeniable, and the notion of at-grade public space difficult to imagine. However, architectural urbanism can alter these derelict spaces through manipulations to the surface. The next chapter discusses theories from various professions that explore the concept of architectural urbanism that integrates the potentials of architecture, urbanism, landscape, and infrastructure.

Figure 2.14

Surface parking in Toronto's core
(outlined in red).

Figure 2.15

Private residential development greater than thirty storeys. David Pecaut Square is highlighted in orange.

3.0

**LANDSCAPES, INFRASTRUCTURES,
AND ARCHITECTURE**

3.1 Landscape's Apparent Operation

Much of the written work that discusses the theories of landscape urbanism over the past decade or so argue for the suitability of landscape (as opposed to architecture) in the development and organization of the contemporary city. Proponents for the use of landscape urbanism's conceptual scope over that of the realms of architecture and urbanism alone advocate landscape's ability to organize the complex and dynamic interaction between the very different realms of ecology and infrastructure into contemporary urban networks. Landscape promotes a horizontal field from which growth and change in an urban setting can occur over an undefined period of time; it is meant to be the integration, as opposed to domination, of landscape (environment/nature) into urban (building/planning), and vice versa. However, landscape urbanism has been criticized for its vagueness

with respect to realized or built work in an urban setting. This obscurity is apparent in its theories as well, which James Corner argues is a result of the persistence of traditional definitions: "...[The] categorical separation between landscape and urbanism persists today not only because of a perceived difference in material, technical, and imaginative/moralistic dimensions of these two media, but also because of a hyper-professionalized classification, a construction further complicated through competing power relations" (2006, p. 27).

Corner instead identifies four themes under which landscape urbanism is to operate: "...processes over time, the staging of horizontal surfaces, the operational or working method, and the imaginary" (2006, p. 16). The first three of the aforementioned themes – processes, staging, and operation – emphasize the means of a system over the final formal expression. They are, as Corner argues, a departure from traditional architectural and urban practices that tend to focus on the final outcome and that thing's rigidity, permanence, and fixed existence in the world. The fourth theme of imagination, however, is even more ephemeral and highly open to interpretation. Though Corner maintains that the "failing of twentieth century planning can be attributed to the absolute impoverishment of the imagination with regard to the optimized rationalization of development practices and capital accumulation" (2006, p. 32), imagination in the context of landscape urbanism theory fails to ground the themes in a real-world urban context. The temporal nature of landscape urbanism's methods fails

to produce a material reality for which human activity is able to operate in a concretized, real-world urban situation. Landscape urbanism provides interesting and critical theory, but lacks built work that operates in urban settings in order to form a meaningful critique.

Charles Waldheim (2006), meanwhile, argues, "...landscape urbanism offers an implicit critique of architecture and urban design's inability to offer coherent, competent, and convincing explanations of contemporary urban conditions" and as such replaces architecture "as the basic building block of urban design" (p. 37). However, it seems that Waldheim contradicts himself with his statements: If landscape urbanism requires the presence of architectural and urban situations in order to critique and improve existing conditions, how does it then manifest itself as the basis from which urbanism and urban life unfolds? Perhaps it can instead be suggested that the shift that has occurred is a change in mentality in which infrastructural landscapes or systems, mostly at a larger scale than the typical architectural project, are viewed as a priority in the re-development of contemporary cities – as opposed to development from an empty field. However, this ideology again emphasizes the network over the object in urbanism; surely there is an in-between that exists in urban centres.

In the more recent past, there has been an integration of landscape's characteristics into the realm of architectural design and production. Stan Allen (2011) notes the distinction between architecture-as-object and

architecture-as-surface: “Common to landscape and architecture, warped or folded surfaces promised new forms of connectivity, novel programmatic configurations.... Architecture, which had traditionally been associated with the vertical plane and bounding partitions, dissolves into an extensive horizontal field of interconnected surfaces” (p. 23). It is this concept of connectivity that has potential to ground landscape urbanism’s theories into reality, and manifests ideas, including networks and processes, into habitable, operable, and flexible spaces. Linda Pollak (2006, p. 127) asserts this idea as well, claiming,

Constructed ground represents a hybrid framework that crosses between architecture, landscape architecture, and urban design, to engage the complexity of contemporary urban landscape. [...] Its goal is to address simultaneously the concerns of architecture, landscape, and city, without having one or more recede in importance, as would happen in conventional disciplinary framework.

While landscape urbanism has provided theoretical and conceptual work that promotes a promising physical realization that influences the urban fabric, there has been little created to date beyond the scope of what has traditionally been deemed landscape architecture (Allen, 2010). An application of landscape’s scope, specifically in relation to the explorations of horizontal surface, into the realms of architectural practice can strengthen the realities of urban situations.

3.2 Infrastructure Beyond Service

Aldo Rossi (1982, p. 29) perhaps realized the possibilities inherent in infrastructure by identifying it as a division of architecture, stating,

By architecture of the city, we mean two different things: first the city seen as a gigantic man-made object, a work of engineering and architecture that is large and complex and growing over time; second, certain more limited but still crucial aspects of the city, namely urban artefacts, which like the city itself are characterized by their own history and thus by their own form.

Rossi argues for the architecture of the city to be classified into two categories: one being the infrastructural system of the city that supports the urban realm and its associated culture(s), and the second being urban artefacts, or objects, which give identity to that culture through their form and spatial content. The classification of infrastructure as architecture is a break away from modern ideology, where infrastructure was strictly separate from the architecture of building autonomous objects.

Alexander D'Hooghe, meanwhile, advocates for a shift in the perception of infrastructure from system to object in itself, and thus the re-insertion of design in its conception. D'Hooghe (2010) claims, "One can look at infrastructures of mobility as a system, or one can

look at them as a series of artefacts. [...] Rather than a system of transportation planning and engineering, we should read infrastructures as objects of cultural production with a spatial content not unlike that of architecture or sculpture” (p. 78). What D’Hooghe promotes is an objectification of infrastructure, and as a result a move away from the master-plan concept of single-function infrastructural systems and networks. Though D’Hooghe is mainly responding to the suburban phenomena of high-speed infrastructural arteries and community branches, it can be argued that the notion of infrastructural object-fragments (as opposed to the complete objectification of infrastructure) can also be applied to the congestion of downtown cores. Instead of surfaces acting as a passive platform for the movement of goods and people, D’Hooghe (2010, p. 78) argues:

Against this reductive interpretation exists another, which reads infrastructure not as a system but as an object; not as a logic but as an artefact; not as a tube but as space. From this point of view, infrastructures of mobility are the prime candidates to become a public space, or, better yet, a public form that is true and proper to the exigencies and demands of a modern urban society.

Objectification, however, insinuates domination over, and control of, users and various other systems. Object-fragments, on the other hand, suggest a shift in attention from “designing for one particular flow, to

organizing yet immediately negotiating a conflict between multiple flows” (D’Hooghe, 2010, p. 81). By understanding infrastructure as a place (network of objects) of multiple flows, human scale becomes the organizing factor in its conception, and as such re-introduces it into the realm of architecture and design.

Stan Allen has long been an advocate for the integration of architecture and infrastructure, amongst other disciplines. Allen (2010) argues, “What is required is a new mind-set that might see the design of infrastructure not as simply performing to minimum engineering standards, but as capable of triggering complex and unpredictable urban effects in excess of its designed capacity” (p. 38). Though Allen has written a number of pieces that contribute to the theories of landscape urbanism, he sees the potentials of infrastructure as having architectural characteristics. These qualities, or urban effects in this case, could translate into flexible and adaptable uses over time or by different users, as defined by distinctive material or formal gestures, and so on. By accepting infrastructure’s inherent network/surface connectivity, Allen (2010, p. 40) proposes,

...The vertical axis is materialized as building and the horizontal as infrastructure and landscape. This suggests an idea of site as a continuous matrix, differentiated locally as movement, building, infrastructure, or open space. The horizontal and the vertical are woven together, and both are understood as architectural material.

As such, the conception of an architectural surface should not be focused on the objectification or static manifestation of public space; rather it should be viewed as , an architectural framework that can allow for the flexibility of its surfaces to promote an active and engaging public realm.

3.3 The In-Between: The Potentials of Architecture as Surface

Architecture (in the sense of building) has traditionally been viewed through the lens of movement through or between spaces and, as such, enclosure and definition of those spaces. Bernard Tschumi (2003) calls these characteristics vectors and envelopes: “Vectors activate; envelopes define. Vectors typically are related to program. Envelopes usually respond to context, whether social, cultural, political or geographic” (p. 64). Tschumi goes on to argue that architecture cannot exist without these components, citing the necessity for architecture to define boundaries through its envelope(s). These boundaries, in turn, mark distinctions between public and private realms, specifically with regards to access, ownership, law, and social convention. This sharp distinction between public/private is in fact not applicable to contemporary society, as a result of the multiple dynamic characteristics discussed in previous chapters. Tschumi’s definition of architecture’s components, meanwhile, remains strictly inwardly focused, in that his definition of context fails to separate architecture from ultimate isolation and objectification. More recently, William J. Mitchell

(2009) has also written on the boundaries/envelopes presented by architecture as building, but in the context of contemporary city networks. Mitchell writes, “These boundary and network structures are topological and functional duals of each other. The boundaries define a space of containers and places (the traditional domain of architecture), while the networks establish a space of links and flows” (p. 228). In other words, the boundary cannot exist without the network, and vice versa. Mitchell argues that while the boundary has typically been the domain of architectural experimentation, networks have recently started to claim importance in the field as well. Mitchell uses the metaphor of the human body in further defining the concepts of boundaries and networks: People tend to surround themselves with artificial, or man-made layers (read: architectural envelopes) that have the ability to change and adapt based on their needs. However, Mitchell (2009) goes on to argue that these skins, or vertical surfaces are “leaky”, and as such require sufficient networks that “spatially concentrate inflows and outflows...” of, in the case of the built environment, people, goods, services, and so on.

Networks, then, perform as connecting pathways that direct and promote social interaction. Mitchell defines networks at varying scales, realizing that people and boundaries are becoming increasingly dependent on them. “Today the network, rather than the enclosure, is emerging as the desired and contested object.... Extension and entanglement trump enclosure and autonomy. [...] Connectivity become[s] the defining characteristic of our

twenty-first century urban condition” (Mitchell, 2009, p. 232). Instead of defining networks as mere connecting lines, however, they are now becoming more closely associated with extensive horizontal surfaces. Stan Allen has written extensively on the subject of horizontal networks – referred to in his work as the field. Allen (1999) claims, “Field conditions moves from the one toward the many, from individuals to collectives, from objects to fields” (p. 92). A possible interpretation can be read as the move away from the objectification of enclosures (in the traditional definition of architecture) to the balance between enclosure and vectors – boundaries and networks. As such, Allen’s definition of architecture delineates from sharp distinctions of public/private to that of “an architecture that admits change, accident, and improvisation. It is an architecture not invested in durability, stability, and certainty, but an architecture that leaves space for uncertainty of the real...” (p. 102).

In spite of these varying definitions, and the resulting unclear edge conditions, boundaries and networks still produce additional spaces within the urban fabric, that of the in-between. Aldo van Eyck (1962) explored the idea of an in-between realm in relation to his theories of twin phenomenon. Essentially, van Eyck claims that twin phenomenon is the reason why any thing has a meaning, identity or definition; it is the understanding of what something is in relation to something else (for example, there is no large without small, no black without white). In social situations for instance, “things” are usually understood and measured in relation to the

individual. However, all occurrences of twin phenomena also produce gradients of scales, colours, and so on – these gradients are the in-between. As a conceptual idea, twin phenomenon was to be transformed into architecture through van Eyck's concept for the in-between realm; this was van Eyck's attempt at humanizing architecture beyond the modern movement's sterilization, or separation, of built form and infrastructural elements. For van Eyck (1962, p. 63), the in-between realm

...Implies a break away from the contemporary context...of spatial continuity and the tendency to erase every articulation between spaces, i.e. between outside and inside, between one space and another. Instead I suggest articulation of transition by means of defined in-between places which induce simultaneous awareness of what is significant on either side. An in-between place in this sense provides the common ground where conflicting polarities can again become twin phenomena.

Through this statement, van Eyck claims that architecture's "job is to provide this in-between realm by means of construction, i.e. to provide from house to city scale, a bunch of real places for real people and real things" (p. 55). Van Eyck seems to be advocating for architecture to celebrate these in-between spaces, and thus to keep enclosures inwardly focused (building as enclosure), as well as to maintain the focus of infrastructural networks on larger-scale connectivity. The in-between, through the

connectivity of its associated networks, can then become public spaces in D'Hooghe's sense of object-fragments.

Additional insight into the concept of the in-between comes from Danish architect Jan Gehl's essay "Life Between Buildings" (1987), in which he explores the relationships between public space and an active, social, urban life. In advocating some form of architectural intervention into the seemingly negative or void space created by the in-between realm, Gehl (1987, p. 368) asserts,

Living cities, ones in which people can interact with one another, are always stimulating because they are rich in experiences, in contrast to lifeless cities, which can scarcely avoid being poor in experiences and thus dull, no matter how many colours and variations of shape in buildings are introduced. [...] Life between buildings is both more relevant and more interesting to look at in the long run than are any combination of coloured concrete and staggered building form.

Gehl seems to approach the conception of architecture through the lens of civic engagement and social interaction, as he often emphasizes the importance of the life that will result within these in-between spaces, as opposed to the form that generates a particular space. Further, Gehl advocates the need for architecture to affect city planning and policy, a notion removed from contemporary architectural practice. If planners

and developers have the ability to debate city by-laws in negotiating maximum allowable heights for high-rise development, for instance, surely the architectural profession can engage with municipal governments in improving the city at the pedestrian scale through thoughtfully designed interventions.

The potentials inherent in architecture for, at least partially, moving away from the objectification of building to an active platform (horizontal surface) for civic engagement is apparent, to varying degrees, in the theories and works of Tschumi, Mitchell, Allen, van Eyck, and Gehl, as explored above. In the comparison of these opinions, together with the theories of landscapes and infrastructures, architectural urbanism establishes a pedestrianized public realm in the context of the city. An exploration of the value of design's influence on the civic engagement of citizens as a result of the space's inherent material and formal qualities at the plane that is truly public - the horizontal surface - is the aim of this thesis. Public space is neither entirely network nor object; architecture as horizontal surface can be read in the same category, that of the in-between.

4.0

PRECEDENT REVIEW

Architecture as Surface

The following chapter explores various projects that demonstrate the potentials of public spaces that are architecturally defined by the horizontal surface. While the scale, scope, and site of each of the reviewed projects differs, the strategy of surface manipulation to create flexible and open-ended public space is consistent.

4.1 Material Consistency: Yokohama International Port Terminal

The 1994 competition brief for the Yokohama International Port Terminal cited the need for the city of Yokohama – Japan’s second largest city (AR, 2003) – to have a revitalized port in which the relationship between visitors and the city, as well as the city’s citizens and their waterfront, could be strengthened. The commission of this international design competition was awarded to Foreign Office Architects, or FOA, the former office of Farshid Moussavi and Alejandro Zaera-Polo. Though FOA no longer exists, the Yokohama Port Terminal, which was completed in 2002, continues to be one of the leading examples in the realization of the integration of architecture, landscape, and infrastructure with regards to built form. Stan Allen (2011, p. 24) claims,

Indeed, Yokohama is nothing if not a constructed landscape, and it is not quite accurate to call it a building at all. As an object on site, the project has none of the vertical, iconic presence traditionally associated with building. The boundary between interior and exterior is fluid and permeable.

The strength of FOA’s design is the seamless flow of people, goods, transportation vehicles (cars and cruise ships), and various services within and between surfaces. FOA took the competition brief – to provide a ferry terminal – and turned the project into a public amenity (AR, 2003) by extending the city’s landscape into the

water, essentially constructing a new site. In addition to the creation of this new land, the formal execution of Yokohama alters the harsh boundary that previously existed at the city's edge (between land and water) through its physical form, accessibility, and use.

Allen (2011) describes the project's permeability as follows: "The project functions at the level of infrastructure and public amenity, shaping and channelling the movement of passengers at the same time that it creates a new public space at the city's waterfront" (p. 24). Boundaries between interior and exterior spaces, programmatic functions, vertical and horizontal planes, as well as levels within the project were designed as extended transitory thresholds in order to accommodate the project's intended flexibility. As such, architecture's traditional concepts of fixed planes and boundaries become blurred through the rigorous submission of minimal material choices, in addition to the extension of public space into the landscape of water (Figure 4.0). The surface, hardscaped with wood decking, creates a new topography

Figure 4.0

Through the application of a minimal material palette, subtle surface manipulations begin to blur boundaries between horizontal and vertical planes.

Figure 4.1

Yokohama Port Terminal creates an extension of the city's topography through its constructed landscape.

for the waterfront (Figure 4.1). Through the application of their skills as architects, and also by working within the realms of landscape and infrastructure, Moussavi and Zaera-Polo operate “almost entirely on the basis of the operative techniques of landscape design and the programmatic effects of continuous topological surfaces” (Allen, 2011, p. 24).

Beyond just the physical realization of this project, it is interesting to understand the context in which it developed – specifically the time of the 1990s when the competition was announced and FOA had presented their proposal. The early 1990s was a period of global economic struggle, which coincided with a period of new architectural theory and shifting aesthetics. Michael Hensel (2011, p. 58) argues that this period signifies a move in architecture away from distinct definitions of type that were so prevalent through much of the twentieth century:

The significance of experiment is not in

its apparent proximity to what has come to be termed “landscape urbanism”, but instead in its organization of the various items and systems that would eventually culminate in an urban and architectural project that redefines a heterogeneous spatial scheme based on extended spatial transitions and the ultimate extension and fine dissolution of the material threshold which had previously resulted in the dichotomous division of the figure from the ground and the inside from the outside – in short the ushering in of the end of type.

It is no surprise, then, that this multi-disciplinary approach to design in the public sphere has manifested itself so strongly, starting in the 1990s and continuing to current practice. FOA’s Yokohama Terminal set the early example in defining the architecture of its project as its horizontal surface, and thus amalgamating the concepts of architecture, landscape, and infrastructure.

4.2 Unity: Simcoe Wavedeck

Located along the City of Toronto’s waterfront, and an integral part of its redevelopment, West 8’s Simcoe Wavedeck (along with the wavedecks found at the foot of Spadina Avenue and Rees Street) can either be viewed as an extension of the city’s urban landscape (in its

tectonic materiality), or as an extension of Lake Ontario's waterscape (in its formal expression). By blurring the boundary between land and water through this surreal manipulation of its surface, West 8 has created a linear public space that allows for a number of informal and non-prescribed uses (West 8, 2012). Though Simcoe Wavedeck operates as the most drastic manipulation of horizontal surface in comparison to the other wavedecks, as seen in the comparison between Figures 4.2 and 4.3, the application of wood decking as the project's main material instigates a change in the perception of passers-by. The juxtaposition in the materiality between the unique wood decking and the regular concrete sidewalk implies that surface infrastructure does not strictly have to serve the purpose of mobility but can also be used by the public.

Figures 4.2 & 4.3

The formal expression achieved in the Simcoe Wavedeck (top) is greatly exaggerated in comparison to the Spadina Wavedeck (left). However, similar materials and details achieve consistency along the waterfront.

The linear insertion of the wavedecks along the city's waterfront allows for this form of public space to grow and manifest itself with the perception of no distinct or harsh boundaries. Each realization of the timber wavedeck concept is unique but ultimately belongs to a larger and coherent vision for the redevelopment of the surface at the water's edge. The conceptual underpinnings of the term "wave" has become the prototype from which similar materials and details have been applied to surfaces at a larger scale to create distinct and publically accessible object-fragments. The design choices made in terms of materiality and detail are what change this linear park from simple infrastructure to an architectural public space. Note, however, that these object-fragments are created through surface manipulations as opposed to the literal placement of static objects in an open space. As a result, the individual's experience of these object-fragments changes with time as their social setting and interactions continuously evolve and differ.

4.3 Scale: Superkilen Urban Park

Superkilen Urban Park (Figure 4.4) is a kilometre-long span of land located in one of Denmark's most ethnically diverse neighbourhoods, and once belonged to Copenhagen's rail yards (BIG, 2012). Through active public participation, Bjarke Ingels hoped that the project would "become a vehicle for integration, rather than an aesthetic exercise in Danish design" (BIG, 2012). As such, at the very specific scale of the pedestrian, the park

has, somewhat unfortunately, become an assortment of very pragmatic found objects from around the world that cater to the immediate requests and needs of its users, as seen in Figure 4.5 for example. However, it is BIG's treatment of the surface that produces an exploration of architectural form. More precisely, in the southern most section of the park, BIG has applied colour to separate the single, horizontal surface into multiple fragments. It is a simple manoeuvre, but is effective in formally signifying public space and distinguishing it very clearly from its adjacent surfaces.. As a result, the minimally manipulated surface (three-dimensionally at least) allows for a wide range of programmatic activities and uses to occur, beyond those prescribed by the placement of the objects: "The different surfaces and colours are integrated to form new, dynamic surroundings for the everyday objects" (Dezeen, 2012).

Aside from the horizontal fragments, additional formal design moves include continuing the colour that is applied to the horizontal surface of the park to the vertical plane onto the site's surrounding buildings (Figure 4.6). Not only does this blur the edge created by the

Figure 4.4 (above)

Site plan indicating the extent of the kilometer-long span of Superkilen. Outlined in red is the southern-most portion of the park, where BIG used colour fragmentation to signify public space.

Figure 4.5

Bicycle storage is an example of a found object requested by the users of Superkilen to be integrated into the park's final form.

Figure 4.6

The continuation of colours from horizontal to vertical planes (and onto existing buildings) allows for harsh boundaries between opposing planes to disappear.

boundaries between horizontal and vertical surfaces, but it also conceptually folds the horizontal plane up and evokes the perception of a continuous and uninterrupted public domain. The objects that are placed on the site have limited architectural significance; it is instead the surface manipulation that translates the surface into an architecturally noteworthy public space.

4.4 Continuity of Surface: Exhibition Road

Exhibition Road in London, England (Figure 4.7), designed by Dixon Jones Architect and completed in 2011, is a re-interpretation of street infrastructure through the lens

Figure 4.7

Dixon Jones' site pan indicating the paving pattern that spans the entire surface of Exhibition Road (outlined).

of the theories of shared space. Shared space is an approach in urban design used to minimize, or blur, the boundaries created in street arteries between various modes of transit: pedestrians, private automobiles, public transit vehicles, bicycles, and so on (Shared Space, 2012). The concept of shared space is not a new one; this methodology is common to the planning of major streets throughout many European cities.

Spanning the street that links many of London's largest and most prominent cultural institutions, the design for the Exhibition Road project was "determined to address the former street layout that was inefficient, dominated by traffic with narrow, crowded pavements and street clutter unable to handle the millions of people who visit annually" (Dixon & Jones, 2012). The project's major formal move was a simple surface manipulation: a new

Figure 4.8

The shared space methodology is applied to Exhibition Road in London to blur the boundaries between various street uses.

crosshatched paving pattern that spans the entire width of the street and creates a single horizontal surface (Figure 4.8). The paving now simply consists of black and white marble, and the single plane has resulted in slower vehicular traffic, as well as greater pedestrian use and accessibility (Dixon & Jones, 2012). The pattern not only instigates a change in the user's perception, notifying them of a new public domain, but it also unifies the larger road despite the collection of ad-hoc architecture-as-object development. Finally, the removal of much of the road's previous clutter – including traffic bollards, highly regular street lighting, garbage disposal stations and so on – has resulted in the ability to design such necessities in such a way that reduces their interference with pedestrian movement. Additionally, this bare landscape allows for a high degree of flexibility in terms of future events or activities.

5.0

A RE-IMAGINED PUBLIC SPACE

5.1 Design Principles

In an attempt to synthesize the research undertaken with regards to the above precedent projects (as well as several other projects that were researched through the course of this thesis), the following three design principles have been created to act as guiding philosophies with the conception and development of the Thesis | Project. Each principle will be briefly explained in this section, and will be further elaborated during the presentation of the project. To re-iterate, these principles are all related to the design of the horizontal surface, or ground plane, as it is realized in the urban public domain of cities.

Hyper Materiality

In all four of the reviewed precedent projects, materiality was a vital factor in their horizontality and designation as public space. Hyper materiality refers to the excessive

nature or use of a very minimal material palette, and the ultimate balance between control of and submission to that material. In particular projects – such as Yokohama Port Terminal and the Simcoe Wavedeck – the material used paid homage to its immediate site and history. In the cases of these two projects, it is the concept of a wood deck at the city's waterfront.

Further, the minimized palette of materials requires highly rigorous detailing in order to maintain a clean aesthetic upon its manifestation. As a result, public space pieces that were once separate entities – simple elements such as lighting standards, benching, planters, and so on – must become an essential component to the design process.

Formal Surreal-ness

As a principle, formal surreal-ness refers to the exaggerated, surreal, or unconventional quality present in all of the reviewed projects. In Superkilen, for instance, it is the application of bold colour fragments to the ground plane. The wooden waves in Toronto create dreamlike yet habitable public space sculptures along the city's waterfront. At Exhibition Road, the consistency with which the crosshatch pattern is applied creates a mosaic on the city's landscape. However subtle the technique, each project poses a bizarre, perhaps artistic, formal reality.

Topographical Connectivity

Of the three principles, topographical connectivity is perhaps the most pragmatic. It refers to the notion of

horizontal surface as enclosure, or as defining space, without the need of the vertical plane. This can be done through application of material (for example, Exhibition Road), or changes in the project's topography (Yokohama Port Terminal), and so on. Besides existing edge conditions – those presented by existing buildings on site – each reviewed project relies most heavily on the definition of public space by its horizontality, or ground plane. This ground plane is able to then act as a flexible surface that can define desired future programmes or activities.

5.2 David Pecaut Square: Site Analysis

David Pecaut Square in Toronto's downtown core presents a unique opportunity in developing the ideas of public space as designed through the lens of architecture as horizontal surface. Though it is currently designated as one of the few public urban squares within a newly re-populated downtown core, the space itself is poorly defined. The square reads as the void created from the four isolated buildings that are placed along its edges. As a result, like most urban plazas in the core, it is most often experienced by its users in a state of passive distraction, as there is no unique character presented. Despite its adjacency to a number of prominent cultural landmarks, the square offers nothing that distinguishes it as "public" besides a number of sculptural art pieces, an eternal flame for example, which seem to represent another period of "public-ness". Prior to its designation

as a public square, the site was once part of Ontario's institutional and administrative lands in the nineteenth century before becoming compartmentalized through various infrastructural and building developments. Roy Thomson Hall, situated at the east end of the block, opened to the public in 1982, followed by the operation of Metro Hall in 1992. Before Toronto's amalgamation in 1998, Metro Hall, designed according to postmodern ideology, was home to Toronto's municipal affairs; today, it operates as private offices in the midst of Toronto's culturally diverse King Street West corridor. Bordered by King Street to the north, Wellington Street to the south, Simcoe Street to the east, and John Street to the west, the block functions as a collection of disjointed object-buildings, and the resulting public space as void. Figure 5.0 illustrates the existing condition of David Pecaut Square in its context, while Figure 5.1 is a site plan of David Pecaut Square in relation to its surrounding blocks. Figures 5.2 - 5.4 are a few images of David Pecaut

Figure 5.0 (above)

David Pecaut Square defined by King Street to the north, Wellington Street to the south, John Street to the west, and Simcoe Street to the east.

Figure 5.1

David Pecaut Square, site plan.
 *Note - floor plans of Metro Hall buildings and Roy Thomson Hall are representational and suggestive; complete accuracy is not intended.

Figure 5.2

Photo taken at the northwest corner of David Pecaut Square. Art and vegetation prevent physical and visual connection to the Square beyond and present a chaotic street presence.

Figure 5.3

Photo taken at David Pecaut Square's edge at John Street. With the random placement of public furniture and the dispersal of vegetation and various objects through the site, the square's edges do not present the quality of "public-ness" or accessibility.

Figure 5.4

The inner void of David Pecaut Square, where the vegetated portion of the surface appears to reference the extent of the Square's public domain.

Square's; additional images can be found in Appendix A.

Building types and major pedestrian entrances are indicated on Figure 5.5. As shown, King Street to the north of David Pecaut Square experiences a fairly fine grain of building entrances, and publically accessible at-grade uses. To the south, however, Wellington Street hosts an irregular building grain and many of the towers are private residences or office buildings. Though King Street remains vibrant, the activity or connectivity to David Pecaut Square from Wellington Street is poor as a result of the immense lot sizes given to private development. Further, Figure 5.6 is a sun/shade study of the effect these developments have had on David Pecaut Square. Although the Tall Building Guidelines “recommends that tall buildings should be designed and oriented to minimize shadow impacts on all parks and open spaces, whether publically or privately owned, at all times of the day” (2010, p. 30), two of the major private developments to the south of David Pecaut Square – the Ritz Carlton Hotels/Residences and RBC Centre – cast major shadows on the square throughout the year. Figures 5.5 and 5.6, as well as the object-in-landscape design of Metro Hall, are a testament to architecture-as-object's inability to frame public space in the contemporary city.

If we can no longer rely on architecture's independent development to shape the public domain, perhaps infrastructural networks can begin to reclaim civic spaces. However, as depicted in Figure 5.7, the traffic

Figure 5.5

Building types and pedestrian access points.

*Note - floor plans of Metro Hall buildings and Roy Thomson Hall are representational and suggestive; complete accuracy is not intended.

Figure 5.6
Sun/shade study of
David Pecaut Square
(outlined in red)
and the effect its
surrounding built form
has throughout the
year at various times,
as indicated.

patterns and vehicular access to buildings that currently exist surrounding David Pecaut Square dismiss simple pedestrian access to the public space, especially from Wellington Street. This condition will be discussed in further detail below. Finally, David Pecaut Square's existing topographical changes are reflected in Figure 5.8. The sunken courtyards and underground PATH access (Figure 5.9) surrounding Roy Thomson Hall present opportunities to house various flexible programmatic elements through weaving and layering formal and infrastructural components. The site is the western-most portion of Toronto's PATH system as it exists today, and its accommodation has potential to produce a public space where the flow of people is layered within multiple surfaces and existing networks.

As a result of the configuration of built form, and the isolation of Roy Thomson Hall through the aforementioned sunken courtyards, pedestrian circulation throughout the square is largely prescribed, while access to the central open space is obstructed by various objects (buildings, sculptures, pavilions, and so on). Additionally, the existing entrances and exits into and out of buildings, shown in Figure 5.10, can be used to create a stronger sense of connectivity between David Pecaut Square and the harsh architectural boundaries presented by the built form. Programmatically, all public spaces are different – there is not one formula that can be applied to all in-between sites throughout the city. Because David Pecaut Square is located within what is arguably Toronto's most culturally active neighbourhoods, these types of

Figure 5.7

Traffic study indicating type of traffic permitted on the streets, and street widths, surrounding David Pecaut Square.

*Note - floor plans of Metro Hall buildings and Roy Thomson Hall are representational and suggestive; complete accuracy is not intended.

activities should be favoured. Not surprisingly, Toronto's arts festival, Luminato is based in David Pecaut Square (Luminato, 2013). Luminato, an annual event, promotes artistic and creative endeavours including theatre, music, dance, visual art, literature and film. These types of activities will therefore be used as a base from which the design is conceived.

Figure 5.8

David Pecaut Square's natural topography.

Figure 5.9

Illustration of how Toronto's PATH system is integrated into the buildings at David Pecaut Square.

Figure 5.10

Building access points and exits at David Pecaut Square, as defined.

*Note - floor plans of Metro Hall buildings and Roy Thomson Hall are representational and suggestive; complete accuracy is not intended.

5.2.1 Wellington Street Corridor

Toronto's main east-west streets in the downtown core have developed into major arteries, accommodating residential, commercial, and institutional needs. Queen and King Streets, for instance, have become desired destinations for their cultural value and amenity offerings, while both Richmond and Adelaide Streets are becoming increasingly publically accessible and used. Wellington Street, on the other hand, continues to develop in an ad hoc manner. The potentials for a corridor (Figure 5.11) have been negated through the objectification of both built form and public spaces. While the network (existing street infrastructure) presents inherent connectivity between these spaces, there lacks a consistent vision to unite the seemingly obvious public space corridor. Instead, Wellington has become a street where service and parking garage entrances spill onto, and pedestrian accessibility is sacrificed.

Further, a major portion of Wellington, from Church Street (just east of Berczy Park) to Spadina Avenue (Clarence Square), consists of a three-lane one-way vehicular street, with one additional lane for street parking. As a result, this corridor often becomes heavily congested during peak hours, or on the other hand, the preferred route for high-speed car transportation. Instead of these situations, Wellington's width and corridor potentials provide an opportunity in creating an instance of shared space within Toronto's core. If public spaces (David Pecaut Square, for instance) act as in-between

Figure 5.11

The Wellington Public Space Corridor.

object-fragments within the city, the concepts of shared space can be applied to the city's networks to create an extension of the public spaces.

Instead of presenting a master plan vision for Wellington Street, this thesis aims to offer the concept of design as acting much like a catalyst towards producing a culture shift, or a changed perception towards public space along the Wellington Street corridor. As such, by implementing the model of understanding architecture as surface – and thus, the creation of public spaces through surface manipulations – the establishment of principles that are then applied to the design of one of the spaces shown in Figure 5.11 can instigate further discussion and/or change. This is a notion not dissimilar to that of the development of Toronto's waterfront, as explored in Chapter 4.2 through the Simcoe Wavedeck project, where consistency in materials and principles have been applied to a number of object-fragments along a larger public corridor.

5.3 David Pecaut Square: Project

With the recent intensification of Toronto's downtown core through private development, there has been restored interest in the city's public domain as well. Massive public developments along the city's waterfront have become a testament to the desires of Toronto's citizens and a large number of its policy makers. However, existing public spaces within the core have yet to receive the same kind of architectural design and rigor, and the public domain within the core remains overwhelmed and overpowered by architectural objects. Further, the public spaces that do exist are connected by overly congested infrastructural networks. Without standing at a safe distance and working at the city's edges, this thesis proposes to confront the obstructions and clutter within the core by architecturally defining the city's landscape, ground plane, or horizontal surface. The Thesis | Project is situated at David Pecaut Square, a public park along a corridor of public spaces connected by Wellington Street. The re-designed Square is detailed in the following series of drawings and follows the three principles that were highlighted earlier: Hyper Materiality, Formal Surreal-ness, and Topographical Connectivity. Each drawing is accompanied by a brief explanation that further explains the design's intentions.

The first major move in the re-design of David Pecaut Square (Figure 5.12) was the complete removal of all objects – sculptures, changes in landscape, and so on – and the suggested demolition of the rotunda, or

council chambers, of Metro Hall's main building. This demolition extends the central space of the Square to its western corners and opens the park to the street, both physically and visually. Additionally, the removal of this highly underutilized space (especially after Toronto's amalgamation) is a move to give the space back to the public and make it part of a newly imagined civic area, thus memorializing the intent of the original council chambers. In response to the various elevation changes and levels within the site, this proposal allows for a higher degree of flexibility between different planes. The existing reflecting pool at Roy Thomson Hall is expanded and now opens to Wellington Street to the south, and now can truly be accessed and used throughout the year. Further, movement through the square was designed to be open and highly adaptable; entry "points" are kept to a minimum – instead, access and transition areas occurs along blurred edges and long thresholds.

In terms of materiality, white limestone pavers are applied throughout the surface in a move to recall Toronto's historic geology. By using limestone as the dominant surface material, the formal quality of the project is reminiscent of the notion of a sculpture carved out of a large stone. Its surreality is achieved through the origami-like folds applied to the material that accommodate the site's natural topography. The limestone is contrasted by charcoal, poured-in-place concrete for the diagonal bands. These bands suggest movement and flow through the site. Both materials continue through all formal elements in the project – benches, planters, steps, pavilions, and

so on. Finally, the surface continues through the public portions of Metro Hall North and South to enhance connectivity between King Street, Wellington Street, and Simcoe Park to the south.

The following colour-based legend defines the subsequent drawings into the key topics addressed in the project, ultimately referring back to the research that was undertaken:

- Connectivity & Flow (to adjacent pedestrian streets, Roy Thomson Hall, and the PATH system)
- Public-ness (increasing visual and physical accessibility from John Street and re-claiming Roy Thomson's Hall court)
- Surface-affirming (visually defining the surface as the public domain)

Figure 5.12

David Pecaut Square proposed site plan. Dashed line at Metro Tower indicates proposed demolition of the existing council chambers.

15m 45m

Figure 5.13

North-south section through King Street and Roy Thomson Hall enhancing physical and visual connectivity.

Figure 5.14

East-west section through Roy Thomson Hall and David Pecaut Square enhancing formal connectivity.

Figure 5.15

Key plan as indicated.

All materials continue through all formal elements in the project – benches, planters, steps, pavilions, and so on. Additionally, access to the PATH system below is now high-lighted and done much more freely, through both the pavilion that takes the user down, or the permanent “bridge” that connects to the Roy Thomson Hall patio.

Figure 5.16

View taken at the northeastern portion of David Pecaut Square, near the intersection of King Street West and Simcoe Street, looking towards the expanded reflecting pool surrounding Roy Thomson Hall.

The lower level patio at Roy Thomson Hall is now opened to the public and can serve an informal programme – what is suggested is café seating. This creates an active and engaging commercial opportunity for the Hall that involves the pedestrian that is casually passing by – something not currently exercised.

Figure 5.17

Key plan as indicated.

The newly expanded courtyard also doubles as amphitheatre-style seating focused towards the Hall. The seats, or steps, are over three feet in width, and at their highest point, just less than eight inches deep. These proportions are comfortable and invite the user to linger, as opposed to being read as a vehicle for circulation.

Figure 5.18

View taken along King Street access, just west of Roy Thomson Hall, looking south.

More than just a resting spot, the quasi-amphitheatre provides the opportunity for the Hall to extend its events beyond its borders, by providing symphonic performances to the broader public, for instance. The amphitheatre can also act as a venue for the number of cultural events that occur in the city's core annually.

Figure 5.19

View taken along King Street access, just west of Roy Thomson Hall, looking south during the evening. Another potential activity is a dance performance as part of Luminato.

A retractable scrim allows the amphitheatre to be used with or without digital media. The lighting standards, as well as indirect lighting from surrounding buildings, allow for the courtyard to be used throughout the daytime and evening hours.

Figure 5.20

View taken along Wellington Street access, west of Roy Thomson Hall, looking north.

Largely passive enjoyment of specific, organized events is not the only opportunity present with the expanded courtyard. Active engagement with the design on a daily basis is highly desired, and goes beyond commercial ventures present in many public spaces. In the warmer months, the expanded courtyard's reflecting pool is now easily accessible. The water feature, a permeable surface, offers retreat from the urban jungle that surrounds the square, and also provides an opportunity for play.

Figure 5.21

View taken along Wellington Street access, west of Roy Thomson Hall, looking north, during winter.

In the cooler months, the surface transforms into a skating rink and winter playground at large. The edges of the auditorium steps are undefined, as the surface from Wellington slopes down toward the expanded reflecting pool, and simultaneously up to accommodate the topographical change.

Figure 5.22

Key plan as indicated.

Access to the expanded courtyard now happens much more seamlessly from the south along the Wellington Street edge. The redundant number of parking ramps have been filled in and capped; instead, one larger ramp is proposed to run directly adjacent to Roy Thomson Hall's service zone. This four-lane ramp serves the site's parking and loading requirements. As a result of this parking ramp amalgamation, the surface is further freed of all unnecessary interruptions.

Figure 5.23

View taken along Wellington access, west of Roy Thomson Hall, looking further west toward Metro Hall building complex.

The resulting vastness of the surface in this area presents the opportunity for subtle and temporal artistic installations that enhance the horizontal surface. This is a reinterpretation to the very permanent sculptures that currently sit at the square – an eternal flame for example – that seem to recall long-gone eras of public-ness.

Figure 5.24

Key plan as indicated.

While the re-design of what is currently the moat was one instance of reclaiming under-utilized and under-designed space back for public use and engagement, the recovery of Metro Hall's former council chambers is another similar gesture. Together, the larger expanded courtyard at Roy Thomson Hall and this new gathering place create an open and permeable "room" at the centre of the Square, one whose thresholds are long and edges blurred.

Figure 5.25

View looking west towards Metro Tower, taken at the space where Metro Hall's rotunda and council chambers once stood.

This new civic space is meant to act as a gathering place for groups, as well as an area for spontaneous events and activities, as shown here. The demolition of council chambers provided an opportunity to re-design the façade of Metro Tower through similar folding techniques and create a more engaging at-grade public presence. The surface becomes a play-scape for the public, as well as the means of access for those who still use the office tower.

Figure 5.26

Key plan as indicated.

Access to this new gathering place, and the interior of the square beyond, can be done through an exaggerated stair/ramp combination, designed in a manner similar to that of the auditorium steps further to the east.

Figure 5.27

View taken at Wellington Street and John Street corner.

Instead of being obstructed visually and physically, by built form and public art pieces, these steps provide simple connectivity to the square beyond. This area now presents an opportunity for the revitalization that is to be done along John Street to overflow onto David Pecaut Square, and vice versa.

5.4 Moving Forward

The research and design project that together produce the content of this thesis demonstrate a specific exploration of architecture's potential role in the public domain. The architectural profession has the largest stage and audience of any other in the world, as thus has a deep-rooted responsibility to civil society. In an attempt to move towards the re-integration of architecture's contemporary concerns with those of landscape and infrastructure, this thesis operates at the scale of the public domain, where design has the opportunity to both identify civic space as well as accommodate and enhance the variety of public activities that might occur there.

The research focuses on the development of the contemporary North American city's downtown core, Toronto specifically. The theory postulates that if we can no longer rely on architecture-as-object to define a meaningful public domain, because of architecture's growing involvement with the private sphere, and further, we cannot clearly define public spaces through the means of architecture-as-network, because of over-congestion and automobile dependence, it is then critical that the design of the horizontal terrain is taken back into the practice of architecture. Instead of defining the public domain through the vertical plane, and thus allowing it to solely manifest incrementally alongside the design of individual buildings, the thesis suggests that it should operate along the horizontal surface. This thesis argues that, in order to create meaningful public spaces, we

must look for opportunities within the midst of the ill considered, left over spaces that already exist within the core, within neighbourhoods that are being re-populated with a new live-work pedestrian population.

The design for a re-imagined David Pecaut Square acts as a case study to which the theory and research is applied. It is meant to provoke and promote discussion with regards to architecture's relationship to the public domain, and how the design of the horizontal surface can manifest a civic identity. Hyper materiality, formal surreal-ness, and topographical connectivity are design principles derived from the analysis of public space precedents of architectural and design quality, and have been applied to the design project.

If the future of architecture seeks to move away from the practice of commodifying the public realm, then the inclusion of not just objects and networks but also the ground plane must become a part of architectural discourse and practice. Moreover, existing public spaces within the midst of our urban centres - those that are under-designed and under-used - must also be re-imagined through their surfaces. In this particular situation, it is suggested that the architect can design the template, framework, or platform with which citizens can engage. Attention goes to the design and creation of a pre-eminent surface, the identity and character of which has the strength to withstand the minor adaptations and embellishments that subsequent "publics" play upon it.

Appendix A

The following photographs are of existing conditions at David Pecaut Square, taken at various times of the day and calendar year, and are for reference purposes. Note the excessive amount of objects placed ad hoc within the square in each image.

Spring/Summer:

David Pecaut Square: Existing Conditions

Source: Dorna Ghorashi

Appendix A

Fall/Winter:

David Pecaut Square: Existing Conditions

Source: Dorna Ghorashi

Appendix A

Photographs of a sketch model made to replicate David Pecaut Square's existing topographical condition.

Source: Dorna Ghorashi

David Pecaut Square Existing Conditions

Appendix B

Landscapes of Connectivity

Installation Statement:

The term infrastructure, when applied to a city has varied meanings and can be used to identify a number of different systems and networks – both tangible and intangible. Regardless, infrastructure is intrinsically tied to civil society; in contemporary cities around the world, infrastructure is the basis from which urban life operates and is served. In cases where infrastructure fails – whether it's the neglect of public transportation or severe damage to roadways and sewer systems as a result of a natural disaster – a city has difficulty maintaining its order and social norms. The physical infrastructure of the typical North American city grid provides a surface from which the traditional notion of architecture-as-building manifests itself. Without it, the city would be chaos, and architecture (as building), lost. Through its organization, surface infrastructure also provides a network of connectivity with respect to the urban realm. It is generally seen as a means to end destinations, and is rarely objectified as architecture typically is. The question then becomes how can architecture reinvigorate surface infrastructure as a viable, interconnected public space within the city?

This exercise was installed in the Architecture building at Ryerson University from December 2012 - January 2013 and was part of a graduate seminar titled *Current Topics in Architectural Praxis*.

Source: Dorna Ghorashi

Design Exercise 1

Right:

Atrium grid proposal,
situating the installation
in Ryerson's Architecture
Building.

Right:

Documentation of installation.

Appendix B

Part of the exercise was to observe how other students in the seminar would respond with the placement of their own installations. The following images reflect how other graduate students chose to place their work within this new infrastructural network.

Design Exercise 1

Appendix C

The following sketches and model photographs depict the development of this design project prior to the Substantial Completion Review, which can be found in Appendix D.

Source: Dorna Ghorashi

Above:

Expressing David Pecaut Square as “solid” and built form as “void”; initial expansion of Roy Thomson Hall’s sunken courtyard.

Design Development

Right:

Sketches exploring the idea of peeling the surface from the ground plane and creating a canopy, or raised surface.

Appendix C

Design Development

Above and Opposite:

Initial design iterations exploring the concept of surface folding that directs the flow of users through the space.

Appendix C

Left and Above:

Design explorations sketching peeling and folding planes along the surface.

Design Development

Appendix C

Design Development

2/

6/

Above and Opposite:

Examples of design development through detail sketches. Site plan indicates approximate location of sketches.

Appendix D

The following drawings and representations are an indication of the thesis | project at the stage of substantial completion (April 2013).

Source: Dorna Ghorashi

Substantial Completion Review

Appendix D

Substantial Completion Review

Appendix D

Substantial Completion Review

Appendix D

Substantial Completion Review

KING ST. KING ST. RAMP ROY THOMSON HALL BOWL ACCESS WELINGTON ST.
TREE MEDIA WALL PROMENADE

Appendix D

Appendix D

Appendix D

Substantial Completion Review

Appendix E

Source: Dorna Ghorashi

Final Design Model

Reference List

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