rethinking the greek agora
interior design + the practice
of everyday public space

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A practicum submitted to the Faculty of Graduate Studies of the University of Manitoba
in partial fulfillment of the requirements of the degree of

MASTER OF INTERIOR DESIGN

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The objective of this practicum project was to explore the role of interior design in transforming unused urban space into public opportunities for gathering. This was achieved by extracting design guidelines from theoretical concepts of space and place, interiority, and immersion. In doing so, subsidiary concepts of interactivity, placemaking, boundaries and thresholds were also examined in order to help achieve the overall goal of transforming in-between space within the city of Winnipeg into meaningful opportunities for spatial and social interaction. It is the intention of the project that these newly designed spaces will help to foster spatial opportunities for pausing that will help to engage the users of the space with one another, the city of Winnipeg, and in turn create a sense of place.
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1.1 introductory background

This practicum project aims to inform the interior design profession and the community of the potential role that interior design has in transforming in-between spaces within the city of Winnipeg. These spaces will exemplify the notion of interiority by creating public opportunities of spatial and bodily interaction by blurring boundaries and thresholds between the interior and exterior realm.

The typology that will be under investigation will be the historic concept of the Greek agora as it was intended to be the central space within a city that served as an open area for public assembly. Over time the agora’s programme morphed and took on the role of a public marketplace and was central to Greek life. In conjunction with the notion of the agora, other concepts and theories will be simultaneously examined in order to help to promote and encourage further forms of communication and interaction in public spaces. One of these theories will be concept of affordances, as it requires the mental and physical engagement of a person with an object in order to realize its perceived and actual properties.

Further opportunities for interaction will be investigated through the use of interactive design and responsive technology. Synthesizing these forms of interaction will foster an immersive spatial experience that becomes memorable and therefore helps to translate space into place, as moments of pause and rest are achieved.
1.2 Objectives of the Project

Reinforcing the importance of public space in our daily lives is one of the main motivations for this project as current trends in North American demonstrate a contemporary privatization of life that has made the function of central public places few and far between (Cooper Marcus and Francis 1998, 1). This is due, in part, to an increase in the commercialization of private space and the advent of personal hand-held technology (Livesey 2004, 71).

With 68,000 people commuting to the downtown core everyday for work, this results in over 32,000 parking stalls within the downtown core alone (Downtown Living: Fast Facts, Downtown Winnipeg Biz, 2010). Spaces for socialization are few and far between and the public environment has become desolate and reliant on planned formal occasions that transpire mostly in monitored enclosed spaces (Appleyard and Jacobs 1987, 101).

This emphasis on the individual and the private sector has influenced the spread of the automobile as it encouraged “private affluence and public squalor” (Appleyard and Jacobs 1987, 101). In the city of Winnipeg, the automobile is the predominant form of citizen transportation as statistics show that 68% of Winnipeggers rely on automobiles for their primary form of transportation (2006 Census Data, City of Winnipeg, 2006).

This loss of human interaction in public space is halting the development of physical interaction among people, which is a crucial method of communication and spatial orientation. A return to public space is therefore necessary to the spatial experience of the city of Winnipeg as “people only grow by the process of encountering the unknown, and the best place to encounter difference and the unfamiliar is in public spaces, where all segments of society cross paths, mingle and be observed” (Shaftoe 2008, 20). This lived experience to spatiality facilitates the develop-
ment of a personal meaning for each individual and helps to transform space into place, once definition and felt value are achieved (Tuan 1977, 138).

It is therefore evident that meaningful experiences and memory are nurtured in spaces were place is given the opportunity to develop through interaction and immersion in experience. It is my goal to design spatial opportunities that foster moments of pause that will help to engage the residents of Winnipeg within the built environment. These moments of pause will allow us to reconnect and contribute to an atmosphere that is fundamental to enriching our daily experiences. This practicum therefore aims to identify and understand the challenges of public space today, by theorizing the meaning of public space in today’s urban society, particularly within the realm of in-between space (see page 11). Design criteria for new public spaces have been examined through a combination of a review of literature and precedent review. Synthesizing these ideas allows simultaneous connections to be made between the practice of interior design and the design of public spaces by focusing the design of this practicum project on a series of smaller public spaces within Winnipeg.
1.3 significance of the project

This project also aims to explore the potential alternative roles that interior design can play within built environments. With advancements in technology, the boundaries between public and private space have become obscured, as public space has become a forum in which private activity transpires. An example of this is people talking on cell phones in the middle of a busy street. These hybrid activities require public spaces that invite and amalgamate various spatial experiences. Interactive design and responsive computing systems are two fields in which design has the potential to accommodate the needs of multiple users. Rather than appealing to the masses, this technology is transformative and flexible in nature. It also encourages and welcomes bodily and spatial interaction, resulting in the activation of space into place as moments of pause are fostered.

Potential actions within spaces that implement this technology are able to transcend architectural prescriptions linked to the boundary of a building; as it is the “boundary conditions that determines the flexibility, mobility and extent of interiority” (McCarthy 2005, 115). Understanding interiority as this abstract quality enables the recognition and definition of an interior, and therefore strengthens the practice of interior design as it unleashes infinite potential for the way in which it can be applied to multiple facets of space. Interior design therefore becomes the “continuation and extension of architecture with the understanding of space and life, and thus creates a better quality of living space and injects new vigor into human civilization” (Wang 2008, 4). This thinking is critical to the advancement of interior design as it aids professionals in understanding the full extent to which interior design can be applied to theoretical concepts of space and place.

The use of digital media to enhance public space has been an expanding research agenda
at various international institutions, and it is therefore important to place the field of interior design within this spectrum. An example of this is Massachusetts Institute of Technology’s (MIT) Design and Development Group, situated in the Department of Urban Studies and Planning, in conjunction with the Department of Architecture. This collaborative team has been researching the use of new digital media in design as they feel that it is one trend that cannot be ignored, especially since work in this field is inherently interdisciplinary.

In Designing Public: Interactive City, Udo Muller states “mobility, interactivity and digitization are the mega trends of modern society that will shape the urban landscape of the future” (Erlhoff, Heidkamp and Utikal 2008, 141). The driving forces behind these trends are resultant of demands by an increasingly mobile population and ever-tougher competition between cities. As a result, cities have begun to incorporate new interactive media that is easily accessible and responsive in order to engage people within the context of the city while simultaneously allowing them to check when the next subway or bus will arrive.
1.4 key research questions

How can the concept of interiority achieve concrete reality without being defined by architectural prescriptions or boundaries?

By questioning the concept of enclosure within this practicum project, notions of privacy, safety, and openness and vulnerability are raised. As a result, how can elements of interior design be applied to the proposed spaces in order to foster environments that welcome and encourage lively participation?

How can technology be used to encourage human connections and bodily and spatial interaction without becoming another vehicle in which individuals become absorbed?
1.5 research methods

The use of primary research in this practicum is vital to the success of the overall design as it allows information to be gathered that is specific to each of the three sites. Detailed information is extracted through the use of site analysis and photographic analysis, which are represented in the form of graphic plates that represent: boundaries, districts and population, site map, micro climate, circulation, greenspace, nodes and landmarks, and ordering systems. Site analysis allows an in-depth study to be undertaken in order to provide an understanding of the particular site and its relationship to the new design (Kilmer and Kilmer 1992, 273). As a result a thoughtful investigation of both the site and the redesign is necessary in order to ensure a copacetic balance between the two. Physical and non-physical characteristics of the sites and surrounding areas are examined in order to help to determine the existing character, identity and spirit of the place (Dodsworth 2009, 38). Geographical, climatic, historical and sensory factors are also examined in order to ascertain a thoughtful and thorough investigation into the site analysis.

Photographic analysis is a key instrument in helping to determine the character and location of the site as it provides visual clues and references to the space (Dodsworth 2009, 33). Photographic analysis can also assist in determining the way in which the site shifts with each change in season. The images therefore begin to form a narrative that would otherwise not be documented, and help to construct visual forms of data that will begin to inform the overall design of the site. American street photographer Gary Wingo-grand believes “the true business of photography is to capture a bit of reality on film…” (Goldstein 2007, 62). Photographic analysis was also used to contribute to the development of the graphic plates as well as giving a physical representation of each of the three sites, which can help to deter-
mine the quality and spirit of the existing space.

The use of secondary research in this practicum comes in the form of a literature review and a precedent review. The literature review conveys the overall knowledge and ideas that have been established in Chapter 2, outlining their relative strengths and weaknesses and their relevance to this practicum project (Procter 2009, The Literature Review: A Few Tips On Conducting It). The underlying themes of this practicum comprise the basis for the literature review as only pivotal resources were selected and analyzed in order to ensure they provide the ability to be translated into design guidelines. Key words and concepts of this project were determined at an earlier stage through the use of a conceptual framework (figure 33), and used as triggers in order to help to prompt the process of extracting design guidelines which will be used later to inform programming and design (Kilmer and Kilmer 1992, 180). This ensures that the research remains relevant and insightful to the nature of the project.

The precedent review within this practicum is vital as it allows a design analysis to be undertaken in order to understand the works of others and in return aids in the formation of original ideas (Clark and Pause 2005, viii). Of importance is the development of a vehicle for the discussion of ideas through the use of examples, as formative ideas are generated and organized through criteria that are established within the literature review. Many precedent reviews invite an investigation into formal and spatial characteristics of existing designs, and allow strengths and weaknesses to be extracted in order to help to inform design considerations and guidelines for this practicum project. In order to ensure the success of this practicum project it is important to understand where it is situated in the current practice of interior design, and the design of public spaces. An understanding of its predecessors is therefore fundamental as precedent reviews act as a way to clarify the link between history and design, and result in enriching the final design (Clark and Pause 2005, xi).
1.6 Key Terms + Working Definitions

In order to avoid the misinterpretation of some of the terminology used throughout my practicum project, I will clarify certain concepts and their meaning. Many of the meanings are derived from various theorists’ work, as they help to ground my research within an existing dictum that provides the foundation for further discussion and development throughout my practicum project.

**Agora:** Harvey M. Rubenstein defines the concept of the agora, historically as well as conceptually in his book Pedestrian Malls, Streetscapes, and Urban Space. Historically, the agora developed in the Mediterranean culture and was the central gathering place for Greek life. It was a multifunctional space that embraced business, government, assembly, as well as a marketplace. The centre area within the agora was a vast open space where people met, talked, and conducted business and civic activities (Rubenstein 1992, 2). As a result of the plethora of activities that transpired within the agora, it is Rubenstein’s belief that this is where urban space was born. Rubenstein believes that spaces such as these “create an image for the city in which they are located; they become a meeting place, and a centre for various activities that improve the physical and social environment” (Rubenstein 1992, 1).

**In-Between Space:** Norwegian-based architect Hoshiar Nooraddin believes that indoor spaces do not end with building edges, but instead interface and integrate with outdoor spaces. As a result, public and private realms overlap to create an identifiable urban space otherwise known as in-between space (Nooraddin 2002, 50). This space becomes the major function of the street, as it is a place of activities and therefore reflects social meanings and lifestyle of the local community.

**Interaction (Spatial + Bodily):** Understanding the scope of interaction is critical to the design of this
practicum, as it helps to inform the design guidelines that promote spaces for interaction. Professor and interactive designer Eva Hornecker realizes interaction to be broken into two main streams: spatial and bodily. Because we are spatial beings we live and meet each other in space. Space is never meaningless; it always surrounds us; it is our habitat (Hornecker 2005, 1). Our body is the central reference point for perception. Movement and perception are tightly coupled and therefore interpret spatial qualities (or positioning of other objects) in relation to our own body (Hornecker 2005, 1). Spatial qualities therefore have psychological meaning. Bodily interaction is comprised of manipulation, movement, and gestures and is therefore seen as enlivening experience as it stimulates mental energy, enhances engagement and is expressive. It is part of expert skill, and also a means of self-expression (Hornecker 2005, 2). Bodily interaction is highly performative and supports implicit coordination.

**Interiority:** The concept of Interiority is derived from the work of Dr. Christine McCarthy, Senior Lecturer of Interior Architecture at Victoria, University of Wellington in New Zealand. McCarthy approaches the notion of interiority as an abstract quality that facilitates the recognition and definition of an interior space and is therefore not an absolute condition that is contingent upon a restrictive ‘architectural definition’ (McCarthy 2005, 112). The boundary conditions associated with interiority are dependent upon an explicit manipulation of an environment in order to achieve and construct a desired space that relies upon flexibility, mobility and porosity. McCarthy clearly states that ‘inside’ and ‘outside’ are architectural prescriptions tied to the boundary of buildings, whereas interiority and exteriority weave within and without built constraints or architecture (McCarthy 2005, 112). Having stated this, interiority welcomes a lived approach to the understanding of space and encourages participation within the environment in order to gain meaning and significance. Interiority is a transformative concept that builds upon the notions of space and place, by recogniz-
ing the significance of social, cultural, physical and
technological developments within current society.
In Intimus: Interior Design Theory Reader, Mark
Taylor and Julieanna Preston define interiority as
the conscious and reflexive awareness of self,
identity, community and others within a social
environment. Situated among philosophy and
psychology, this cluster of associated points
in the interdisciplinary arena of 'interiority' ex-
amines the innerness of interior design as that
which is felt and projected upon and within
the interior environment via body as a cultur-
ally lived organism (Preston and Taylor 2006,
11).

This definition exemplifies the lived approach
to interiority as it is something that is experi-
enced and felt rather than something defined
by architectural boundaries and prescriptions.

Public Space: According to Clare Cooper Marcus
and Carolyn Francis, professors of Architecture and
Landscape Architecture at the University of Califor-
nia, Berkeley, public space is an area or space that
is without limitations. It is open to all people regard-
less of gender, age, race, ethnicity, and socio-eco-

nomic level. It is flexible and adaptable to multiple
uses. It is a space for casual encounters and en-
courages interaction (Cooper Marcus and Francis
1998, 9-10). It is the space of everyday life, where
all segments of society can cross paths, mingle and
be observed. It is tangible and cultural and responds
to human needs. Vienna-based architect Florain
Haydn and Viennese architectural and urbanism
theorist Robert Temel view public space as a place
that is “action defined” and is therefore not limited
to architectural boundaries or prescription and has
the potential to penetrate the built body of the city
like a metaspace contained by the intersection of
existing boundaries (Haydn and Temel 2006, 68).

Spaces Between Buildings: Larry R. Ford's book,
The Spaces Between Buildings examines the roles
of spaces between buildings and the qualities and
characteristics of these spaces that make them
desirable to everyday life. Ford defines space be-
tween buildings as “any space that cloaks build-
ings, such as doorways, stairways, porches, side-
walks and parking lots” (Ford 2000, 5). They are the ordinary nooks and crannies of everyday life that tend to explore issues of scale, texture, colour, complexity, and permeability. They are more human in scale and therefore create a sense of enclosure for people on the street. Space between places is generally characterized as relaxed and undemanding. It is an opportunity to be with others, as the individual themselves is present, and therefore participating in a modest way (Gehl 1987, 19).

**Urban Space:** In Design of Urban Space: An Inquiry into Socio-Spatial Process, Ali Madanipour defines urban space in a broad sense to encompass all the buildings, objects and spaces in an urban environment, as well as the people, events, and relationships within them (Madanipour 1996, xi). Urban space can therefore be understood as the amalgamation of people, objects and events. In a more technical breath, Statistics Canada defines an urban area as having a minimum population concentration of 1,000 persons and a population density of at least 400 persons per square kilometre, based on the current census population count. All territories outside the urban areas are classified as rural (Statistics Canada: Geographic Units, Urban Area). Urban space is therefore a synthesis of people, objects, and events.
1.7 chapter summaries

Chapter 2 outlines the relationship between the client, user and site in order to help determine the needs and values that will inform the program and design of the three unused urban sites that will be transformed into public places. As the user group is the general public, census data and demographics were studied and analyzed in order to extract key characteristics and information that are relevant to the project. The client, “The Business Improvement Zones” (BIZ) is a complimentary pairing to this project as its aim is to serve the overall community of Winnipeg by creating positive changes within the public realm that, in turn, directly affect the success of local business. Understanding the existing local fabric was equally important as the three sites are situated within the context of an existing built environment. Site description and analysis was therefore undertaken in order to understand quality of space and sense of place. Overall analysis of the downtown core was executed in the form of mapping and was further developed in photographic analysis.

Chapter 3 examines the history of the greek agora and the role it played in the development of public space. Historical documentation of the greek agora is supplemented graphically through the use of maps that help to delineate the various activities within the agora, as well as the public, private, and semi-public / semi-private spaces. In order to begin designing the three sites, it was important to understand the spatial structure of the agora, and its organization graphically.

Chapter 4 outlines and discusses the main theoretical approaches and concepts that were examined in order to extract design guidelines that will be used to inform the design of the practicum project. A conceptual framework was developed in order to help derive and organizing the discussion of theory throughout the review of literature. The conceptual framework is comprised of three overarching themes: space and place, interiority, and immersion.
Chapter 5 evaluates a number of precedents that were used to examine the themes and issues discussed in the review of literature. Issues of space and place, public space, in-between space, boundaries and thresholds, interiority, immersion, new digital media, interactivity, affordances, adaptive reuse, and the typology of the agora are all studied by examining existing designs. Studying projects that evoke these various theories allows design strategies and concepts to be extracted and later used during the design process to help inform the conceptual development as well as the programme for the proposed three sites.

Chapter 6 identifies and synthesizes the values and needs of the user, as well as the project, and translates this information into the spatial requirements for the development of the three spaces. This chapter also examines the goals and objectives of the practicum, and helps to articulate them into strategies and design guidelines that can be used in the design and quality of the various spaces. This chapter also reveals the final programme for the project.

Chapter 7 examines the finalized proposed design for each of the three sites and discusses the concept, rationale and intention behind the practicum design. The discussion of the final design is supported and explained through the use of plans, sections, and perspectives and graphic images.

Chapter 8 summarizes the overall practicum project and its transformation from concept to a final design. It discusses the design process that was undertaken, and the linkages between the three sites. It also addresses the initial research questions by addressing the outcomes and realizations of the project.
CHAPTER 2

USER - CLIENT - SITE
2.1 user group overview

This project focuses on public spaces, thus there is no specific identifiable user group. People living or working within the downtown core are targeted as the primary user group, while people living within the outskirts of Winnipeg, or travelling to the city are considered the secondary user group. In order to be able to identify the needs of these user groups, economic data, demographics, and user characteristics have been analyzed to understand the existing and actual conditions of the proposed area in question (Kilmer and Kilmer 1992, 182). The most current census conducted in Canada was completed in 2006, and utilized a 20% sample to compile statistics that help to paint a portrait of Canada's people (Statistics Canada, Census, 2010). The census data, therefore, generates an image of the lives of Winnipeggers.

According to the City of Winnipeg, the anticipated population for the year 2011 is 689,200, which is a 2% increase since 2008 (City of Winnipeg, Population of Winnipeg, 2009). According to the 2006 census, only 20,095 people reside within the perimeter of the downtown core of Winnipeg. Statistics Canada demonstrates that 95% of these residents (61,469.275 people) live in rental accommodations, while 75% of these renters (46,102 people) live in apartment buildings of five or more stories without direct access to greenspace (Downtown Winnipeg Profile, A Growing Economy, 2002). The main mode of transportation for the people living within the downtown area is walking (40%-24,587.71 people), compared to 6.4% (37,177.9 people) in the rest of the city. In addition to walking, 25.2% of downtown residents (16,176.86 people) utilize Winnipeg’s public transit system to get around in comparison to 14.2% (86,748.34 people) of people in the rest of the city. The 2006 census identifies the automobile as the dominant mode of transportation within the city of Winnipeg, as 68% (421,349.1 people) of Winnipeggers use cars, trucks and vans as their preferred mode of trans-
portation to and from work (2006 Census Data, City of Winnipeg, 2006). As a result of this, the downtown core has over 35,000 parking spaces, 18,511 of which are located on the street or at street level (City of Winnipeg, Winnipeg Parking Facts, 2010).

In addition to the people living within this area, the downtown is the destination for over 68,000 workers daily, and over 10,000 post secondary students (Downtown Winnipeg Profile, A Growing Economy, 2002). As a result, within any given day of the work week there are over 100,000 people within an area of .96 square miles (Downtown Winnipeg Profile, A Growing Economy, 2002).

A network of landmarks (Figure 8) that exists within the core is also reason for Winnipeggers to make the pilgrimage to the downtown. The City of Winnipeg reported that 582,000 visits are made to this area in order to attend the entertainment and cultural venues (Downtown Winnipeg Profile, A Growing Economy, 2002). The downtown residents of Winnipeg therefore witness a constant flow of movement as this area attracts people to attend the various events and programs that transpire throughout the year.
2.2 client overview

This project focuses on transforming three in-between urban spaces within the city of Winnipeg into public spaces that will become active social spaces for meeting, playing, entertaining, and communicating. As the nature of the practicum focuses on the development of public spaces, it is necessary to ensure that the selected clients are ones whose predominant mandate is to serve the overall community of Winnipeg. The Business Improvement Zones (BIZ) is an organization within the city of Winnipeg that consists of sixteen chapters with each assigned to individual city districts or zones.

BIZ gives businesses the opportunity to organize themselves in an effort to make improvements and market their businesses while halting decline and rejuvenating their area (City of Winnipeg, Business Improvement Zones, 2011). Typically the structure of organizations such as BIZ produce positive changes in the community as there is a direct correlation between a more physically attractive environment and a more successful business area. Each of the three selected sites resides in separate districts within the core of downtown Winnipeg (figure 5). As a result the amalgamation of the Exchange District BIZ, the Downtown BIZ, and the West Broadway BIZ function as the overall client for the project, as their objectives are closely aligned.

The client for the first site, Maw Garage, located at 114 King Street (figure 4), is the Exchange District BIZ. It was established in 1989 and is comprised of a management board of volunteers and a city council appointee who oversees the general operation. The board is comprised of a wide range of business activity within the area from small owner-operated enterprises to larger corporations. Every business within the Exchange District is automatically a contributing member of the organization by the fact that it pays a special levy on its business taxes. Other stakeholders within the community are arts and cultural organizations, educational institu-
tions and residents. All are welcomed as it strengthens the core of people promoting and improving the Exchange District. The ultimate role of the Exchange District BIZ is to bring local businesses together to promote the area, to improve the District's physical appearance, to support events that attract people to the community, and to play an advocacy role for local businesses on issues of common concern (The BIZ, Winnipeg Exchange District BIZ, 2011).

One of the most active spaces within the Exchange District is Old Market Square, which is across the street from Maw Garage. Old Market Square caters to many public events such as the Winnipeg Jazz Festival, the Winnipeg Fringe Festival, historical walking tours, the Farmers Market and moonlight movie nights. These events, which all occur during the summer months, bring vitality and energy into the area and encourage interaction within the public realm. The Exchange District BIZ is a main sponsor of these important cultural events.

The client for the second site, which is situated in an alleyway between Portage Ave, Graham Ave, Edmonton Street, and Kennedy Street, is the Downtown BIZ (figure 4). Similar to the Exchange District BIZ, the Downtown BIZ represents 1,400 businesses within the area that facilitate programs to target the cleanliness, safety, transportation, parking and the overall image of the downtown core (Downtown Winnipeg BIZ, About Us, 2011). They are committed to the community and profoundly attempt to encourage downtown living and business development. One of their main pursuits is to advocate for downtown revitalization as a method for bringing people into the area. Established in 1989, its vision for the area is to foster a vibrant and thriving neighbourhood that is alive with unique entertainment, culture, arts, heritage, retail, housing and street culture that reflects the ethnic and social diversity alive in the community (Downtown Winnipeg BIZ, About Us, 2011).

In the past ten years, the Downtown BIZ has
helped to contribute to 50 major developments that have encouraged active public participation within the area. The MTS Centre, Millennium Library, The Forks, the Forks Skate Park Plaza, The Canwest Global Baseball Park, the Manitoba Hydro Building, and the construction of the new Canadian Museum of Human Rights are examples of some of the major projects. Smaller initiatives such as public art displayed along Portage Avenue, and a new lighting plan for Portage Avenue have also been developed in an attempt to increase safety and security within the area, and improve the overall image of the area.

The client at the third site, Mostyn Park, located on Mostyn Place and Osborne Street, is the West Broadway BIZ (figure 4) Similarly to the aforementioned Business Improvement Zones, the West Broadway BIZ consists of locally elected representatives from all the retail, commercial and professional businesses in the area as they are automatically contributing members of the organization. It, too, is funded through a special levy on business taxes and utilizes these funds to do things that the businesses in the area feel are critical to the vitality of West Broadway such as sponsoring events and improving the physical amenities (West Broadway BIZ, What is a “BIZ”?, 2011).

As the West Broadway BIZ is comparably smaller, their initiatives are not as ambitious as the two previously mentioned clients. However, they have found a way to implement a variety of programs in the area that have helped to improve the overall quality of the community, and in return have improved local business. The Streetscaping program has included hanging baskets, flower planters and pots, and installing individually-crafted birdhouses throughout the neighbourhood (West Broadway BIZ, Programs and Incentives, 2011). The storefront improvement programs aim to assist local businesses financially in order to renovate and improve their storefronts and building exteriors thus enhancing the commercial visibility and safety of the BIZ area. The implementation of
the white lights program encourages the businesses to change all the lights to energy efficient LED lights, which is more cost effective for the BIZ. The Sherbrooke Street Festival, Art City, the Broadway Neighbourhood Centre, and the Wolseley Family Place Halloween Party are also programs that are supported by the West Broadway BIZ in an attempt to create opportunities for public engagement.
2.3 site analysis

According to Graeme Brooker and Sally Stone, a building or interior is intrinsically tied to its context, as the site offers a succession of unique conditions that are specific to that position (figure 6) (Brooker and Stone 2008, 18).

The selected sites for this project were therefore determined based on location, neighbouring spaces or buildings, climatic conditions, vistas or views, proximity to public transit, pedestrian access and walkability, refuge from automotive traffic, street level access, and its level of enclosure (figure 9). The three sites include access to natural light, views of the surrounding environment, and are a refuge from the visual and aural congestion of automotive traffic. All three are framed within a dense collective of existing places.

They are also within close proximity to existing routes of major circulation as they aim to pro-
* See landmarks / greenspace map for names of places.
mote an opportunity for interaction with the surrounding environment as well as pedestrian traffic in an unobtrusive way (figure 7). According to urban quality consultant, Jan Gehl, it is these characteristics that improve the overall quality of public spaces and initiate the interaction and movement among people (Gehl 1987, 36).

As this project aims to understand the concept of interiority within the public realm, and within the subject of interior design, the sites selected vary in their level of enclosure in order to promote the opportunity to explore boundary and threshold conditions, which are critical to the concept. As a result, the first site is fully enclosed, while the second is partially enclosed, and the third site is completely open. These differing levels of enclosure also help to raise questions of security, privacy, and public space; public spaces are generally fully enclosed areas that are monitored and sanctioned by governing authority and are, therefore, not entirely public (Shaftoe 2008, 74). The sites were also specifically selected as they vary in their levels of in-betweeness. Much of the time, in-between spaces are overlooked and considered surplus, as their main function is not always obvious, resulting in them being deemed unused spaces. The three sites that have been selected for the purpose of this practicum are considered to be in-between spaces, as they only really exist as they are defined by the presence of existing places.

The sites are deliberately placed within an existing network of landmarks within the downtown core of Winnipeg in order to allow for further connections and spatial engagements to be made (figure 8). For the purpose of this project, a landmark is understood as a “an object or feature of a landscape or town that is easily seen and recognized from a distance, esp. one that enables someone to establish their location” (New Oxford American Dictionary 2009, “landmark”). By doing this, the new sites are situated within an existing spatial narrative and the formation of new trajectories and energy between places are fos-
tered. There is no one specific path that links the three sites together; instead they exist within a seemingly infinite network of circulatory paths, that intend to promote opportunities for pause. While meandering in space allows for movement and freedom, the moments of pause in movement make it possible for the location to be transformed into place. Movement and pause, or space and place, are therefore codependent concepts that help us to understand how spatial experiences shape human interaction within the environment. Each spatial experience is therefore unique to the individual and never the same. This therefore encourages a lived approach to the understanding of space.
2.3.1 site one analysis
maw garage, 114 king street

The first site, which is situated between King Street and Princess Street in the Exchange District, represents the most fully enclosed space as it has four delineating walls and a roof. The façades on both King Street and Princess Street are penetrated with openings that act as the primary access to the interior of the building. The other point of access is located along the south wall on Bannatyne Avenue and another perpendicular with access to a street level monitored alleyway parking lot. Currently, the site operates as a privately-owned parking garage that services local business and venues in the vicinity (figure 10).

The site is situated opposite of Old Market Square, which operates as a main venue for many summer festivals. Its fronts offer optimal views as the rest of the building is without windows and therefore has limited access to the outdoors. The view to Old Market Square becomes one of the predominate vistas and becomes the prevalent vignette to the site (figure 11). The north wall of the building is shared between Maw Garage and the King’s Head Pub, while the south wall is common to the Peasant Cookery as well as Republic Night Club. The east façade has direct access to King
Street with a view directly to Old Market Square while the west facade opens to Princess Street with a direct view of the Fairchild Lofts, which are predominantly residential. The site is in close proximity to Red River College, City Hall, Pantages Theatre, The Manitoba Museum, Centennial Concert Hall, and The Walker Theatre and is readily accessible by walking, cycling, public transit, and car.

Maw Garage was built in 1906 by Joseph Maw, who was a Winnipeg businessman specializing in motor vehicles (Virtual Heritage Winnipeg, 1). In 1905 he took out a permit to construct a storefront that would be one storey in height to house
and service his collection of 145 cars. He enlisted the architect W.H. Stone to construct a building that contained no interior posts or columns as to allow for fluid movement of vehicles within the space (City of Winnipeg, Historical Buildings Committee, 3). Steel girders, trusses and brick-concrete walls were the method of construction that was utilized. As a result the Maw Garage became the largest indoor automobile showroom without interior supports in North America at the time (City of Winnipeg, Historical Buildings Committee, 3). The building was developed on a grid that can be read through the placement of columns that were built into the wall. As a result, the building has a definite rhythm that is achieved through the repetition of elements such as iron trusses and brick columns (figure 12). Due to the significance in its building construction, Maw Garage has been deemed a heritage building with a class three rating. According to the City of Winnipeg, a class three heritage building has been identified as a “moderately significant heritage example worthy of listing. Suitable
exterior alterations and modifications may be permitted. There are usually no restrictions on interior alterations” (City of Winnipeg, Historical Buildings By-Law, 3). Since its construction, alterations have been made to the King Street façade of the building, as plate glass was part of its original construction but has since been replaced with wood panels that function as a community message board. The Princess Street façade has retained the original design and therefore exemplifies a sense of symmetry and balance through the repetition of elements.

In order to gain a better sense of the space as it is today, a visual chart has been assembled that details elements vital to the interior condition of Maw Garage (figure 15).
2.3.2 Site Two Analysis
Portage Ave Alley

The second site represents the space of partial enclosure as the existing surrounding buildings delineate hard boundaries and edges. The site is nestled between Portage Avenue, Graham Avenue, Edmonton Street and Kennedy Street; all of which act as points of access (figure 18). Directly north of the site is Portage Place Shopping Centre, which is the main point of access for public transit users as well as shopping, therefore making this area a major node for pedestrian traffic. The University of Winnipeg, MTS Centre, Millennium Library, Winnipeg Convention Centre, and Winnipeg Art Gallery are all points of interest that generate and stimulate daily activity within this vicinity. Portage Avenue and Graham Avenue are two main routes for public transit in the city and are therefore frequently populated by pedestrians. In addition to pedestrian traffic, Portage Avenue is one of the most important roads in Winnipeg as it connects the downtown core to Polo Park, the Richardson International Airport, and extends all the way to the Perimeter Highway (figure 16).

The site is delineated by a number of different businesses that range from clothing stores, book stores, salons and barbers, a school of es-
The numerous activities that transpire in close proximity to the site encourage multiple uses of the space. The site is often used as a thorough-
fare for traffic as it directly joins Edmonton Street, Kennedy Street, and Graham Avenue. There is no direct access via vehicle to Portage Avenue as there is a sidewalk and bus shelter directly north of the site. Due to the presence of vehicles to the site, it is also often used as an impromptu parking lot. At one time the north edge of the site had two small plant beds that were lined with paving stones and park benches, but they have since been removed.

Murals and vine-covered buildings are repeated throughout the space and soften the edges of the brick buildings. These spatial elements and qualities can be better understood and visualized through the following photographic chart that examines: colour, texture, light, material, and mood (figure 22).
The third site, located on Mostyn Place and the Osborne Street Bridge is the least enclosed site, as the only form of enclosure is the canopy that is created by the bridge. The result of this enclosure has led a number of homeless people in the area to take refuge under the bridge from Winnipeg’s harsh climatic conditions throughout the year. Mostyn Park is situated on the southwest side of the Legislative Building, directly south of the Great West Life Insurance Building, and east of the Granite Curling Club. The Assiniboine River is located directly south of the site and operates as a delineator of space to the site. Soft and organic qualities dominate the space, as the only form of construction is the bridge and railings that line the footpaths. The site is embedded with trees and multiple footpaths for pedestrians and cyclists that connects along the Assiniboine River to The Forks (figure 24). The
rhythm / repetition
openness of the site lends itself to unrestricted views and vistas of Osborne Village and the Legislature Building, therefore making direct visual links to the space, which helps to frame the site within an existing built environment (figure 23).

In the winter when the Assiniboine River is frozen, it is transformed into the world's longest outdoor skating rink with Mostyn Park as a point of access. In the summer the site is home to one of the many canoe-launching points along the river. Located diagonally south of the site is one of the nine access points for the Winnipeg waterbus, which operates throughout the summer months. In addition to water transportation, the site is in close proximity to public transit stops, as Osborne Street is a main thoroughfare for vehicular traffic.

In order to gain an understanding of Mostyn Park's quality of space a photographic chart outlining the predominant colours, textures, light, materials and moods was undertaken in order to help inform the development of the practicum design for this site (figure 28).
CHAPTER 3
THE GREEK AGORA
3.1 the agora centrality of public life

The typology for this practicum project is public space, and it more specifically embodies the traditional notion of the Greek agora. The development of the agora originated in 420 B.C and was located to the northwest as the base of the Acropolis in Athens. It was roughly 457,380 square feet in size (figure 29) (Rubenstein 1992, 2). The agora was considered to be the gathering place of Greek life, as it was the focal point in the city-state. As such, people were encouraged to participate in its space. Normally situated at the centre of the city with primary streets leading to it, it served as an early meeting place for political assemblies and thus became bordered by buildings that housed civic administration (Thompson 1954, 9). Stoas or colonnaded porticos formed these buildings with a façade on one side that provided shelter to the central space (Rubenstein 1992, 2).

Smaller spaces between each of these buildings led to the primary streets that terminated at the agora. This allowed focus to be placed on the central space as all main routes led there. The agora welcomed the notion of simultaneity, as multiple activities were able to transpire in the space at all times. In order to engage in a space such as this, Richard Sennett claims that physical propinquity is just as vital as verbal expression. He notes
that “what is critical about multifunctional spaces like the agora is that the association of which we speak is the associating of bodies as much as it is an understanding of somebody else’s words” (Sennett 2005, 43). This physical closeness therefore aids in the production of spatial memory, identity and experience through the development of bodily gestures, as it makes it possible for people to participate in space without having to verbally communicate. “It is the space in which the physical arousal is important, in fact more important than verbal clarity. Clarity is not something you seek for in the multifunctional space” (Sennett 2005, 43). This therefore allows the development of personal freedom and choice in space, as the simultaneity of things happening allows for a plethora of spatial engagement that in turn makes the space meaningful to each individual in a very personalized way. A strategy that Harvey Rubenstein discusses in Pedestrian Malls, Streetscapes, and Urban Spaces that helped to encourage the presence of people in this space was that the Greeks stressed the importance of human scale and proportion in the architecture of the agora (Rubenstein 1992, 2). As a result, the sizes of the buildings were designed to relate to people, instead of intimidate them.

Although freedom of movement within the space was encouraged, it was delineated by boundaries between the public and private realms within the agora. The central space of the agora functioned primarily as the public realm, while the buildings located along its periphery were considered to be private, as they were associated with enclosed space. This juxtaposition between open and closed made it possible to clearly define that which is not public (Sennett 2005, 43). The enclosing buildings which took the form of stoas, or colonnaded porticos were designed to remain open and permeable to the central public space, and as a result, became spaces that blurred the public and private realm. People in this in-between space were visible to the people within the public area, and vice versa.

The interesting point is the edge of the stoa.
If you stand exactly on the edge of the stoa between the open space out in the front and the closed space at the back, you enjoy a different kind of liminal experience... and its quite simply that you can speak to people out in the open space but they can’t speak back to you. It was here that the Greeks defined the transition from public to private space. As you become private you still can speak out to those out in the open but they have no right to respond to you in that liminal space (Sennett 2005, 44).

According to Sennett, this is how the first distinction between public and private space came to be, architecturally. In addition to housing civic administration, the enclosed spaces were also areas where people dined and where they paid for sex (Sennett 2005, 43). One could not gain access without an invitation to enter. The open space that comprised the majority of the agora served as a market place at all times with small open-air sanctuaries and altars scattered throughout the space to allow people to worship (Thompson 1954, 9). Later developments of the agora saw the inclusion of intellectual life as libraries and lecture halls were built and scattered throughout the space. At its inception, trees and groves surrounded the buildings and sanctuaries as a method of screening. One of the historic functions of the agora was a venue for festal processions, as well as an arena for dramatic contests and athletic displays as it was central Greek life. The benefit of the centre space of the agora was that it always remained a democratic space that welcomed all people within society. According to Sennett, the agora is a democratic spatial model, as it doesn’t matter if people understand each other verbally, because they can understand each other by their bodies. This can only be achieved through a form of association in which people are brought together, and aroused by each other’s presence while simultaneously kept distinct (Sennett 2005, 47). The design, layout, and overall concept of the agora therefore becomes the perfect metaphor for exploring avenues of public and private space, in-between space, boundaries and thresholds, interiority, lived experience, space and place, and interaction as it performs as a semi-enclosed public space, surrounded by flexible architectural facades.
3.2 deconstructing the Greek agora

The map highlights the main activities and spatial configuration of the ancient Greek Agora found in Athens, Greece from 4th century BC. It demonstrates the overall functions of the space, by delineating the various activities that transpired within the Agora. The predominant activities can therefore be categorized into three main headings: political, commercial, and recreational (figure 30). Figure 31 visually delineates the public, private, and semi public-semi private spaces housed within the Greek Agora. The only spaces within the Agora that were considered to be private spaces were those associated with politics and government offices. The white buildings, Stoas, were considered to blur the boundaries between the public and private realm as they contained small business and shops that were privately owned. However, the colonnaded porches that lined all sides of the Stoas made for a permeable threshold that welcomed public activity. The centre space of the Agora was left uncluttered and was therefore flexible in nature. This allowed for the public market, performances, and events to transpire. It was also considered to be the main gathering space within the Agora.
public space
private space
public / private space
3.3 reconstructing the greek agora

Fragmenting the three main functions of the Greek Agora (Commercial > Recreational > Political) amongst three smaller sites within the core of downtown Winnipeg, allows for clusters and sequences to form, which Henry Shaftoe believes creates more successful urban cores as there is greater variety in public spaces and results in enjoyable movements through the cityscapes. Shaftoe also believes that “people seem to enjoy a sense of enclosure without feeling claustrophobic. Huge structures—whether they be walls or buildings—and vast open spaces may be awe-inspiring, but they are unlikely to facilitate a feeling of conviviality” (Shaftoe 2008, 141). Smaller sites were therefore selected, and as a result of this decision, limiting the programme for each site to one of the three specific functions of the agora ensures that each space will be uncluttered and therefore flexible.
CHAPTER 4
REVIEW OF LITERATURE
4.0 review of literature

The underlying themes of this practicum comprise the basis for the review of literature and can be visually understood through the use of the conceptual framework that was initially developed in order to extract key words and concepts (figure 33). These key words and concepts have been translated into filters that comprise the basis of this project. These filters are: space and place, interiority and immersion. They become the points of reference throughout my research as they help to translate research into design guidelines that can later be used to help inform future programming, and design considerations (Kilmer and Kilmer 1992, 180). These filters do not operate individually but synchronously with one another, and only gain significance when discussed simultaneously. The ways in which the filters overlap and work together fosters the formation of sub-topics and themes, which are used to narrow and focus the scope of research. These subtopics are: boundaries and thresholds, place, and interactivity. The combination of these elements comprises the preceding review of literature, which is divided into a series of specific topics that form the basis of this practicum project.
4.1 transforming public space understanding spatial interaction and the creation of place

As this project focuses on design in the public realm, an understanding of the ways in which people move and behave in space is a key element of my investigation. Human geographer Yi Fu Tuan’s research into space and place became a primary filter in my conceptual framework as it encompasses an experiential understanding to spatiality. In *Space and Place: The Perspective of Experience*, Tuan explores the spatial concepts of space and place as a co-dependent relationship that formulates human interaction in the environment. He enlists the discipline of human geography to help understand spatiality as it concerns itself with the study of human interaction with the earth’s surface, thus creating place (Cresswell 2004, 19). This movement is not just understood from a physical perspective but also from an emotional, mental and spiritual vantage point as place to human geographers means more than just a location in the world, but rather a “concept and way of being-in-the-world” (Cresswell 2004, 20).

Tuan tells us that understanding the concept of experience is vital to space and place as it is an overall term for the various modes through which a person knows and constructs a reality with the external world (Tuan 1977, 8). Experience can be direct and intimate or it can be indirect and conceptual. It is also mediated by symbols. Tuan articulates this idea with the comparison between home and country, saying that “we know our home intimately; we can only know about our country as it is very large” (Tuan 1977, 6). This thought informs the development of a more focused understanding of experience: knowing it, figuring it out, and studying it.

The development of space and place begins at birth and is a continued life experience as
our senses and ability to comprehend develop. As people mature, place can acquire a deeper meaning through the consistent accumulation of sentiment. Architect Juhani Pallasmaa believes that humans experience space in terms of seven senses: sight, sound, smell, touch, taste, skeleton, and muscle (Pallasmaa 2006, 30). It is these sensual qualities that differentiate our interpretations and spatial experiences as no two people experience space in the same way. The senses do more than just mediate information; they become a means for articulating sensory thought (Pallasmaa 2006, 30). This relationship therefore becomes an intimate one, experienced on a completely individual level between the participant and the activated space. As a result, experience is intimately bound to our existence as humans, and in turn, informs future events and experiences through our past knowledge of space and place. Each visitor to a place experiences space uniquely as spatial experience is subject to sensory interpretation.

For Tuan, space and place are the basic components of the lived world. Space allows movement and freedom while place causes pause (Tuan 1977, 6). Each pause in movement makes it possible for a location to be transformed into place, therefore helping to define the existence of space, as it can be experienced as the relative location of objects or places or the distances and expanses that separate or link places.

Even more abstractly, space can be the area defined by a network of places (Tuan 1977, 12). For Tuan, space is transformed into place as it acquires definition and meaning. Pauses in movement make it possible for a locality to become a centre of a felt value as permanence is a key characteristic associated with place. It requires a sense of stability and assurance (Tuan 1977, 138). Place therefore achieves concrete reality when our experience of it is total, that is through all the senses as well as the active and reflective mind (Tuan 1977, 18).
Spatial values, personal relationships and body location are understood to be things that foster moments of pause, and the development of places, as meaning is created through the body’s movement through space. For example, frontal space is primarily a visual realm, as the eyes have the ability to process larger and more vivid spaces. The space behind the body is less visible and usually attuned to alternate sensory states. Every person positions themselves at the centre of their world, and as a result, allows space to be differentiated in accordance with the schema of the body (Tuan 1977, 41). The human body is therefore the measure of direction, location and distance in space. Just as much as body position in space is important to the development of place, so is the arrangement of space. Areas of spaciousness are closely associated with the sense of being free, which implies a sense of freedom according to Tuan (Tuan 1977, 52). This spatial freedom is translated and understood as having power, as the potential in which to act is infinite and therefore invites future action. Place, on
the other hand, is the calm centre of established values, the enclosed humanized space, and as a result can foster feelings of crowding (Tuan 1977, 54). Crowding for Tuan is the awareness that one is being observed primarily by people. This awareness can also be caused by things or objects and is the result of depriving ourselves of spatial freedom. Tuan realizes that within this dichotomy, human lives require a dialectical movement between both venture and shelter, and freedom and attachment.

Eva Hornecker, professor in the Faculty of Computer and Information Sciences at the University of Strathclyde in Glasgow, specializes in tangible interfaces and interaction and believes that the concepts of space and place set the platform for social interaction and the development of. Her belief, similar to Tuan’s, is that space and place are interrelated and cannot be discussed separately. She says that their simultaneity is what aids in the production of social interaction (Hornecker 2005, 1). Her work explores the use of interactive de-
sign to create moments of engagement in order to transform space into place. The way to achieve this is discussed through the use of a framework, which is comprised of two overarching concepts: spatial interaction, and embodied facilitation. The term spatiality is the result of spatial interactions that are inescapable because we are spatial beings that live and meet one another in space. Space is never meaningless; it always surrounds us; it is our habitat. Our body is the central reference point for perception. Movement and perception are tightly coupled and we interpret spatial qualities (or positioning of other objects) in relation to our own body. Spatial qualities therefore have psychological meaning—space can feel protectively enclosing or claustrophobic, objects and people are near or far, large objects tower over smaller ones, protect or crush them (Hornecker 2005, 1).

Therefore, when space is inhabited it transforms into place through the presence of people in it. By inhabiting space, we appropriate it, interpret it, and instill it with meaning. When we encounter objects and people in space, we are confronted with a material or physical presence that demands our attention and emits an aura that resonates and therefore makes every spatial experience unique (Hornecker 2005, 1). Being in the same place is a reciprocal situation where seeing implies being seen and thus creates a simultaneous vulnerability and trust which implies a certain quality to the formation of tangible interaction. In order to fully produce a tangible interaction we must negotiate through space by either moving our bodies or moving the objects that surround us. Hornecker refers to this as configurability, which is the meaningful rearrangement of significant objects. This therefore embeds the user with control over the environment, thus enhancing engagement, which supports explorative behaviour (Hornecker 2005, 2). This is a form of bodily interaction as manipulation, movement and gestures are maneuvered in order to create an enlivening experience that stimulates mental energy and enhances engagement that has an
expressive quality. “The size of interaction spaces / objects influences bodily interaction style. Movement furthermore leads to bodily appropriation of space (taking ownership)” (Hornecker 2005, 2).

Hornecker outlines four methods that can be employed in order to achieve these positive outcomes associated with the development of spatial interaction. They are:

- Inhabited Space: Do people and objects meet? Is it a meaningful place?
- Configurable Materials: Does shifting stuff (on your own body) around have meaning? Can we configure the space at all and appropriate it by doing so?
- Non-Fragmented Visibility: Can everybody see what’s happening and follow the visual reference?
- Full-Body Interaction: Can you use your whole body? (Hornecker 2005, 2)

By allowing these questions to inform and penetrate design, tangible interfaces can be realized and embedded in space in order to initiate body movement. These, in turn, aid in the production of transforming space into place through the dimension of the lived experience, which is achieved through interaction. In order to be able to embody this facilitation one must be able to reconcile the difference between physical space and virtual space. Hornecker defines the physical as the tangible element associated with space while virtual space remains within the realm of software. The combination of both types of space embodies the potential to facilitate or hinder the production of movement and behaviour, and is therefore able to shape social configurations. The way the interactions are designed and set up can affect social synchronization, coordination, and participation as the choice of representations and iterations will either engage or exclude participants. The questions that should be considered when designing for embodied facilitation according to Hornecker are the following:

- Embodied Constraints: Does the physical set-up lead users to collaborate by subtly constraining their behaviour?
- Multiple Access Points: Can all users see what’s going on and get their hands on the central objects of interest?
Tailored Representations Does the representation build on the users’ experience? Does it connect with their experience and skills and invite them into interaction? (Hornecker 2005)

Both spatial interaction, and embodied facilitation address the notion of space and place by questioning levels of inhabited space. They do this by understanding space as the structural and geometric qualities of a physical environment that are a mere collection of coordinates that are transformed into place once it becomes inhabited and acquires the dimension of lived experience. Understanding space and place as a transformative process that has the potential to be accomplished through the use of interactive environments can therefore begin to inform the design of this practicum project.

Similar to how Hornecker discusses the use of interactive design in order to bring a tangible quality to the concepts of space and place, Tuan enlists the discussion of architectural spaces as a key to comprehending reality as it fosters awareness at various levels. For Tuan, architecture can operate conceptually, pragmatically, and existentially; it is a key to comprehending reality (Tuan 1977, 102). Built space can refine human feeling and perception, however even without it people are able to determine and sense the difference between interior and exterior, closed and open, darkness and light, and private and public (Tuan 1977, 102). The built environment, similar to language or symbols has the potential to define and refine sensibility as it can create an acute consciousness. Without it, feelings about space remain fleeting and obscured. “Constructed form has the power to heighten the awareness and accentuate, as it were, the difference in emotional temperature between ‘inside’ and ‘outside’” (Tuan 1977, 107). Tuan further discusses this concept with regards to the use of light and shadows as a delineator of space. Historically, interior spaces were dark, narrow, cluttered and crudely finished. Once light was brought into these spaces they were transformed, and therefore redefined interior spaces (Tuan 1977,
For Tuan, this example articulates the way in which architecture continues to exert a direct impact on the senses and feelings one experiences in space, as the body continues to respond to basic features of design; such as enclosures, exposure, verticality, horizontality, mass, volume, interior spaciousness and light. These concepts and ideas are fundamental to the design discipline as they help us to understand the physical, emotional, mental and spiritual states that humans pass through on a daily basis when they navigate their spatial experiences. This approach to spatial understanding helps designers become more aware in daily practice, thus designing environments that are receptive and embrace movement and pause of people in space. Understanding human behaviour within the public realm is therefore key, as people tend to perform differently whether in a public or private space.

The work of Jan Gehl and William H. Whyte was therefore examined in order to help realize what makes a public space convivial as both have studied the social life of public spaces. Architect and urban quality consultant, Jan Gehl examines the effect of community planning and architecture on the use and meaning of public space and the way in which it impacts peoples lives in his book *Life Between Buildings: Using Public Space*. Gehl chooses to focus on the everyday spaces that occur within cityscapes, as these are the primary spaces that influence and surround us. It is the life between buildings where social interaction, perception, urban recreation, and the sensory experience of everyday life occurs (Gehl 1987, 11-14). Gehl’s idea of space between buildings is similar to Tuan’s understanding of space and place, as places have space between them that only gain meaning when activated through the movement and pausing of people. These types of spaces are constantly evolving, as the movements of people are transient, fleeting and therefore temporary in nature. The reason these in between spaces can evoke such a response is because they are areas of increased activity according to
It is in these spaces that anything is possible. There are three distinct types of activities that occur in these spaces: necessary activities, optional activities, and social activities (Gehl 1987, 11). Necessary activities include commuting to work or school, and running errands. There’s a lesser degree of participation that is required and therefore less involvement within the space.

Optional activities include pursuits that are undertaken if time and place allow for it. Taking a walk for pleasure, or getting fresh air are examples of this. These activities are generally undertaken when the exterior weather condition is optimal and therefore invites participation.

Social activities are all activities that depend on the presence of others in public space (Gehl 1987, 14). These types of activities can be described as children playing, people greeting or conversing with one another. They are characterized as spontaneous activities that are resultant of people moving about and being in the same space. Social activity is supported whenever necessary or optional activities are afforded with the opportunity to flourish. Degrees of involvement therefore determine the level of sensory experience that is obtained, and directly influence the level of public participation that is performed in the space between places. The seeing and hearing that occurs within this realm also dictates the level of participation that is realized, and can help to define the type of spatial experience that is achieved.

Space between places is generally characterized as relaxed and undemanding. It is an opportunity to be with others as individuals themselves are present, and therefore participating in a modest way (Gehl 1987, 19). This thought leads to a key argument outlined by Gehl that as a civilization we require these spaces in order to discover how our fellow neighbours work, behave, and dress. It is a way to obtain knowledge about the people who surround us. It allows us to gather first hand information.
rather than seek various forms of mass media (Gehl 1987, 23). In-between space therefore allows us to disconnect from various forms of technology and engage with our senses. Gehl believes that seeing other people is a form of inspiration and therefore becomes a form of stimulation for ourselves. Just like the way in which buildings and inanimate objects possess the ability to stimulate, people moving about and performing are a form of sensual variation, especially because people are attracted to other people. “People gather with and move about with others and seek to place themselves near others. New activities begin in the vicinity of events that are already in progress” (Gehl 1987, 25). Similar to how people are attracted to other people, they are also attracted to qualities of space, as there is a direct correlation between the two. It is therefore important that the quality of public space promotes the opportunity for encounter or else people will be less apt to meander and mingle with one another. Certain qualities and characteristics promote and encourage various forms of interaction within space and should be incorporated into the proposed design in order to ensure its success. Although Gehl addresses some of these qualities throughout Life Between Buildings: Using Public Space he does so by looking at existing urban centres, mainly in Europe, that exemplify Renaissance and Baroque architecture as he believes that planning characteristics associated with these periods encourages social outdoor activities (Gehl 1987, 41).

William Whyte’s The Social Life of Small Urban Spaces provides the qualities, characteristics and attributes of public space that promote interaction and engagement. In 1970, Whyte formed a small research group called “The Street Life Project” that examined first hand qualities of city spaces, and what worked for them and what didn’t. The study began by looking at New York City parks, playgrounds and informal recreation areas such as city blocks. The information that was gathered surprised Whyte and his team as neighbourhoods with a higher population density didn’t have crowd-
ed public spaces. Instead crowding was traced to nodes throughout the city which were characterized by areas of high foot traffic and within close proximity to bus stops, subway stations, and pedestrian sidewalks (Whyte 1980, 12). Through a further examination of these spaces, it was determined that access to direct sun light and places to sit increased the population density in these areas even more.

After much more research, Whyte and his team deduced that no matter how attractive a space is, if there is no place to sit, people would not come. The key to designing these seating areas is to ensure they are embedded with choice and comprise 10% of the overall total open space (Whyte 1980, 39). For Whyte this meant allowing users to be able to determine where they were positioned in space while maximizing the sittability of inherent features within the design of surfaces (Whyte 1980, 28). This means making ledges so they are sittable, or making other flat surfaces do double duty as tabletops of seats. For Whyte, this can be
achieved through varying elevation changes and attempting at least 17 inches in height. Another concept that Whyte and his team realized when sittable surfaces were 36 inches deep, people tended to sit on either side, lowering the proximity between each other and therefore increasing the opportunity for chance encounters and conversation (Whyte 1980, 31). By increasing the depth of potential seating, you are also increasing the level of social comfort as people are afforded the choice of sitting near or far from other people in the space.

Whyte also observed that the most successful public spaces had a variety of seating—some that were fixed and some that were movable. The ability to move a chair enlarges choice. Whyte believes this to be why “people so often move a chair a few inches this way and that before sitting in it, with the chair ending up about where it was in the first place. The moves are functional, however. They are a declaration of autonomy, to oneself, and rather satisfying” (Whyte 1980, 35). His research even goes as far as to state that fixed seats are awkward in open spaces because there’s so much space around them that people feel as though they have been designed to sit in the exact spot that the seat it, which negates the feeling of choice. By being able to allow visitors to the space to dictate the way in which they will occupy it fosters spatial engagement, which in turn creates opportunities for pause and aids in the formation of a spatial identity, which ultimately begins the process of transforming space into place.

In addition to seating being a vital component of public spaces, so too is nature. Sun, wind, trees and water are all valuable elements that can encourage people to congregate in spaces if dealt with successfully, or repel them if not. As Whyte observed, the more access to sun the better. So much so, that the City of New York amended its zoning requirements that all open spaces and plazas be oriented to the south in order to maximize southern exposure (Whyte 1980, 42). However, when the temperature gets too high, people seek
refuge from the heat and opt for indoor areas or shade. It is therefore key to the design of a public space to offer variation in access to direct sunlight.

Another factor that Whyte believes to be equally important is the discussion of winds and drafts. This issue is particularly important to this project as Winnipeg experiences a great deal of wind throughout the year and has a cooler climate than most other North American cities. Therefore, sites enclosed on three sides function well because physically and psychologically they feel more comfortable and also provide an extra element of shelter from the wind. Architect James Marston Fitch states adverse effects are simply ignored, and the outdoor space designed as if for some ideal climate, ever sunny and pleasantly warm. Thus [the spaces] fail in their central pretensions that of eliminating gross differences between architectural and urbanistic spaces of extending in time the areas in which urban life could freely flow back and forth between the two (Whyte 1980, 45).

We can therefore effectively lengthen the season of outdoor spaces by designing according to climatic conditions. Whyte suggests that one method to achieving this is to select sites that are semi-open niches or informal crannies that people often inhabit. Another possibility is instead of selecting entirely outdoor or indoor sites is to choose sites that straddle the in-between and explore the use of glass canopies, small pavilions, or semi-outdoor spaces (Whyte 1980, 46). This feeling of enclosure can also be created with the use of trees, as they can form canopies and delineate spaces.

Just as space can be defined by hard or soft surfaces such as benches or trees, it can also be action defined. According to Whyte, providing opportunities for food is one of the best ways to attract people into a space as it becomes a rendezvous point and attracts more than just one person, but generally groups of people. As Whyte notes, “food attracts people who attract more people” (Whyte 1980, 52).

In addition to providing food as a way to
connect people, Whyte elaborates upon the notion of triangulation as a means to engage people in space. He defines this concept as a “process by which some external stimulus provides linkages between people and prompts strangers to talk to each other as though they were not” (Whyte 1980, 94). The stimulus can be a physical object or sight. It can be a view, sculpture, street art, street performers, musicians, entertainers, anything that engages people in the space enough to create a temporary bond. It is therefore prevalent from Whyte’s first hand observation and research that if the climatic conditions are dealt with compassionately, and a reason for pause is introduced, people will linger in space, encouraging new activities to begin as they are in the vicinity of events already in progress as Gehl believes. The opportunity for connections to be made between people is heightened and begins to form a collective identity of the city, which in turn strengthens the value of public life, and transform space into place through engagement.
Methods of spatial understanding invite the potential to realize space and place as something that is transformative, ephemeral, and open to interpretation. Tuan’s human geographical approach to space and place provides this required framework, as it requests the involvement of the individual’s sensory experience and body movement as the pivotal factor in the formation of spatial identity and ultimately place. As a result, our individual identity and lived experiences influence the way this is done. Each individual carries with them a portfolio of unique spatial experiences that is reflective of a construction process guided by their life experiences. Hornecker’s belief in interactive design is a strategy in which place is formed by way of spatial interaction and embodied facilitation. An informal and casual venue in which this can be achieved follows Gehl’s understanding of spaces that exist between places or in-between spaces, as they are typically informal and playful realms that welcome spontaneous and unconscious levels of participation.

The latent sensory experiences that exist and thrive in public spaces have the ability to transform and evolve our spatial experiences and influence how we perceive, conceive and live in space. The importance of public space to the development of place is critical as they are forums for intense stimulation and interaction on a daily basis. Whyte’s research and observation into urban spaces outlines design guidelines that either encourage or deter public forms of interaction and communication and therefore aids in the formation of convivial public spaces.
4.2 reimagining in-between spaces living the boundary of interiority

Methods of spatial understanding invite the potential to realize space and place as something that is transformative, ephemeral, and open to interpretation. It also helps us to rethink boundaries and thresholds as more than just markers or delineators of space. This concept introduces the presence of the interiority filter, which is primarily derived from the work of Dr. Christine McCarthy. McCarthy approaches the notion of interiority as an abstract quality that facilitates the recognition and definition of an interior space and is therefore not an absolute condition that is contingent upon a restrictive ‘architectural definition’ (McCarthy 2005, 112). According to McCarthy, interiority understands that interiors are controlled and therefore potentially controlling environments and as such limit and restrain what is possible in space. They therefore rely upon sensual conditions that are acoustic, haptic, olfactory, tactile, visual, climatic, physical, psychological, and social in order to remain intimate and elastic (McCarthy 2005, 112).

Interiority is born with the body’s movement in space, as it is the distance between the body and the outside. Traces are obvious examples of engagement with the boundaries of interiority as a smudge created by touch is left behind, and a trace of the interior is left on the hand. “Touch is the bringing together of two surfaces. It constructs interiority at the very point at which it also obliterates interior space” (McCarthy 2005, 119).

Because it engages people and objects in space, social roles and conventions are therefore another factor that has the potential to produce interiority. McCarthy notes “etiquette’s harsh, unforgiving, and ostracizing boundaries construct inclusion and enclosure through custom, social hierarchy, and legislation (segregations of age, class, gender, race, sexual preference)” (McCarthy
2005, 121). Public space is therefore a rich forum in which the concept of interiority can be reconciled to its fullest potential. Reassurance and safeness are also sentiments associated with the concept as boundary conditions produce promises of security that is achieved through a sense of enclosure (McCarthy 2005, 117). The sense of safeness and security that is associated with this concept aids in the design of public space for this practicum project as Whyte clearly outlines that providing a sense of safety and security is one of the primary concerns in the design of public spaces.

Interiority is a transformative concept that builds upon the notions of space and place by recognizing the significance of social, cultural, physical and technological developments within current society. In Intimus: Interior Design Theory Reader, Mark Taylor and Julieanna Preston define interiority as the conscious and reflexive awareness of self, identity, community and others within a social environment. Situated among philosophy and psychology, this cluster of associated points in the interdisciplinary arena of ‘interiority’ examines the innerness of interior design as that which is felt and projected upon and within the interior environment via body as a culturally lived organism (Preston and Taylor 2006, 11).

This definition exemplifies the lived experiential approach to interiority, and can be further defined by Quentin Stevens when he attempts to analyze the breakdown in threshold space between interior and exterior as something that can be loosened up and deconstructed to allow a wider range of perceptions, movements and social encounters to transpire. Stevens notes that “the opening up is the element that makes place come alive, because the basis of any life is interaction” (Stevens 2007, 73). By breaking down the boundary, the interior and exterior work simultaneously as one, rather than delineated spaces, and therefore create infinite opportunities for spatial engagement that contribute to the production of everyday spatial experiences.

McCarthy further examines the boundary
conditions associated with interiority, as they are dependent upon an explicit manipulation of an environment in order to achieve and construct a desired space that relies upon flexibility, mobility and porosity (McCarthy 2005, 113). The degree of boundary permeability allows or disallows weather, intrusions, views in or out, interruptions, noise pollution, and daylight that are typically controlled within interior spaces. Interiority is therefore a condition that requires a controlled crossing of a boundary, a change of state or status. Cultural theorist and urbanist, Paul Virilio states that the “boundary is this point of discrimination that conditions how interiors are and can be occupied” (Virilio 1991, 9). These situations create a sensation of intimacy that provides a slight feeling of enclosure that forms an imagined closeness and therefore has the potential to draw closer together. For McCarthy “enclosure is the encompassing aspect of closed space, implying the assertion of boundary, and contributing with deepness to the traditional notion of place in architecture” (McCarthy 2005, 15). Understanding the potential of the boundary is one of the key aspects of interiority as it is a point of transition between spaces. Boundaries shift and move, making them temporal and an active condition of interiority. By blurring the threshold one suddenly realizes he or she has been jarred into somewhere else, into another place, another spatial or temporal condition. McCarthy visualizes this notion by using a series of examples: the edge of a shadow across the ground; lingering smoke encircling, intoxicating, asphyxiating; humidity embracing, and suffocating, and an expanding pregnant body (McCarthy 2005, 115). The boundary is therefore a liminal threshold between realms that can be perceived or imagined, and exists in varying degrees for each person. As a result, it questions the concept of inside and outside, or as McCarthy states, interiority and exteriority. Similar to space and place, neither can exist without the other as they are a pair and would be subject to separation anxiety. The interdependency between interiority and exteriority is separate from that of inside and outside as
Interiority is not a guarantee of inside location. Equally, inside is able to sustain exteriority. Inside and outside are architectural prescriptions tied to the boundary of building, whereas interiority and exteriority weave within and without the built constraints of architecture, sometimes between them, and sometimes independent of them (McCarthy 2005, 116).

Therefore, in order for the notion of interiority to be fully realized, space that is neither concretely interior nor exterior is required. Spaces between buildings, that are the resultant space of the built environment, can therefore be employed as a medium in which to discover the potential of interiority.

According to architect Donlyn Lyndon, the space between is where the structure of our relationships is born; it is the space of everyday society. It provides the opportunity to reach out to one another, while simultaneously allowing room for separation (Lyndon 1993, 1). Lyndon feels that the space between generally receives a reputation for being considered leftover space, however, he feels that this is where the most important transactions occur, and is therefore essential to life and not surplus. These spaces straddle the interior and exterior of buildings and therefore question notions of public versus private space.

Hoshiar Nooraddin believes that indoor spaces do not end with building elevations, but instead interface and integrate with outdoor spaces. As a result, the public and private realms overlap to create an identifiable urban space otherwise known as in-between space (Nooraddin 2002, 50). This space becomes the major function of the street, as it is a place of activities and therefore reflects social meanings and lifestyle of the local community. As a result, leftover space from the built environment, or in-between space, becomes the perfect forum for this practicum project.

Larry R. Ford further examines the role of in-between spaces and the qualities and charac-
teristics of these spaces that make them desirable to everyday life. Ford's definition of this concept is "any space that cloaks buildings, such as doorways, stairways, porches, sidewalks and parking lots" (Ford 2000, 5). They are the ordinary nooks and crannies of everyday life that tend to explore issues of scale, texture, colour, complexity, and permeability. They are more human in scale and therefore create a sense of enclosure for people on the street, unless the surrounding structures are very tall in which case people lose the sense of enclosing architecture (Ford 2000, 25). In addition, parking lots add to this feeling of separation and remove any sense of architectural identity, which is a necessary component of street life.

Ford's book, Spaces Between Buildings takes a historic look at the concept of the alley. Until the mid-nineteenth century, alleys were only used to house trash containers, fire escapes, rear exits, and ventilation systems. "Alleys increased the exposure of the backs of buildings just as highly visible patchwork infrastructure of water pipes, electric wires, heating and air conditioning equipment, fires escapes, and large trash dumpsters" (Ford 2000, 31). As automotive traffic was becoming more prevalent in major cities, back alleys began increasing in size, leaving more significant in-between spaces. In later years, this space had the ability to accommodate radically new purposes with the development of alley gentrification (Ford 2000, 149). In San Francisco a number of tiny downtown alleys have been transformed into flowers shops, pubs, delis, and business service establishments. In Columbus, Ohio, a small alley that runs behind a major office street has been converted into a makeshift pedestrian mall with several lunchtime hangouts. From Ford's examination of the alley, it is evident to see the potential that is instilled in them, and that they way can be adapted into vital city spaces that welcome everyday life.

This is especially true for the second site that was chosen for this practicum project, as the
The current use of the alley is an informal vehicular parking lot that doesn’t receive much attention from the local community. It is currently a space that is defined by the existence of the surrounding places and therefore requires people to activate its meaning, at which point it will be transformed into “place”. Even though only one of the sites is deemed an alley, all three sites imbue the same potential as they are situated in areas that receive a lot of pedestrian attention, and defined by the existence of places.

One of the main characteristics that Ford feels is vital to the success of spaces between buildings is the fact that they are generally located at street level, and are therefore walkable. Like alleys, sidewalks make up an important part of the “landscape of movement” surrounding businesses and dwellings (Ford 2000, 154). Sidewalks are however, strictly for pedestrians, as they were designed to separate and protect vehicles. They are the areas that promote brief encounters, and make for safer streets, as they are part of a var-
ied urban life (Ford, 2000, 157). Addressing in-between spaces, as a lived space that simultaneously straddles interior and exterior conditions affords the development of place that encompasses both public and private functions and has the potential to become the realm of everyday life.

As the sites selected are currently unengaged spaces, literature on adaptive reuse has been consulted in order to ensure that a meaningful symbiotic relationship between the old and new functions of the site is achieved. In *Re-readings: Interior Architecture and the Design Principles of Remodeling Existing Buildings*, Graeme Brooker and Sally Stone state “a building can retain a remembrance of the former function and value; it has a memory of its previous purpose engrained within its very structure” (Brooker and Stone 2004, 9). The building is imbued with inherent qualities of the place and its surroundings and is therefore a complex multi-layered system. Therefore in order for the remodeling of a site to occur, one must take its past into consideration, continuing the conversation between the past and present. Without an in-depth understanding of a buildings unique and inherent qualities it is impossible to create a coherent remodeling (Brooker and Stone 2004, 14). Brooker and Stone outline a methodology in which this can be achieved:

- **Form and Structure**: how the building stands up, whether it has a distinct rhythm or order and what the relationships between the rooms and spaces are like.

- **History and Function**: The previous use of building and what has happened to it are very important.

- **Context and Environment**: Analysis of the existing building establishes relationships between the site, its neighbours and occasionally things further away, and also discusses the influence that climate can have upon the adaptation.

- **Proposed Function**: Without an understanding of the requirements of the remodeling it is difficult to appreciate whether a relationship with the original building can be established. (Brooker and Stone 2004, 14).

Brooker and Stone also outline three distinct remodeling strategies that are employed in order to balance the old and new:

- **Intervention**: When a building is transformed that it can no longer viably exist indepen-
ently and the nature of remodeling is such that the old and new are completely intertwined.

Insertion: If a new autonomous element, the dimensions of which are completely dictated by those of the existing, that is, it is built to fit, is placed within the confines of the existing.

Installation: In which the old and new exist independently. The new elements are placed within the boundaries of the building. The design or grouping of these elements may be influenced by the existing, but the fit is not exact (Brooker and Stone 2004, 14).

A way of achieving these remodeling strategies begins with uncovering the design tactics or elements that were used in the conception of the building. Brooker and Stone regard these tactics as the expressive and inherent qualities associated with the building; what it looks like, what it feels like, and how it sounds. There are six distinct tactical elements that can be analyzed in order to uncover its character:

Planes: Are normally either horizontal or vertical and can be used to organize and separate space. The category is subdivided into the wall, floor, the façade, and the soffit.

Object: Discusses elements such as furniture or larger-scale things that can provide a focus or a rhythm to a space.

Light: The effect of both natural and artificial light as a way of transforming the building and its space.

Surface: The use of specific materials to confer identity and meaning.

Movement: Refers to circulation.

Opening: How physical and visual relationships can be established between places and things.

By reading a building- its past and present- information can be extracted that can be used to inform the remodeling process that allows for a fluid and coherent design to be implemented. It is a process of finding a balance between the old and new through an in-depth examination into a building’s character and ensures the success of the new design.

Understanding interiority as a transformative concept that has the ability to blur private and public spaces, allows architectural boundaries that normally delineate interiors and exteriors to be transcended. Spaces can therefore be re-imagined with infinite potential. In-between spaces therefore be-
come the perfect venue for this spatial understanding, as they already blur boundaries through a lived experience approach, as they require the presence of people in space to gain meaning and significance. By implementing Brooker and Stone’s guidelines to remodeling, tactics and elements are outlined that possess the ability transform these derelict spaces in a meaningful way that pays homage to its past and present by bringing people back into the space, which allows for the transformation into place.
4.3 achieving spatial meaning through design responses

In order to facilitate physical and mental engagement in space, the concept of affordances has been employed as a design consideration in this practicum project. The concept first originated in 1979 with the work of perceptual psychologist, James J. Gibson, whose work focused on the field of visual perception (Ho and McGrenere 2000, 1). His book, *The Ecological Approach to Visual Perception* outlines the notion of affordances as an action possibility that is latent within the environment and accessible to individuals. It is independent of an individual’s ability to perceive the potential possibility. This notion deviates from classical theories of perception at the time that were based on physics and physical optics. Instead, Gibson felt that physics provided an inappropriate frame of reference for visual perception and that we perceive at the level of mediums, surfaces, and substances rather than at the level of particles and atoms (Ho and McGrenere 2000, 1. Thus, he developed the notion that “the affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill” (Gibson 1979, 127). His seminal example of this concept relates to surfaces and their latent capabilities:

A horizontal, flat, extended, and rigid surface that affords support. A given surface that provides support for one actor, may not provide support for another actor (perhaps because of a differential in weight or size). There is only one surface in question here, yet the affordance of support exists for one another whereas it does not exist for another. Note that the affordance is not a property of the experience of the actor but rather of the action capabilities of the actor (Ho and McGrenere 2000, 1).

Due to his understanding of affordances as resultant of direct perception, he failed to acknowledge that as humans we carry with us our past experiences. Instead, Gibson believed that each encounter with something is being perceived for the first time; the individual is therefore always the point of reference (Ho and McGrenere 2000, 3).
In 1988, Dr. Donald Norman, scholar and scientist in the field of cognitive science, appropriated the term both implicitly and explicitly and adjusted the meaning for the design of common objects (Ho and McGrenere 2000, 1). As a result, the reworking of this concept in his book, *The Psychology of Everyday Things*, became highly influential to the Human Computer Interaction (HCI) community as it was seen as a way to ensure successful design. For Norman, an affordance referred to the perceived and actual properties of a thing, primarily the fundamental properties that determined how it could be used. This interaction with an object is determined based on the cues that the object affords, as well as from our mental state and interpretation of things, which is based on our past knowledge and experiences (Ho and McGrenere 2000, 2). “I believe that affordances result from the mental interpretation of things, based on our past knowledge and experience applied to our perception of the things about us” (Norman 1988, 219). For Norman, affordances provide strong clues to the operation of things, and therefore suggest the range of possibilities. He believes, that when designers take advantage of affordances, the users know what to do just by looking. If this isn’t achieved, then the designer has failed. In order for maximize the potential of affordances in design, it is important to understand that the concept to Norman is dualistic. “It's very important to distinguish real from perceived affordances. Design is about both, but the perceived affordances are what determine usability” (Ho and McGrenere 2000, 3). The goal of affordances in the design of everyday things and spaces should be to design information that uniquely specifies an affordance and also to design useful affordances that can be undertaken with ease (Ho and McGrenere 2000, 4). Authors of *Affordances: Clarifying and Evolving a Concept*, Joanna McGrenere and Wayne Ho, therefore determine that the fundamental difference between the two definitions of affordances is that for Gibson, an affordance is the action possibility, whereas according to Norman, it has both the action possibility and the way
that that action possibility is conveyed or made visible to the actor (Ho and McGrenere 2000, 3).

The concept of affordances is therefore implemented as an understanding of design responses in this practicum project. It invites individual perception and engagement between an individual and an object in order to determine its usability and function. Norman’s notion of incorporating cues into the design of objects is important in public spaces especially, as it suggests ways that persons can interact with and therefore insinuates clarity as opposed to confusion. Therefore, by incorporating affordances into the design of everyday things, the usefulness and usability is enhanced and ensures its overall success.

Just as affordances encourage and promote engagement with objects in space, rapid advancements in technology have transformed everyday experiences and as a result have altered our perceptions and conceptions of the way things happen or exist. Technology has therefore become a mediation device in which we experience everyday life. Oliver Grau refers to this notion as immersion in Virtual Art: From Illusion to Immersion and believes that it is the key to understanding the concept of ‘new media’ (Grau 2003, 4). Immersion for Grau can encompass many different characteristics and traits, thus making it versatile in nature. Immersion can be mentally absorbing, and an intellectually stimulating process, or a change in mental states. It can also be characterized by a diminishing critical distance to what is shown and therefore increases the emotional involvement with what is happening (Grau 2003, 134). Because immersion employs a technological vocabulary, he positions it within the genre of new media art, which is anything related to video, computer graphics, animation, net-art, interactive art, and virtual art (telepresence and genetic art) and therefore exemplifies the marriage of art and science now more then ever (Grau 2003, 4). For Grau, primitive examples of immersion include the frescoes of Pompeii and Renaissance illusion
spaces (perspectives), and Baroque ceiling panoramas as they all broke down the illusion of space and evoked feelings of immersion. Grau defines illusion as the relationship that exists between humans and images. It is the way in which we perceive, conceive, and experience images within space and time. Panoramas, for example, break down the spatial boundaries, and filled the entire field of vision. This technique in itself is therefore a method of virtual reality as the intention is to instill an artificial world that renders the image space a totality (Grau 2003, 13). This spatial illusion technique therefore fosters an immersive environment that transforms and mediates our experiences within the space.

Interactive installation art is a specific medium that cultivates immersive environments by embracing a technological vocabulary to engage people in everyday experiences. Interactivity is praised as a means to change the passive reception of the viewer into an active one through the use of immersion resulting in the formation of memo-
rable spatial experiences. These memories help inform the construction of spatial experiences, which in turn create moments of pause, thus transforming space into place. Artists, architects and designers have embraced the potential of this concept and are employing technology and new media that are interactive and responsive within the context of the built environment in order to individually engage people into having memorable spatial experiences. The advent of interactive installation art stems from a multitude of ideas, movements, occurrences, and most importantly, from the intermingling of disciplines (Bullivant 2007, 9). Interactive installation art is an active, rather than passive art form that requires the involvement of participants to fulfill its identity by giving meaning to the work. Typically, interactive installation art employs a palette of sensors, computers, wiring, lights, or audio equipment fused with an element of materiality in order to be executed and responsive. As a result, touch and noise, if not a prerequisite, are generally encouraged on the visitor’s behalf (Bullivant
This interaction with the artistic medium helps to foster an immersive environment, as the visitor or participant plays a critical role in formulating and generating the meaning of the installation. One of its aspirations is to encourage sociability where the process of interacting is at its more potent and has the ability to transcend the banality of everyday routine, causing the individual to pause and be playful. Behavioural aspects are welcomed and encouraged, and give the work a live quality feel that in turn makes the experience highly personal while completing the identity of the work.

This engagement is what fosters an aspect of immersive environments and makes the experience meaningful to the individual. With explosions in technological advancements in more recent years, interactive installation art has had the opportunity to push the boundaries even further, through the use of new media, new materials new technology, and innovative engineering-building systems in order to force us to re-think how we perceive and conceive our spatial experiences. Examples of this will be reviewed in the following chapter through the use of a precedent analysis.

In Questions of Perception: Phenomenology of Architecture, Pallasmaa explores the importance of making memorable spatial experience by realizing that “space matter and time fuse into one single dimension, into the basic substance of being, that penetrates the consciousness” (Pallasmaa 2007, 30). In interactive installation art, time and space are the only constant and require the involvement of participants to activate and bring meaning to the work. It is therefore endowed with the ability to be acted upon, thus altering the meaning. Each visitor will most likely enter into a totally different relationship with the work and as a result, fluctuate the meaning and context of the piece. Interactive installation art therefore remains truly ephemeral.

As much as technology has tendencies to mediate our daily lives, it also affords the oppor-
tunity for artists and designers to spatially engage humans in immersive environments that activate and respond to the sensory system. Just as affordances invite individual perception and engagement between an individual and an object in order to determine its usability and function, interactive installation needs to be spatially activated through the participation of people in order to construct and achieve meaningful and memorable experiences. The synthesis of these ideas are what penetrates the language of the design for this practicum as both concepts require the presence and interaction of people to achieve to value, and transform space into place by creating moments of pause through spatial engagement, body movement, and sensory activation to create immersive environments.
CHAPTER 5
PRECEDENT REVIEW
5.0 precedent review

The precedent review within this practicum is fundamental as it allows a design analysis to be undertaken in order to understand the works of others, and in return aids in the formation of original ideas (Clark and Pause 2005, viii). Of importance is the development of a vehicle for the discussion of ideas through the use of examples, as formative ideas are generated and organized through criteria that are established by the literature. The reviews of precedents invites an investigation into the formal and spatial characteristics of existing designs, and allows their strengths and weaknesses to be extracted in order to help inform design considerations and guidelines for this practicum project.
5.1 the high line
the high line, 2009
diller scofidio + renfro
manhattan, new york city

The first precedent exemplifies the conceptual filter of space and place, as it is a space previously classified as abandoned, left vacant until it was recently reactivated and transformed into an urban park. It therefore also exemplifies the notion of adaptive reuse. “The High Line was built in the 1930’s as part of a massive public-private infrastructure project called the West Side Improvement. It was designed to lift freight trains 30 feet in the air, thus removing them from the streets of Manhattan” (Friends of the High Line, History of the High Line, 2010). In 1980 the High Line was shut down and abandoned. In 1999 a community-based non-profit group, “Friends of the High Line” formed in order to protect the industrial structure as it was under threat of demolition. In 2002 the architectural firm Diller Scofidio + Renfro in collaboration with James Corner Field Operations and with guidance from a diverse community of High Line supporters (Friends of the High Line, History of the High Line, 2010) began developing a conceptual programme and design for the High Line. Construction began in 2006 and was completed in 2009.

The High Line is a 2.4km long urban park built on an elevated abandoned railroad stretching 22 city blocks in between and through buildings from the Meatpacking District to the Hudson Rail Yards in Manhattan (James Corner Field Operations, the High Line, 2009). This post-industrial ruin had once been a key component to the urban industry of the neighbourhood, and once abandoned, the railroad became overtaken by the local ecology, and became vacant space. As a result, the High Line aligns itself with the concept of in-between space as it was left dormant and considered surplus space as its original programming was no longer viable. Because of the tumultuous past it was important to Diller Scofidio + Renfro to pay hom-
age to its history and marry the local ecology with the existing rail tracks. By incorporating the site’s history and context into the redesign, Diller Scofidio + Renfro embraced the guidelines for adaptive reuse outlined earlier on by Brooker and Stone.

The High Line is inspired by the melancholic, unruly beauty of the ruin today where nature has reclaimed a once vital piece of urban infrastructure. The team retools this industrial conveyance into a post industrial instrument of leisure reflection about the very categories of ‘nature’ and ‘culture’ in our time (Diller Scofidio + Renfro, The Highline, 2009).

The design solution raises questions associated with thresholds as the materiality of the ground...
cover and custom designed discrete paving units blend into one another and blur the juxtaposition of hard and manufactured materials with soft and natural vegetation. “By changing the rules of engagement between plant life and pedestrians, the strategy of agri-tecture combines organic and building materials into a blend of changing proportions that accommodate the wild, the cultivated, the intimate, and the hyper-social” (Diller Scofidio + Renfro, The High Line, 2009). The differentiation in ground cover also speaks to its intended use as a new popular public space for the local community. The design team purposely planned for varying ratios of hard to soft surfaces that transition from high use areas (100% hard) to richly vegetated biotops (100% soft) with a variety of experiential gradients in between.
(James Corner Field Operations, The High Line, 2009). By transforming the access points into durational experiences, the design is able to slow down the transition from the frenetic pace of the city streets to the slowness marked by the “otherworldly landscape above” by employing platform steps that are enclosed in transparent planes to create a sense of refuge (Diller Scofidio + Renfro, The High Line, 2009). Because The High Line is located above street level, design strategies were implemented in order to visually connect the two realms to one another through the use of viewing windows that were put in the places of billboards that were once attached to the railway’s structure. Other tributes to the site’s history and context are also incorporated into the program of the High Line though the development of the High Line Art Program which aims to maintain creative partnerships between the site and its local art district through a series of public artistic interventions and installations. The many considerations that were incorporated into the High Line encourages meandering and pausing in unscripted ways through the juxtaposition of materials, edges and history of the site. These strategies in turn act as a catalyst for the development of spatial experiences and results in transforming the once unused in-between space into a public space that exemplifies the notion of place.
5.2 stadtlounge
stadtlounge, 2009
carlos martinez + pipilotti rist
st. gallen, switzerland

Architect Carlos Martinez and artist Pipilotti Rist designed the second precedent, Stadtlounge or “city lounge”, in 2005, in St. Gallen, Switzerland. The project was conceived when The Raiffeisen bank, which built its headquarters in a series of buildings that surround the space, realized that something was missing at street level, as there was a lack in pedestrian presence (McKeough 2006, 33). Instead the street was predominantly used for vehicle parking, and made the space unwelcoming as an environment in which to spend leisure time. According to Martinez, one of the main challenges of the site was to create a new identity for the space, as there was an existing range of architectural styles (McKeough 2006, 33). However, with-
out the ability to alter the facades of the buildings, or the sky, they realized that they were limited to the ground plane. The design was therefore conceived as a tongue-in-cheek public living room that would encourage a typically private activity such as lounging to take place in the public realm on a stage-like set (Leydecker 2008, 106). This was achieved by enveloping the city street, as a red rubber fabric flows in-between the surrounding buildings in order to animate and recreate urban life.

Cars haven’t been banished from the space all together however. Instead there are five parking spots available that are demarcated by stenciled graphics. In the same playful tone, one of the amorphous shapes that appears to have been swallowed by the red rubber takes the form of a Porsche. According to Martinez and Rist, this action hints at the fact that the car has merely been parked in the wrong place at the wrong time (McKeough 2006, 33).
The overall design goal of the project was to utilize the red rubber fabric to create a continuous space that engages the public and fosters pockets of playful interaction by encouraging moments of socialization. “Here in Stadtlounge, the idea is to have a landscape of furniture where you can sit and visit with other people,” Says Martinez (McKeough 2006, 33). In order to create the feeling of a lounge, or living room, the red fabric was able to overtake more than just a car, as it meanders throughout the space swallowing tables, benches, chairs, sofas, and other amorphous forms to lounge or play on. The way in which the forms are ambiguously designed allows the concept of affordances to transpire, as each person to the space will engage with the forms differently dependent on their past and present perceptions. The actions that transpire are therefore fleeting and are constantly changing depending on who the dominant users of the space are, the climate, and time of day. Lighting for the space appears suspended above the lounge in the form of “lightbubbles”.

With a diameter of 3 m and a mother-of-pearl-like fiberglass covering made of Scobalit, the lights both function as illumination and create an atmospheric mood through coloured light. The surface is covered with a dirt, snow and ice-repellent coating, which is ultra-thin, transparent and unaffected by UV light. Its anti-adhesive function ensures that dirt, which with time would impair the intensity of the light, is washed away with the rain. The lights are also equipped with fan heaters, a “plan B” for melting snow and ice. The coating has a limited lifetime, and must be renewed after several months (Leydecker 2008, 106).

The way in which the red rubber fabric meets the architectural facades of the existing buildings creates a dialogue between interiority and exteriority as each functions as a backdrop for the other. It therefore exemplifies the filter of interiority by blurring boundaries, thresholds, and edges between the interior and exterior. It is able to permeate the architectural prescriptions of the site by animating a once in-between space. The overall nature of the design fosters an immersive environment that encourages participation through the concept of affordances and perception and as a result contributes
to the formation of a meaningful spatial experience, which in turn helps to achieve a sense of place.
Another precedent that exemplifies the notion of interiority and in-between space that was investigated in order to understand the way in which the theoretical concept can be articulated through principles of interior design is Avebury St. Catherine Smith communicates the design for Avebury St in Inside-Out: Speculating on the Interior, which is an account of her doctoral research into the interior as a site of betweeneness by challenging how we inhabit and change architecture. Her work attempts to re-conceptualize ‘interior’ as the space of betweenness rather than the space of the contained and is therefore able to question notions of boundary (Smith 2004, 93). In order to explore this concept, Smith focuses on making alterations to an existing residence at Avebury St in West End, Queensland, Australia. This project focuses on the everyday, family, and collaborative in terms
of making and its context. As part of the design-build process, Smith and her family have occupied the once termite-eaten, one bedroom house in order to challenge the conventional architectural process. This has allowed them to take a more experimental approach to exploring space through simultaneous building and inhabitation, thus “developing the concept from the making” rather than through drawing (Smith 2004, 95). This has also allowed them to ‘rethink’ the interior as a blurring of physical and conceptual boundaries by thinking about volume without contour (Smith 2004, 96).

Her process highlights issues important to the making of Avebury St that contribute to its quality of betweeness. The first strategy is that the alterations to Avebury St have been thought of as built propositions about how Smith and her family might live in space. By doing this, the notion of building as a process, rather than a finite, finished object is achieved. This acknowledges that life is provisional and experimental to some degree (Smith 2004, 96).

Another strategy is to recognize objects within the interior as elements that possess multiple functions, and are therefore temporal in nature. Smith states we have treated spaces, their uses and the objects in them as ephemeral installations: for example, a walk-in wardrobe has been transformed into several different uses including study, bedroom, dining room, play space, and a library / office. Termite-eaten walls were removed, and then replaced with walls made of shelves. We reinvent the space, and it reinvents how we live through simultaneous designing, making and occupation (Smith 2004, 96).

As such, Smith and her family, have re-appropriated standard interior objects and materials and transformed them into architectural elements that result in challenging the boundaries of what constitutes the architectural envelope and its internal limits. She derived this strategy from the notion that “objects exist in space: architecture makes space” (Smith 2004, 98). Therefore, by using objects in diverse ways, we can re-imagine how the “world defines us, and therefore the construct of what is outside (world) and what is inside (us)”
(Rendell 1998, 245). By doing this, the objects in Avebury St, are no longer associated with their original and single function. An example of this is Smith’s use of the cupboard for storage, to define space inside the building, and frame view of the landscape outside of the building. Smith believes when “interior objects can become and define the quality of spatial enclosure, the interior is no longer bounded by the structure of architecture” (Smith 2004, 98). Recognizing the border thickness and edges associated with the building is important, as its thickness not only affects the exterior of the building, but occurs as well on the interior. In order to break this down, translucent and transparent materials were used to physically and virtually amalgamate interior and exterior space while simultaneously operating with the architectural volume.

By removing existing, non-structural walls, we have also enabled all internal rooms and spaces to have views through each other, and through the new thresholds, to soft or green landscapes. The existing house was once defined by solid materials and small internal spaces, so that we were contained by the building fabric. By re-constructing the interior and its edge materials, the interior has become a space of conceptual and physical blurring with the external landscape (Smith 2004, 99).

By employing all of these strategies and techniques into Avebury St, Smith has demonstrated that by challenging the conceptual, qualitative and physical boundaries associated with the architectural envelope, it is possible to redefine and re-imagine the interior as a contained state to a realm of betweeness. Interior objects and cladding materials redefine edges and boundaries by connecting to the external landscape and force us to see the potential of interior spaces.
The fourth precedent illustrates the significance of the new digital media filter while simultaneously touching on the first two filters of space and place and interiority. Digital Mile is a project that was first developed in 2004 as an attempt to bring the ancient city of Zaragoza, Spain into the information age. In 2005 the city of Zaragoza enlisted the help of MIT’s “Joint Program in City Design and Development” and the “Media Lab” to create a vision for the city that would help attract attention. Supported by an advisory panel of sociologists and designers, the team focused on the potentials of advanced communications and media technology in the public realm rather than in buildings and the private domain (Frenchman and Roja 2006, 16). The site for Digital Mile extends from Portillo and Aljaferia to the high-speed train station situated at the 2008 Expo site. As a result, the site links the old parts of the city with the new.

A driving force behind the project was to “ensure that a truly digital space could bring together multiple layers of media that would form a responsive environment that can change and react to information, much like media must become instrumental in shaping its form” (Frenchman and Roja 2006, 18).

Advantages to creating digital spaces are that the potential to respond to different needs can be better accommodated by flexible, responsive urban spaces. By endowing users with the potential to influence and shape these spaces, noticeable changes have been created that make a more dynamic and participatory “open-source” environment. For examples, light fixtures are designed to sense and respond to the time of day or the number of users within the space, providing general illumination where there are larger crowds of people and more intimate lighting for patrons of
cafes. Horizontal surfaces such as café tables will be interactive and allow users to access restaurant menus, while simultaneously sending an e-mail and planning the next stop within the city through the use of radio frequency identification (RFID).

One of the over-arching goals of the project was to help break down people’s fear of technology
by being easy to use, and easy to manipulate. By allowing the technology to be malleable, it provides affordances that allow the space to be transformed dependent upon the needs of each individual. This sense of ownership for the residents of Zaragoza can help to provide a means through which people can construct and divulge narratives about the city’s culture, functions and history. The entire city will be connected to an Internet based system that allows users to access the technology from the presence of their own home. It will also allow users to plug-in and use the Digital Mile as an office or classroom; further blurring the distinction between public and private, interior and exterior spaces as it allows the action to dictate the level of interiority that is achieved.
The materiality and spatial design is driven by the city’s existing cultural fabric and therefore includes elements such as water, bridges, towers, walls, and layering of historical information. Pedestrian bridges will connect the Digital Mile to the high-speed rail station and neighbourhoods to the south and west. Other design elements incorporated in the Digital Mile are digital facades, moveable physical elements that can provide shade or modify spaces along the edges of buildings, paving that reflects patterns of use, a “waterwall” that responds to ambient conditions and human interaction, and urban light pixels that delineate the edges of space (Frenchman and Roja 2006, 21).

The use of technology within the project creates opportunities for engagement and interaction with technology, the space, and other users. This helps to foster a positive urban experience that is in a constant state of flux. The space therefore becomes completely experiential, and transforms space into place by creating engaging moments of pause and
recognition. The plethora of activities that are possible obscure the spatial boundaries, and create moments of infinite possibility that aid in creating a sense of interiority. This helps to build a collective and individual identity for the users of the space.
The fifth precedent that was consulted for the development of this practicum project is the known as Le Plan Lumière du Quartier des Spectacles in Montreal, Quebec. The project was realized in conjunction with the City of Montreal, Quartier des Spectacles, and designers Ruedi Baur and Jean Beaudoin from the architectural firm Integral. The project explores the possibility of using light, projection, and graphic design as a way to create signage and mark the urban landscape, which in turn expresses the local identity of the community. This design intervention is intended to map pedestrian paths to major near by venues and cultural activity by highlighting their presence within the community. “Light rises from the theaters and pulses to the rhythm of cultural activities, lending an identity to a whole neighborhood and revealing its very essence. Visitors can see the
abundance of culture available in Montréal at a glance” (Quartier des Spectacles, Projects, 2010).

Quartier des Spectacles is a partnership between a group of stakeholders that attempts to “establish overarching orientations for the development of this lively part of downtown Montreal, the members of the partnership have collaborated to create a vision based on the enhancement of the neighbourhood’s cultural assets” (Quartier des Spectacles, Vision, 2010). The partnership aims to achieve this by tactically implementing the following framework into the overall design strategy of the area:

- **Use Culture as a Lever For Development:** The Quartier des Spectacles is a true centre of cultural creation, exhibition, and broadcasting. To consolidate and support the neighbourhood’s vitality requires initiatives that use its existing cultural assets, such as the creation of affordable studio spaces.

- **Create a Distinctive Iconography and Signature:** The lively cultural character of the Quartier des Spectacles makes it one of Montreal’s must-see attractions. Sainte-Catherine Street forms the backbone of its identity, where various cultural spaces are highlighted by special street furniture, and installations reveal the area’s creative abundance.

- **Harmonize Access and Traffic Flow:** Access to the cultural nodes of the Quartier des spectacles is ensured through managing parking lots and reinforcing pedestrian, bicycle, and transit connections – with neighbouring areas and with the broader region.

- **Use The Four Seasons of The Neighbourhood:** To maintain the vitality of the Quartier des Spectacles 365 days a year requires bringing life to the public spaces that are currently underutilized, and taking advantage of Montreal’s underground city (Quartier des Spectacles, Vision, 2010).

The lighting plan employs the use of LED technology to ensure that it is energy efficient, while simultaneously respecting and protecting the starlit sky by limiting light pollution. Quartier des Spectacles lighting plan was meticulously designed in order to achieve the vision set out by the partnership and was therefore divided into three main components. The first animates the ground plane along Sainte-Catherine Street by projecting a series of red dots that emulate a vibrant red carpet. This strategy indicates that the area is a cultural outlet and a hub of activity to be explored.

“Projecting light onto the ground has been one of the central elements of the Quartier des Spectacles Lighting Plan since its launch...
in 2006. Light illuminates the sidewalk to provide signage, reinforce identity and create a lively aesthetic outside more than fifteen cultural venues. The double line of dots is the neighbourhood’s common signature, rolling out a dynamic red carpet for visitors and indicating the presence of a cultural venue at the pedestrian scale” (Designboom, Quartier des Spectacles Lighting Plan, 2010).

The application of light blurs the thresholds between the interior and exterior boundaries of the area by insinuating the presence of activity that transpires on the interior of the buildings. Also, the element of the illuminated red carpet forces us to question, and re-see interior elements that are occurring on the exterior of the building within the public realm. The second strategy that is implemented is architectural and stage lighting. The goal with this is to showcase the unique identities representing each of the different types of cultural venue by illuminating façades, windows or other important features. “In addition to the buildings themselves, the personalities and activities of each area are clearly revealed by light through concepts developed by different night architects” (Quartier des Spectacles, Projects, 2010).
The final approach that was applied to the lighting plan was the inclusion of vibrant elements. Awnings and façades were equipped with interactive LED screens that present information on the neighbourhood and its cultural and artistic events.

By employing new technology to emulate materiality, boundaries between interior and exterior are blurred and as a result, a sense of place for the local community of Montreal is created by giving a sense of identity through graphic connections. Since its inception, the success of the project has received five national and international awards including the International Illumination Design Award grand prize for excellence (Quartier des Spectacles, Projects, 2010).
The sixth precedent that was examined is a contemporary look at the use of the agora to inform the design of public space. The project is a redesign of Nathan Phillips Square in Toronto, Canada by Plant Architecture and Shore Tilbe Irwin and Partners. The site was never really utilized the way its creator, architect Vilijo Revell had initially envisioned. It was originally intended as an open public place that later became tangled with clutter: a rambling peace garden, stacks of metal barriers, and bunker-like change rooms (Steiner 2007, 48). The proposed redesign aims to bring clarity back to the space by clearing out the centre of the square and emphasizing its sparseness. The use of the Greek agora and stoa was the basis for the new program as the design team always felt Nathan Phillips Square had operated as an agora. It was historically the Athenian place of public and political exchange and also the theatre, which was the place of focused gathering as Nathan Phillips Square is home to Toronto’s City Hall (Plant Architect Inc., Agora/Theatre, 2007).

“The porch (stoa) that surrounded the Athenian agora, provided a programmed threshold between the square’s openness and the adjacent private spaces for intimate debate. Agora/Theatre clearly defines the interior space of theatre and square – a theatre for the city – where planned and unforeseen events are encouraged, against a vast forested perimeter of intimate programmed green rooms” (Plant Architect Inc., Agora/Theatre, 2007).

In order to achieve the concept of the agora and theatre, the design team developed a strategy that was comprised of four equal parts:

Open the Square: The openness of Nathan Phillips Square is the source of its democratic power. By removing the clutter, the Square is left as a space of pure potential for a vast range of interactions and events. A new stage will act as a fourth element added to the existing composition of iconic elements – Council Chamber, Freedom Arches, and Ceremonial Ramp – while the surface of the Square will be animated by light, “disappearing” fountains, and seating.

Program a Porous Perimeter with Green Rooms: The new-forested perimeter (increasing trees by 30% – by 60% on the perimeter)
is a container for a host of programmes: the Queen Street forecourt, Peace Garden, Treetop restaurant, entry/bike pavilion, playground and chip trucks. A unique soil support system allows for maximum paving, trees, and a storm water sponge to ensure a healthy forest legacy.

// Activate the Stoa as a Threshold: New trees will provide shade and enclosure, new pavings, benches, linear gardens, and openings provide a rich texture and connectivity between upper and lower walkways, the Square, and the revitalized podium. New elevators, stairs, and ramps will double the connections between the levels of the Square.

// Organize the Existing Architecture to Bridge the Threshold: The stage is reconceived as a permanent public landscape acting as a stair and terrace, connecting the walkways to the Square, serving as bleachers for small performances and a stage for larger ones. The skate pavilion, restaurant and entry kiosk all plug into the multi-levels (Plant Architect Inc., Agora/Theatre, 2007).

By clearing out the central space, Nathan Phillips Square is able to accommodate a wide range of activities that accommodate the various needs of the city of Toronto. The square is therefore left as a truly democratic venue and reaffirms the role of the Greek agora as a forum for public and political exchange while simultaneously behaving as a space for assembly.

It achieves this in an informal manner by welcoming individuals' behaviours and spontaneity by layering the compositions of daily activity and life into the design. This is executed by juxtaposing formal elements such as the podium, stage, restaurant, pavilion, and raised walkway against informal elements such as planting, trees, kiosks, peace garden, furniture and spatial voids. By doing this, thresholds between the various spaces within the site are blurred and allow Nathan Phillips Square to operate as a whole while providing an additional sense of intimacy to the space. The redesign therefore brings a contemporary spin to the traditional notion of the Greek agora by respecting Revell's original minimalist intent for the space and focusing the design on creating a people-centered environment.

This precedent review examines current designs that articulate issues of space and place, public space, in-between space, boundaries and
thresholds, interiority, immersion, new digital media, interactivity, affordances, adaptive reuse, and the typology of the agora. As a result design strategies and elements have been studied and extractions can be made to begin to inform the conceptual elements for the design of this practicum project.
CHAPTER 6
PROGRAMME
This chapter identifies and synthesizes the values and needs of users as well as the project, and translates this information into spatial requirements for the development of the three spaces. By understanding and anticipating the user’s present and future needs, activities, conditions, equipment, spatial allocations, and other particulars makes the organization and the design of the space relevant and successful, and helps to ensure the design’s longevity.
## 6.1 devising design guidelines

**Concept**  
Transforming Public Space: Understanding Spatial Interaction and the Creation of Place.

<table>
<thead>
<tr>
<th>Writer</th>
<th>Topic</th>
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| Yi-Fu Tuan      | Space and Place                    | • Space allows movement and freedom, while place causes pause.  
• Each pause in movement makes it possible for location to be transformed into place, therefore helping to define the existence of space.  
• Space is transformed into place as it acquires definition and meaning. |
| Eva Hornecker   | Social Interaction                 | • Interactive design to create moments of engagement in order to transform space into place.  
• The main component of social interaction is spatiality: spatiality is an inherent property of tangible interfaces or products.  
• Interaction with spatial installations or interactive spaces can be interpreted as a form of tangible interaction. |
| Jan Gehl        | Use of Space Between Buildings     | • Space between buildings is where social interaction, perception, urban recreation, and the sensory experience of everyday life occurs.  
• Modest space that is relaxed and undemanding allows us to connect with our senses. |
| William Whyte   | Quality / Characteristics of Public Space | • Choice is important in public space as it allows freedom and sense of ownership in space.  
• Quality of public space is important to people's comfort- proximity to natural elements- sunlight, water, vegetation, shade, breeze, refuge from weather |
design consideration

• Provide opportunities for pause, lingering, rest.
• Seating or spaces that encourage participation- as people will join in on an activity if other people are already involved.
• Triangulation is another strategy to get people to pause and stay in space.

• Interactive / responsive elements create opportunities for pause.
• Haptic elements will strengthen engagement between body and installation- tangible elements create a lasting impression.

• Choose sites that are situated between buildings in order to explore the potential of relaxed public space and not monolithic public spaces.
• more intimate scale of space to the human body.

• Non-fixed seating
• Flexibility of design to allow for a multiple uses
• Incorporate elements of nature into sites
• Design should provide options for protection from weather.
Boundaries and thresholds as more than just delineators of space.
Interiors are controlled and therefore potentially controlling environments, and as such limit and restrain what is possible in space.
Interiors therefore rely upon sensual conditions that are acoustical, haptic, olfactory, tactile, visual, climatic, physical, psychological, and social in order to remain intimate and elastic.
The boundary permeability either allows, or disallows weather, views daylight (things normally controlled in interior spaces). Boundaries shift and move, making them a temporal condition of interiority- the boundary is a liminal threshold between realms that can be perceived or imagined.

The breakdown in threshold space between interior and exterior as something that can be loosened up and deconstructed to allow a wider range of perceptions, movements and social encounters to transpire.
Opening up the boundary allows place to become alive, and lets the interior and exterior to work simultaneously and therefore creates infinite opportunities for spatial engagement.
design consideration

- Sites should be selected that are neither concretely interior nor exterior- spaces/voids between buildings is therefore a potential venue for boundary condition exploration.
- Allowing elements of exterior into the interior of the building can begin to blur the boundary between inside and outside- elements such as noise, smells, views, etc (haptic elements of outside fused with interior elements helps to do this)

- The programme could be developed to allow typically interior activities to transpire on the exterior, and typically exterior activities to transpire on the interior as a way to break down the boundary.
- Materials could also be used to blur the interior and exterior- interior-like materials used within the exterior, and exterior materials used within the interior
**concept** Achieving Spatial Meaning Through Design Responses

<table>
<thead>
<tr>
<th>writer</th>
<th>topic</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donald Norman</td>
<td>Affordances</td>
<td>• Affordances refer to the perceived and actual properties of a thing, primarily the fundamental properties that determine how it can be used.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• This interaction is based on cues that the object affords, as well as from our mental state and interpretation of things which is based on our past knowledge and experiences.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• James J. Gibson believes affordances as something with just an action possibility. Whereas, Norman believes an affordance has both an action possibility, and the way in which the action possibility is conveyed or made visible- affordances therefore provide strong clues to the operation of things and therefore suggest the range of possibilities.</td>
</tr>
<tr>
<td>Oliver Grau</td>
<td>Immersion</td>
<td>• Immersion is versatile in nature, and can encompass many different characteristics and traits. It employs a technological vocabulary and positions itself within the realm of new media.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Immersion is mentally absorbing, an intellectually stimulating process, or a change in mental states.</td>
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<tr>
<td></td>
<td></td>
<td>• It increases our emotional involvement with what is happening by diminishing our critical distance to it.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• An example of immersion is interactive installation as interactivity shifts the passive reception of the viewer into an active one through immersion- requires interaction of people with the installation in order fulfill its identity by giving meaning to the work- encourages socialibility.</td>
</tr>
</tbody>
</table>
**design consideration**

- Maximize useability of objects- things with multiple functions- allows users to determine its function which in turn equates to engagement and the creation of place.

- Responsive / interactive elements- things that change with the involvement of humans.
- Sensors, computers, wiring, lights, and sound fused with an element of materiality in order to be executed and responsive.
6.2 goals, objectives, strategies

goals

- transform urban space
- spatial engagement
- promote face to face contact
- create a sense of place
- enliven
- push boundaries of interior design

objectives

- formation of memory
- community engagement
- urbanity
- people on the street
- deconnect from technology
- sense of interiority
- safety + security
- bring people into exchange district
- placemaking
translating objectives into strategies

strategies

- lighting
- proximity to transit routes
- human scale
- seasonal
- responsive environments
- events planned
- diversity of use (adaptable)
- gathering space
- amenities
- comfortable sensory experience
- haptic engagement
- activity based
6.3 summary of user needs as project goals

Primary Users | People living + working within the downtown core / Exchange District {refer to section 2.1}

- Create intuitive, effective and uncluttered paths of travel that help to facilitate the flow of people, movement, and wayfinding through space.
- Encourage moments of pause that help to foster communication and spatial engagement.
- Plan / design for flexibility of space in order to achieve multiple uses of the space.
- Diversity of use.
- Create a safe space that promotes a sense of security in public space.
- Transform unused in between spaces into spaces that enrich the quality of everyday life for the users.
- Ensure proper amenities are available- in relation to the programme of each site- such as opportunities to eat and drink.
- Make sure to promote pedestrian movement by eliminating/controlling vehicular traffic.
- Ensure that there is a strong emphasis on human scale as it promotes a sense of enclosure, security, and inclusiveness.
- Mediate the microclimate in order to ensure physical comfort.
- Create design features that promote gathering.
- Variety of seating- some fixed, most flexible- reconsider the role of horizontal surfaces.
- Incorporate new media technology as a way to form immersive environments that en-
courage experiential spaces.

- Accessibility to space from multiple directions.
- Spaces must be perceived as distinct places - must be visible and accessible to passersby on the street - transitional boundary spaces.
- Design choice into sites to allow for affordances and varying degrees of interaction within the space to transpire.
6.4 proxemics + anthropometrics

Intimate space is considered to be the immediate distance around a person’s body. It consists of a 1’6” sphere of space (Kilmer and Kilmer 1992, 191).

Personal space is 1’6”-4’0” away from a person. In this realm people can choose to interact with one another at their own will (Kilmer and Kilmer 1992, 191). They can make face-to-face contact and engage in conversation, or chose not to.

Social space consists of a 4’0”-12’0” trajectory from an individual’s body (Kilmer and Kilmer 1992, 191). In this zone people can still initiate interactions as it is relatively easy to ascertain someone’s attention. In this space, personal communication shifts to a group setting where more than two people are involved. At this distance, body language plays a more important role in communication as gestures are read and interpreted by more group.

Public space is the last spatial zone as it is the furtherest away from the body at 12’0”. In this space people are not necessarily engaged with one another. Instead, they are able to observe and read people based on inferences made from body language and gestures. (Kilmer and Kilmer 1992, 191).
28"  

6"  

12"  

2'-0" - 3'0"
6.5 maw garage programme

“The Agora, literally ‘gathering place’, was the focal point of community life in the Greek city state. A sizeable square situated normally toward the centre of the city...The open area in the centre, served as a market place at all times; permanent shops came to be erected on its periphery.” (Thompson 1954, 9)

“In Athens, the Agora is lined on three sides with rectangular box buildings called Stoas. These have one open side. In the centre, people buy fruit. There were tables where bankers set up for money changing. The Agora is a space completely unlike the mono-functional political theatre. There are lots of things happening at once in this space.” (Sennett 2004, 43)
### 6.5.1 User Analysis

<table>
<thead>
<tr>
<th>User Group</th>
<th>Values</th>
<th>Activities</th>
</tr>
</thead>
</table>
| **Primary**       | • security  
|                   | • safety  
|                   | • comfort  
|                   | • wayfinding  
|                   | • functionality  
|                   | • access to nature  
|                   | • proximity to amenities  
|                   | • proximity to transit  
|                   | • connectivity  
|                   | • convenience  
|                   | • privacy  
|                   | • face to face connections  
|                   | • wireless  
|                   | • reliability  
|                   | • accessibility  | • socialize  
|                   |                | • shop  
|                   |                | • viewing / enjoying performances + events  
|                   |                | • participate in public performances + events  
|                   |                | • winnipeg cultural/arts information  
|                   |                | • use washrooms  
|                   |                | • relax  
|                   |                | • eat / consume food + drinks  
|                   |                | • buy shop from vendor booths  
|                   |                | • remotely working (wireless communications)  
|                   |                | • viewing to old market square  |
| **Secondary**     |                |                                                 |
| **Tertiary**      |                |                                                 |
### Environmental Needs
- ease of circulation
- space to feel secure + safe
- space to relax + feel comfortable
- view to outside- natural elements
- viewing areas
- access to washrooms
- attractive spaces to gather + socialize
- stimulating environment to create excitement / interest
- variety of interior space to provide intrigue and prolong stay in space
- variety of people / users to observe
- ability to purchase food / beverages quickly
- space for vendors to set up temporary stalls
- choice + option in activity + venue
- some segregation from public space

### Emotional Needs
- natural light
- climate control
- acoustical control
- connection to environment
- public views
- circulation movement free in space
- choice / flexibility / affordances of design elements
- responsive elements
- textural comfort
- lighting at night for safety + security
<table>
<thead>
<tr>
<th>user group</th>
<th>values</th>
<th>activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>secondary vendors</td>
<td>• functionality</td>
<td>• space for selling</td>
</tr>
<tr>
<td></td>
<td>• safety + security</td>
<td>• flexible display area</td>
</tr>
<tr>
<td></td>
<td>• accessibility</td>
<td>• open space for social interaction</td>
</tr>
<tr>
<td></td>
<td>• convenience</td>
<td>• personal storage / product storage</td>
</tr>
<tr>
<td></td>
<td>• cleanliness</td>
<td>• access to washrooms</td>
</tr>
<tr>
<td></td>
<td>• organization</td>
<td>• prep, bake, make food / beverages</td>
</tr>
<tr>
<td></td>
<td>• wayfinding</td>
<td>• stock display</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• serve</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• cash exchange</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• clean area / wash equipment</td>
</tr>
<tr>
<td>maintenance / support staff</td>
<td>• organization</td>
<td>• selling tickets</td>
</tr>
<tr>
<td></td>
<td>• functionality</td>
<td>• information / reception</td>
</tr>
<tr>
<td></td>
<td>• comfort</td>
<td>• cleaning</td>
</tr>
<tr>
<td></td>
<td>• safety / security</td>
<td>• service</td>
</tr>
<tr>
<td></td>
<td>• accessibility</td>
<td>• deliveries</td>
</tr>
</tbody>
</table>
environmental needs

- personal storage, product storage
- food, bakeware / utensil storage
- large work surfaces
- cash exchange area
- washing station
- food display
- access to washroom
- controlled space for selling
- flexible signage
- flexible display

- maintenance closet (with sink)
- storage
- service entrance
- work surface
- access to washroom

emotional needs

- natural light
- climate control
- acoustic control
- connection to environment
- public views
- circulation / movement free in space
- choice / flexibility / affordances of design elements
- responsive elements
- textural comfort
- lighting at night for safety + security
6.5.2 User needs

*based on William Whyte’s The Social Life of Small Urban Spaces (Whyte 1980)

<table>
<thead>
<tr>
<th>Physiological</th>
<th>Economics</th>
<th>Psychological</th>
</tr>
</thead>
<tbody>
<tr>
<td>sitting heights in public spaces:</td>
<td>Exchange District BIZ</td>
<td>• proxemics: personal</td>
</tr>
<tr>
<td>• 18” surface depth for one person</td>
<td></td>
<td>• space: 1’-6”-4’0”</td>
</tr>
<tr>
<td>• 36” surface depth for two people (doubles the amount of seating).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• chairs need at least 30” to move.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• café / food counter style eatery food brings people together (triangulation)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Public space needs:

• stairs: 11” tread with 7 ½” rises.
• bathrooms easily accessible to all people (barrier-free).
• all pathways and corridors are barrier-free
Proxemics: social distance
- 4'0"-12'-0"

Triangulation

Activity based programing:
Food brings people together—it's a reason to go to a place where people already are.

Dialogue between the interior and exterior opening the façade during the warmer months of the year can be a good way to allow both to flow together seamlessly. Glazing + windows can also help. Encouraging interaction beyond the limits of the building can be another method of creating a dialogue between the two.

Protection from weather—people like natural light—congregate to it, but tend to avoid: wind, cold weather, dampness, trees, plants, natural elements, sounds of water all encourage relaxation in public space. Trees are also good for sitting spaces as they provide shade + shelter—they also provide a sense of enclosure. Ability to touch water is enjoyable and playful and encourages further interaction easy entrance + egress.

Conclusion
- Triangulation can be a successful way to draw people into the space—offering food, performance space, and shopping areas can therefore be strategies in which to achieve this
- Incorporate outdoor elements into the interior in order to blend two together
- Keep interior elements flexible
- Design for affordances—gives choice to the users, and allows the space to be individually interactive
- Simultaneity of activities—however, ensure interior space is not cluttered as the Agora was open and flexible and therefore encouraged bodily expression, communication, and movement.
### 6.5.3 spatial requirements

<table>
<thead>
<tr>
<th>area</th>
<th>activities</th>
<th>atmosphere</th>
<th>sensory experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>information kiosk / tickets</td>
<td>purchasing, information gathering, display</td>
<td>visible from exterior, stimulating, welcoming, unobstructed, accessible</td>
<td>high energy, use light / colour to enhance, visibility from street</td>
</tr>
<tr>
<td>washroom</td>
<td>cleaning, going to the bathroom, pause</td>
<td>accessible, unobstructed, safety, visible, way-finding</td>
<td>create sense of security through visibility to other areas within the space, relaxing + pausing environment</td>
</tr>
<tr>
<td>lounging</td>
<td>public space, sit / lounge, rest / pause, work, eat</td>
<td>horizontal surfaces, informal seating, relaxed, affordances, stimulating, welcoming, choice</td>
<td>choice in seating, softer seats for longer moments of pause, surfaces to create gathering space, sightlines to street</td>
</tr>
<tr>
<td>street level</td>
<td>direct access, from street, observation, accessibility</td>
<td>open, unobstructed relaxed, accessible</td>
<td>interior space to attract people from street- bright, high energy, flow from inside to outside seamless</td>
</tr>
<tr>
<td>eating purchasing</td>
<td>eating, relaxing, ordering buying, cooking, baking, food preparation</td>
<td>unobstructed, bright, fulfillment, choice, organization, efficient, lively</td>
<td>choice in what is sold, scent of food / baking, accomplishment, taste, stimulating</td>
</tr>
<tr>
<td>storage / loading</td>
<td>unloading / loading, storage</td>
<td>efficient, organization, accessibility</td>
<td>not cluttered, away from main activity</td>
</tr>
<tr>
<td>performance</td>
<td>public space, observation</td>
<td>engaging- high activity, open / spacious, visible</td>
<td>informal space- variety of possibilities for performances / viewing - neutral spaces</td>
</tr>
</tbody>
</table>
6.5.4 mechanical requirements + building code

electrical + plumbing
A hot water tank of commercial grade will be installed in the basement of the garage to support the programme of the food stalls and washrooms. The hot water tank will be insulated for maximum efficiency and low flush toilets will installed. Vertical chases for plumbing ventilation will be installed in the basement and run into the living wall where it will be vented.

An electrical panel will also be installed in the basement of the garage and will be surge protected.

heating + cooling
A forced air heating system fueled by a central furnace will act as the main heating and cooling system for the garage. The furnace will be located in the basement. The heating and cooling system will mostly be used in the fall, winter and spring months, as the garage facade will be designed to be completely open during the warmer months, allowing for fresh air ventilation and circulation.

lighting
Because the intended design involves public space, emergency lighting will be provided in the main staircase, entry areas, and throughout the main corridors. This will be connected to its own battery pack and circuit.

Overall lighting will be provided in warm temperature tones for an even light distribution. In addition, feature lights, pendants and task lighting will be used to highlight certain spatial features and create more intimate areas. Track lighting will be installed around the performance space, to allow for flexibility.

other
Wireless internet installed throughout. Sprinkler system will also be installed.
building code summary

*This summary is based on a review of the Manitoba Building Code 2010 as it applies to the above noted project.

section 3.1 general
major occupancy classification | group e, mercantile occupancies + group a, assembly
site sqft | 3,728 sqft

section 3.1.16 occupant load
occupant load calculation is based on table 3.1.16.1
assembly uses | space with non-fixed seats
total occupant load | 6,748 people (however, for the nature of the programme and size of the city, the determined occupancy load will be 400 people)

Section 3.1.5.1. Noncombustible Materials
A building or part of a building is required to be of noncombustible construction and shall be constructed with noncombustible materials.

Section 3.1.5.4. Combustible Glazing + Skylights
Combustible skylight assemblies are permitted in a building required to be of noncombustible construction.

Section 3.2.1.6. Mezzanines
The floor assembly of a mezzanine that is considered a storey shall be constructed in conformance with the fire separations requirements.

Section 2.2.57. Group E, Any Height, Any Area, Sprinklered
The building shall be sprinklered throughout, and floor assemblies shall have fire separations with a fire-resistance rating not less that 2h. Mezzanines shall have a fire-resistance rating not less that 1h.

Section 3.2.4.1. Fire Alarm Detection System
A fire alarm system shall be installed in a building in which an automatic sprinkler is installed.

Section 3.3.1.9. Corridors
The minimum width of a public corridor shall be 1100mm (43”). No corridor is less than 2438mm (96”).

Section 3.3.1.14 Ramps and Stairways
Ramps and stairways that do not serve as exists shall conform to the dimensional guard, handrails, and slip-resistant requirements for exit ramps and stairways.

Section 3.3.1.19 Transparent Doors + Panels
Glass or transparent doors shall be designed and constructed so that the existence and position of the door is readily apparent by attaching non-transparent hardware, bars or other permanent fixtures to it.

Section 3.4.2.2 Means of Egress from Mezzanines
Mezzanines shall be served by a means of egress leading to exits. The occupancy load of a mezzanine level is no more than 60 people. A mezzanine shall be served by more than two means of egress.

Section 3.4.2.3. Distance Between Exits
The distance between exits shall be no more than one half the maximum diagonal dimension of the floor area.

Section 3.4.6.4 Handrails
A stairway shall have a handrail on at least both sides.

Section 3.7.2.2 Water Closets
Water closets shall be provided for each sex assuming that the occupancy load is equally divided between males and females. If a single universal toilet room is provided, the total number of persons in the building used to determine the number of water closets can be reduced by 10. Seventeen water closets are therefore required in the space.

Section 3.8.1.2 Entrances
Not less than 50% of the pedestrian entrances of a building shall be barrier-free and shall lead from the
outdoors at sidewalk level.

Section 3.8.1.3. Barrier-Free Path of Travel
Interior walking surfaces that are within a barrier free path of travel shall be stable, firm and slip resistant. A barrier free path of travel can be a passenger elevator.
6.6 portage alley programme

“The semi-formal space within the agora always welcomed: performance, recreation, lounging, people watching, walking, eating. It was a flexible space that welcomed simultaneity and spontaneity” (Rubenstein 1992, 2).
### 6.6.1 User Analysis

<table>
<thead>
<tr>
<th>User Group</th>
<th>Values</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary</strong></td>
<td>• security</td>
<td>• socialize</td>
</tr>
<tr>
<td></td>
<td>• safety</td>
<td>• participate in public performances + events</td>
</tr>
<tr>
<td></td>
<td>• comfort</td>
<td>• relax</td>
</tr>
<tr>
<td></td>
<td>• ease of wayfinding</td>
<td>• eat / consume food + drinks</td>
</tr>
<tr>
<td></td>
<td>• functionality</td>
<td>• buy from vending machines</td>
</tr>
<tr>
<td></td>
<td>• access to nature</td>
<td>• remotely working (wireless communications)</td>
</tr>
<tr>
<td></td>
<td>• proximity to amenities</td>
<td>• viewing to adjacent streets - portage ave, gra-</td>
</tr>
<tr>
<td></td>
<td>• proximity to transit</td>
<td>ham ave, edmonton st, kennedy st</td>
</tr>
<tr>
<td></td>
<td>• connectivity</td>
<td>• areas to sit and wait for public transit</td>
</tr>
<tr>
<td></td>
<td>• convenience</td>
<td>• area to display local information</td>
</tr>
<tr>
<td></td>
<td>• privacy</td>
<td>• gathering space</td>
</tr>
<tr>
<td></td>
<td>• face-to-face connections</td>
<td>• sit / lounge</td>
</tr>
<tr>
<td></td>
<td>• wireless</td>
<td>• work</td>
</tr>
<tr>
<td></td>
<td>• reliability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• accessibility</td>
<td></td>
</tr>
<tr>
<td><strong>Secondary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>people living in Winnipeg</td>
<td>• security</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• safety</td>
<td></td>
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<td></td>
<td>• comfort</td>
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<td></td>
<td>• ease of wayfinding</td>
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<td></td>
<td>• functionality</td>
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<td></td>
<td>• access to nature</td>
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<td></td>
<td>• proximity to amenities</td>
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<td></td>
<td>• proximity to transit</td>
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<td></td>
<td>• connectivity</td>
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<td>• convenience</td>
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<td></td>
<td>• privacy</td>
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<td></td>
<td>• face-to-face connections</td>
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<tr>
<td></td>
<td>• wireless</td>
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<tr>
<td></td>
<td>• reliability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• accessibility</td>
<td></td>
</tr>
<tr>
<td><strong>Tertiary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>people visiting Winnipeg /</td>
<td>• security</td>
<td></td>
</tr>
<tr>
<td>travellers</td>
<td>• safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• comfort</td>
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<td></td>
<td>• ease of wayfinding</td>
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<td></td>
<td>• privacy</td>
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<tr>
<td></td>
<td>• face-to-face connections</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• wireless</td>
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</tr>
<tr>
<td></td>
<td>• reliability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• accessibility</td>
<td></td>
</tr>
</tbody>
</table>
environmental needs

• ease of circulation
• space to feel secure + safe
• space to relax + feel comfortable
• view to natural elements
• viewing areas
• attractive spaces to gather + socialize
• stimulating environment to create excitement / interest
• variety of interior space to provide intrigue and prolong stay in space
• variety of people / users to observe
• ability to purchase food / beverages quickly
• solar panel cells to power lit surfaces
• solar panel cells to power horizontal surfaces
• some segregation from public space
• wireless communications- internet
• vending machines

emotional needs

• natural light + some daylight control
• climate control
• connection to environment
• public views
• circulation movement free in space
• choice / flexibility / affordances of design elements
• responsive elements
• textural comfort
• lighting at night for safety + security
### 6.6.2 User Needs

*Based on William Whyte's The Social Life of Small Urban Spaces (Whyte 1980, 47)*

<table>
<thead>
<tr>
<th>Physiological</th>
<th>Economics</th>
<th>Psychological</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 18” surface depth for one person</td>
<td>Downtown Winnipeg BIZ</td>
<td>• Proxemics</td>
</tr>
<tr>
<td>• 36” surface depth (benches) for two people (doubles the amount of seating).</td>
<td></td>
<td>• Personal Space: 1’-6”-4’0” (figure)</td>
</tr>
<tr>
<td>• Chairs need at least 30” to move around and give people options on where to sit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Protection from weather - people like natural light - congregate to it, but tend to avoid: wind, cold weather, dampness. There is no overhead canopy / roof so important to provide some type of shelter from the weather.

**sociological**
- Proxemics
- Social distance 4'0"-12'-0"
- Triangulation: Activity based programming - Food brings people together - It's a reason to go to a place where people already are.

**contextual**
- Work with surroundings, as site is completely outdoor and open - create a sense of security in the space - through enclosure, lighting, while also keeping the space open to allow for large group of people to gather.

**structural**
- Protection from weather - people like natural light - congregate to it, but tend to avoid: wind, cold weather, dampness. There is no overhead canopy / roof so important to provide some type of shelter from the weather.

**conclusion**
- Keep elements flexible to transform to different uses of space.
- Predominantly used as a thoroughfare so give reason for people to pause / stop / rest - Interactive / responsive materials, seating, opportunities for play / working, and informal central performance space.
- Keep space semi-formal in programming + design as it isn't a formal interior space.
- No canopy - open to the elements of weather - design some kind of sheltering structure - could be responsive to the weather because it is an outdoor space, incorporate interior elements (whether material or activity based) into space in order to challenge boundary conditions.
### 6.6.3 spatial requirements

<table>
<thead>
<tr>
<th>area</th>
<th>activities</th>
<th>atmosphere</th>
<th>sensory experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>relax</td>
<td>public space, sit, lounge, rest / pause, work</td>
<td>horizontal surfaces, informal seating, afforances, stimulating, welcoming</td>
<td>choice in seating, light that responds to motion, materials that responds to people, interactivity, textured materials on surfaces to identify certain spaces; seating vs. flooring, smart technologies to allow for dynamic interface between building and user</td>
</tr>
<tr>
<td>circulation</td>
<td>public space, running, walking, bicycling</td>
<td>lively, open, unobstructed, bright, energetic</td>
<td>stimulating materials, high energy, responsive light /materials, secure / safe, ease of navigation</td>
</tr>
<tr>
<td>performance</td>
<td>public space, observation</td>
<td>engaging, open, spacious, high activity</td>
<td>responsive light, high energy, excitement, stimulating aesthetics for the public to enjoy</td>
</tr>
<tr>
<td>street level</td>
<td>access, observation</td>
<td>open, unobstructed, relaxed / undemanding, accessible</td>
<td>offset automotive traffic with light responsive materials to engage people’s senses, provide visual intrigue through use of light</td>
</tr>
<tr>
<td>vending</td>
<td>eating, purchasing</td>
<td>unobstructed, bright, fulfillment</td>
<td>choice, accomplishment, taste</td>
</tr>
</tbody>
</table>
6.6.4 mechanical requirements + building code

**electrical**

Solar panels will be used as a way to convert energy from the sun directly into electricity through the use of photovoltaic cells. Multiple cells are assembled making solar panels that will be fastened to the top of each of the overhead planes. This in turn will power each of the ribbon segments of the design installation. QI wireless power transmission technology will be used in order to transmit the solar power generated by the panels without any wires into the various surfaces of the ribbon, making it possible to place a laptop computer or cell phone, or any other device with a battery on the ribbon’s surface to charge. This allows users to the space to use personal communication devices within the space, and prolongs the length of their visit in the space, while simultaneously allowing multiple activities to transpire.

**heating + cooling**

Because the space is an outdoor space, nothing will be done to regulate the climate, other than the provision of an overhead plane to help shelter from the weather.

**lighting**

LED (light-emitting diode) lighting will be embedded within each of the ribbon’s planes, and will be powered by the solar panels on the upper planes. The LED’s will be connected to photoresistors (light dependent resistors) which change intensity according to brightness or dimness of light. The horizontal seating / work planes within the installation will be wired with weight sensors and accordingly the LED’s will illuminate when the sensors detect someone sitting. The horizontal surfaces will therefore illuminate when in use, signifying the presence of people within the space.

**other**

Wireless internet throughout the installation.
**building code summary**

*This summary is based on a review of the Manitoba Building Code 2010 as it applies to the above noted project.*

section 3.1 general
major occupancy classification | group a, division 4
assembly occupancies in which occupants are gathered in the open air
site sqft | 3,728 sqft

section 3.1.16 occupant load
occupant load calculation is based on table 3.1.16.1
assembly uses | space with fixed seats
total occupant load | 1,516

Section 3.3.1.9. Corridors
The minimum width of a public corridor shall be 43". No corridor is less than 96".

Section 3.3.2.8. Fixed Seats
bench-type seats without arms are provided, the seat width per person shall be assumed to be 18". The centre-to-centre spacing between rows of bench-type seats shall be not less that 30" if back rests are provided, not less that 22".

Section 3.8.1.2. Entrances
All entrances are barrier free and at street level.

Section 3.8.3.2. Exterior Walks
Exterior Walks that form part of a barrier-free path of travel shall | Have a slip resistant, continuous and even surface | Be not less that 43"wide.
6.7 mostyn park programme

"The centre space of the Agora was a democratic space that welcomed all people. It was the place of assembly for the community. The Odeon of Agrippa was located within the centre space of the Agora, and was unroofed, with a central space for events." (Thompson 1954, 9).
### 6.7.1 user analysis

<table>
<thead>
<tr>
<th>user group</th>
<th>values</th>
<th>activities</th>
</tr>
</thead>
</table>
| **primary** | • security  
                 • safety  
                 • comfort  
                 • ease of wayfinding  
                 • functionality  
                 • access to nature  
                 • proximity to amenities  
                 • proximity to transit  
                 • face to face connections  
                 • reliability  
                 • accessibility | • socialize  
                 • excersise  
                 • viewing / enjoying performances + events  
                 • participate in public performances + events  
                 • play  
                 • relax  
                 • eat / consume food + drinks / picnic  
                 • canoe launch  
                 • access to river (winter + summer)  
                 • rallying  
                 • lounge, sit  
                 • running  
                 • walking  
                 • bicycling  
                 • skateboarding  
                 • canoe launch  
                 • access to assiniboine river skating trail (winter) |
| **secondary** | people living in winnipeg |  |
| **tertiary** | people visiting winnipeg/travellers |  |
environmental needs

• ease of circulation
• space to feel secure + safe
• space to relax + feel comfortable
• view of natural elements
• viewing areas
• attractive spaces to gather + socialize
• stimulating environment to create excitement / interest
• variety of people / users to observe
• choice + option in activity + venue
• view of legislative building
• refuge from automotive traffic on osborne street

emotional needs

• acoustic control
• connection to environment
• public views
• circulation  movement free in space
• choice / flexibility / affordances of design elements
• responsive elements
• textural comfort
• lighting at night for safety + security
6.7.2 user needs
*based on William Whyte's The Social Life of Small Urban Spaces (Whyte 1980, 47)

<table>
<thead>
<tr>
<th>physiological</th>
<th>economics</th>
<th>psychological</th>
</tr>
</thead>
</table>
| • Sitting heights in public spaces: 18” surface depth for one person 36” surfaces depth (benches) for two people (doubles the amount of seating). | Westbroadway BIZ | • Proxemics: personal space: 1'-6”-4'0" (figure

• Chairs need at least 30” to move with. Stairs for public space need 11” tread with 7 ½” rises.
• Lighting creates a sense of security for users- pedestrian friendly lighting isn’t mounted too high- should incorporate full colour spectrum
sociological

- Proxemics: social distance: 4’0”-12’-0”
- Triangulation: Activity based programming- ood brings people together- It’s a reason to go to a place where people already are.

contextual

Work with surroundings as site is completely outdoor and open- create a sense of security in the space-through enclosure, lighting, while also keeping the space open to allow for large group of people to gather.

structural

Protection from weather- people like natural light- congregate to it, but tend to avoid: wind, cold weather, dampness. There is no overhead canopy / roof so important to provide some type of shelter from the weather.

conclusion

- Keep design intervention simple to ensure the integrity of the landscape- simple, yet effective
- Provide opportunities for various activities to transpire- stairs as seating- exploring ratios of horizontal surfaces
- Lighting should be a vital element to the design in order to promote a sense of security for the users of the site
- Lighting can be responsive to the time of day, or amount of users in the space, so each visit to the site is always different
## 6.7.3 spatial requirements

<table>
<thead>
<tr>
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<td>relax</td>
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<td>horizontal surfaces, informal seating, affordances stimulating, welcoming</td>
<td>choice in seating, light that responds to motion, materials that responds to people, interactivity, textured materials on surfaces to identify certain spaces; seating vs. flooring</td>
</tr>
<tr>
<td>play</td>
<td>public space, running walking, bicycling, skateboarding</td>
<td>lively, open, unobstructed, bright, energetic</td>
<td>stimulating materials, high energy responsive light / materials soft / natural materials to offset hard surfaces of site</td>
</tr>
<tr>
<td>circulation</td>
<td>public space, moving through space</td>
<td>open, unobstructed relaxed / undemanding, accessible</td>
<td>secure / safe, ease of navigation, responsive light, high energy</td>
</tr>
<tr>
<td>performance</td>
<td>public space, events</td>
<td>engaging, open, spacious, high activity</td>
<td>excitement, stimulating aesthetics for the public to enjoy, smart technologies to allow for dynamic interface between building and user</td>
</tr>
<tr>
<td>street level</td>
<td>rallying, play</td>
<td>views / vistas to legislative building, welcoming, lively, stimulating</td>
<td>offset automotive traffic with light / responsive materials to engage people’s senses, provide intrigue to lower levels of site through light</td>
</tr>
<tr>
<td>seasonal</td>
<td>walkway to river/ canoe launch</td>
<td>changes with seasons traces left behind on materials</td>
<td>allow river to dictate the sensory experience- wet (flooding) cold (frozen)</td>
</tr>
</tbody>
</table>
6.7.4 mechanical requirements + building code

electrical
Electrical panels (surge protected) will be located below the gate, as well as both staircases in order to power the outdoor LED modular screen, the LED's embedded in the stairs and ramp, as well as the LED columns.

heating + cooling
Because the space is an outdoor space, nothing will be done to regulate the climate, other than an overhead plane to help shelter from the weather.

lighting
An extremely high-powered LED light bar (available in a variety of beam optics, colors and color temperatures of white) will be embedded in each of the 6” rise stairs to help illuminate the staircase. Thin fluorescent tubes will be installed on the underside of the railings in order to help wayfinding.

Outdoor lighting fixtures will be scattered throughout the site and are designed to look like interior floor lamps. The lights will be made out of translucent acrylic and are responsive to the people within the site through the use of motion sensors. The lamps are also responsive to the time of day. During the day they act as sculptural elements, while at night they illuminate.

The gate will also act as an overhead light that will be illuminated through the use of a LED modular panel screen. The gate will also have a direct light source - the bottom of the overhead plane and will have fluorescent tubes that illuminate the threshold and boundaries of the site.
section 3.1 general
Major occupancy classification | group a, division 4 assembly occupancies in which occupants are gathered in the open air
site sqft | 69,000 sqft

section 3.1.16 occupant load
Occupant load calculation is based on table 3.1.16.1
assembly uses | space with fixed seats
total occupant load | 28,550

Section 3.3.1.14. Ramps and Stairways
Except as permitted by Sentence (2), Article 3.3.4.7. and Subsection 3.3.2., ramps and stairways that do not serve as exits shall conform to the dimensional, guard, handrails and slip-resistance requirements for exit ramps and stairways stated in Sentence 3.4.3.2.(8) and Article 3.4.3.4., and 3.4.6.1. to 3.4.6.8.

Section 3.3.2.8. Fixed Seats
Bench-type seats without arms are provided, the seat width per person shall be assumed to be 18". The centre-to-centre spacing between rows of bench-type seats shall be not less than 30" if back rests are provided, not less than 22".

Section 3.8.1.2. Entrances
All entrances are barrier free and at street level.

Section 3.8.1.3. Barrier-Free Path of Travel
Interior walking surfaces that are within a barrier free path of travel shall be stable, firm and slip-resistant. A barrier free path of travel can be a passenger elevator.

Section 3.8.3.2. Exterior Walks
Exterior Walks that form part of a barrier-free path of travel shall | Have a slip resistant, continuous
and even surface | Be not less that 43” wide.

Section 3.8.3.4. Ramps
The ramp has a slope of 1 in 20, and is therefore safer and less strenuous than a ramp with a slope of 1 in 16. A.3.8.3.4.(1)(b)
CHAPTER 7
DESIGN
This chapter examines the design proposal of each of the three sites and discusses the concept, rationale and intention behind the proposed practicum design.
7.1 maw garage
site selection

For the purpose of this practicum project, the Maw Garage was selected as the site with full enclosure. The goal of the new intervention was to navigate ways in which its boundaries and edges could be broken down, and opened up to create a successful interior public space.

One of the key design considerations in the proposed intervention of Maw Garage was to respect the building’s integrity and original structure as it is deemed a class three heritage building. According to Heritage Canada, this meant that alterations could be made to the interior of the space with minimal changes to the façade of the building. Over time, however, alterations were made to the façade that resulted in the interior space feeling dark, and closed off from its surrounding environment. One of my design goals was to restore the façade to its original design, and open up the interior space to the street and adjacent environments. I therefore replaced two-thirds of the façade (east façade and west façade) that were clad in plywood with NanaWall glazed folding doors. In the warmer months the panels have the potential to be fully opened, allowing a seamless transition between interior and exterior. During Winnipeg’s colder months, the glass doors allow visual connections to be made between the interior and exterior without impeding the climate control of the interior space. Because the east and west façades can be completely opened...
during warmer months there is seamless flow between King Street and Princess Street, helping to connect the area through an interior thoroughfare.

The second major factor in my design came from Maw Garage's proximity to Winnipeg's Old Market Square. Because the new function of Maw Garage is an indoor public space, I wanted Maw Garage to feel like an extension of Old Market Square. The amount of glazing on the façade of the building is one way in which I felt I could visually connect the two spaces.

The second strategy was to keep the floor plane of the interior space at street level. I used polished concrete for the entire main floor finish, as its aesthetic quality felt like an extension of the sidewalk. As well, it is durable and requires low maintenance in spaces where there is a lot of foot traffic. Another reason for wanting the main floor at street level is to ensure that the space is completely accessible to all people who enter.
level one

The spatial configuration of Maw Garage’s main floor was dictated by the proximity to Old Market Square, as I wanted the space directly adjacent to be more open, public, and fluid. As a result, the only permanent fixtures on the east side of the building is an information kiosk / ticket booth, and vertical circulation- stairs and an elevator that lead to the mezzanine level and basement. This allows the east side to remain flexible in its programme, as it can be an overflow space for Old Market Square. In-
formal non-fixed furniture will be scattered throughout the mainfloor of the building to allow for choice in seating and to allow people to create their own spatial configuration. The inclusion of the information kiosk / ticket booth in this space was strategic so that it was visible to people walking by.

The main floor's central space is the heart of the building as it has been left unprogrammed and completely open in order to allow for performances, spontaneous activity, and informal gathering space. When performances aren't transpiring, the space can be configured into seating areas
(with non-fixed seating and tables) where people can work, eat, lounge, play, rest or pause. The central space is signaled by a major design intervention into the space that comes in the form of a four storey “living wall” that penetrates all levels of the building, as well as the roof. The “living wall” begins in the basement and extends up through the main floor, mezzanine and punctures the roof structure and monitor by 12’ where it is encased in a glass cube-like terrarium that is visible from the sidewalk and Old Market Square. This becomes a strategic architectural intervention into the space as it mimics the form of Old Market Square’s “Cube” (performance stage structure) and helps to reaffirm the relationship between the two spaces and their similarity in programme. The presence of the “living wall” within the interior space helps to soften the perception of hard materials such as brick and concrete while reiterating the visual link to the outdoors. Also, during the winter months when the city is clad in white snow, the juxtaposition of the living wall rising out of the roof reminds pass-
ersby and users to the space of the warmer, lush green months of Winnipeg’s spring and summer.

The east side of the main floor houses two informal restaurants that operate like a cafeteria where food can be purchased and taken away. The food counter against the south wall offers desserts, baked goods, bread, and pastries, while the food counter along the north wall serves drinks, coffee, soups, sandwiches, salads, and pre-prepared meals. Both counters are self-sufficient in that they have kitchens that allow all food to be made in
house. By doing this, the aroma of food can penetrate the open floor plan and help to create a sense of place by activating people’s senses. The inclusion of these food counters in the design of Maw Garage helps to ensure that when there are no performances transpiring in the space, there is still a reason for people to come into building and linger; helping to ensure the space retains its vibrancy.

The existing structure of Maw Garage has load-bearing pilasters lining both the north and south walls that repeat every 12’6”. As a result of this formalized structure, I wanted the new floor plan to establish a relationship with the existing structure, yet to feel distinctly different. I therefore utilized Brooker and Stone’s strategy of insertion, where the “introduction of a new element into, between or beside an existing structure is inserted and can be seen as independent and confrontational, a single large powerful element that establishes surprising dialogues between itself and the existing structure or volume” (Brooker and Stone 2004, 102). This method works best when there is an obvious distinction between the old and the new. Brooker and Stone state “it is at its best when the clearest possible distinction between the crisp new contemporary work and the crumbling antiquity of the existing is established and therefore the style, language, the materials and the character of each are different” (Brooker and Stone 2004, 102). As a result, the new floor plan works with the 12’6” repeating dimension, but the new design elements are skewed on a diagonal. The design intervention therefore works on an angular plan while respecting the original grid. The brick walls are left untouched to show the age and history of the space, and as a result, the majority of materials chosen for the new insertion employ new material technology. The specified materials are vibrant, smooth, and articulate themes and colours associated with nature without being obvious. An example of this is the 3Form poured glass. The material is comprised of seaweed sandwiched between two pieces of smooth glass. The material is used in the design of the food counter
that is placed against the north wall. The use of the seaweed conjures up notions of nature, while the slick quality of the glass contrasts represents the new. The old and new materials form a visual dichotomy between old and new, rough and slick, analogue and digital. Similar to the brick walls, the roof is also left intact with structural steel I-beams that repeat on the same grid as the pilasters. The only change in the roof structure is instead of four singular monitors, I designed one long monitor to allow more overhead light penetration into the space.
perspective of cafe

mezzanine

The angular plan of the main floor dictates the layout and form of the mezzanine level, which is accessible via two staircases and one elevator. In order for the main floor to not feel enclosed and dark, the mezzanine level only covers a portion of the floor plate and is situated 12’ above the main floor. Large vertical penetrations allow for visual connection to be made between the first floor and upper level. I also designed flooring changes in strategic ar-
eas within the mezzanine level that are transparent (structural glass floor panels) so as to allow natural light from the monitor to penetrate to the main floor.

An important design feature of the mezzanine level is that it penetrates the east façade that is directly adjacent to Old Market Square. The mezzanine level therefore has an outdoor component that can be used as an outdoor public patio for viewing, sitting and relaxing. The function of the mezzanine level is intended to be informal, in that it is used as a viewing area to the central performance
space on the main floor. It is also intended to be a space of refuge, a space for moments of longer pause and rest as it is removed from the main floor where there is a higher level of activity. As such, the furniture and fixtures chosen for the mezzanine level offer a higher level of comfort through material choice, padding, and arrangement. Modular furniture is specified so to allow visitors to the space to govern the way in which it is occupied.

**lower level**

The existing basement level of Maw Garage is accessible through an elevator and the staircase located on the east side of the building. The basement level of the building houses the washrooms, storage, and building systems. The placement of the washroom in the basement was strategic as I wanted the main floor to be as open as possible without any wall partitions. Also, the function of the washroom is a highly private activity and the basement level is the most enclosed and private space within Maw Garage. However, it is important for me to ensure there is a strong sense of safety for the users of the space in the basement. I therefore articulated the same flooring changes (structural glass floor panels) that are present within the mezzanine level directly above the washroom area so there is direct
visibility between the main floor and basement. In designing the washrooms, I opted for singular stalls that are non-gendered in order to allow for choice. This also helps to give visitors to the space a sense of a personal enclosure within a public space. By opening up the façades of the garage, and allowing natural light to penetrate the interior, visual sight lines can be made from the interior to the exterior and exterior to interior helping to blur spatial boundaries. By allowing for a flexible floor plan, us-
north-south section looking east
ers of the space are able to control and govern the ways in which it is occupied and inhabited, allowing for flexibility in function and spontaneous activity to transpire. The juxtaposition between the old and the new helps to reaffirm what was there and the history of the site while embracing the new function of the building as an indoor public gathering space.
7.2 Portage Alley

Site Selection

The selection of an alley off Portage Avenue was chosen to represent a site of partial enclosure, and as such the design intervention into this space had to address the concept of enclosure. The programming for the site was realized as transitional space that was self-governing and accommodated pedestrian foot traffic of people working and living within close proximity to the site. For the purpose of this practicum project, this site was developed conceptually and not fully realized. The design is intended to explore notions of spatial interaction and the creation of place, in-between spaces, interiority, and the concept of affordances. The design was therefore abstractly rendered as ribbon that weaves throughout the alley and provides opportunities for lounging, resting, working, and passing through with the inclusion self-serve vending machines for the purchase of food and snacks. The idea is that the structure of the ribbon would provide surfaces to sit on, work at, eat at or lounge on through the design of varying horizontal surfaces. The materiality of the ribbon would employ new responsive technology that is powered by solar cells. The ribbon would be embedded with sensors that would be activated through the presence of people and movement within the space. The ribbons would illuminate as people passed through the space, and remain lit if people lingered. The varying horizontal surfaces would be imbued with the potential to charge battery-powered devices (such as laptops, cell phones, etc) through smart surface technology. The horizontal surfaces are placed along the edges of the existing building so they don’t obstruct the

c conceptual site plan
The flow of foot traffic through the site, and also in order to activate the edges of the site as a space of embodied activity. The ribbon is designed to be a continuous form that touches all entrances to the site in order to help engage the street and pull people into the site. As the ribbon approaches the centre of the site, its overhead plane increases in height so it creates a sense of an opening, rather than enclosing. The overhead plane helps to create a sense of an interior without fully enclosing the space. By doing so, it helps to shield against climatic elements such as rain, snow and sun. The design of the space is intended to feel uncluttered, transient, and offers opportunities for pause.
conceptual north-south section looking east
conceptual perspective from graham avenue
7.3 Mostyn Park

Site Selection

Mostyn Park was selected as the third site because it has little enclosure, and is fully open to climatic elements. The main objective for this site was to create a sense of enclosure without actually designing an enclosure. This was achieved by studying the boundary conditions of the site, and allowing the programme to be dictated and developed based on its surrounding environment. The site has three strong edges: the Assiniboine River, Osborne Bridge, and Mostyn Place that help to determine the boundaries, thresholds and inevitably the function of the site. The site’s proximity and adjacency to the Manitoba Legislative building was also influential in the programme’s development as there is a strong visual connection to the building and its formalized landscape.

Design

The programme developed as a space for gathering, rallying, socializing, playing, lounging, and relaxing. The landscape of the site has a steep grade and it was important to work with it. As such, the design became a central concourse in the form of a ramp that leads down from Mostyn Place to the existing pathway that cuts through the site. In order to conform with building code ramp regulations, there are three landings placed every 30'-0" within the ramp. The landings are each 10' in depth. The concourse is lined with a two large sets of stairs on either side that begin at street level and terminate at the ramp; this strategy helps to create a central space which becomes the focus of the site and design. As the ramp descends toward the river, steps emerge to offer the potential for seating. Both staircases are designed to act as areas for informal seating as each step is a varying height based on different heights and types of chairs. The steps range in height from 6"-2'0". The runs of each step...
site plan
perspective from osborne street
also vary in depth, and range from 12”-3’0”. This allows users to the space to engage with each step differently and allows for choice in seating that is created by affordances. Because the space is a public space, it is important that there is also a clear and easy set of stairs that allows for ease of circulation. As a result, both staircases on either side of the ramp have an embedded subsidiary set of steps that are designed to code for public spaces and are clearly delineated based on materiality. The staircase will be built out of reclaimed wood, while the steps to code are designed out of a white translucent plastic embossed with a wood grain (for traction) that will illuminate at dusk for added clarity and way-finding at night. The juxtaposition of materials is similar to the material dichotomy present within the design of Maw Garage.

Because the majority of the site is below street level, it was important for the design to bring attention to the space at street level. As a result of this, the sidewalk along Osborne Bridge was extended out into the site by 25’0”, acting as a platform or stage. Light fixtures that emulate floor lamps normally associated with residential interior spaces were also designed and embedded into this plat-

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east-west section looking north
form, and throughout the site in order to bring street presence to the site. The floor lamps also behave as threshold markers, and only illuminate when people come in close proximity to them, marking the presence of people in the space. The floor lamps are also responsive to the weather and time of day, as they change in colour based on the time of season, and whether its dusk or daylight. During the day the floor lamps act as a sculptural installation as they will be formed out of white translucent molded plastic. The floor lamps are placed on the platform, as well as throughout the site in order to create a sense of security at night, as the space is heavily vegetated. The juxtaposition of the floor lamp within
the context of the landscape encourages people to see their environment in a new way, and to question the relationship between the interior and exterior.

Another design element that reaffirms this concept is the design for the flooring material used for the ramp. The ramp’s surface is clad in paving stones that emulate a traditional rug normally found in residential spaces. There are seven bands that comprise the perimeter of the rug, each in a distinct colour and paving pattern. Each colour is symbolic of Winnipeg’s landscape, built and indigenous. Blue represents the large sky, brown stands for the muddy rivers, gold acknowledges the Gold-
en Boy on top of the Legislative Building, purple represents the prairie crocus, and yellow is canola, while green references the elms, and beige nods to local limestone. The design of the carpet will be placed on the ramp in a rectangular form. This way, the edges of the rug will disappear under the staircases, reaffirming the role of the steps as furniture. The paving pattern rug design doesn’t descend past the horizontal pathway so it helps to delineate the upper portion of the site as the central and interior space of the site. As well, the space below the horizontal pathway typically floods every spring, and because of this, the portion of the site is less functional because it is always in transition.

There are however, two ramps that stem out of the main ramp and reach into the river. These ramps can be used as access points in the winter when the river is turned into a skating path or in the summer as a canoe or kayak launch.

The final design element within the space comes in the form of a “gate” that is located parallel to Mostyn Place. The design of the “gate” is visible at street level and therefore helps to bring presence to the space, while demarcating the main entry point into the site. The “gate” performs double duty, both as an overhead light fixture, and also as the main vertical support for a large outdoor LED
screen. The screen can be used as an information board, broadcasting headlines or for viewing performances, sporting events or movies, or as a lighting feature in the space. It becomes a flexible form of signage and information display, to all that pass by.

The overall design intention of Mostyn Park was not to overwhelm the existing landscape, but to design elements and features that are flexible, and make us question the similarities and differences between interiors and exteriors. The design opens up the landscape to create a space that is able to accommodate multiple activities and people simultaneously. By synthesizing these design strategies, a sense of security and safety is restored to Mostyn Park, allowing for a sense of place to be fostered through spatial engagement and interaction.
8.0 conclusion

The objective of this practicum project was to explore the role of interior design in transforming unused urban space into public opportunities for gathering. This was achieved by extracting design guidelines from theoretical concepts of space and place, interiority, and immersion. In doing so, subsidiary concepts of interactivity, placemaking, boundaries and thresholds were also examined in order to help achieve the overall goal of transforming in-between space within the city of Winnipeg into meaningful opportunities for spatial and social interaction. It is the intention of the project that these newly designed spaces will help to foster spatial opportunities for pausing that will help to engage the users of the space with one another, the city of Winnipeg, and in turn create a sense of place.

Because of this, the agora was one of the first spaces that recognized a distinction between public, private, and semi-public, semi-private space. The private spaces were organized along the perimeter of the agora and faced forward to the vast open space in the centre. As a result, the boundary between the central open space, and the enclosed private spaces became a threshold of semi-public, semi-private space. The centre of the agora was left completely open and untouched; it therefore became the main area of gathering and assembly. In this space anything was possible as it was characterized by flexibility and spontaneity, and was therefore ephemeral in nature. This concept of openness is ultimately what helped inform the overall programme
for this practicum project, as it was crucial for the proposed designs to remain flexible and spontaneous, allowing freedom and choice in public space.

The selection of sites for the project was crucial to the overall goal of the practicum, as spaces were chosen based on varying levels of enclosure, so the concept of interiority and openness could be fully realized. This strategy helped me to push the boundary of interior design by exploring alternative roles that the profession can play within the built environment, by breaking down the distinction between interior and exterior, and questioning the architectural prescriptions and boundaries tied to each of the sites. Three sites were therefore chosen: Maw Garage- full enclosure, Portage alley- partial enclosure, and Mostyn Park- no enclosure. By choosing sites with varying levels of enclosure, I was able to question its role and the importance it plays in interior design. Because of this, the proposed designs for Portage alley, and Mostyn Park strive to create a sense of enclosure.
without physically enclosing the two spaces, and in contrast, the design for Maw Garage attempts to open up, and blur the boundary between interior and exterior. As each of the sites are distinctly different, the programme for each differs slightly in order to ensure that they each remain a public space.

The programme for Maw Garage was heavily influenced by its proximity to Winnipeg’s Old Market Square, an open outdoor gathering and performance space. As a result, the design for Maw Garage is intended to be an extension of Old Market Square that could facilitate as a year round indoor public gathering and performance space. In order to transform the once forgotten space, a sense of place had to be created that was achieved by employing themes associated with interiority. By breaking down the boundary between interior and exterior, the outside environment becomes intertwined with the interior space of the garage and helps to form a seamless transition between the two. This was achieved by opening up the façade
of the building through the use of glass panel bi-fold doors, and vast amounts of glazing. Keeping sight lines open to the exterior was another strategy employed throughout the design as they help to reinforce the connection to surrounding environment. In order to keep the space flexible, an open floor plan with non-fixed furniture was designed as a way to maintain choice and freedom in space. This allows the users of the space an element of control, which is vital in public spaces as it creates a sense of ownership, which aids in the formation of place. While the programme of Maw Garage does include two food counters, the intention of the design is that visitors to the space do not have to be paying customers to enjoy it. However, it does offer people a reason to come into the space and pause, helping to create a sense of place.

Many of the themes and design strategies employed in Maw Garage were subtly translated into the design of Portage Alley and Mostyn Park. Because these were the sites of partial and no enclosure, it was important that the final design echoed themes associated with interior spaces, without having to physically create an interior space. Similarly, sight lines were used in determining the physical form of both spaces, as the context in which the sites were in helped to determine the programme. Materiality also played a huge role in conjuring up themes of interior spaces, as it allows the users to re-think and re-see their environment. New material technology as well responsive technology was employed in both of these sites, as it extends a sense of control over the space to the users.

The concept of affordances also played a key role in the design of both sites, as it allows people to determine how the space will be engaged with depending on their own previous experiences. As a result of this spatial engagement, each person develops a unique and individual experience that helps form memories, which ultimately, aids in the production of place.
By studying and designing three distinct sites, with varying levels of enclosure, certain realizations and observations were made with regards to what it means to develop truly public spaces. Due to the programming of Maw Garage, and the final design, the space itself requires monitoring, and therefore can’t be operable at all hours of the day. As a result, the building needs to be locked and secured at night in order to prevent theft, vandalism and other negative behaviour. After having reached this conclusion, I still feel it is possible that interiors can be public spaces, but acknowledge that they require a level of formality that doesn’t necessarily exist in more open, outdoor spaces. However, the same issues of security and safety were present within the design of Portage alley and Mostyn Park and were addressed by opening up the sites, increasing the lighting, and developing programmatic elements that would draw people into the space.

By realizing space as something that is transformative, ephemeral, and open to interpretation I am able to reconsider boundaries and thresholds as more than just markers or delineators of space. As a result, I conclude that interior design has the potential to extend beyond architectural definitions and into the public realm where space can be loosened up and deconstructed, allowing for an infinite array of activities and social interaction to occur. In this realm, interior design has the potential to provide less controlling environments and to allow users of the space freedom, choice and control, which is a fundamental quality of public space. By opening up interior design in this way, spaces have the potential to be alive, thus facilitating interaction, and creating greater opportunities for pause, and the production of place.
## Floor Schedule for Maw Garage

<table>
<thead>
<tr>
<th>Room Number</th>
<th>Room Name</th>
<th>Covering Type</th>
<th>Colour</th>
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<td>Entrance</td>
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<td>Stairs</td>
<td>RW</td>
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<td>Performance Area</td>
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<td>Thoroughfare</td>
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<tr>
<td>106</td>
<td>Cafe</td>
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<td>107</td>
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<tr>
<td><strong>Mezzanine</strong></td>
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<td>Terrace</td>
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<td>202</td>
<td>Lounge / Viewing Area</td>
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<td>TC-1</td>
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### Legend
- PC - Polished Concrete
- RW - Reclaimed Wood
- TC - Translucent Concrete

*See plan for change in architectural glass flooring panels.*
main floor flooring plan

mezzanine flooring plan

roger wilde lite-flam fire rated glass floor (24" slabs)
## Millwork Surfaces Schedule for Maw Garage

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<thead>
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<th>Notes</th>
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<td>Information/Ticket</td>
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<td>R-2</td>
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<td>M-103</td>
<td>Information/Ticket</td>
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<td>R-3</td>
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### Legend
- R - Resin
- L - Linoleum
- WP - Wall Panel
- RW - Reclaimed Wood
- TC - Translucent Concrete
- W - Wood
- G - Glass
## Material Code Chart for MAW Garage

<table>
<thead>
<tr>
<th>Code</th>
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<th>Product Code</th>
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## Furniture Selection for Maw Garage

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REFERENCE LIST
reference list


McCarthy, Christine. 2005. Toward a Definition of Interiority. Space and Culture, 8. no. 2.


