

**Image and Edge in Contemporary Public Space:
Examining the “Times Square” Phenomenon,**

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Abstract

The decline of urban public space in the last century has been tied to the rise of suburbia, the increased use of private transportation and the emergence of telecommunication technologies. During the same period, images (especially commercial in nature) have accumulated in key public spaces, promoting urban revitalization through illumination and spectacle. Times Square is an example of this. Commercial signs and media imagery supplement the architectural edges of such spaces, adding characteristics of changeability and global connection, while blurring the relationship between the public realm and private interests. This has produced a rich, opportunistic, and sometimes parasitic relationship between image and architecture – a phenomenon that I wish to explore in this thesis.

In the past two decades -- during a period marked by renewed interest in urban revitalization – another of these image-laden public spaces has emerged, namely Yonge-Dundas Square in downtown Toronto. Like Times Square, Yonge-Dundas Square is developing as a global node in a city that is becoming increasingly important on an international level. Through the design of a cinema complex on a vacant site at the northern edge of Yonge-Dundas Square an integration between image and architecture is explored that tests these observations and further investigates the role that public space may play in the contemporary North American city.

Acknowledgements

I would like to take this opportunity to thank my thesis supervisor Benjamin Gianni for all his help over the past year, and for being a great teacher. I would like to thank James Brown and Kim Storey for taking the time to sit down and discuss their work with me. Also, I would like to dedicate this thesis to my parents and Joey, who have always given me their constant love and support, especially when I needed it most.

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Introduction

To better understand the increasingly interconnected roles of architecture and imagery in contemporary public spaces, the thesis looks at the changing nature of public space (both throughout time and in relation to recent demographic trends), and integrates a proposal for the design of a building facing a major public space in downtown Toronto.

Chapter 1 explores public space as a form of socio-political barometer. It also examines key historical examples in order to define characteristics, morphologies and typologies for urban public space. Following Paul Zucker's book "Town and Square," public squares are grouped into five major types (*closed square, dominated square, nuclear square, grouped square, and amorphous square*) and categorized as either *figural* or *residual*. These observations provide a framework and vocabulary with which to discuss contemporary urban public space.

Chapter 2 examines the ways in which architecture has been used to define public spaces, exploring boundaries, edges and mechanisms for connecting to adjacent interior and exterior spaces. Depending on the circumstances, edges can range from fluid to porous to definite. The presence of stairs, porticos and arcades provide clues as to the nature of the relationship between a given space and the urban fabric at large. Contemporary examples such as Rogers and Piano's Pompidou Center and Jean Nouvel's Cartier Foundation demonstrate an interest in transparency, translucency and reflectivity, using modern materials and construction techniques. I then discuss the increased presence of digital billboards and commercial imagery in contemporary public spaces. This reflects

an increase in public-private partnerships within these spaces, leaving these edges up for sale.

Chapter 3 examines factors that contributed to the decline in urban public spaces in the decades following WWII, including the growth of the suburb, the increased use of private transportation, and the emergence of telecommunication technologies. We then explore the grafting of suburban-style, semi-public spaces into the urban core, specifically the use of the shopping mall as a substitute for more traditional public spaces. We then examine the use of large-scale advertising and digital imagery to re-animate public spaces, transforming traditional spaces into global nodes, as exemplified by Times Square.

The role and nature of contemporary media imagery is discussed in Chapter 4 in relation to its use as spectacle in the tradition of theatre and film. Theatre and cinema are explored, in turn, as precursors to the spectacular imagery and digital screens now common in public spaces – by way of exploring how architects might harness the potential for media imagery to benefit public space. Techniques and forms associated with traditional theatre are also relevant with respect to the challenge of integrating image and spectacle in an architectonic way.

Finally, Chapter 5 outlines the project I used to further explore the larger themes of the thesis – the design of a cinema complex on the northern edge of Yonge-Dundas Square in downtown Toronto. Among the considerations were the site (currently transforming into a global node), public-private partnerships, the relationship between image and architecture, flexible programming, the changing characteristics of reflectivity, transparency and opacity, and fluid exchanges between spectacle and spectator.

The goal of the thesis was to more fully understand the combined and interconnected roles of architecture, imagery and telecommunications technologies in the life and times of contemporary public spaces. As a form of “design as research,” the proposal attempts to integrate the architectonic, material and spatial potentials of a new edge with the benefits of various types of media imagery – to create an ensemble appropriate to a vital square in a contemporary global North American city.

1 | Public Space and the City

The architecture of a city is, to some degree, characterized by its public spaces; as a city develops, these spaces change accordingly. Factors such as culture, politics, and economy play a role in how, why, and what changes the city and can then be reflected in its public spaces.

This chapter looks at the characteristics of urban public spaces in western history to establish general characteristics, morphologies and typologies from which a vocabulary is established that will be used to investigate contemporary public space later in this text. Examples ranging from antiquity to the present will be discussed in relation to five main types of public squares (as outlined in Paul Zucker's book "Town and Square"). These include: the *closed square*, *dominated square*, *nuclear square*, *grouped square*, and *amorphous square*, with a secondary emphasis on the formation of these squares as *figural* or *residual*.

Inherent Characteristics

Urban public spaces are socio-economic barometers for the cultures in which they were created, to the extent that all public spaces are, to a certain degree, places of gathering. In this sense, while the home or domestic realm facilitates exchange among intimates (e.g., family members), urban public space facilitates exchange among strangers and non-intimate acquaintances. Such exchanges are normally characterized by conventions of behaviour and/or scripted by rituals (related to civic or religious festivals,

etc.), but may also take the form of spontaneous activities (such as protests), and depending on their location and function within the city, often also accommodate spectacles. These spectacles take many shapes and forms, from religious ceremony to rock concert. Some spectacles can be produced using people alone, as with buskers or the Spanish traditions of tower building (Fig.1) and dancing in public squares. Other types of spectacles involve both people and images as seen in theatre performances, puppet shows, and the parading of significant religious artefacts through public spaces for religious celebrations such as the statue of the Virgin Mary for Easter or the Shroud of Turin in the Baroque era. Similarly, images alone can also create spectacles in public spaces, experience in contemporary society predominantly with commercial media imagery in key public spaces, as will be discussed in more detail later in this text.

As places where the city presents itself both to its inhabitants and its visitors, public spaces can communicate significant information about a society through its ability to act as a socio-economic barometer, expressing the interests of a culture of a specific time and place. Such presentations can be active (taking the form of spectacles, festivals, concerts, etc.), or passive/ambient (shopping, strolling or simply sitting within an open square on a sunny afternoon). It is through such public gathering that individuals may define their own character, and make sense of the world around them. An understanding of one's self – both as an individual and as part of a collective -- is achieved by viewing others and being viewed by them,¹ in a space where individuals can be free from “survival activities” (i.e., the domestic realm) and can distinguish themselves through action².

¹ Sack, Robert D. Place, Modernity and the Consumer's World: A Relational Framework for Geographical Analysis. (U.S.A.: John Hopkins University, 1992) 13.

² Arendt, Hannah. The Human Condition. (Chicago, USA: University of Chicago: 1958) 7

Morphology and Typology

It is possible to identify general types and morphologies of public space by studying key examples throughout history in relation to the time frame in which the spaces emerged. In this way, public space can be engaged as a cultural artefact whose form expresses the beliefs and interests of the societies that built them and, more generally, the historical periods in which they were made. That said it is important to understand that, as components of an evolving organism (i.e., the city), public spaces cannot be fully described using only historical criteria. In that respect, the categories outlined below are neither meant to be exhaustive nor prescriptive, but rather to help us better articulate the connection between society and public space – by way of helping us to better understand the forms that public space may take in the contemporary urban realm.

The Roman Forum

As the main public space of the Roman city, the Forum reflects both the form of local geography and pre-existing infrastructure (where applicable), and in many cases (Rome excepted) the generalized form of the Roman military camp. This is in contrast to Egyptian cities, which had no clear main public spaces due to the particularities of the political, governmental, social (and therefore psychological) conditions that obviated the need for gathering places of this type³. When the Romans established a town for military purposes, their temporary camp structure was designed to evolve into a permanent

³ Zucker, Paul. *Town and Square: From the Agora to the Village Green*. (New York: Columbia, 1959) 26.

fortification and eventually become the heart of a city, namely the Forum. The camp structure was characterized by intersecting perpendicular axes (cardo and decumanus) with secondary streets laid out in a gridiron plan forming blocks of varying proportions⁴. The main administrative buildings were located around an open rectangular space located at the intersection of the two main axes that would later become the Forum. This city centre was not only designed to support military functions, but to accommodate religious ceremonies that were thought to be significant in protecting both the camp and the community it was there to incubate⁵. In this way, the design of the Forum expresses the Roman's desire for a centralized control – in the form of a public space that incorporates military, religious, administrative and commercial aspects of Roman society.⁶

The Forum of Pompeii typifies Roman spatial planning in the early years of the Roman Empire (Fig. 2). The clear rectangular plan of the square is emphasised by two-story porticoes on three of its sides; these are used to unite individual buildings and create a homogeneous edge, broken only by the main temple. The Forum of Pompeii can be categorized as one of Zucker's five main square typologies: as a closed, self-contained space, characterized by careful proportioning, homogeneous edges and a regular geometrical form⁷.

Despite the differences imputed by local topography and pre-existing infrastructure, the Forum expresses the Roman predilection for geometrically pure spaces with clearly defined edges. In morphological terms the Forum can be described as a 'figural void' within the fabric of the city -- an outdoor room at the scale of the city. This

⁴ Zucker 46.

⁵ Zucker 47.

⁶ Zucker 49.

⁷ Zucker 50.

is in contrast to the Greek tendency to set individual structures off from one another (e.g., to establish an ideal distance of thirty to seventy meters between a temple and the entrance to the temple precinct⁸) as ‘figures’ in a relatively amorphous space with loosely defined edges and views out to the larger landscape. Such planning characterizes the Acropolis in Athens, (Fig. 3)⁹ and, to some degree, distinguishes a planned (e.g., Roman) city from one that developed organically. And while cities in ancient Greece incorporated a central gathering space, the Agora, it was not as figural or rigidly defined as the typical Roman Forum. The form of the Agora reflects a different (i.e., non-military) governmental and administrative structure, a peculiarly Greek spatial consciousness, and an open relationship to the landscape (Fig. 4)¹⁰.

The Medieval Parvis

In contrast to Roman cities, many medieval towns (those that are not built on the ruins of Roman cities) are less geometrically rigid, having evolved over several hundred years from a series of disaggregated private buildings connected along footpaths related to processional journeys and the daily exchange of goods and services¹¹. In its fully formed (e.g., fortified) state, the medieval city was viewed as a holistic organic entity, segregated from the landscape by geological boundaries and/or a fortified perimeter wall¹². Rather than being organized around a central Forum like the Roman camp town, the medieval city is characterized by a disaggregated series of loose public spaces distributed along its

⁸ Madanipour, Ali. Public and Private Spaces of the City. (New York: Routledge, 2003) 195.

⁹ Zucker 60.

¹⁰ Morris, A.E.J., History of Urban Form: Prehistory to the Renaissance. (England: Tonbridge, 1972) 25.

¹¹ Mumford, Lewis. The Culture of Cities. (New York: Harcourt, Brace and Co. Inc.: 1938) 56.

¹² Bacon, Edmund N., Design of Cities. (New York: Penguin: 1974) 93.

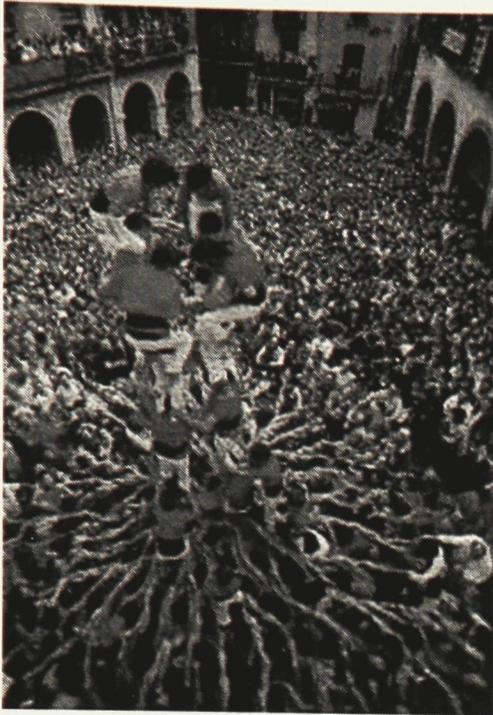


Fig. 1 - Human Tower Building, Spain
 <www.european-schoolprojects.com>
 Example of human spectacle within a public square.

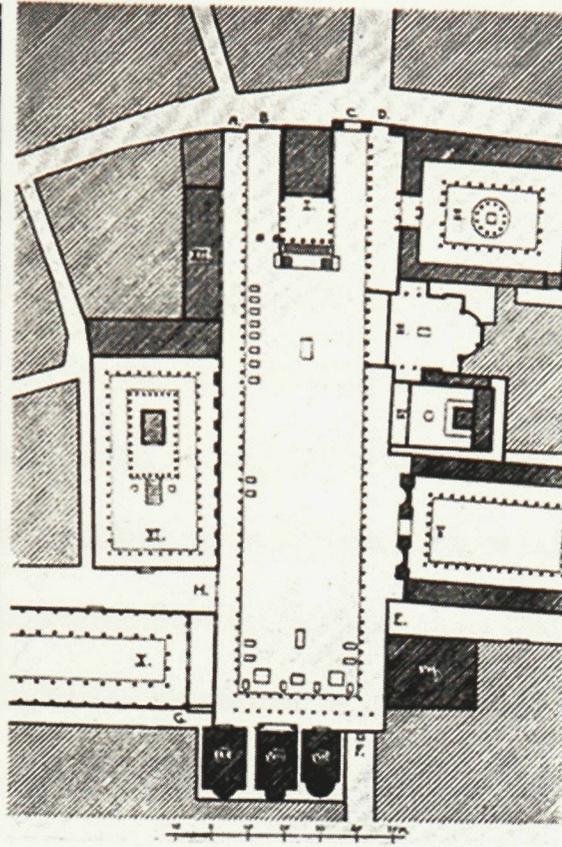


Fig. 2 - Pompeii Forum, Italy
 Zucker, Town and Square.
 Figural public square reflecting interest in centralization of power within Roman cities.

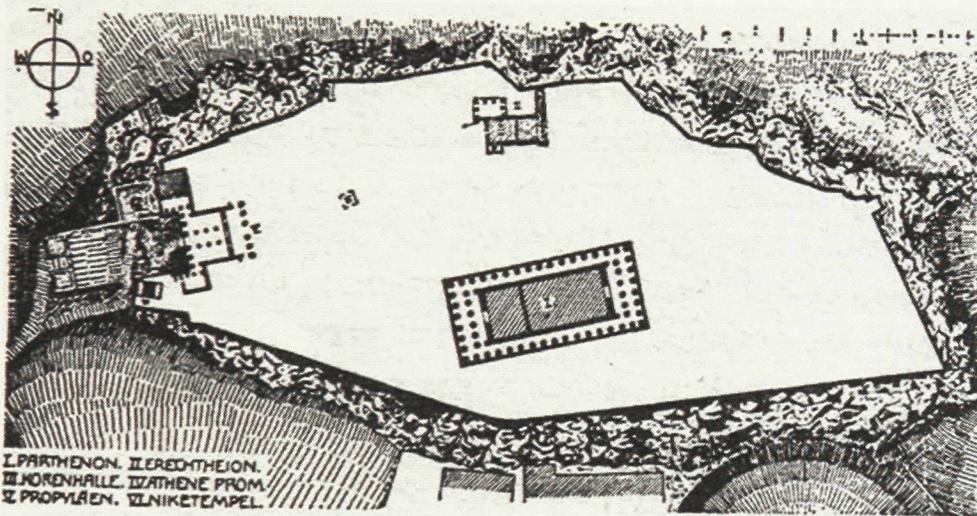


Fig. 3 - Athens Acropolis
 Zucker, Town and Square.
 Religious Greek public square formed from individual stand alone buildings.

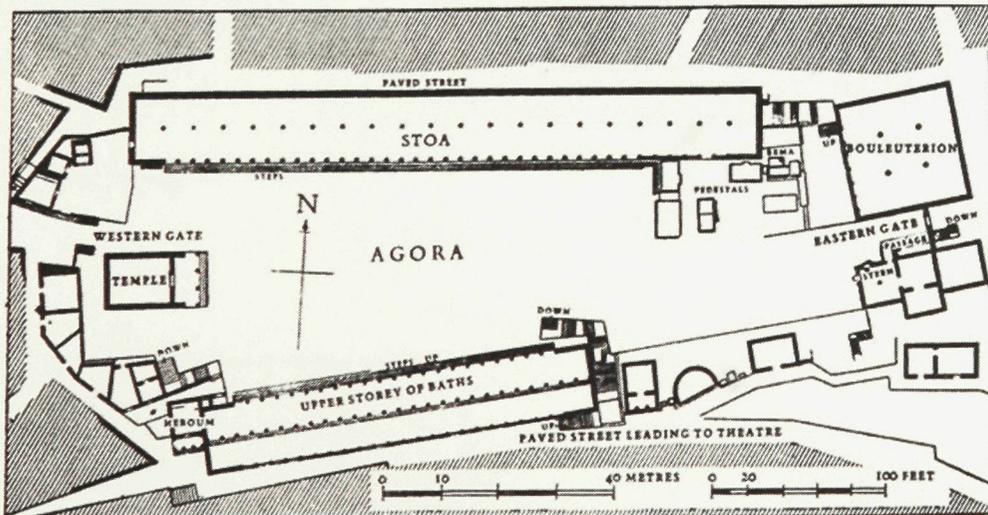


Fig. 4 - Athens Agora
 Zucker, Town and Square.
 Main Greek public square showing a less rigid and figural spatial consciousness than the Roman Forum.

circulation routes. This decentralization of public space reflected the need to prevent overcrowding and needless circulation while maintaining a human scale appropriate to the city's relatively dense population¹³.

According to Zucker there were two main types of public spaces in the medieval city, the market square and the Parvis, or main church square. These squares were separated from one another, maintaining an area of "local immunity" around the church, which, as a sacred structure, was constructed as a freestanding building oriented directly east-west¹⁴. As a result of the contrast between the stand-alone church and the typically organic medieval city fabric, the Parvis was formed by the residual space left between the church and the surrounding street wall as circulation routes moved around the structure (Fig. 5). In this way there was no formal (i.e., figural) open space in front of the medieval church, which functioned as a community centre. Instead, the space around the cathedral, and the cathedral itself functioned as public gathering spaces obviating the need for a larger, more centralized space. In this space the spectacles of the medieval time were played out, including mystery plays put on by traveling troupes that depicted biblical stories to the surrounding public (Fig.6). In this way the Parvis of the medieval town can be categorized as a 'dominated' square comprised of "one individual structure or a group of buildings toward which the open square is directed," and where the viewer is drawn to the dominant building by the tension and/or dynamic motion it creates with surrounding buildings¹⁵.

¹³ Mumford 55.

¹⁴ Zucker 81.

¹⁵ Zucker 11.

The form and structure of the medieval 'market square,' by contrast, varied from city to city -- from a simple widening of the main commercial street, to a larger open area¹⁶. In some instances two squares came together to form the third main type of square, a 'grouped square,' as seen in the town of Todi. The grouped square is formed through a meeting of two equally self-contained squares, which in the case of Todi are the Parvis square and a secondary open square (Fig. 7). Due to their proximity, the two squares can act together to provide a visitor with a sequence of dynamic views and vistas from one square to the other.

The Renaissance Square

Influenced by Classical ideas of structural clarity and, to some degree, in reaction to the tight, irregular, and organic fabric of the medieval context, Renaissance architects imposed order and discipline on the city by carving out geometrically stable shapes. This carving was an "expression of man's fight against being lost in a ...disorderly mass of urban dwellings" and usually resulted in closed, self-contained squares¹⁷. In this way key public spaces of the medieval period were regularized and retrofitted with homogeneous arcades to unify edges and create figural spaces. Renaissance design also employed focal elements as in, for example, the Place des Vosges in Paris, whose clear rectangular plan was reinforced both with a central statue and a homogeneous arcade around the periphery (Fig. 8). The use of monuments and fountains as focal elements to organize spaces is also characteristic of another Renaissance type of public square, namely the nuclear square. This integrity of the space is reinforced through the

¹⁶ Mumford 55.

¹⁷ Zucker 9.

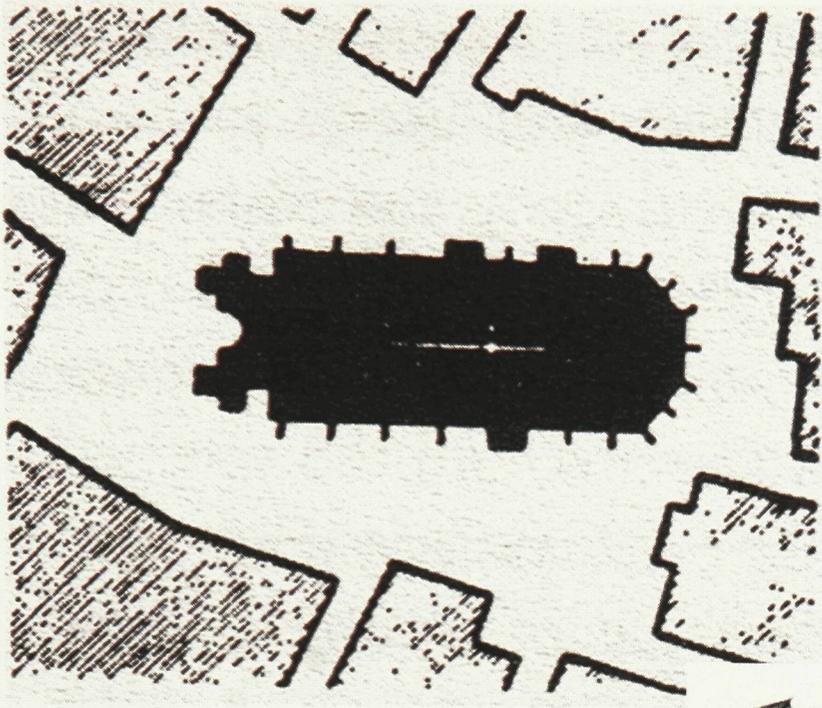
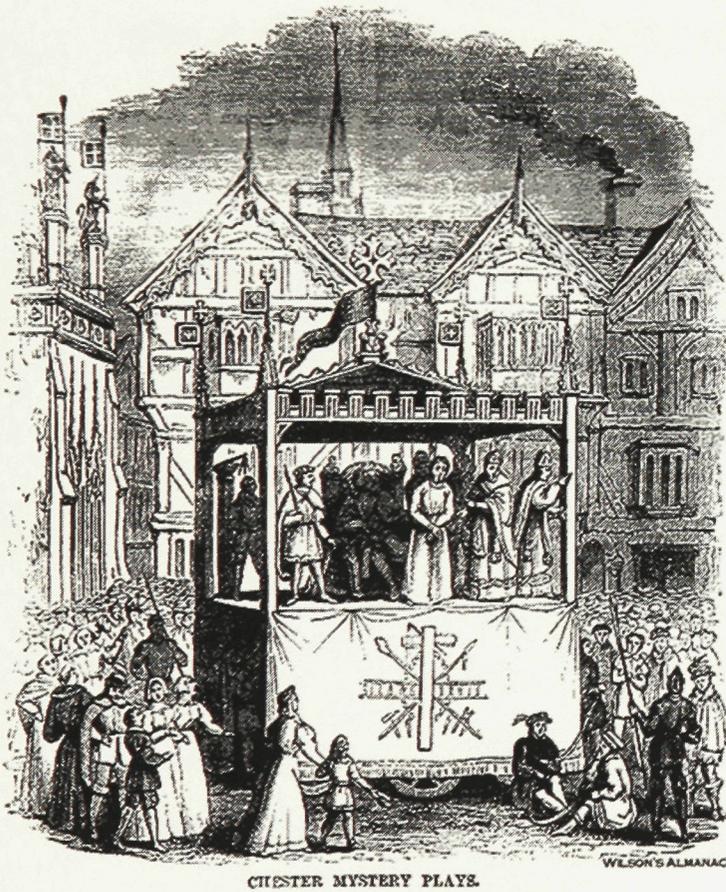


Fig. 5 - Freiburg im Breisgan, Strasbourg Zucker, Town and Square
 Medieval church parvis square formed from residual space left between the church and surrounding building fabric.



CHESTER MYSTERY PLAYS.

WILSON'S ALMANAC

Fig. 6 - Medieval Mystery Play
 <www.wilsonsalmnac.com>
 Example of use of image in association with theatre to produce public spectacle within medieval public space.

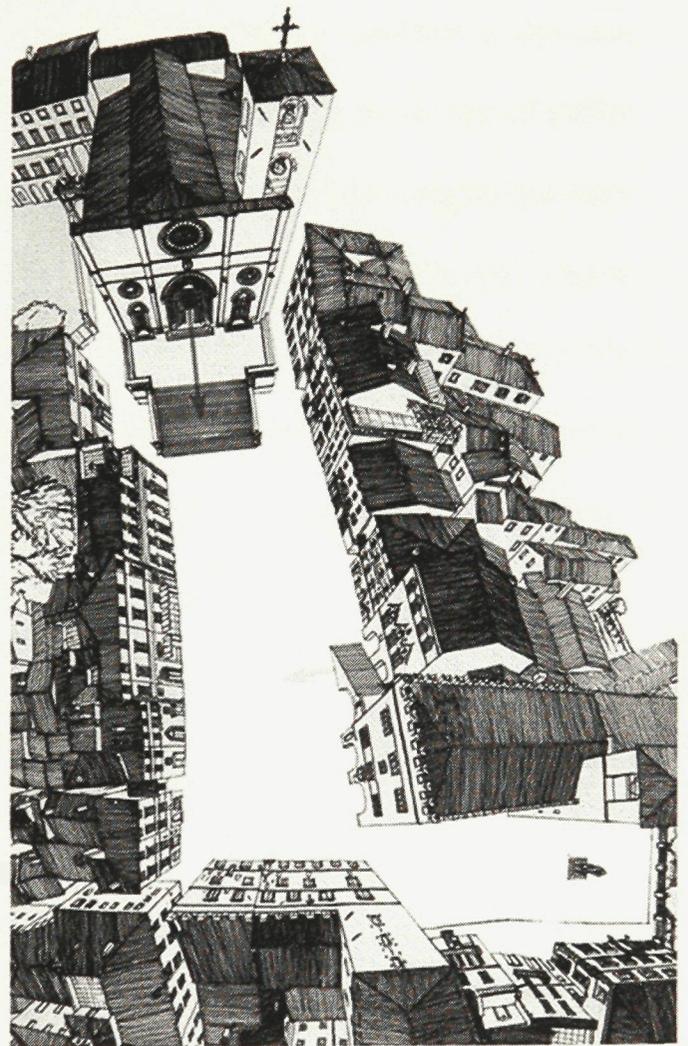


Fig. 7 - Todi Square, Italy
 Bacon, Design of Cities.
 Example of a typical medieval grouped square, where two self-contained squares act together to provide visitors with a sequence of dynamic views and vistas.

imposition of a strong vertical element powerful enough to organize and keep the whole together -- creating “squares” out of residual spaces such as the Piazza di SS. Giovanni e Paolo in Venice¹⁸. (Fig. 9)

Baroque Public Space

As Renaissance architects reacted to medieval space, so too the Baroque emphasis on motion and playfulness can be interpreted as a reaction to the rigid, overly formal language of the Renaissance. Baroque public spaces emphasize movement through a sequence of vistas and interconnected architectural elements to produce a dynamic experience¹⁹. In this way, the element of time is incorporated into the design of public space, promoting suspense and surprise comparable to what one might expect from stage design²⁰. Moreover many Renaissance space were private, internally focused, and/or small in scale, Baroque public space operated at the scale of the city – connecting nodes and facilitating circulation from one precinct to another. At the forefront of Baroque design, Michelangelo incorporated visual techniques in the redesign of the Campidoglio in Rome -- the terminus of a long axis through the city.

Michelangelo was commissioned to bring order to a disaggregated but significant ensemble of medieval buildings at the Campidoglio. By leveling the terrain between the structures, adding onto one of the buildings to mirror the building opposite it, and by placing a focal statue in the center of the newly configured space, Michelangelo created a dynamic, trapezoidal piazza opening to the city below (Fig. 10). The facades of the

¹⁸ Zucker 14.

¹⁹ Zucker 144-145.

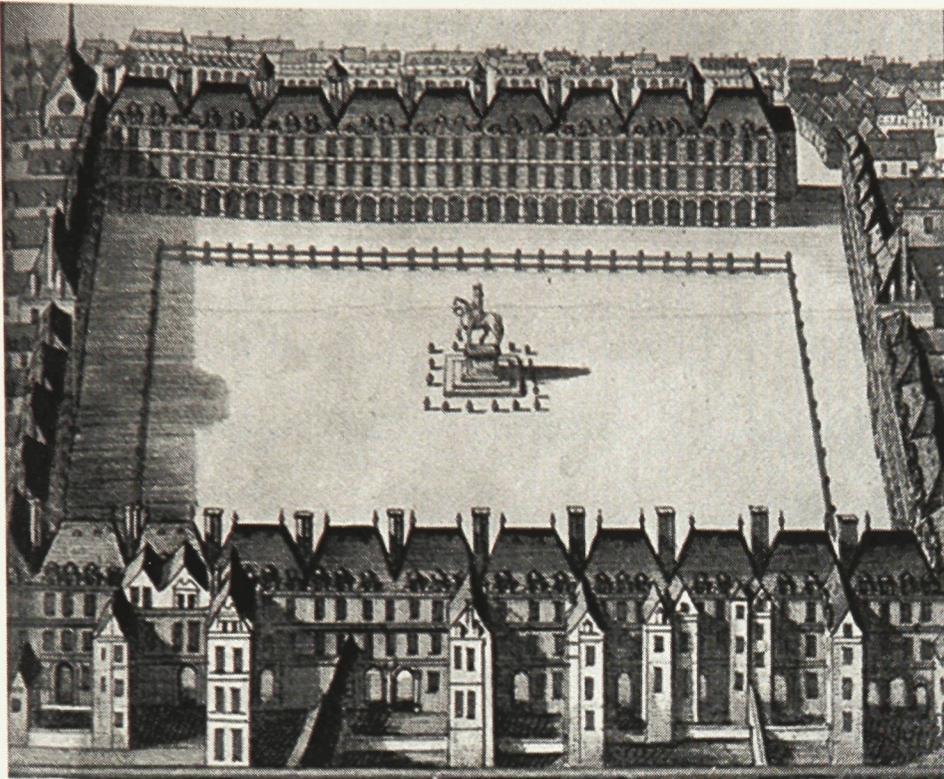


Fig. 8 - Place des Vosges, Paris
Zucker, Town and Square.
Figural renaissance square employing
a focal statue and a homogeneous
arcade to unify its edges.

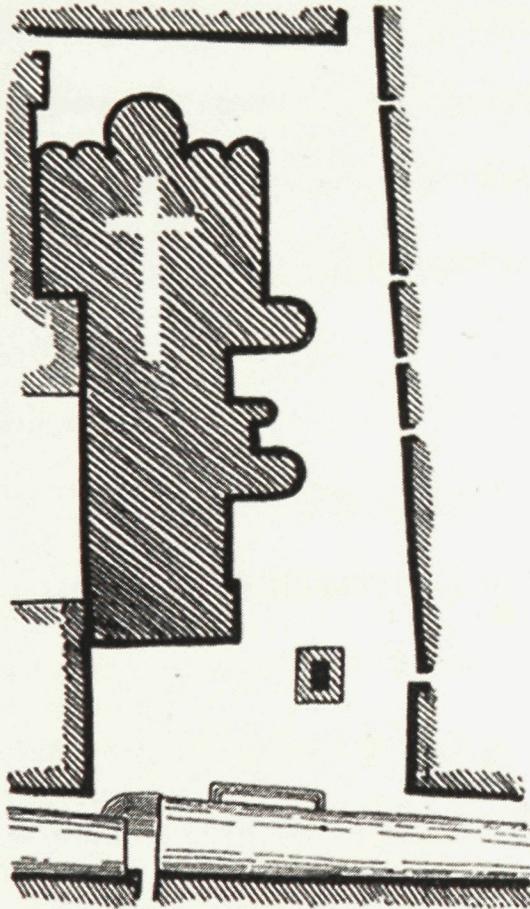


Fig. 9 - Piazza di SS. Giovanni e Paolo, Venice
Zucker, Town and Square.
Example of the use of a focal organizing element to
create a nuclear square.

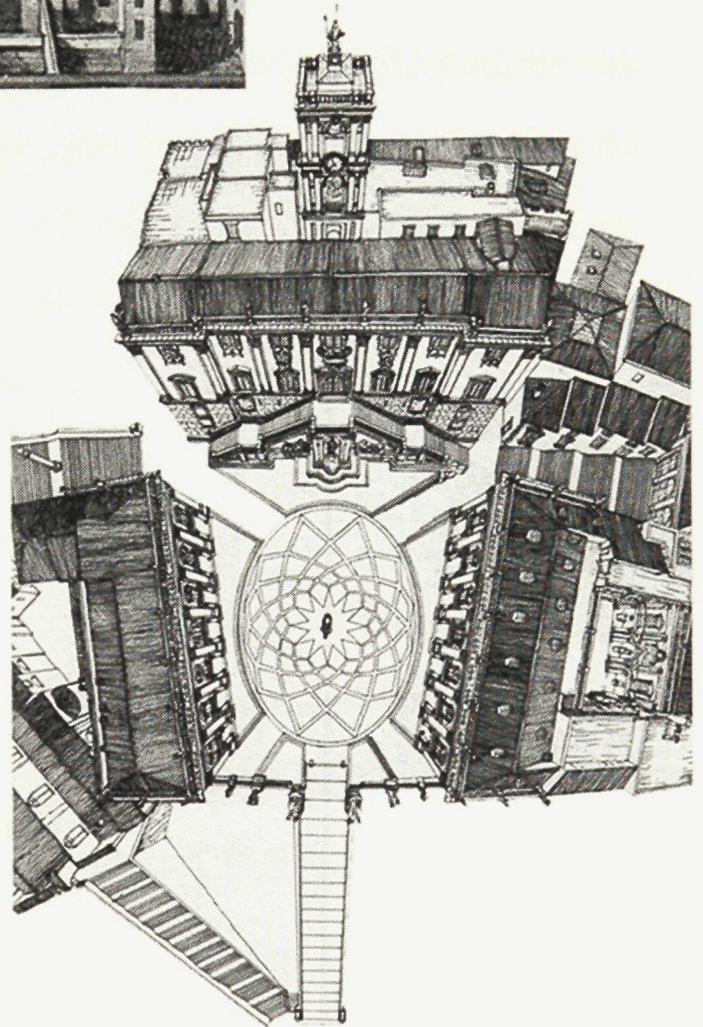


Fig. 10 - Campidoglio, Rome
Bacon, Design of Cities.
Plan view of trapezoidal piazza created by Michelangelo,
exemplary of an amorphous square.

existing buildings were fitted with monumental arcades to animate the space -- in marked contrast to the way in which arcades were used in the Renaissance and Antiquity (i.e., to promote stasis and continuity). Among the visual techniques he employed, Michelangelo sloped the plaza upwards toward the center and inscribed a dynamic oval pattern into the paving to capitalize on the piazza's trapezoidal shape²⁰. Both the shape of the plaza and the oval figure reinforce the role that perspective, distortion, foreshortening and visual perception play in Baroque design. Whereas Renaissance space was idealized and cerebral, Baroque space was designed to be experienced and to provoke an emotional response.

The addition to these techniques a monumental staircase was added on axis with the Campidoglio (the secondary stair to the side, being pre-existing) reinforcing the importance of sequence and movement (Fig. 11). Emblematic of Baroque principles, the Campidoglio also represents the final type of square, the 'amorphous square' -- as a hybridization of a closed square and a nuclear one.

Modern Space

As a reaction to the growth of industrialization, the modern movement privileged a separation of city elements from one another for both hygienic and aesthetic reasons, as seen in Ebenezer Howard's 'Garden City' and Tony Garnier's 'Cite Industrielle' favoring gardens as focal elements and separating residential, recreational and factory areas from one another. These proposals favored the use of public transportation to travel from one

²⁰ Bacon 118.

section of the city to the other, and became known as early influences for the development of the suburbs in Europe and subsequently North America.

The modern mentality also manifested itself in the form of city proposals that favored the automobile and rapid movement through urban areas -- privileging buildings as objects and landmarks rather than creators of space. With this focus came a preference for vast open spaces as settings for freestanding slabs, rather than for more traditional (pedestrian-scaled) public spaces such as the street and the square²¹. This led to the revival of the 'figure in space,' as seen in Greek temple planning, where public space is relegated to the residual or 'negative' space between and around buildings. This sensibility is epitomized by LeCorbusier's proposal for the Ville Radieuse (Fig. 12).

In North America, Mies Van der Rohe developed large-scale skyscrapers in urban centers in the modernist (international) style that were developed as objects, set back from the main street by hard-landscaped plazas. These plazas, as residual space around the 'building as object', became vital public spaces of the city, providing urban gathering space and incorporating art as focal elements. Examples of this kind of plaza include the Seagram Plaza in New York City as well as the TD Center in Toronto and Westmount Square in Montreal also by Mies.

Additional Considerations

While the general linear (i.e., historical) approach to the morphology of urban space can be useful, it must be emphasized that public spaces come in many shapes and sizes and don't always adhere to clear-cut categories. It is also important to note that not

²¹ Mandanipour 202.

all public spaces act as socio-economic barometers, since forms and types are often appropriated from other cultures and places and grafted into new contexts (spatial and temporal) with little regard for their origin or function. It was my intention here to acknowledge the ability for public space to act as a socio-economic barometer, establishing a framework for my later observations that the use of media imagery in contemporary public space allows it to act as a barometer for contemporary society.

Similarly, the way in which a square develops morphologically does not necessarily relate to its function. As Spiro Kostof observes that “any attempt to classify squares will have to rely on form, or on use, but not on both...(as) squares that fulfill the same or similar functions through history do not, by and large, take on the same or similar forms”²². For example a market square may function better if circulation is kept to the edges, permitting the center of the square to be occupied (Fig. 13). By contrast, civic and institutional spaces are often characterized by an axial relationship between the road leading into/through the square and the building in relation to which the space may have been designed (Fig. 14). As the purpose of the civic square may be primarily ceremonial, the need for circulation through the center of the space is less significant than in the market square.

Additionally many significant public squares were not designed, *per se*. As with the residual spaces around the cathedral in a medieval town, cities are rife with incidental spaces with no specific function but to ‘pass through’. These spaces are often the result of a seam and/or anomaly in the urban fabric such as the intersection of arterial roads in a

²² Kristof, Spiro. The City Assembled: The Elements of Urban Form Throughout History. (London: Thames and Hudson: 1992) 144.



Fig. 11 - Campidoglio, Rome
 Bacon, Design of Cities.
 View of main staircase that exemplifies the focus on sequence and movement in public space in the Baroque era.

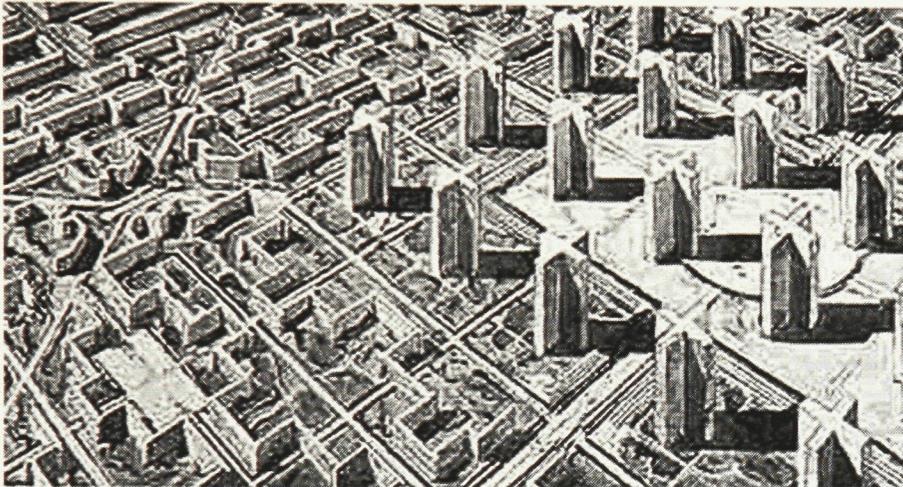


Fig. 12 - Proposal for Ville Radieuse (LeCorbusier)
 <www.brianmicklethwait.com>
 Proposal for a new city scape by LeCorbusier showing the creation of public spaces by 'figures in space' in the modern period.

Legend: Black - Roads
 Dark Grey - Buildings
 Light Grey - Open Space

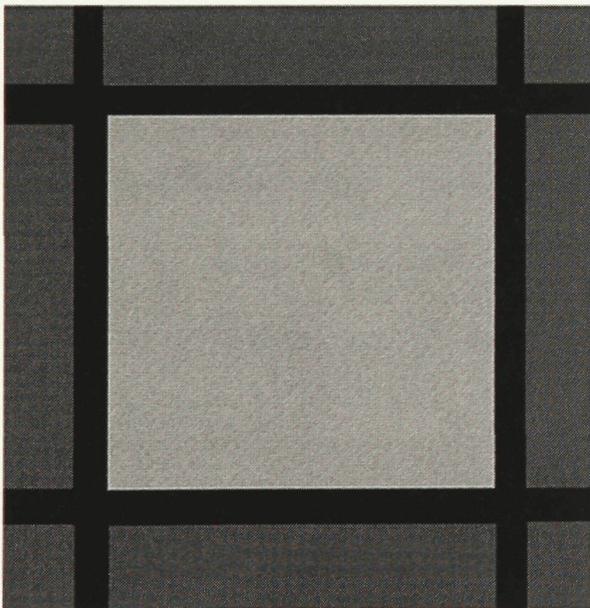


Fig. 13 - Functional Market Square (not to scale)
 Part of a figure-ground study done by the author showing the ideal configuration for a market square.

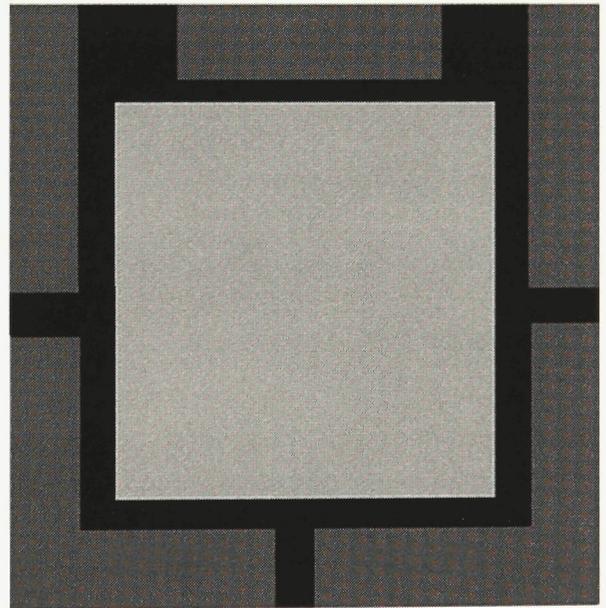


Fig. 14 - Functional Civic Square (not to scale)
 Part of a figure-ground study done by the author showing the ideal configuration for a civic square.

non-typical way -- as is the case for Times Square in New York City (Fig. 15) and for London's Piccadilly Circus (Fig. 16), discussed in further detail later in this document.

Post-modern Conditions

Rampant suburbanization in North America in the later part of the 20th century triggered a marked decline in the vitality of urban public space. This phenomenon will be discussed in greater detail in later chapters. The attendant interest in urban revitalization has led to a renewed interest both in the form and function of public spaces in the contemporary city. Where form is concerned, we are witnessing a renewed interest in well-defined, programmed spaces, in contrast to the proposed residual spaces associated with the modern movement. We are also observing a renewed emphasis on pedestrian circulation (supported by mass transportation) in reaction to the imperative of accommodating the automobile at all costs, as well as the continuing emphasis on public art to help animate public spaces. These somewhat "reactionary" developments are occurring in tandem with new technological discoveries and in the context of increasing globalization. No longer limited to fountains and statuary, public art can now take the form of digital video screens and large-scale billboards. Screens and signage can now not only be used to insert private interests into public space, but may also be used to leverage telecommunications technologies to showcase connections between cities around the globe.

Consistent with the time-honoured tendency for of urban public space to promote exchange and interaction between non-intimates, contemporary spaces accommodate public spectacle – much of which is fed, via video link, into the living rooms of private

television viewers. While the forms and functions of public spaces change with the times and with cities they serve, the morphologies and typologies identified above continue to describe key characteristics of these spaces.

Relevant to the design portion of this thesis is the nature of the edges around public spaces. Since the design involves developing the edge of a key public square in downtown Toronto it is important to explore the architectural edge as a mediator between private (interior) space and exterior open public space. This topic is discussed in the following chapter -- drawing on examples from various time periods.

2 | Architectural Edge

Relevant to the design portion of this thesis (the design of the northern edge of Toronto's Yonge-Dundas Square) is the architectural and material nature of the edges that define urban public spaces. The walls and facades that circumscribe such spaces mediate between the public, exterior realm and interior private or semi-private domains. Therefore, depending on the nature of the architectural edge, this zone of mediation can be fluid (e.g., a porch, portico or threshold), porous (e.g., an arcade), or emphatically definite (in the case of a fortification or retaining wall). Over time, building construction techniques and social interests have contributed to the ways in which these edges have been articulated and, in turn, what they accommodate and communicate. In addition to time-honoured architectonic elements -- arcade, façade, portico, threshold, porch, rampart, stair, etc. -- one must consider the impact of new materials and construction techniques. Qualities such as transparency, translucency and reflectivity characterize more experimental ways of defining and edge, as is apparent in contemporary examples. Like the square itself, the role and nature of the architectural edge transforms as society changes.

Traditional Methods and Transitional Tools

Until the late 19th century buildings were constructed primarily of load-bearing masonry. In contrast to the contemporary use of steel and re-enforced concrete, traditional masonry construction imposed a limit on the number, position and proportion

of openings in a wall or building. Working within this limitation, architects deployed elements like the stair, arcade, portico, podium and balcony to articulate the edge -- depending on the nature of the space and the function of the structures surrounding it. Together these design elements produced a canon of approaches to the marking of boundaries, influenced by whether the space was figural or residual, carved out of the fabric or open to the larger landscape.

In this way, urban “rooms” could accommodate both peripheral circulation (see functional market square Fig. 13) and secondary circulation specific to the way the square was occupied or used. In this way formal or ceremonial spaces could be designed with uniform edges, re-enforcing their figural integrity and directing attention to a focal façade or sculptural element. This effect could be achieved through the use of a gateway or portico (as exemplified by the temple portico in the Forum of Pompeii, Fig. 17) in conjunction with covered arcades (as seen in the Place des Vosges Fig. 18, and in the two-story edges in the Pompeii forum, Fig. 17) that act as viewing galleries, grandstands, and passageways. These elements are used as devices both to organize the square and to mediate between its space and the surrounding building fabric, whether public or private.

By contrast “residual” spaces (such as the church parvis) are frequently spaces to pass through, i.e., circulation paths whose edges don’t easily accommodate elaborate or articulated transitional elements. As such the boundaries between the surrounding buildings and the public space/street (with the exception of the church) is often one of solidity and opacity. Spaces of this kind, however, can take advantage of the grand stair, which can be used, for example, to signal the entrance to the main church and act as a transition -- physical and metaphorical -- between the mundane city and the house of god.



Legend: Black - Roads
Dark Grey - Buildings
Light Grey - Open Space

Fig. 15 - Times Square (not to scale)
Part of a figure-ground study by the author showing the configuration of Times Square, New York

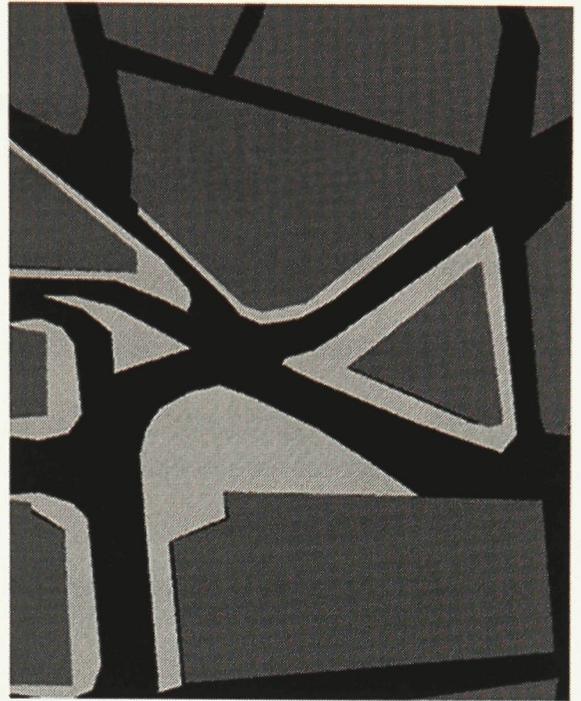


Fig. 16 - Piccadilly Circus (not to scale)
Part of a figure-ground study by the author showing the configuration of Piccadilly Circus, London.



Fig. 17 - Pompeii Forum, Perspective
Zucker, Town and Square
Perspective showing the temple portico in the Pompeii Forum which represents a transitional relationship between the public square and interior space.

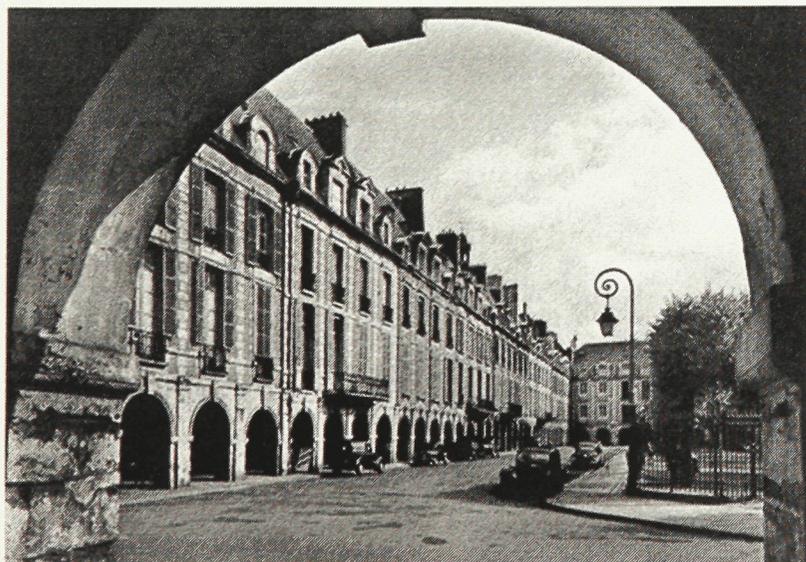


Fig. 18 - Place des Vosges, Paris.
Zucker, Town and Square.
Perspective showing the arcade used to unite the edges of the Place des Vosges creating a porous relationship between the public square and the surrounding interior spaces.

Similar stairs can be seen at the entrance to the Temple in the Forum of Pompeii as the only break in its otherwise homogeneous edge (Fig.17). The medieval square in Todi uses grand stairs to emphasize both the main church and the entrance to a prominent civic building facing onto the parvis (Fig. 7). In this way, the steps ensure that the

“citizen never loses his feeling of relationship with the city as a design entity while he is participating in his function as a member of the church or as a member of the political community”²³

and provide a raised podium from which to view out across the city to the fields beyond. Treated in this way even a residual space may provide a greater sense of depth and a “unique vantage point from which to more completely understand the intricacies of the city around it”²⁴.

In the absence of the literal transparency we associate with modern materials and techniques, design elements have been used to articulate the edges around public spaces and to provide transitions between the square and the interiors of prominent buildings addressing the square. In most cases the entrances to significant public and sacred buildings were placed above the level of the square – accessible via a stair (as seen in the Greek and Roman temple porticos and the Medieval Church steps) -- while secondary buildings were protected from the square by transitional devices such as arcades

²³ Bacon 95

²⁴ McDonogh, Gary, “The Geography of Emptiness”: 3-15. The Cultural Meaning of Urban Space. Ed. Robert Rotenberg and Gary McDonogh. (Westport, Connecticut: Bergin & Garvey, 1993) 15.

Modern Materials and Edge Play

In the 19th and 20th centuries traditional masonry construction gave way to new techniques and materials. In concert with these developments architects began to realize that:

“a material can be both surface and structure. External walls are no longer homogenous and monolithic. They consist of a number of layers the thickness of these layers is being reduced more and more, while at the same time their efficiency increases,”²⁵

New materials and techniques provided innovative ways to explore, articulate, and question the boundary between enclosure and exterior. Prime examples of this “edge play” can be seen in Rogers and Piano’s Pompidou Center and in Jean Nouvel’s Cartier Foundation, both in Paris.

The entry façade of the Pompidou Centre, completed in 1977, is an extremely porous ensemble of glazing and steel components, fronting a thriving public square. The façade resembles a kind of scaffolding, thanks to an exo-skeletal frame from which the mechanical systems, the vertical circulation and the interior floors are hung (Fig. 19). The glazed surface separating interior from exterior -- traditionally a dense, solid protective cladding -- is pushed back behind the skeletal structure in a way that privileges transparency and celebrates structure. The façade, traditionally a singular element combining all the required elements of an architectural edge (such as structural integrity, protection from the elements and a place to hide all the mechanical systems), becomes in

²⁵ Rexroth, Susanne and Bernhard Weller. “Effective Materials - New Façade Design.” Detail – Facades and Materials. Nov. 2005: 1296.

the Pompidou Center, a palimpsest of individuated elements moving from the plaza, under suspended circulation system, around structural elements, between ducts and mechanical systems, and through glazed panels into the interior of the building.

By hanging the circulation from the scaffolding – suspending it over the plaza -- a greater sense of connection is made between the building's occupants and those gathered in the public square below. Visitors inside the building maintain continuous visual contact with visitors outside, each providing a focus or spectacle for the other. By articulating the circulation in the form of a climbing glass tube, occupants move from floor to floor in an enclosed catwalk where they are on continuous display to the square. To further encourage this participation in public spectacle, the square slants downwards towards the building and forms a kind of hard-landscaped hill. The plaza acts as a raked grandstand, using the building as a backdrop. Visitors stand, sit and even lay on the plaza, facing the mammoth, animate, skeletal façade.

The Cartier Foundation, a combination of gallery and office spaces for a contemporary art institution, is another interesting example of the exploration of the architectural edge using modern materials and techniques. Although its main façade faces a street (Blvd. Raspail) rather than onto a public square, the Foundation Cartier exemplifies how a façade can leverage changing light conditions to transform over time. The building is separated from the street by a freestanding glass screen that Nouvel uses to create a thick (almost virtual) threshold to the rather banal glass and steel building behind. Emphasizing this gap or interval between the façade and the building, vegetation is allowed grow up the structure supporting the façade²⁶. This transitory edge condition

²⁶ <www.foundation.cartier.fr>

is also significant since the ground level galleries of the building can be opened up to the air and are therefore shielded by the green zone. Through this strong but simple gesture - a freestanding glass screen -- an ordinary building is transformed. Thresholds are thickened and edges are rendered ambiguous with the use of organic (vegetation) and inorganic materials (glass), which, depending on the light, time of day, and time of year, can be reflective, translucent, transparent and/or opaque. In this way, the character of the Cartier Foundation is subject to the play of light -- ephemeral, ambiguous and constantly in flux (Fig. 20-21).

Experimentation with building materials is but one aspect of an ongoing exploration of new ways to articulate walls and building edges. As has been the case with signage and billboards for the past century, digital video screens are now being attached to buildings in key public spaces, adding a kinetic layer to the architectural edges that mediate between public open space and the interiors of buildings around them -- just as advertising and commercial interests are injected, via television and the internet, into the private realm of the home. The last half-century has seen a proliferation of layers, surfaces and screens – literal, virtual and electronic.

With the availability of new materials and the drive to redefine the architectural edge, especially in the case of contemporary art institutions, more ambiguous types of edges have emerged producing a wider variety of types of transitions into and out of public spaces.

All of these developments are, to some degree, related to the history of public space in the last sixty years, which, not surprisingly, relates to the rise and fall of the city over the same period. Large-scale media imagery became more prevalent in key public

spaces due, in part, to the fact that these spaces were up for sale, and with the ability and economic stability of large corporation to achieve this spectacular scale. Images were also used to revitalize and reanimate urban spaces – particularly in North America where the rise of suburbia and the mall as public space redefined both the demand for public space and the distinction between the public and private realm. This phenomenon, along with the use of private transportation and communication technologies, will be discussed in the following chapter.

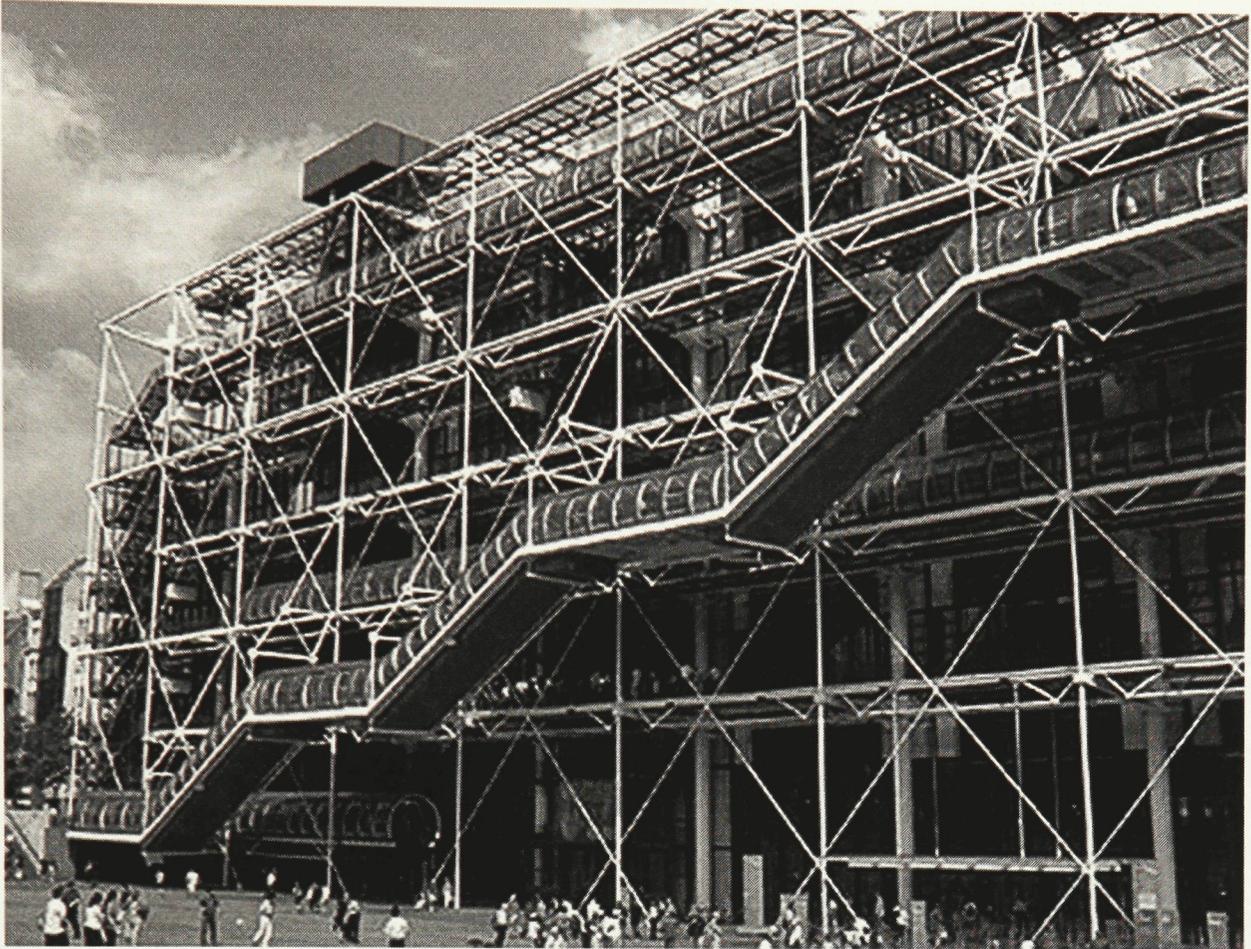


Fig. 19 - Pompidou Center, Paris

<www1.cs.columbia.edu>

View of one of the main facades of the Pompidou center showing the circulation system hung on an exo-skeletal frame.



Fig. 20 - Cartier Foundation (Jean Nouvel) - day time

<www.lightningfield.com>

Daytime view of the Cartier Foundation showing the free-standing facade that serves to thicken the threshold between the public street and the building interior.



Fig. 21 - Cartier Foundation (Jean Nouvel) - night time

<www.flower-wolfe.com>

Night-time view of the Cartier Foundation showing how the facade can transform with lighting conditions.

3 Contemporary Influences

The 20th century has witnessed a proliferation of images (and types of signage) in public spaces. While no simple causal relationship exists, I believe the advent of media imagery in public spaces has some relationship to the rise of the suburb, the increased use of private transportation, and the emergence of communication technologies over the same period. In North America the growth of suburbia led to a gradual depopulation of the urban core and ushered in a decline of urban public space. The center city became only one in a series of regional nodes, competing with shopping malls and office space on the periphery – most of which were better equipped and more easily accessible to the majority of the population. Especially in the US, the urban tax base decreased as the middle-class decamped to the outskirts, resulting not only in a change of the level and kind of demand made on public spaces, but in less money being available to maintain them. I would suggest that media and images have been used not only to revitalize urban spaces but also to transform certain spaces from urban nodes into what can now be identified as global nodes. New York City's Times Square is a prime example of such a node. In the discussion that follows, I use Times Square both as precedent and an example to demonstrate key transformations of public space in the past half-century.

Suburbia, Private Transportation, and Communication Technologies

A major influence on urban public space in western society within the last century, in tandem with successive waves of development of transportation and

communications technologies, has been the rise of suburbs²⁷. Although the development of the suburb can be tied to a variety of factors – varying in relation to different cities -- there is a broad pattern beginning with the original suburbs of London, England. Tracing this pattern will help us to explain and better understand the contemporary urban condition.

The idea of the suburb, as we have come to know it, originated in 19th century England as a result of the middle-class's desire to escape the increasingly unsanitary conditions of London²⁸. With fewer walled medieval cities than in continental Europe, English cities were generally more open to the surrounding landscape and movement into the suburban landscape was easier. The evangelical movement in 19th century England also advocated the removal of women and children from the defiled, economically heterogeneous and potentially pernicious urban core. While women and children were segregated to suburban areas, however, the men of the household continued to commute into the cities to maintain family businesses²⁹. Suburbs were connected back to the urban core via rail lines.

Over time the suburban model was appropriated by other cities, especially in North America, where suburban development was heavily based on the London model. The American predilection toward suburbanization was grounded in a longstanding

²⁷ Mitchell, William J. City of Bits: Space, Place and the Infobahn. (Cambridge, Mass.: MIT, 1995) 163.

²⁸ Fishman 38. In London, like in many other large cities, before the migration to the suburbs, there was a strong bond between the middle class family and their business. Generally, the business, which was located in the downtown core of the city, was situated directly below the living quarters of the family. Although the owner would handle most of the business, his family would also take part in its running. However, there came a point at which time the intimate connection between family and business was severed. This separation, influenced by the Evangelist religious movement, as well as an overcrowded and unhygienic urban core and a fear of immigrants entering the city, was further encouraged by the development of suburban communities

²⁹ Fishman 34 -36.

mistrust of the city, beginning with settlements in New England in the 1600s and reinforced by Thomas Jefferson's belief that democracy was best served by small communities of landowners³⁰. Progressively the traditional suburban model (small arrangements of homes in the midst of parkland) gave way to large stretches of single-family dwellings with private and separate front and backyards. This was particularly true after WWII. Changes in settlement patterns shifted the sense of the middle-class suburban community from one of imagined conformity to religious and family values (as with the original suburbs of London) to one of private, familial relationships.

The transformation from community to privacy was also influenced by the rise of the automobile, which facilitated better connections between the city and the suburbs. Public transportation, originally used to connect suburbanites to the city en masse, gave way to a multitude of private cars -- the mobile expression of what the suburbs have come to symbolize, namely autonomy, privacy and separation. Consequently, it became a priority for suburbanites to spend as little time as possible in the city, and to return to suburban hearth and home as soon as the workday was over.

More recently, as outlined in Joel Garreau's book "Edge City," suburbs have developed into their own cities as businesses move out to them, cutting off consistent relationships with original city centers. Los Angeles is a particularly extreme example of this arrangement, with an infrastructure of highways which by-pass the old city core altogether in order to move from suburb to suburb more freely, based on a planned decentralization scheme³¹.

³⁰ Dennis, Michael, Court & Garden: From the French Hotel to the City of Modern Architecture. (Cambridge, Mass.: M.I.T., 1986). 231.

³¹ Fishman 167-172.

Traditional urban cores were greatly affected by the rise of the suburb. The exodus of middle-class families meant a loss of mixed-use, mixed-race and in turn mixed-class neighborhoods. This loss, in conjunction with various other factors, resulted in the formation of single-use, single-class and single-ethnicity areas in the city (e.g., ghettos), as the mirror image of the homogeneous enclaves that had developed in the suburbs. This led to a decline in urban public spaces, leaving them open for appropriation by groups of individuals who capitalized on the city's lack of interest and/or lack of funds. While the growth (and the tax base) of the suburbs exploded, inner-city neighborhoods saw an increase in crime, violence, and class and race tensions.

Both counteracting and exacerbating the suburban trend toward privacy and separation, increased access to telecommunications technologies permitted individuals to become connected, virtually, over large geographical areas. This resulted in the promotion of 'imagined communities', as described by cultural geographer Benedict Anderson, as "the imagined image of a communion between a group of people who will never know most of their fellow-members, meet them or even hear of them"³². Imagined communities are promoted in contemporary society through commercial broadcasting, advertising, sporting events, and other television or internet-based programming. Examples include an imagined national Canadian community united through a viewing of

³² Anderson, Benedict. *Imagined Communities*. (Norfolk, England: The Thetford Press Ltd., 1983) 15. According to Anderson there were two main systems in which imagined communities are traditionally ordered, the religious system and the dynastic system. Anderson describes that both of these systems are able to promote imagined communities through the use of visual and oral elements consisting of sacred texts and non-arbitrary signs and symbols, contained within sacred public spaces, such as churches. However, with the development of print technology, the capitalist system, and the growth of a literate monolingual consumer group, Anderson theorizes that the grip of these two systems was loosened. Print media allowed for the dissemination of information to large groups of people at relatively similar times, enabling them to think about themselves in relation to others like them, which formed the basis for the third main ordering system of imagined communities, that of the nation.

hockey games, as well as imagined communities built around television programs such as *Friends* or *Lost*. Imagined communities exist in the knowledge that large groups of people are accessing the same information at the same or similar time, promoting a shared experience. Similarly, through the Internet, a variety of communities are maintained by means of web-enabled software.

In contrast to television, however, connections made through the Internet have the potential to be more interactive and more personalized, as evidenced by the development of chat rooms, instant messaging software and personal blogs. Although individuals can communicate and interact with each other, in real-time, over large geographical areas they are mediated encounters -- although web cams are making a version of face-to-face interaction more common. With the development of these technologies comes a multitude of time-space relationships that individuals can have with one another. These include synchronous telepresence, as in on the telephone, online chat rooms or web-enabled gaming, and asynchronous telepresence, as in blogs or communal web sites³³.

Therefore, in contrast to the urban public spaces of the past, which were the *de facto* locales in which to interact with non-intimate acquaintances, current technologies provide a variety of alternatives for such interaction. In tandem with the phenomena observed with respect to suburbanization, telecommunications technologies are seen by some to have siphoned vitality from the public square. In this way:

“Broadcast media enlarged the spectator circles to encompass entire communities and shattered the once-unified audience space into thousands

³³ Mitchell, William J. “The City of Bits Hypothesis”: 105-129. *High Technology and Low Income Communities*. Ed. Donal A. Schon, Bish Sanyal, William J. Mitchell. (Cambridge, Mass.: MIT, 1999) 128.

of scattered armchairs, couches, car seats, boom-box emplacements, and ear-to-ear spans of headphones.”³⁴

However, it should not be forgotten that although there may be no technical need for physical public space, it does not mean that we would chose not to have it, or as author William Mitchell explains:

“the reserves of resilience and adaptability that have allowed great cities to survive (in changed form) the challenges of industrialization and the automobile will similarly enable them to adapt to the bitsphere.... There is no reason to think that this novel condition will make us indifferent to our immediate surroundings or suddenly eliminate our desire for face-to-face human contact in congenial settings. We will still care about where we are, and we will still want company.”³⁵

Indeed as the public spaces of the city languished and decayed, shopping malls sprouted up in every corner of every metropolitan region to facilitate public gathering and social interaction. This desire for physical human company -- perhaps in reaction to the isolation of suburbia -- resulted in the emergence of the mall as one of the most frequented ‘public’ spaces of contemporary society. Similarly, in the period in which we’ve seen rapid growth in internet-based communications, we’ve seen a corresponding growth in the number of coffee shops (in the form of Starbucks and Second Cup) -- as the living rooms of the contemporary city. To paraphrase Mitchell, just because we can be anywhere doesn’t mean we’ll choose to be nowhere.

The Mall as Public Space

With the decline of urban public space and the large-scale migration of the middle class to the suburbs came a need for a new type of public space – one that was easily

³⁴ Mitchell, *City of Bits*, 62.

³⁵ Mitchell, *City of Bits*, 170.

patrolled and safe for women and children. Enter the shopping mall. The original suburban shopping malls were organized around a pedestrian street flanked by retail spaces and surrounded by parking. These malls (in contrast to strip malls) contained a large number and variety of types and scales of stores, and were an amalgamation of the 19th century department store, the urban market type (such as the St. Lawrence Market in downtown Toronto), the galleria or arcade, and the traditional commercial street. In this way, urban models were combined, adapted and inserted into the suburban landscape. Shop fronts lined either side of the pedestrian corridor, which was equipped with benches, infrastructure for gathering and performances, and which connected the anchor stores (generally department stores) located at either end. This layout is known as the “barbell plan” due to the use of anchor stores as termini. The configuration encouraged a continuous movement of consumers from one end to the other along what evolved into a covered ‘street’³⁶. The suburban mall thus succeeded (to varying degrees) in providing the suburban population a safe, climate-controlled, central, and quasi-urban locus for gathering and commercial exchange – a viable and convenient alternative to the urban core. The abundant parking easily accommodated the car.

Forced to compete with regional shopping malls, urban centers in the 1970s embarked on their own shopping mall implementation. Examples include the *Renaissance Center* in Detroit, the *Gallery at Market East* in Philadelphia and, perhaps most notably, the *Eaton Center* in downtown Toronto. In this way, the denatured urban model was grafted back into the city to promote revitalization of the urban core. The urban shopping mall provided a safe, climate-controlled, and familiar environment –

³⁶ Sack 144-145

palatable to the larger metropolitan population and convenient for urban dwellers. Critics argued that these internalized complexes turned their back on the city and threatened the businesses that had managed to survive along the traditional commercial corridors. They decried the urban shopping mall as the final blow in a series of failed attempts to revitalize the rotting urban core. They pointed out the contradictions of passing off a privately owned and heavily patrolled space as an alternative to the traditional public squares and spaces of the city. However, as will be discussed further, this is not what occurred. Indeed, due to a variety of demographic transformations in the last two decades, the shopping mall has proven its potential to be as successful in the urban core as it is in the suburbs.

That being said, the degree of 'public-ness' of public space should be considered. Being equipped with surveillance technology, security personnel, and lockable entrances (in order to maintain an acceptable level of safety and security) the shopping mall is not truly public. In this way the mall works in an inclusive/ exclusive way to entice its target market while discouraging undesirables, rendering it a kind of hybridized public/ private domain.

The 'privatization' of 'public' space has proven successful in minimizing potentially unappealing encounters for the consumer. Consequently, private/public partnerships are becoming the norm in open, exterior public squares as well -- as is of the case with both Yonge-Dundas and Times Squares. This situation is due in part to building authorities offering incentives to corporations to provide public spaces and public amenities adjacent to their buildings. This has led to a trend of semi-public spaces, which are under full surveillance at any given time. Although it may be argued

that surveillance is an invasion of individual privacy, a growing percentage of the population, especially women, have both accepted and come to depend on the idea of being ‘watched’ by surveillance cameras. Whether or not anyone actually monitors the monitors, the presence of cameras projects an image of safety³⁷. In this way “the public display of surveillance deters theft by producing correct and useful types of fear (fear of authority) while suppressing middle-class fear of the potentially criminal ‘other’”.³⁸

In concert with the growth in public/private partnerships as a strategy for creating urban spaces, the last three decades have witnessed an increase in the number of young, educated, self-sufficient singles and childless couples (as exemplified in chapter five through the demographic study of the City of Toronto) choosing to remain in the city for longer periods of time. This trend is the result of a greater emphasis on higher education and the desire to become financially established prior to marriage and/or children. More so than families, young professionals tend to avail themselves of infrastructure associated with the urban core, namely restaurants, bars, coffee shops, and cultural institutions. The increase in the number of individuals (with disposable incomes) living in the city center also elevates the demand for public space -- as the urban equivalent of the suburban backyard deck or living room of the single-family home. As such the privatizing tactics of the shopping mall – replete with surveillance technologies and an abundance of commercial signage -- have been brought to bear on key open ‘public’ squares of the city. In the name of revitalization, public and private interests have conspired to create the global urban node.

³⁷ Parenti, Christian. The Soft Cage: Surveillance in America from Slavery to the War on Terror. (New York: Basic, 2003) 111.

³⁸ Parenti 111.

Image as Parasite: Urban Nodes and Architectural Edge

According to author Kevin Lynch, an urban node (often an urban public square) develops at a junction where it's necessary to make decisions about where to go or what to do next. In this way, the urban node is reminiscent of the Roman Forum located at the crossroads of the city's main axes. Lynch argues that the need to make decisions enhances the citizen's awareness of the city, resulting in a heightened perception of surrounding elements³⁹. Where cars, people and public transportation come together at these nodes, views to significant elements must be provided. Although they are certainly not what Lynch had in mind, large-scale images (in the form of digital screens and mechanical billboards) increasingly augment more traditional architectural and sculptural elements in urban nodes/public squares. These images also serve to represent the condition of economic exchange in a given city, as an indication to the extent that the city is 'alive'. Urban nodes are an especially propitious location for these images, since they are clearly visible both to pedestrians and to drivers, whether they are moving or stopped at an intersection (becoming a captive audience).

The desire for this augmentation of surroundings, as previously discussed, comes from a need to revitalize urban public space. However, the choice to apply large-scale images onto existing buildings is based not only on economic factors, but cultural and social ones as well. This brings us to the idea that in today's society public architecture:

³⁹ Lynch, Kevin. The Image of the City. (Cambridge, Mass.: MIT, 1960) 72-73.

“lacks instant appeal: it does not yield its virtues readily. It has no common public language, as in the past. Until this century the public and the profession shared a known vocabulary; the divide between them was simply a matter of degrees to which traditional forms were mutually understood.”⁴⁰

Therefore, rather than trying to protect what is essentially “mute” architecture, covering buildings with images is seen to be appropriate to the contemporary ever-changing urban environment. The loss of a common vocabulary can be seen as a characteristic of our individualistic post-modern society in which an increasing number of distinct cultures both dynamically hybridize and protect their own particular beliefs and interests. Because this hybridization happens primarily in urban cores, the creation of a shared and stable architectural language is increasingly difficult. Commercial imagery fills the gap; to the extent to which these images are un-symbolic or stereotypically symbolic enough for them to be understood by a variety of people, they represent a common, flexible, and somewhat culturally neutral patois. Images may act as signs, symbols or even icons or idols depending on a variety of factors. These include individual cultural, racial, gender, sexual and age filters, as well as the extent to which the products or persons being showcased are identifiable.

Robert Venturi offers a critical perspective on the use of images on architecture.

He states:

“Here is architecture as iconographic representation emitting electronic imagery from its surfaces day and night rather than architecture as abstract form reflecting light from its surfaces only in the day...There are dangers in an architecture of representation that makes art out of information...but techniques available now can help us achieve change and balance via

⁴⁰ Huxtable, Ada Louise. The Unreal America: Architecture and Illusion. (New York: New Press, 1997) 112.

flexibility, and promote richness through variety. Our iconography will not be etched in stone.... and it is important to remember that it is a generic architecture that acknowledges symbolism and iconography for our time, that represents ornament and projects detail rather than engages them... and it is this generic quality that can dominate over the iconographic where appropriate.”⁴¹

In many of his earlier writings, Venturi promotes the use of imagery and defends the indigenous commercial vernacular. In this respect he differs from most architects, who tend to disregard both as bad design. Venturi sees the positive elements of this vernacular and attempts to incorporate it into his own work in order to promote its possibilities. He realizes that the traditional language of architecture has changed, and proposes that the commercial language as a viable alternative. Therefore, rather than mourning the loss of the traditional role of architecture and the ability of architectural syntax to be culturally expressive, he emphasizes the benefits that commercial imagery might bring to architecture. The same line of thinking is expressed in the abstract for the 2006 Media Facades Symposium in Vienna, which states that:

“The harbingers of the media city are cropping up everywhere: projected images the size of an entire façade, huge screens on roof tops and culture buildings used as flickering display surfaces. Developments in the area of display technologies have produced new possibilities for hybrid architecture. The theme of media facades in architecture is not simply the next fashion trend, but represents a step in technological development that will have a lasting impact. This trend will affect the city with or without architects' collaboration. Therefore the important thing is to assume social responsibility and to integrate the new technologies in building in a culturally ambitious way.”⁴²

⁴¹ Venturi, Robert, Iconography and Electronics Upon a Generic Architecture: A View From The Drafting Room. (Cambridge, Mass.: MIT, 1996) 5.

⁴² Schurer, Oliver. Abstract for Virtual Dschungel 5 – Media Facades Symposium in Vienna, 2006. <http://www.azw.at/event.php?event_id=565>

Recent attempts to enhance interaction between individuals and large-scale, public, commercial images include interactive billboards. Examples include the Vidafone billboard in Piccadilly Circus (in London) where one can type in a message on the web to be displayed on the billboard⁴³, and the Nike build-a-shoe advertisement on the Reuters building in Times Square, which encouraged passers-by with cell phones to dial a number and select the elements of a shoe to be displayed up on the billboard⁴⁴.

Perhaps symptomatic of the mutual disregard of architecture for large-scale commercial imagery (and vice versa), the primary method by which images have been incorporated into urban nodes has been to attach them directly onto surrounding buildings -- adding a new layer onto the existing, presumably banal facades. This technique privileges the image, which dominates the facade and reduces the building to a kind of scaffolding or support structure for the image. In this respect the relationship between commercial image and architecture in public spaces can be described as a parasitic one, where the images use the architecture for its prominent location and in many cases its height with no consideration for the interior space behind the façade it covers over.

However, whatever loss of architectural engagement with public space that such images might represent, one should not discount what they bring to the space. Traditional building façades are supplemented with dynamically changing surfaces capable of disseminating a range of information. Digital screens and commercial billboards can augment the traditional function of the public square as a socio-economic barometer. A look at New York's Times Square will help to illustrate this.

⁴³ <www.vidafone-piccadilly.co.uk>

⁴⁴ Oser, Kris "The Nike build-a-shoe sign on the Reuters building in Times Square." 2005. <http://bbdolab.typepad.com/the_lab/2005/05/the_nike_builda.html>

Global Node: Times Square, NYC

Most successful urban nodes are morphologically unique (capitalizing on some interruption in the urban fabric) and intensify the characteristics of the immediate surroundings.⁴⁵ The unique bow-tie form of Times Square, for example, is the inadvertent result of the angle at which Broadway crosses 7th Avenue (Fig. 15). Arguably it is residual space created by circulation infrastructure. Billboards in the “square” are used both to promote the local commercial and cultural context (the theatre district) and to dress up the lack-luster architecture of the surrounding buildings, many of which face on to adjacent streets rather than into the awkwardly shaped square itself. Moreover, imagery and technology are used to forge an association between a local place and a global context, permitting a variety of types of content to be communicated. The display of products made by multinational corporations, the fact that the node is promoted as a global tourist attraction, and the fact that celebrations staged within the square are broadcast worldwide, transforms a local, often residual urban node into a global one.

The recent history of Times Square demonstrates many of the issues discussed earlier in this chapter, namely the effects of the rise of the suburb, the degradation of the urban core, the privatization of public space, etc, within the unique context of New York

⁴⁵ Lynch 77.

City. Since the late 19th century Times Square has been a locus for New York's theatre district and has housed New Years Eve celebrations since 1904 -- the same year as the invention of the neon sign⁴⁶. The first billboard with moving lights was located in Times Square in 1917, and news bulletins were first posted on a building in 1919, solidifying its significance as a space where large groups of citizens could gather to share in the awe of new visual technologies, receive news-worthy information, and celebrate historical events.

In 1920 instances of a new commercial art form named 'the spectacular' (gigantic electric billboards) appeared in Times Square, and during Prohibition, the Square was home to many speakeasies. During the Great Depression many theatres in the area converted to burlesque show houses and movie theatres, transforming the Square from an elite destination to cheap thrill haven⁴⁷. The Square's decline was exacerbated by suburban flight in the post-WWII era. Porn palaces and massage parlors moved into the area during this period, making the Square one of the most dangerous part of New York City for violent crime.

In the late 1970s the decision was made to promote commercial and office development in the area in order to counteract the criminal degradation. Midtown was too crowded to accommodate an increasing demand for office space as the city emerged from bankruptcy in the 1980s. Although a threat to the unique ambiance and character of the area, the commercialization of Times Square -- along with the opening of the TKTS 'last-minute' ticket booth in 1973 and the formation of the Times Square Business Improvement District -- ushered in a resurgence in Broadway theatres and a 23% drop in

⁴⁶ <<http://www.timessquarenyc.org>>

⁴⁷ <<http://www.timessquarenyc.org>>

the crime rate, leading to the emergence of Times Square as a global tourist attraction (Fig. 22)⁴⁸. The ad hoc manner in which the commercial billboards and digital screens of the Square appear to be erected is now codified in the city's planning strategy of "spontaneous unplannedness"⁴⁹, which began in 1987 with the implementation of zoning regulations requiring buildings in Times Square to have bright signage⁵⁰.

Times Square has been described as a mirror of American society -- reflecting the obsessions, desires and priorities of a changing nation⁵¹. This is consistent with what we've observed about successful public spaces throughout time, namely that they function as socio-political barometers for society. Both American and global culture are reflected in Time Square's changing surfaces, whether in the form of digital screens, mechanical billboards, or kinetic architectural facades. These images are, in turn, transmitted around the world in a variety of ways.

We've noted that the rise of the suburbs, the increased use of private transportation, and the development of new communication technologies have each affected the role and nature of public space in the past 50 years. However recent demographic trends -- bolstered by the ongoing human desire for company -- point to a renewed demand for urban nodes, and to new strategies (i.e., public/private partnerships) for their revitalization. These strategies encourage a parasitic relationship between

⁴⁸ <<http://www.timessquarenyc.org>>

⁴⁹ Boyer, Christine "Twice-Told Stories: The Double Erasure of Times Square": 77-81. Strangely Familiar: Narratives of Architecture in the City. Ed. Iain Borden, Joe Kerr, Alicia Pivaro and Jane Rendell, (New York: Routledge) 80.

⁵⁰ Similarly, the urban node of Piccadilly Circus in London has used similar techniques to Times Square in order to supplement its surrounding elements. As a central node in which other significant areas of London radiate out from, it was theorized that if you stayed within it long enough that you would encounter everyone you had ever known.

⁵¹ <<http://www.timessquarenyc.org>>

architecture and image and privilege impermeable edges and leverage telecommunications technologies to transmit information into and out from the square.

Having said this, in order to better understand the role of image in contemporary society, and more specifically its use as public spectacle, the next chapter will briefly explore the history of images. Beginning with the development of photography, image will also be discussed in relation to its use in commercial advertising and cinema, with secondary emphasis on cinema in relation to live theatre and the changing role of the screen.

4 | The Development of Image

Image can be defined as the representation of something or some form and is therefore subject to a variety of interpretations, both in its production and its reading. Images can be created in a number of ways and have both physical and psychological characteristics. Psychologically, images can be categorized as signs, symbols, icons or even idols, depending on a variety of factors ranging from commercial to religious intent. Given that the focus of this thesis is on the role of images in contemporary public spaces (focusing on entertainment and spectacle more than images as religious reference, as manifestations of biological processes, and/or as a basis for a philosophical discussion), the sources examined were purposely limited. Accordingly I have excluded references to writers like Jean Baudrillard and Pavel Florensky, whose work would be relevant to a discussion of images in a broader social and cultural context.

This chapter explores our perception of images -- from the association between image and gaze to the development of the moving image -- to better understand the images we see on billboards and video screens in key public spaces. Similarly, commercial advertising will be discussed with respect to the image as a social construct. As a society increasingly connected through media rather than face-to-face encounters, it is important to understand of the role images play. That said we must understand the use and development of images in order to harness the benefits that media imagery may bring to contemporary public space.

Image and Gaze

In his article, “Guarding the Eye in the Age of Show,” Ivan Illich describes the evolving relationship between image and the ‘gaze’ prior to the invention of photography⁵². As distinct from image, the ‘gaze’ has historically been associated with deities and authority figures, whose lidless eyes are all-seeing and infinitely reaching⁵³. Images as pictorial representations, on the other hand, have been around since the first cave paintings -- prior to any conception of gaze.

The union between image and gaze was explicitly established in the Renaissance, when the eye was first understood as a lens that could be augmented with mechanical viewing devices. In this period (characterized by rational thought) the image was transformed into a “geometrical construct... visualized as a cut through a visual pyramid”⁵⁴. This new method of viewing connected sight with mathematical principles

⁵² Illich, Ivan. “Guarding the Eye in the Age of Show.” 1998 (London: Marion Boyars, forthcoming) 11 - 15. An important step towards this association was achieved during Greek antiquity, when the gaze was associated with general vision and not limited to godly sight. It was at this time that it was believed that gaze required three conditions; glance, light (being “the solar energy that brings forth the colors of objects”), and a translucent media (which “tinged by the color that the visual ray has grasped, and allow[ed] the soul to be colored”), such as water or air, acknowledging a relationship between light, the environment and sight. In the medieval era, influenced by the rise of iconological thought, it was believed that sight was not what “gaze grasps from the object, but light reflected from the object that reaches the eye”. In this religiously focused age, it was believed that the eye was “empowered to extract ‘universals’ from the shapes that things emit by their radiation” from their constant dependence on the creative act of God. This belief can be seen expressed in medieval scriptures and stained glass images that depict objects that radiate light from within them, rather than being illuminated by light from without.

⁵³ Schmidt-Burkhardt, Astrit. “The All-Seer: God’s Eye as Proto-Surveillance”: 17-31. Ctrl [Space]: Rhetorics of Surveillance from Bentham to Big Brother. Thomas Y. Levin, Ursula Frohne, and Peter Weibel. (Cambridge, Mass.: MIT, 2002) 19. For example, the gaze of the disembodied ‘eye’ of the sun god Ra, from ancient Egypt, was thought to radiate out from his pupil to embrace and therefore fuse with any object that it saw, resulting in an all-embracing view. This tradition has been continued in contemporary popular culture through the depiction of the watchful gaze of 1984’s Big Brother, and the eye of Sauron as seen in the Lord of the Rings movie trilogy.

⁵⁴ Illich 18.

to produce an empirical viewing of reality in order to transform it into a framed optical facsimile on a wall or canvas⁵⁵.

With increased interest in the empirical world came numerous attempts to produce images that were ever closer to perceptual reality. This desire culminated in the camera and (more recently) video technologies, used to capture the real-life and real-time images we associate with communication media. The first widely known use of photographic technology (the principles of which were known since antiquity) was in the 1700s, with the use of the Camera Obscura. The Camera Obscura consists of a dark chamber with a small opening -- through which light entering into the chamber is projected onto a surface, with or without the help of a mirror to direct it⁵⁶. Using light to project images, the Camera Obscura was ultimately used to capture and burn perceptually real images onto photographic paper (or film), becoming the precursor to the contemporary camera⁵⁷.

As images more closely approximate perceptual reality there is less need for active interpretation by the viewer; to some degree this distinguishes the (documentary) photograph from fine art. Photographic images are inherently pre-fixed in their presentation, based on pre-determined choices by the photographer. However, as image-capturing technologies have evolved, there is now a greater ability to edit and alter

⁵⁵ Illich 18.

⁵⁶ Huhtamo, Erkki. "Elements of Screenology". WRO Centre for Media Art, 9th International Media Art Biennale, 2001 <http://wrocenter.pl/biennale/wro01/erkki/html/erkki_en.html> It was also in the 18th century when the Camera Obscura was first used within a room, in order to produce an all-encompassing real-time tourist experience. In this instance "the image of the outside world was directed by means of a lens and a mirror from the top of the room onto a horizontal table in its center. Visitors stood around the table and admired the moving scenery from the outside".

⁵⁷ Huhtamo <http://wrocenter.pl/biennale/wro01/erkki/html/erkki_en.html>

photographic images to suit specific desires -- whether through the air brushing of a portrait, or the creation of a fantastic image for a product campaign.

Having been firmly established in the Renaissance, the connection between gaze and image has become increasingly passive and fleeting. Rather than focusing on light, shadow and proportion, contemporary image interpretation is based on the principles of speed-reading, pattern recognition and symbol management in order to absorb and manage an increasing amount of visual stimuli. These skills are necessary in order to effectively engage television and movies, and to use interactive computer icons, search commands and web browsers to our advantage. Where images associated with contemporary communication and media technologies are concerned, the relationship between image and gaze is now an amalgamation of passive scans, rather than an active, holistic engagement⁵⁸.

Commercial Images

Contemporary images, especially commercial images, are manipulated for psychological reasons to better capture the attention of the passive scans of their viewers. In this way, commercial signage acts as an architecture of communication, disseminating information and evoking desire among would-be consumers. As a precursor to large-scale billboards, it is helpful to briefly explore the development of commercial imagery, signage, etc., to better understand its uses, effects and techniques.

⁵⁸ Illich 6.

In the original marketplace there was no need for images or signs; communication of product information was achieved through proximity to the product itself and/or to the merchant, whose oral persuasiveness was a key element in the sale of goods. However, as the consumer environment became less intimate, subtle signage -- as along the traditional medieval street -- was used to signal which building contained which kinds of goods. In this instance however, the sign was not used to sell the product, but instead direct the consumer to the shop, where the sight and smell of the actual products did the selling – whether in the window or in the shop itself⁵⁹.

Objects were used to promote services as well as products, leading to the transformation of the object as sign into a symbolic representation of a particular service. Shingles, for example, were hung on shops to identify them as the work places of roofers, horseshoes denoted blacksmiths, and crosses might indicate churches or places of health care. This was an important step in the ongoing evolution of the relationship between sign, symbol, image and display. In the contemporary commercial environment a “regular” person can be transformed through the display of his or her image on a media billboard into a symbol for a corporation or lifestyle -- raising them to the quasi-deific status of a commercial icon. One example of this is seen in the depiction of the actress Sarah Jessica Parker, who become famous for her television show ‘Sex and the City’, on large-scale billboards to promote her new perfume fragrance. In this way, Ms. Parker is using her celebrity status in a way that transforms her into an icon to sell her new product. This is in contrast to the original use of an icon as a representation of a spiritual figure for which there was no physical manifestation.

⁵⁹ Venturi, Robert, Denise Scott Brown and Steven Izenour. Learning From Las Vegas. (Cambridge, Mass.: MIT, 1972) 9.

The precursors to today's commercial squares and shopping atria were the gallerias and department stores of the late 19th century. These took the form of glass-roofed streets, such as the Galleria Vittorio Emanuele in Milan, along which were located a high concentration of shops and stalls. Because they were both integrated with and closed off from the city at large, these covered streets were places where women could go out "in public" alone and feel safe. A new type of interior marketplace, the department store, was introduced in the 1850s with the opening of the Bon Marché in Paris. As with the traditional marketplace and the galleria, a large variety of different products were available in one location, but they were presented in a more passive way. The obligation to buy was replaced with an invitation to look, without a need for oral engagement to obtain product information. In this respect the department store was an outgrowth of the exposition building and its architecture (predominantly iron and glass) referenced exposition halls like the Crystal Palace.

Related to the above, signage, image and glazing began to replace the salesman. Glass display counters, vending machines, display windows, product packaging, and advertising, (progressively associated with the photographic image)⁶⁰ all came to characterize the "retail environment." Display windows thickened the edges of commercial architecture, providing a gap or interval to accommodate products as well as permit views into the store. This allowed the contents of the building to be on constant display, eliminating the need to physically enter a shop to see what was for sale. This continuous exposure, in turn, generated desire and augmented demand for the products.

⁶⁰ Chung, Judy Chuihua. "Ms. Consumer": 505-525. Harvard Design School Guide to Shopping. Ed. Chuihua Judy Chung, Jeffrey Inaba, Rem Koolhaas, Sze Tsung Leong. (Cambridge, Mass.: Taschen GmbH, 2001) 512.

Advertising, as discussed below, also represents a form of ongoing and pervasive exposure, extending the marketplace well beyond the physical boundaries of the shop or department store.

In the contemporary landscape, commercial signage/image now exists at a spectacular scale, in the form of billboards. As billboard images are meant to appeal to the driver they are scaled to higher velocities. In order to be effective, viewers must grasp the intent of the sign/image with one 'passing scan'. This type of signage deploys both text and image (perceived as symbol, idol or icon) in order to market goods and services to the consumer. In this way products are brought to the consumer rather than forcing the consumer to relate to the actual product through proximity, as is the case in the traditional marketplace.

Today's commercial images have not only transformed in scale, but also in their psychological approach to engaging the consumer. As Guy Debord explains, the capitalist system, for the sake of its own survival, has led us to believe that we are required to participate in an endless pursuit of commodity satisfaction in which "the real consumer becomes a consumer of illusions" and where "the commodity is this factually real illusion, and the spectacle is its general manifestation"⁶¹. It was also with the rise of the department store that commodities were linked to personal feelings, and the consumer was encouraged to "invest objects with personal meaning above and beyond their utility"⁶². In this way the motivation behind the purchase of consumer products was transformed from one of needing to one of wanting.

⁶¹ Debord, Guy. Society of the Spectacle. (Detroit: Black and Red, 1983) paragraph 47.

⁶² Sennett, Richard. The Fall of Public Man. (New York: Vintage, 1974) 145.

To appeal to consumers in a psychological way, contemporary advertising increasingly blurs the boundaries between the real and the imagined by transforming advertisements into spectacles. This is evident in advertisements that promote products in a digitally enhanced way -- where skin moisturizer is effective enough to cure the cracking skin of a crocodile, or dog food is tasty enough to make dogs dance for joy. Whether or not these images are believable, they capture our attention (their primary goal), and therefore have the opportunity to affect our lives.

Commercial images also leverage psychology to capture our attention by promoting 'imagined communities', as discussed in the previous chapter. Advertising encourages the purchase of products by reinforcing the human desire to conform to a community, producing meanings that are 'thin' enough to be shared quickly by a variety of different people. Advertising images promote the illusion that the purchase of brands or products can connect consumers to particular imagined communities. An example is Benetton's "United Colors of Benetton" campaign -- featuring models of all colors and races -- promoting the idea that one can become a part of the community of multiculturalism by purchasing their products (Fig. 23). Similarly, Apple's ad campaign for their iPod MP3 players depicts a variety of different types of people in silhouette. The generic nature of the dancing figure allows consumers to project themselves into the image, attached via their iPods to the imagined iPod community (symbolized through the connecting element of white headphones) (Fig. 24).

Contemporary commercial advertising responds to the passive scanning of consumers in both physical (in the form of spectacular, large-scale billboards) and psychological ways (by the promoting imagined social connections, encouraging desire,

stimulating the imagination, etc.). With this in mind -- and in light of the loss of a common architectural language as discussed in the previous chapter -- the role that these images play within the built environment becomes clearer. Within environments like Times Square, images promote urban revitalization by stimulating consumer activity, suggesting communities and connections (although in a biased and stereotypical way), and by promoting spectacle.

Moving Image, Theatre and the Screen

It is helpful to review the history of the moving image to better understand the digital screens now found in public spaces and in our homes. An optical phenomenon called the 'persistence of vision' makes it possible to perceive a succession of still images as a continuous moving image. The human eye retains a viewed image for a certain interval of time, permitting a smooth linkage between successive stills to produce the impression of an uninterrupted sequence.

One of the main precursors to the cinematic image is live theatre. Theatrical techniques that create images in a non-photographic ways include Asian shadow theatres (that use intricate two-dimensional puppets behind a screen to cast shadows (Fig. 25), elaborately painted backdrops, and the use of mirrors to produce reflected images to enhance perspective.

In its fully developed form, cinema was seen as a threat to live theatre; in comparison to cinema, theatre was seen to lack both variety and the potential to transport viewers to other places. Yet the screen and the stage share a common ancestry. Theatre

construction in ancient Rome consisted of staggered audience seating facing a stage that was attached to a background building, or 'skene' -- meaning 'tent' or 'hut'. This building began as a temporary structure, used to store costumes and to support painted panels that served as the backdrop for the play⁶³. Over time the 'skene' evolved into a permanent structure comprised of one or more stone buildings called the 'sceanae frons.' The actors used this multi-leveled structure, replete with openings, as part of the stage set (rather than purely as a backdrop) (Fig. 26). In this way the 'sceanae frons' brought the painted backdrops of the 'skene' into concrete reality, transforming surface spectacle into architectural form. Note the etymological relationship between "skene," "scene" and "screen;" note a similar relationship between "sceanae" and cinema.

The proscenium style theatre also prefigured the cinematic screen by framing the stage within an opening in a wall, which separated the stage from the audience or house (Fig. 27). This frame rendered the theatrical production pictorial⁶⁴. Moreover, both cinema and live theatre have the ability to produce an exchange between spectacle and spectator. While this can be done literally in live theatre (actors emerging from the audience, objects being tossed from the stage, etc.), films facilitate a similar exchange in a virtual way. Through the use of scale and magnification (the "close-up"), viewers are encouraged to project themselves into the intimate personal space of the actors. Cinema and theatre can also act together, supplementing one another. Large-scale video screens are often used behind players or performers at events. Images of performers are transmitted for better (more spectacular) viewing. Similarly, cameras may be directed

⁶³ Perseus Digital Library <www.perseus.tufts.edu/cgi-bin/ptext?doc=Perseus:text:999.04.0004:id=skene>

⁶⁴ Vardac, A. Nicholas, "Realism, Romance, and the Development of the Motion Picture": 27-36. *Theater and Film: A Comparative Anthology*. Ed. Robert Knopf. (U.S.A.: Yale, 2005) 28.

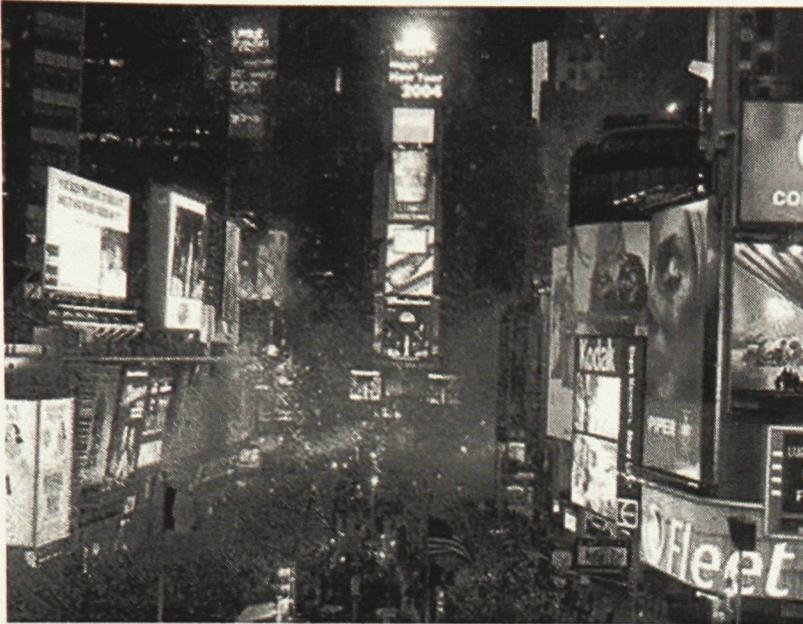


Fig. 22 - Times Square, NYC
 <<http://gibbsonline.typepad.com>>
 View of Times Square showing the use of media imagery to supplement its architectural edges.



Fig. 23 - United Colours of Benetton Advertisement
 <www.yvessimply.canalblog.com>
 Advertisement showing an imagined community of multiculturalism.



Fig. 24 - Macintosh Ipod Advertisement
 <www.davenetics.com>
 Advertisement showing an imagined Ipod community connected through white headphones.



Fig. 25 - Shadow Theatre
 <www.fairbruk.demon.co.uk>
 An example of traditional shadow theatre as an example of how to create images with lighting techniques.



Fig. 26 - Roman 'Scaenae Frons'
 <www.brynmawr.edu>
 Inhabitable Roman theatre backdrop.

at the audience, images of whom are projected onto screens behind the performers – blurring the distinction between spectacle and spectator.

The partnership between cinema and live performance re-enforces the historical connection between the two. That said screens have their own genealogy. Traditionally a mechanism comprised of a translucent material stretched across a wooden frame, a screen was used to defend oneself against the heat of a fire, the wind, or an uninvited gaze. Screens were often decorated with painted images⁶⁵. As defenders of privacy, screens evolved into dressing partitions – surfaces behind which to hide from the gazes of others in the room. Due to its translucent nature, a screen can also be used to expose rather than hide, reversing its role from protector to revealer. The changing role of the screen relates to the lighting conditions. When lit from the side of the protected subject (where the subject is located between the light source and the screen), shadows create silhouettes on the screen, as with the shadow theatre example. Similarly, if the screen is lit from the opposite side (with no subject between the light source and the screen), silhouettes disappear, and the screen appears opaque. This phenomenon is used to great effect in the theatre with a drop known as a *scrim*. The scrim can appear totally transparent (virtually invisible) when back lit and completely opaque when lit from the front (Fig. 28). In this way the scrim is used to transform stage sets by hiding or exposing elements as required by changing the position and intensity of light sources.

In the cinematic sense of the term, a screen is simply a surface on which to project images, i.e., off of which to bounce light. Where televisions, computers and digital outdoor LED screens, are concerned, screens are surfaces from which light

⁶⁵ Huhtamo < http://wrocenter.pl/biennale/wro01/erkki/html/erkki_en.html >

emanates -- often from within the apparatus. In both cases screens are generally blank, opaque or invisible (as with a backlit scrim) when not in use. In its evolving relationship with technology, the function of the screen has changed. The public 'media' screen has become a mechanism for exposing large numbers of people to the "visual extravaganza of capitalist commodity culture"⁶⁶. This calculus of exposure is in marked contrast to the screen's traditional role as a visual shield – patrolling and protecting the borders of the private realm.

As buildings to stage the viewing of moving images, movie theatres have emerged as important gathering places in contemporary society – witness the social infrastructure associated with the suburban multiplex. Unlike the shopping center, however, an entrance fee is required to enter the cinema, rendering it less publicly accessible. In recent years we've seen the design of cinemas transform from small movie houses (based on theatres intended for dramatic productions) to Megaplexes. The Megaplex incorporates a number of theatres, large and small, as well as game arcades, food courts, party rooms, etc. More often than not they take the form of big box warehouses located in the suburban periphery.

Like the re-grafting of the shopping mall into the city, the suburban multiplex model has been applied to the urban cinema – replacing the classic (early 20th century) movie houses. One such complex is located at the corner of John and Richmond streets in downtown Toronto's entertainment district (Fig. 29). As the first movie theatre to be built in the downtown area in fourteen years, the *Paramount Toronto* was built on top of an existing parking garage and Chapters bookstore. It incorporates thirteen regular size

⁶⁶ Huhtamo < http://wrocenter.pl/biennale/wro01/erkki/html/erkki_en.html >

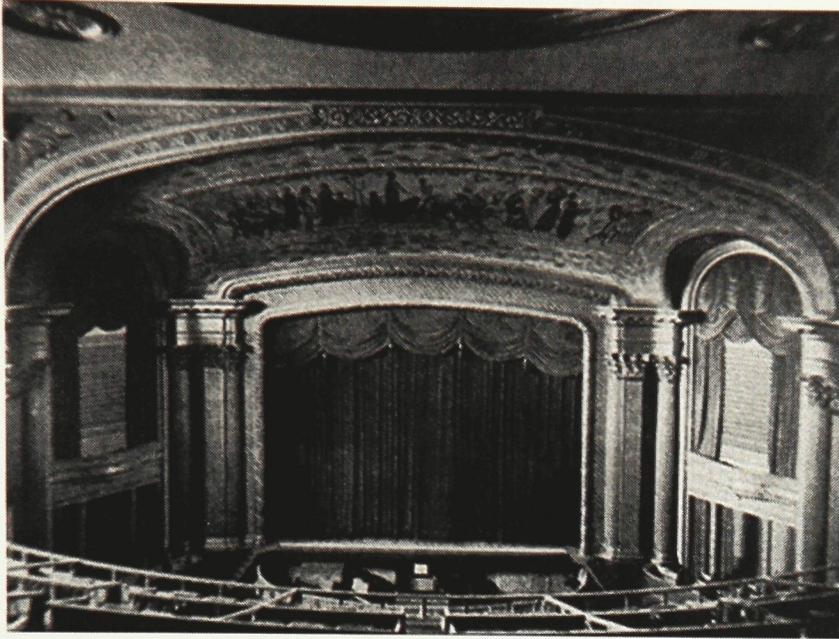


Fig. 27 - Proscenium Theatre Stage
<www.hawaiiitheatre.com>
Proscenium type of theatre construction that pictorially frames live performances.

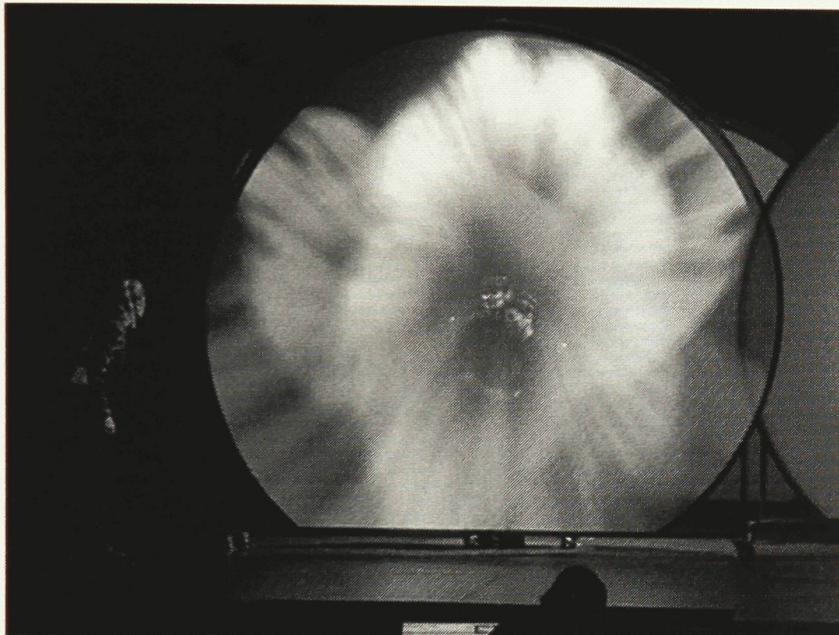


Fig. 28 - Theatre Scrim
<www.luxious.com>
Use of a theatre scrim to reveal actors placed behind it through the use of stage lighting.



Fig. 29 - Paramount Toronto Movie Theatre Complex
<www.bigmoviezone.com>
Main facade of the Paramount Toronto movie theatre in downtown Toronto depicting the Rubik's cube- like section which incorporates LED screens.

theatres, an Imax theatre, a licensed bar, a food court and rentable conference room -- all on one level, five stories above the street.

The Paramount Toronto building incorporates media technology into its architecture, using a large Rubik's-cube-like object to mark it within the city. The cube incorporates 16 sq. ft. LED screens on three of its sides, each broadcasting featured films to passers-by. Another distinguishing architectural feature of the theatre is the forty-five foot high entrance lobby in which one of Canada's longest escalators lifts moviegoers from the ticket booth to the theatre level. In this way the moviegoer is treated to an ascending and descending (although vertigo inducing) view of the adjacent city, which is lively through much of the night due a concentration of dance clubs in the area. Although criticized for its theme park feel (replete with movie paraphernalia such as a large-scale model space ship from the Star Trek franchise), this complex reflects a move towards the composed integration of design and media technology, while allowing for a unique architectural experience within the city. It represents an important precedent for an urban movie theatre complex for the design portion of this thesis.

Contemporary commercial imagery deploys both physical and psychological mechanisms to attract the attention of potential consumers. I've noted that these images can be perceived as signs and/or symbols, that the individuals they depict often assume the status of icon or idol, and that advertising both encourages imagined social connections and stimulates the imagination. I have also observed that images produced for the purposes of public spectacle can be created in ways that do not involve the camera; examples include the use of lighting, scrims and mirrors to change one's

perception of the architectural environment. Similarly, moving images on digital billboards can supplement and augment live activity, blurring the distinction between spectacle and spectator.

The design portion of this thesis will explore the potential of integrating architectural form with digital screens, commercial imagery and non-photographic images in the (re) formation of a key public space. The project, a cinema complex at the northern edge of Yonge-Dundas Square in downtown Toronto, is described further in the following chapter.

5 Design Investigation

Throughout this document I've examined the history, typology and changing nature of public space in order to understand its role in the contemporary North American city. I have also explored signage and images (moving and still) as they relate to the increased presence of advertising and televised spectacles in public places. Both to further this investigation and to test my observations, I have chosen to explore the design of a building at the northeast corner of Yonge and Dundas Streets in downtown Toronto. This site was chosen for its adjacency to the recently upgraded and image-enhanced Yonge-Dundas Square, which references Piccadilly Circus and Times Square in its approach to urban revitalization. My proposal for the vacant site to the north of the square consists of a vertical public space (leading to a series of cinemas with an associated café) through which one accesses a secondary public square that compliments the existing square. I will briefly describe the history of the Yonge-Dundas area, exploring demographic trends in the city to better understand recent developments. I will then introduce the design, describing the influence of existing conditions on the proposed form, function, program, and tenants.

Site Specifics: The City of Toronto and Yonge-Dundas Square

The Yonge-Dundas area is located in the heart of downtown Toronto. Predictably, its transformation over time can be related to a number of the factors we've discussed, namely the rise of suburbia and the grafting of the shopping mall into the urban

fabric. The area in and around Yonge-Dundas Square acts as a barometer, revealing key developments that affect the transformation of public space – both generally and related specifically to the City of Toronto.

Site History

In 1884, the Yonge-Dundas neighbourhood consisted of scattered churches in a fine-grained, densely arranged fabric of mixed residential and commercial uses (Fig. 30)⁶⁷. Then, as now, Yonge Street is the primary commercial thoroughfare, moving northward through the city. The street grid was straighter than it is today, absent the curve in Dundas Street that currently forms the northern edge of Young-Dundas Square. Dundas St. was bent when the streetcar was introduced into the city, giving the current square its unique shape.

As with most North American cities, Toronto's downtown core declined as portions of the urban population migrated to the suburbs, resulting in a loss of multi-use and multi-class districts. The effects of this can be seen in the numerous Toronto neighbourhoods now known, specifically and separately, for their low-income housing, business, fashion, entertainment, shopping, etc. The portion of Young St. between Queen and Bloor deteriorated significantly, although it remained an important commercial artery.

In 1955 a subway system was built to connect Toronto's downtown core to the developing suburbs. The configuration of the subway system, similar to the streetcar network, is significant to the site, as the Dundas station subway station is located at the corner of Yonge and Dundas Streets. Its position along Yonge St., coupled with its

⁶⁷ Martyn, Lucy Booth. The Face of Early Toronto: An Archival Record 1797-1936. (Sutton West, Ontario: Paget, 1982) Maps 9-10, 12-13.

location within two main transportation systems, made the site a prime candidate for the urban (global) node into which it is developing.

As early as the 1960s the City of Toronto began to look for ways to promote urban revitalization. This led to the construction of a variety of major tourist attractions around the city, including the CN tower, the Ontario Place theme park, and the Ontario Science Centre. It was at this point that large-scale department stores, shopping malls, and theatres began replacing the finer-grained buildings around Yonge-Dundas Square, as evidenced in the 1971 site map (Fig. 31). This reflects attempts to promote urban revitalization by adapting the suburban mall model to the urban context, as previously discussed. Arguably the most significant of these shopping complexes, the Eaton Centre, designed by Architect Eb Zeidler was completed in 1979. A portion of the Eaton Center faces onto what is currently Yonge-Dundas Square. The complex incorporates a variety of retail shops and office towers and is accessible from the street, the underground PATH⁶⁸ pedestrian walkway system and the subway. The Eaton Centre is organized as a modified barbell plan, based on the suburban mall model (which, ironically, was based on an a variety of urban precedents); its arcaded pedestrian spine recalls the open-air Galleria Vittorio Emanuele in Milan (Fig. 32, 33)⁶⁹. The four-block “façade” along Yonge St. was built without windows, as seen in the 1983 site map (Fig. 34). The mall’s success eroded the vitality of Yonge Street -- the internal circulation spine and interior connections to the subway and PATH systems encouraged a lack of connection with the surrounding context.

⁶⁸ Although PATH is not an acronym each letter is used to signify a cardinal direction where the user of the underground system can follow the letter that indicates which direction he/she wants to go.

⁶⁹ <www.torontoeatoncentre.com>

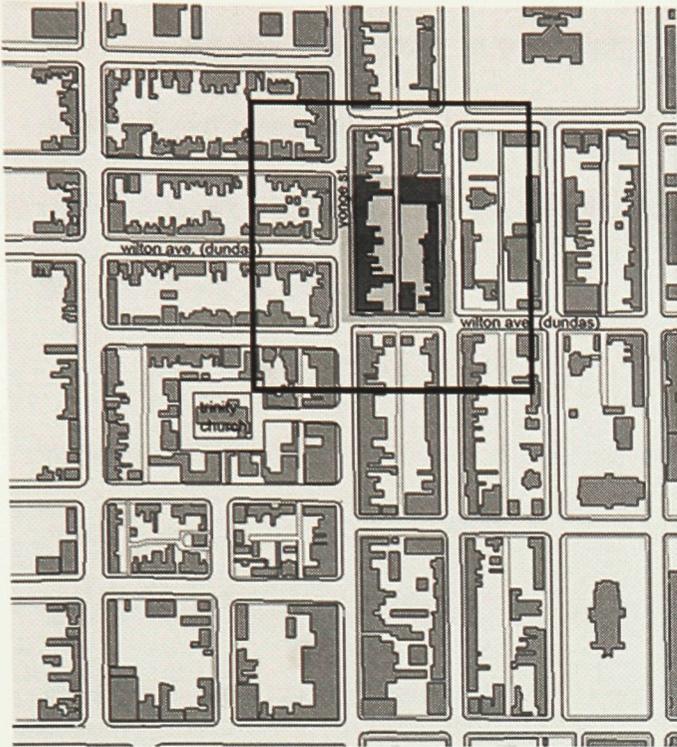


Fig. 30 - 1884 Site and Context Map
 Site map of Yonge-Dundas area compiled by author showing original fine-grained building fabric.

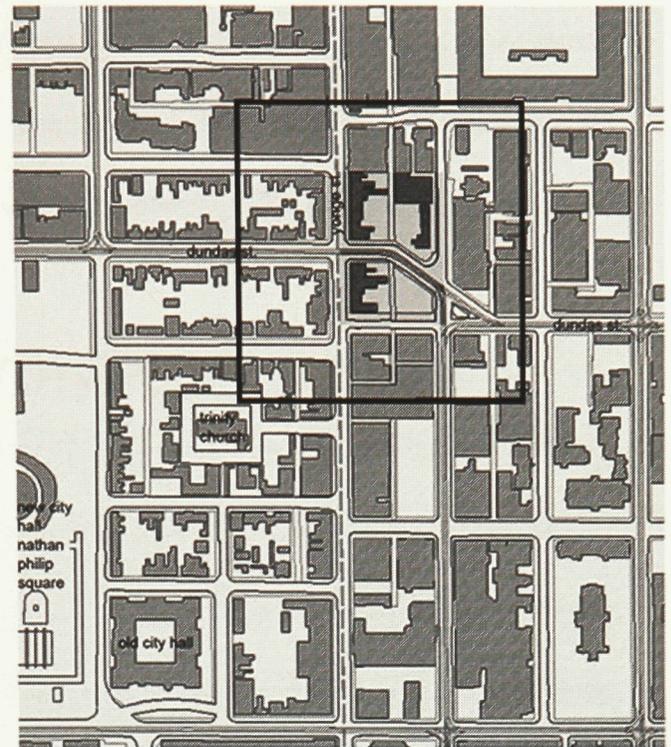


Fig. 31 - 1971 Site and Context Map
 Site map of Yonge-Dundas area compiled by author showing implementation of larger scale developments.



Fig. 32 - Galleria Vittorio Emanuele
 <www.greatbuildings.com>
 Galleria in Milan that the Toronto Eaton Center is modeled after.

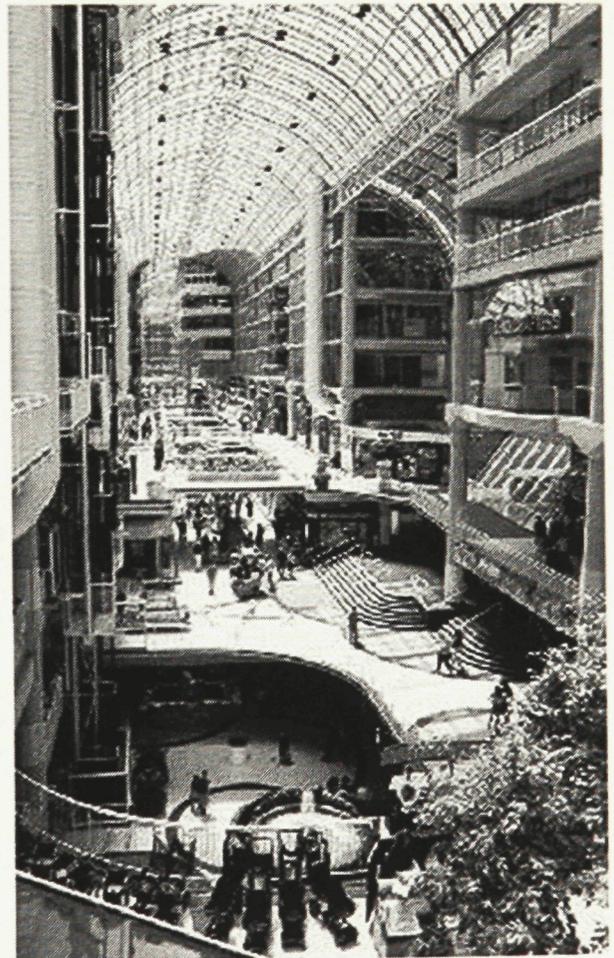


Fig. 33 - Eaton Centre Shopping Mall
 <www.bolts.net>
 Interior 'street' of the Eaton Center shopping mall.

As the mall grew in popularity, the quality of street life along Yonge Street declined and pawnshops, arcades, dollar stores and purveyors of discount clothing moved into the neighbourhood. In this respect the history of the Yonge-Dundas area parallels that of Times Square.

This state of affairs reinforced what planning professionals believed at the time, namely that urban shopping malls accelerated the decline in the quality of life on the city's streets and plazas. It reinforced the inevitability of decentralization and the decay of the urban core. This is not, however, what transpired – at least not in the way or to the extent that some planners feared. A combination of factors, not least of which was a reversal in demographic trends, has contributed to an increased synergy between the Eaton Centre and the street life around it.

City Development

Demographic trends help to explain the recent increase in residential construction in the urban core and, by extension, the revitalization of public spaces like Yonge-Dundas Square.

Typical of other urban centres in the past several decades, the downtown core of Toronto increasingly attracts young singles and childless couples. The 2001 census shows that singles and childless couples comprise 87% of the population in the area surrounding Yonge-Dundas Square, compared to an average of only 76.5% for the rest of the City of Toronto. Similarly, 45% of the population in the Yonge-Dundas area is between the ages of 25 and 44, as compared to 33% for the city as a whole (which has been amalgamated to include all of its original suburbs). Supporting these statistics, the percentage of the

population with a college level education or higher is 81% in the downtown core as compared to 56% across the city⁷⁰. These statistics reflect the trend for people to stay in school longer and wait longer to have families -- and the tendency for greater numbers of young people to remain in the downtown core for a longer period of time than in the decades following WWII.

These trends, coupled with relatively low interest rates (which dropped from 11.5% in 1991 to approx. 5.5% in 2006), have resulted an increase in residential construction in the downtown core. This new construction consists primarily of high-rise condominiums catering to this increasingly young population. The majority of the units being built are one-bedroom and bachelor apartments, geared toward first-time homebuyers. (see Fig. 35 for new residential development locations around the Yonge-Dundas area).

High-rise residential units offer smaller living quarters than suburban single-family homes and lack the private outdoor spaces associated with suburban housing. In this respect, urban public spaces must take up the slack -- acting as communal living rooms and front yards for urban denizens. This will become increasingly important given that the population of the City of Toronto is projected to rise by 8% in the next 25 years⁷¹. Increased pressure on Toronto's downtown core to house its growing young educated population means that nodes like Yonge-Dundas Square will become increasingly significant and have the potential to remain vital for years to come.

⁷⁰ <www.toronto.ca/demographics>

⁷¹ <www.toronto.ca/demographics>

Yonge-Dundas Square

In the 1990's, land around the Yonge-Dundas area was purchased by the City of Toronto, which demolished buildings (similar to the cutting away of the medieval city fabric in the Renaissance) to make way for the new public square and adjacent entertainment complexes. The construction of Yonge-Dundas Square, designed by the Toronto Architectural firm of Brown and Storey Architects, began in 1999; the Square was officially opened in November of 2002 (Fig. 36, 37).

Opening up a city block in this particular location had many advantages; its relationship to various transportation systems, its proximity to a major shopping centre reinforced its potential to function as an urban node. In addition to providing a focus to an important shopping district, the square helps define the boundaries of the Ryerson University campus, adjacent to the northeast. The university has 25,000 full-time and 61,000 continuing education students, many of whom travel through and by the square en route to and from campus. In addition to students, many other types of visitors arrive at and leave from the square via the subway station, resulting in an estimated 20 million people annually that start or end their subway journeys there. Moreover, given that the square sits at the intersection of two major streets, an estimated 14 million car passengers drive by the square every year. The net result is an estimated 56 million people visiting the square yearly, whether for work, school, shopping or entertainment⁷².

Brown and Storey Architects designed Yonge-Dundas Square as a hard landscaped piazza incorporating water fountains, a stage, access to the subway station,

⁷² < <http://www.penequity.com/pdfs/Metropolis.pdf> >

underground parking, a rush ticket booth and a covered colonnade meant to maintain a sense of human scale against the large-scale imagery surrounding the square. The shape of the square is a bit amorphous, with no central focal organizing element, and it is neither grouped with another square nor dominated by one particular building. However, as a void within the city fabric, the square has the ability to be used in a variety of ways, and given the fluid circulation at its periphery, it has the typological/functional characteristics of a market square (see Fig. 13).

That said, the activities that take place within the square are varied, reflecting its nature as a space managed through a public-private partnership (comprised of the City of Toronto in conjunction with private business and residential communities including the Downtown Yonge Business Improvement Area group⁷³). The square accommodates organized events, such as concerts, markets, and promotional events staged by private companies and corporations. In the summer months, feature films are projected onto the facades of the surrounding buildings of the square, turning it into an open-air movie theatre. The events are managed and organized by a volunteer Board of Management appointed by the Toronto City Council including local business and community leaders and City of Toronto representatives. The range of activities illustrates the square's dual focus on private and public interests. In this way, Yonge-Dundas square provides public gathering space for events and spectacles at a location that is easily accessible through a variety of transportation modes.

Following in the footsteps of Times Square and Piccadilly Circus, Yonge-Dundas Square is currently in the process transforming itself from an urban node into a global one

⁷³ <www.ydsquare.ca>

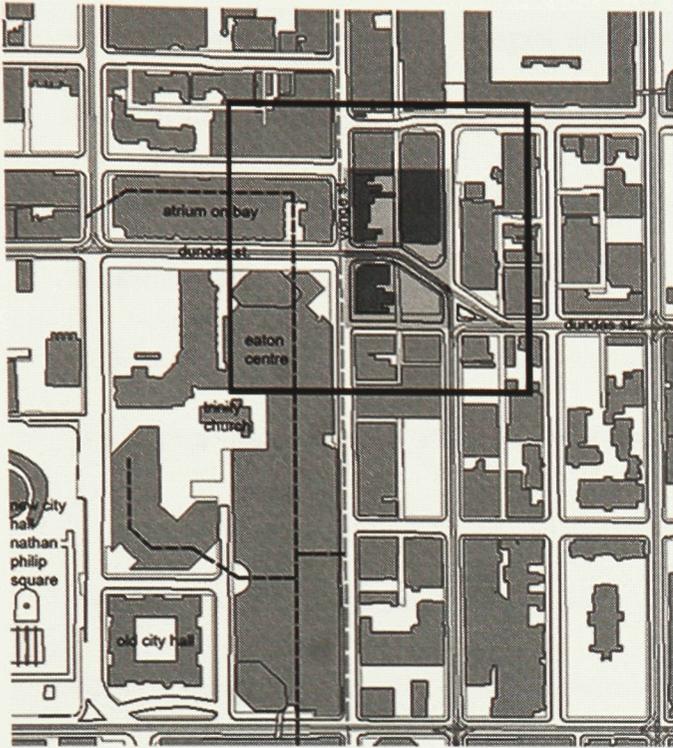


Fig. 34 - 1983 Site and Context Map
Site map of Yonge-Dundas area compiled by author showing location of the Eaton Centre shopping mall.

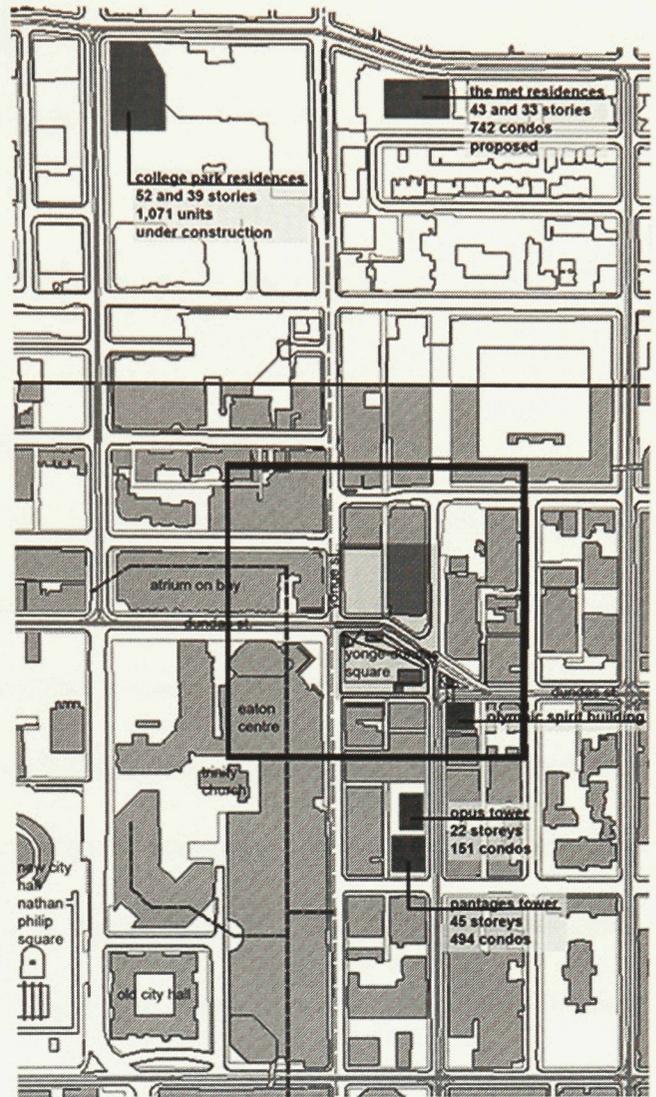


Fig. 35 - 2005 Site and Context Map
Site map of Yonge-Dundas area compiled by author showing newly created Yonge-Dundas Square and new residential developments.

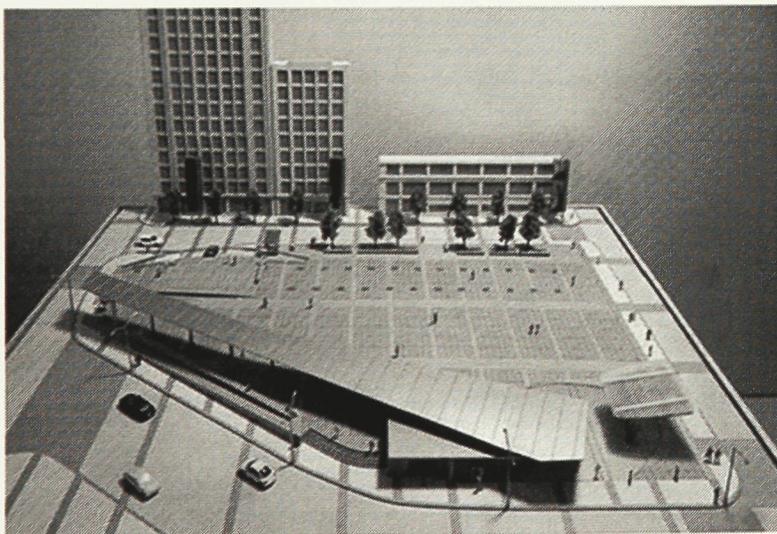


Fig. 36 - Yonge Dundas Square (Brown and Storey design model)
<www.browinandstorey.com>
Design model of Yonge-Dundas Square from designers web site.

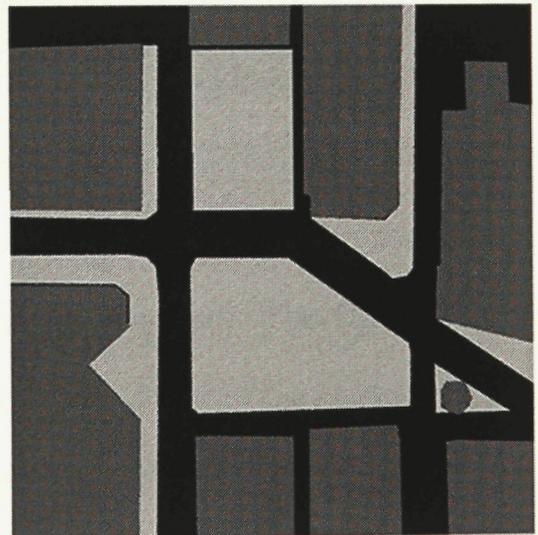


Fig. 37 - Yonge-Dundas Square - Figure Ground Plan
Part of figure-ground study conducted by author of Yonge-Dundas Square and area.

-- replete with large-scale images and screens, mostly commercial in nature (companies include Labatt Blue, LG electronics and the GAP). However, the buildings surrounding Yonge-Dundas Square are lower height than those surrounding Times Square. In order to accommodate large-scale images, then, structures have been erected atop existing buildings (and new buildings are being built to incorporate the same types of structures) to produce a false sense of height and enhance the square's boundaries.

The first structure of this nature is an assemblage of scaffolding (known as the 'media tower') located on top of a three-story GAP store on the northwest corner of the square (Fig. 38). This tower incorporates images on still and mechanical billboards, sculpture, and a digital screen that rises an additional four stories above the building to a total height of thirty-five meters. Billboard structures being erected around the square also aim for a total height of thirty-five meters, as exemplified by the new Olympic spirit building, the proposed *Metropolis* complex, and the renovations to the Eaton Centre facade.

As a part of the City of Toronto-initiated Yonge Street revitalization project, (which included the development of the Yonge-Dundas Square), the Eaton Centre's Yonge Street façade was renovated to open it to the street by adding a number of new grade-level entrances (Fig. 39). Similarly, atop of the corner of the Eaton Centre that faces the new square, a scaffold support structure akin to the 'media tower' was built to accommodate large-scale billboards and digital screens (Fig. 40). The Olympic Spirit building, an Olympic museum that opened in 2004, is located off of the southeast corner of the square and incorporates both a scaffold support for billboards and a digital screen,

strategically marketed as the ‘torch on Dundas’ by the developer of the complex, PenEquity (Fig. 41)⁷⁴.

The images and screens that have been used to supplement the physical boundaries of the square also allow it to “expand” into a global node, through an association with Times Square and Piccadilly Circus. However, they have been accommodated in a way that suggests a parasitic relationship with the surrounding architecture by being attached onto it through the use of scaffolding structures. This produces a false sense of height and density around the square and due to the scale of the media imagery transforms the existing architecture into podiums and support structures for the benefit of better image visibility.

Currently, the two main mechanisms for broadcasting images into the square are mechanical billboards, which are purely commercial in nature, and digital screens, which may be used in a variety of ways (but are currently used mostly for advertising). Digital screens have the potential to be used for non-commercial purposes and can therefore create a variety of visual exchanges with the visitors in the square. The digital screens around the square can be transformed into ‘jumbotrons’ in the event of a concert or celebration (similar to the jumbotrons in large sports arenas), by broadcasting live events in the square at a spectacular scale. Similarly, cameras can be directed at the public, inter-cutting images of performers with images of unknown individuals and blurring the relationship between spectacle and spectator (as discussed in the previous chapter). In addition to their use to create or enhance spectacles, the digital screens of Yonge-Dundas Square are used to broadcast news, information and community events, and are,

⁷⁴ <www.downtownyonge.com>

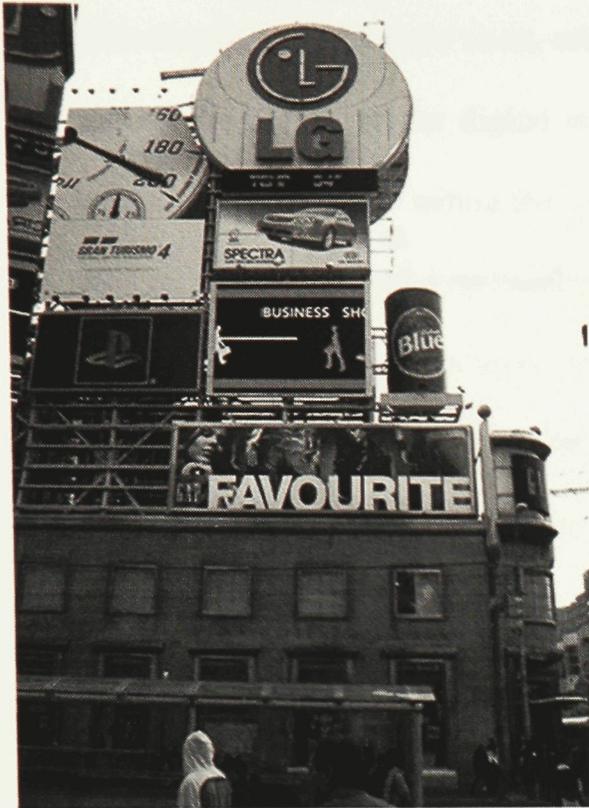


Fig. 38 - GAP Media Tower
 Site photo taken by author showing existing media tower in a parasitic relationship to the existing GAP building looking onto Yonge-Dundas Square.



Fig. 39 - Eatons Centre Street Facade (post-renovation)
 <www.downtownyonge.com>
 View of Yonge street Eaton center facade renovation that attempts to re-initialize a more porous and lower-rse street facade.

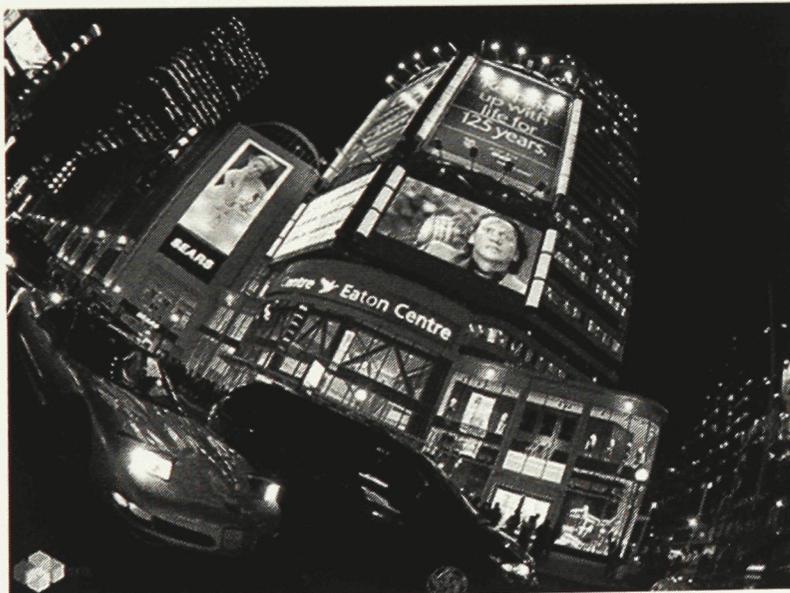


Fig. 40 - Eatons Centre Media Facade (post-renovation)
 <www.Oxte.com>
 Renovated Eaton Centre facade incorporating scaffolding for media imagery looking onto the new Yonge-Dundas Square.



Fig. 41 - Olympic Spirit Building 'Torch'
 Site photo taken by author showing existing media 'torch' in a parasitic relationship to the Olympic Spirit building looking onto the Yonge-Dundas Square.

periodically, used to show short, artistic films. Given the variety of activities held in the square, the ability of the digital screens to be used for various purposes enhances the square's public-private nature that allows it to be both a place of security and regulation as well as a place of public spectacle and celebration. Therefore I believe the ability for a 'time-sharing' of image location, where both private and public interests can be broadcast is a step in the right direction for contemporary public space, a direction that acknowledges the need to maintain public interests within a public/private space.

Metropolis

A new development called the *Metropolis* is being constructed in the vacant lot directly north of the square-- on the site I have chosen to use for my design proposal. Like other recent developments, it incorporates a support structure for images. While, for the purposes of the thesis, I will assume the *Metropolis* will not be there, it is helpful to describe the project in order to understand the differences between what is being proposed for this site and my own proposal.

The complex, being developed by the PenEquity Corporation, will be a four-story structure comprised of movie theatres, a museum, retail shops and restaurants (Fig. 42, 43)⁷⁵. A scaffolding to support billboards will be built atop the building, with not inhabitable space behind -- bringing the height of the complex to the now-standard 35 metres. Therefore it will be built to incorporate a parasitic type of relationship between architecture and large-scale media imagery, as the images will be applied to the building

⁷⁵ < <http://www.penequity.com/pdfs/Metropolis.pdf> >

in a way that renders it a support structure for them allowing them to take over the façade of the building.

A parking garage for Ryerson University occupies the adjacent site, to the east of complex, also facing onto the square. In order for the new complex to take full advantage of the exposure onto the public square it negotiated with Ryerson to buy the air rights to the parking garage. The new complex will thus be built over and around the parking structure, hiding it from the square. In exchange, the *Metropolis* will allow the University to use the cinemas as lecture halls during the weekdays⁷⁶, resulting in a partnership that takes advantage of the existing site context by accommodating a variety of user groups. I hope to maintain and further emphasize this attitude toward the sharing of program in my own design proposal.

Different than the proposed building, however, I wish to explore the possibility of an integration (rather than a parasitic relationship) between image and architecture. Additionally, the design portion of the thesis will be used as to test a variety of other observations about public space made throughout this document. These are discussed below.

⁷⁶ Amborski, David. "Chapter 10: Ryerson University and Toronto's Dundas Square Metropolis Project". <http://www.lincolninst.edu/docs/221/342_10.%20Amborski-rev2.doc>

Design Development

Contextual Considerations

At the outset I considered a number of contextual conditions, among which was the need to accommodate a certain amount of commercial imagery in the form of digital screens and billboards, and the need to build the edge to a height of thirty-five-metres. It was my goal to accomplish this in a way that was both appropriate to the site and acknowledged the unique nature of the façade as an edge to a major public square. Again, the major consideration was the integration of architecture and image (rather than further promoting the existing parasite relationship between them seen around the site) that would take advantage of the spatial potential of architectural form along a vital public square and facilitate the need for its façade to be used to broadcast large scale media imagery into that same square. In addition to this, I wished to respect the typical low-rise building height along Yonge St., (originally disrupted by the Eaton Centre, but now re-established through its renovation). Maintaining commercial retail at street level was also a priority.

In addition to these physical site considerations, the programmatic context of the surrounding area was also important, i.e., the variety of entertainment and commercial uses (shopping malls, stores, restaurants and live theatres, etc.) in the immediate area. Because the site is located in a major shopping and entertainment district, the program incorporates shops along Yonge Street, and cinemas along Dundas. A cinema complex was chosen not only for its entertainment focus, but to reinforce the use of image as spectacle, complementing the surfeit of images already present the square. As with the

Metropolis proposal, a cinema complex also allows for a sharing of program between commercial and institutional usages.

Form

As noted, the primary formal concern of the design proposal was to promote a meaningful dialogue between architecture and image – exploring alternatives to the parasitic scaffolding strategies common around the square.

Therefore, whereas the surrounding buildings use scaffolding as parapets to augment their height, my goal was to design a structure that both matched the existing context height and was fully inhabitable. In the tradition of the porticos of the Roman Forum and the circulation tubes of the Pompidou Centre, I developed the façade as a circulation space, setting up a visual dialogue between those who inhabit it and the inhabitants of the square. This is in marked contrast to other buildings around the square, most of which have no visual connection with the square except at street level (this includes the Eaton Centre). Permitting the façade to be occupied allows for views from a multitude of vantage points from within the proposed circulation structure – views that are not available elsewhere on the site.

The need for a tall structure facing into the square (as the building's main façade) and a lower structure along the Yonge St., suggested two separate, yet interconnected elements. These took the form of a shallow, virtually freestanding facade facing south onto Yonge-Dundas Square, and a low-rise commercial structure along Yonge Street.

Behind the façade and atop the commercial space I developed a secondary public square. This allows Yonge-Dundas square to be transformed into a grouped square with

the ability for a dynamic sequence of views and vistas from one to the other. I also incorporated the cinemas program. In this way circulation through the façade leads up to the cinemas located above the existing Ryerson parking garage. The narrow, transparent facade orchestrates a procession up to the cinemas, putting cinema-goers on display while providing them views both out to Yonge-Dundas Square and into the secondary public square to north.

Functions, Program and Tenants

As noted, public-private partnerships have become increasingly common as a means of maintaining a certain level of safety and visitor appeal in public spaces. Accordingly, my proposal includes a number of these partnerships, mirroring the public-private nature of the square itself. Business interests would provide the necessary economic stability for such a proposal, while allowing for programs that have both daytime and night-time functions. In this way the tenants of this proposal include: the City of Toronto, the Art Gallery of Ontario, Ryerson University, the Toronto Theatre Alliance, a private Cinema owner, and private retail tenants. Each would have a varying stake in a variety of programmatic elements, including a main public circulation structure, a commercial complex, a secondary public square, a half-price ticket outlet, cinemas, and a café space.

Circulation Ramp Structure:

(City of Toronto/ Art Gallery of Ontario/ Private Commercial Groups)

As the most prominent component of the design, the main circulation structure consists of a switch-back ramp parallel to Dundas St. This structure is an integral part of the building's main façade, and its scaffold-like language speaks to the existing site context. This structure orchestrates a series of visual exchanges with the public squares to either side of it, and metaphorically mirrors them to become a vertical public space of its own. This portion of the proposal would be the most able to facilitate a variety of types of images that would be integrated with the architecture, changing from ones that are commercially focused, to those produced by the inhabitants of the building by way of shadows, rendering the relationship between image and architecture less parasitic and more reciprocal. This part of the structure is also significant in that it allows for a public inhabitation and views into the public squares not available on the site in the present, or in the Metropolis complex proposal. In this way the structure takes on a variety of roles as follows:

Backdrop, Billboard, Stage and Landmark

As a building to be **looked at**, the circulation structure acts as a landmark within the main square, a backdrop to it, a billboard to enhance its physical boundaries, and a stage.

As a stage, this structure takes cues from live theatre construction, operating as a Roman *sceanae frons* in which the building's users become actors for viewers in the squares below. This function as a stage can be augmented with the use of digital screens

as 'jumbotrons,' broadcasting large-scale images of the structure's inhabitants into both squares.

Similarly, as a billboard or backdrop, the use of large-scale commercial imagery as well as digital screen technology allows the building to relate to the existing context by supplementing its architectural characteristics with images -- designing the northern edge of the square in a site-appropriate way.

By carefully deploying materials, it is my hope that the structure may alternate between stage and billboard depending on the time of day, producing changing façade conditions through both digital and architectural mediums. And by integrating digital media with architectural materials the building can blur the relationship between spectacle and the spectator (as discussed with respect to cinema and theatre). Where architecture is concerned, a louver system is used to wrap the corner of the ramp structure. When closed, this system can be used as a mechanical billboard; when open it reveals the ascending ramp and its occupants (Fig. 48- 49). Similarly, large-scale images printed on scrim material can be attached to the edge of the structure opposite the louver system, facing into the secondary public square. Depending on the position of the louvers and how much light they permit to pass through the structure, the images will appear more or less visible (Fig. 46 – 47).

To emphasize its function as a landmark, the west corner of the commercial complex is pulled away from the circulation spine, transforming it into a tower-like object in the form of a thick, freestanding façade. This portion of the structure can be read in association with the GAP 'media tower' (located to the west), forming a gateway to define the movement into and out of the square from Yonge Street.

Grandstand

As a space to be **looked from** the circulation structure blurs the relationship between viewer and viewed, between spectator and spectacle by oscillating between stage and bleacher. The winding ramp functions as a vertical grandstand/box seating from which to view spectacles in the square. When events are over, the relationship again reverses and people moving up and down the ramps again become the spectacle.

Threshold / Framing Device

Being only partially enclosed, the circulation structure also functions as a mechanism to be **looked through** -- forming an ambiguous and provisional edge to the squares it separates and helps to define. Moreover the thin, transparent nature of the structure not only permits views through it, but also acts as a threshold or gateway through which to pass to access the secondary public square. This secondary space, in turn, is seen from Yonge-Dundas Square as if though a proscenium arch – up one level and accessible from the street both via the ramp and a main staircase. This staircase passes under the ramp structure, perpendicular to the façade. Wide steps and landings allow this staircase to function as a stoa, stoop, porch, bleacher, and/or space to be ‘on’ as well as a route ‘through.’ As one moves up and down the stair – passing from one square to the other -- views of the surrounding context are framed by the ramp structure.

The circulation structure would be maintained through a public-private partnership between the City of Toronto, the Art Gallery of Ontario, and retail tenants. Accordingly,

as a structure embracing a scaffold-like role within the square it could be used to project/display a variety of types of images, using various materials and mechanisms (e.g., glazing, scrims and screens). This would give the Art Gallery the ability to take over the façade at certain times for digital media installations, providing it greater public exposure (for which it has recently turned to architect Frank Gehry⁷⁷) and a presence on Yonge-Dundas Square⁷⁸. Similarly, private interest groups could rent the façade to display commercial imagery (whether through projection, mechanical billboards or digital screens), as is the case elsewhere around Yonge-Dundas Square.

The position of the secondary, supplementary public square permits the main ramp portion of the building to become a truly public space – detached as it is from adjacent buildings. Being freestanding above the first floor, it is primarily a vertical promenade for walking, sitting and viewing. The ramp also acts as a vertical transitional zone, connecting the underground subway exit to the street and onward up to the theatres and cafe space.

The additional programmatic elements of the project are described below.

Commercial Complex and Secondary Public Square:

(Private Investors, City of Toronto and the Art Gallery of Ontario)

The supplementary public square – to the north of the façade atop the retail spaces along Yonge St. -- adds an additional dimension to Yonge-Dundas Square. As noted, the two spaces are connected via a stair running perpendicular to the primary façade. This secondary space represents both an extension of and a counterpoint to the main public

⁷⁷ <www.ago.net>

⁷⁸ The Gallery is located on Dundas St, several few blocks west of the site.

square. It is designed to be reflective in nature – a sculpture garden incorporating seating, water elements, soft landscaping, and installations curated by the Art Gallery of Ontario. The square is envisioned as a smaller version of Bryant Park -- a green, soft landscaped, space just off of Times Square. Like the vest-pocket parks scattered throughout Midtown, Bryant Park has become a refuge from the hustle and bustle of Broadway, (Fig. 44).

To play up the metaphorical connection between the two squares, however, digital screens are attached to one of the walls of this secondary space, allowing images of the main square to be projected into it. This is reminiscent of the Brasserie project by architects Diller and Scofidio, in which digital surveillance technologies transmit images of people who entering at ground level into the, which is located in the windowless basement level of the same building (Fig. 45 – brasserie, Fig. 46-47 – computer model rendering of secondary square, Fig. 48-49 – computer model rendering of front façade).⁷⁹

T.O. Tix Ticket Booth:

(Toronto Theatre Alliance/ Cinema Owner)

An additional programmatic element is deployed to activate the ramp structure during the day, when the cinema complex is being used (via a separate entrance) by Ryerson University. This is a rush ticket booth or “T.O. Tix” booth run by the Toronto Theatre Alliance group. The booth, which is currently located within the square proper, sells last-minute tickets for various live theatres show around the city during the day –

⁷⁹ Dimendberg, Edward. “Blurring Genres.” Scanning: The Aberrant Architectures of Diller + Scofidio. Ed. Aaron Betsky et al. New York: Whitney, 2003: 67-80.

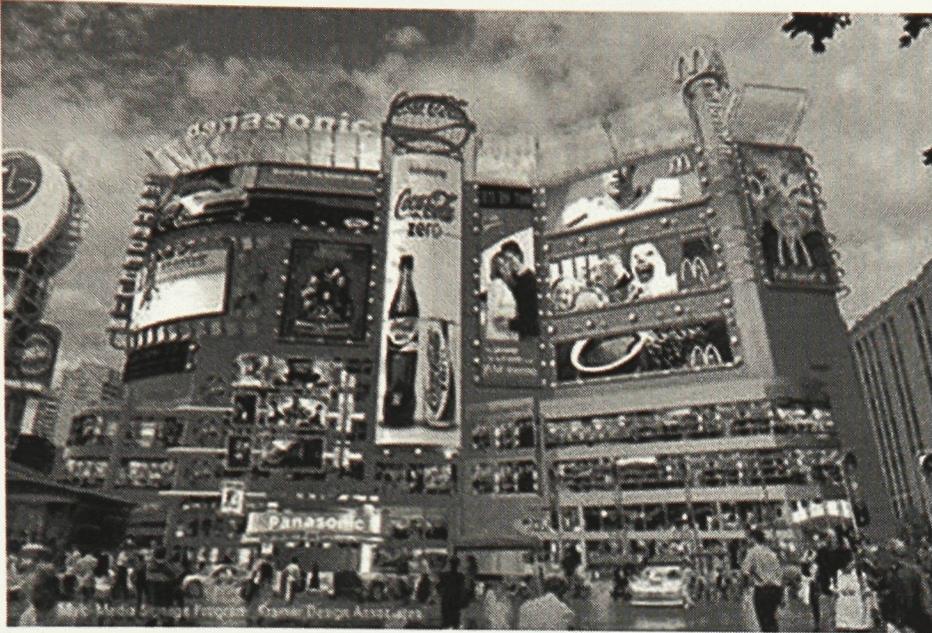


Fig. 42 - Metropolis Proposal
<www.penequity.com>
Computer rendering of proposed Metropolis complex to be situated on the vacant lot across from the Yonge-Dundas Square.



Fig. 43 - Metropolis Proposal
<www.penequity.com>
Computer rendering of proposed Metropolis complex adjacent to the Yonge-Dundas Square.



Fig. 44 - Bryant Park, NYC
<www.pps.org>
Greenscaped public square that counterpoints the adjacent "Times Square" environment.

similar to the TKTS booth in Times Square. I am proposing that the booth be moved into the ramp structure and that it double as a ticket booth for the cinema in the evenings. The existing booth in the square would then be changed into a seasonal concession stand. The new booth would be suspended as an object within the ramp system, above the main stair. This new location affords would-be ticket buyers a more dynamic queuing experience, providing unique views onto the squares below and transforming them in to a spectacle for passers by. Also, a digital screen attached to the ticket booth will allow ticket buyer to view up-to-date listings of what is available as they ascend. This multi-functional ticket booth would guarantee that the ramp structure stays active in different ways throughout the day.

Movie Theatres:

(Cinema Owner and Ryerson University)

Consistent with the *Metropolis* proposal, a cineplex and associated café space -- the primary programmatic element associated with the circulation ramp -- is located four stories up, atop the existing parking garage adjacent to the site. Cinema goers can also promenade down the ramp when exiting the theatres, with the option of exiting through the secondary public space by means of a stair leading off the ramp.

As noted, these theatres would be used by Ryerson University students during the day for lectures, and be given over to the public at night. In this way a digital screen located on the façade of the theatre space could be used to broadcast information regarding educational lectures during the day, and to showcase the movies playing in the theatres at night, connecting changing program with the site. This portion of the façade is

adjacent to the ramp structure and is expressed as a clipped on curved surface from which images can be attached or projected. Similarly, this screen could be used, to broadcast the images of theatre patrons, as they enter and exit the cinemas -- in the spirit of the Brasserie project -- as one possible example of the blurring of spectator and spectacle (Fig. 49).

Café Space:

(Cinema Owner/ Art Gallery of Ontario)

A café space is accessible from the cinema complex, extending into the upper level of the ramp structure. The café, accessible by the ramp during the day without having to go through the theatre complex, benefits from unique views out to both squares, and provide interior public gathering space for events/exhibitions staged by the Art Gallery of Ontario. At night the café façade can be turned into a shadow theatre, casting shadows of café patrons onto the surface of the façade to be seen from the square below (Fig. 49).

(see Figures 51 – 55 for building plans and site section, and Table 1.1 for image, materials and time of day design specifics)

As an ensemble, this combination of threshold, billboard, stage and grandstand engages surface as spectacle in a way that encourages a continuous exchange between the public, the site and the programmatic stakeholders. While consistent with other usages around the site (existing and proposed) it attempts to improve on and make explicit the idea of exchange – between uses, users, spectators, performers, roles, images, technologies and architecture.



Fig. 45 - Brasserie Project (Diller and Scofidio)

Dimendberg, "Blurring Genres", Scanning: The Aberrant Architecture of Diller + Scofidio.

View of the bar in Diller + Scofidio's 'brasserie' project of monitors showing the front entrance doors.

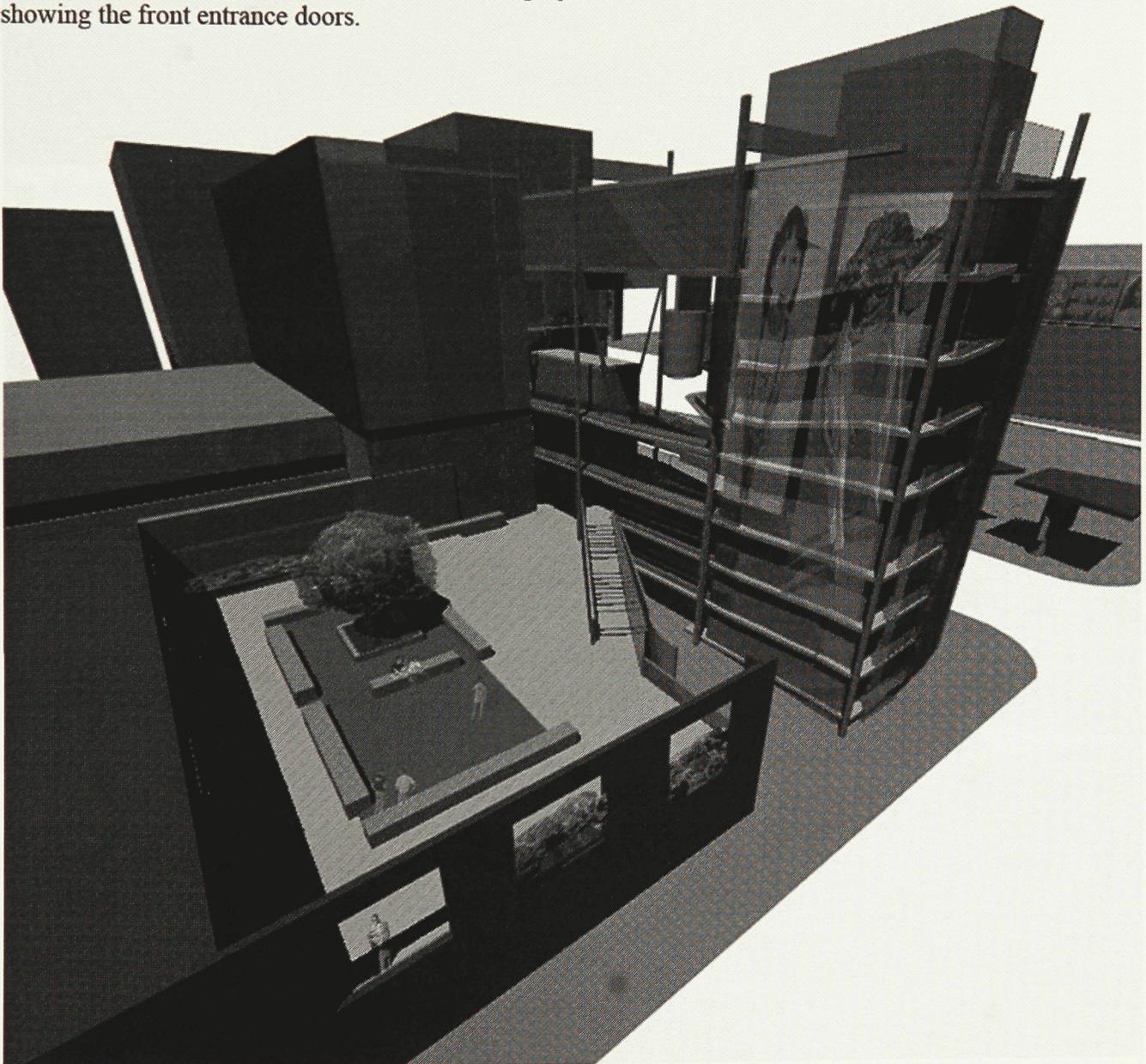


Fig. 46 - Computer Model - aerial view of secondary square
Rendered view of proposal for design portion of the thesis.

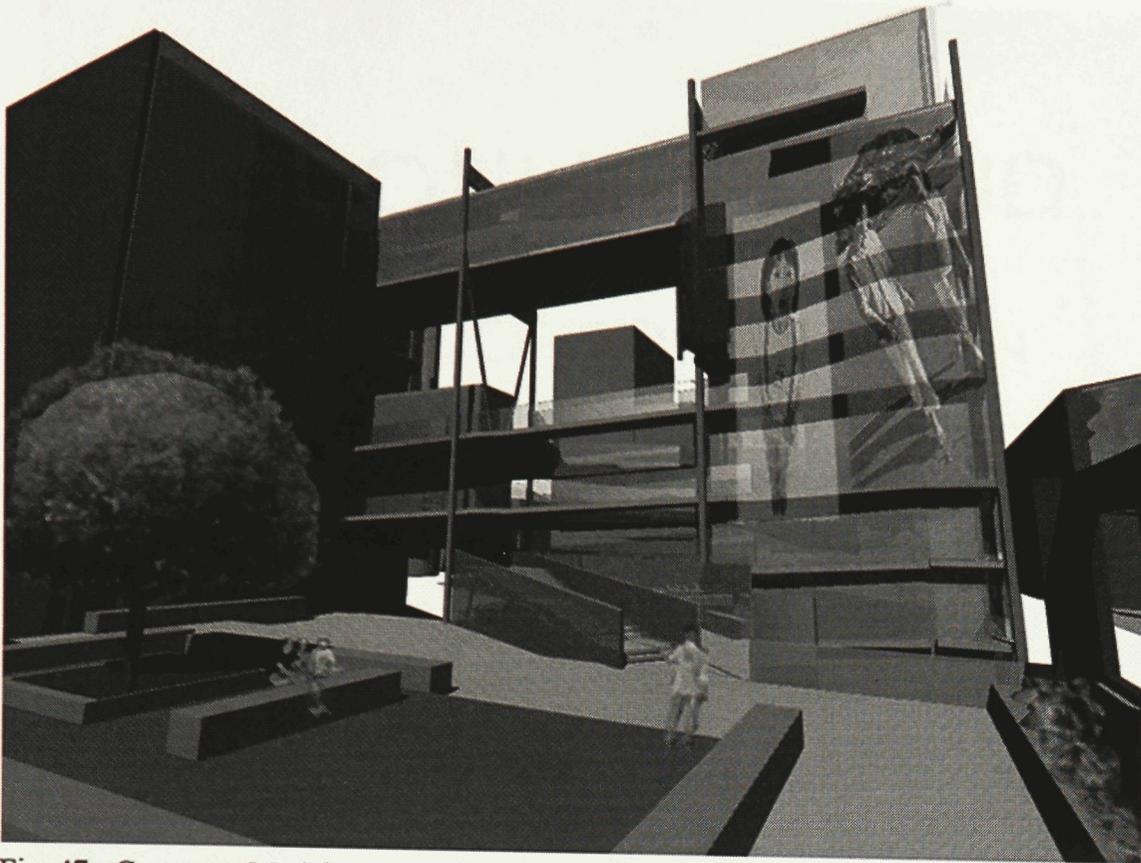


Fig. 47 - Computer Model - perspective of secondary square
Rendered view of proposal for the design portion of the thesis.



Fig. 48 - Computer Model - view of front facade
Rendered daytime front view of design proposal.

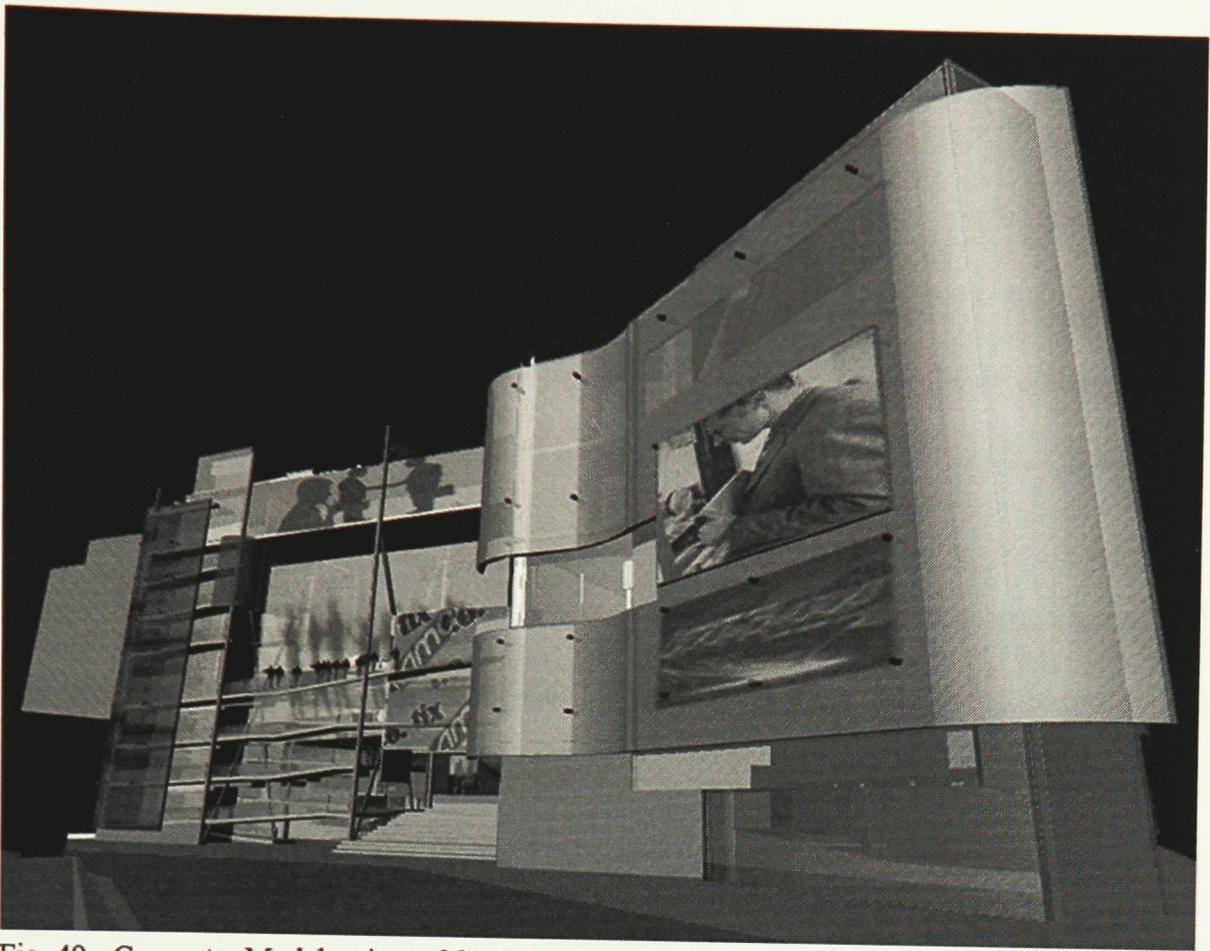


Fig. 49 - Computer Model - view of front facade at night
Rendered night-time view of design proposal.



Fig. 50 - Computer Model - view of corner tower during the day
Composite image by author of rendered image from computer model and site photo.

6 Summary and Conclusion

An examination of precedents suggested that that urban public spaces have long functioned as socio-economic barometers, mirroring the societies that produced them. While predominately commercial in nature (with several notable exceptions), urban public spaces facilitate social and economic exchanges between non-intimates. They are the “rooms” of the public realm.

We explored the variety of ways that architecture has been used to define these spaces – the kind of edges possible. This investigation revealed a range of different kinds of boundaries between interior space and exterior public spaces, ranging from porous and transitional to definite. As building construction technology has developed over time, notable buildings (predominantly art institutions) have used materials and structural systems to inventively articulate their relationship to adjacent spaces and the city at large. We noted the ways in which Jean Nouvel used glazing to explore transparency and reflectivity in the Cartier Foundation. The freestanding glass façade transforms continuously as light conditions change throughout the day. Similarly, using an exo-skeletal structure, the Pompidou Centre creates a porous relationship between its façade and the public space onto which it fronts. By hanging the vertical circulation on the façade, the architects set up a series of exchanges between visitors inside the museum and those on the plaza outside.

In Chapters 3 and 4 we looked at the factors influencing urban public space within the last century – particularly in North America. We noted a decline in the vitality of urban public spaces as a result of suburban growth, facilitated by increased use of private

transportation and the development of new telecommunication technologies. In an attempt reverse creeping urban blight; shopping malls were grafted into urban centres – the initial result of which was to exacerbate the problem. Further decline was in part due to the success of the shopping mall, which internalized and privatized public space – pulling people off the streets. This public-private approach was subsequently applied to the city’s open spaces, the vitality of which has benefited from recent changes in demographic trends. In key examples, the public-private husbandry of urban spaces manifests itself in the presence of large-scale imagery, primarily commercial in nature.

Commercial imagery in the form of billboards and digital screens is used increasingly in open public spaces to supplement and animate existing architectural facades, to promote spectacle, and to establish global connections. Given the right combination of other factors, images can transform key public spaces from urban nodes into global ones, tapping into the international consumer market via signage and advertising, reflecting our society’s obsession with change, transforming spaces into techno-enabled socio-economic barometers of our time.

The increased demand for imagery means that buildings around many public spaces are increasingly asked to accommodate screens and billboards – to be used as scaffolding and/or podiums for large-scale signage. In this context it is important for architects to embrace (or at least address) this situation and consider the ways in which architecture and image might be integrated – ideally enhancing the spatial potential of architecture with a variety of types of images and technologies.

These considerations informed my approach to the design of a structure facing onto an ‘image-enhanced’ square in downtown Toronto. As an extension of the written

portion of the thesis (i.e., embracing design as form of research), I chose to design a building for Young-Dundas Square to more fully investigate the changing nature of contemporary urban public space within a global North American city. The design attempts to promote a non-parasitic relationship between architecture and image, taking advantage of the sites proximity to an emerging global node. Therefore, the primary design element of the proposal functions as a billboard, backdrop, stage, landmark, threshold, framing device and grandstand -- engaging and extending the squares below.

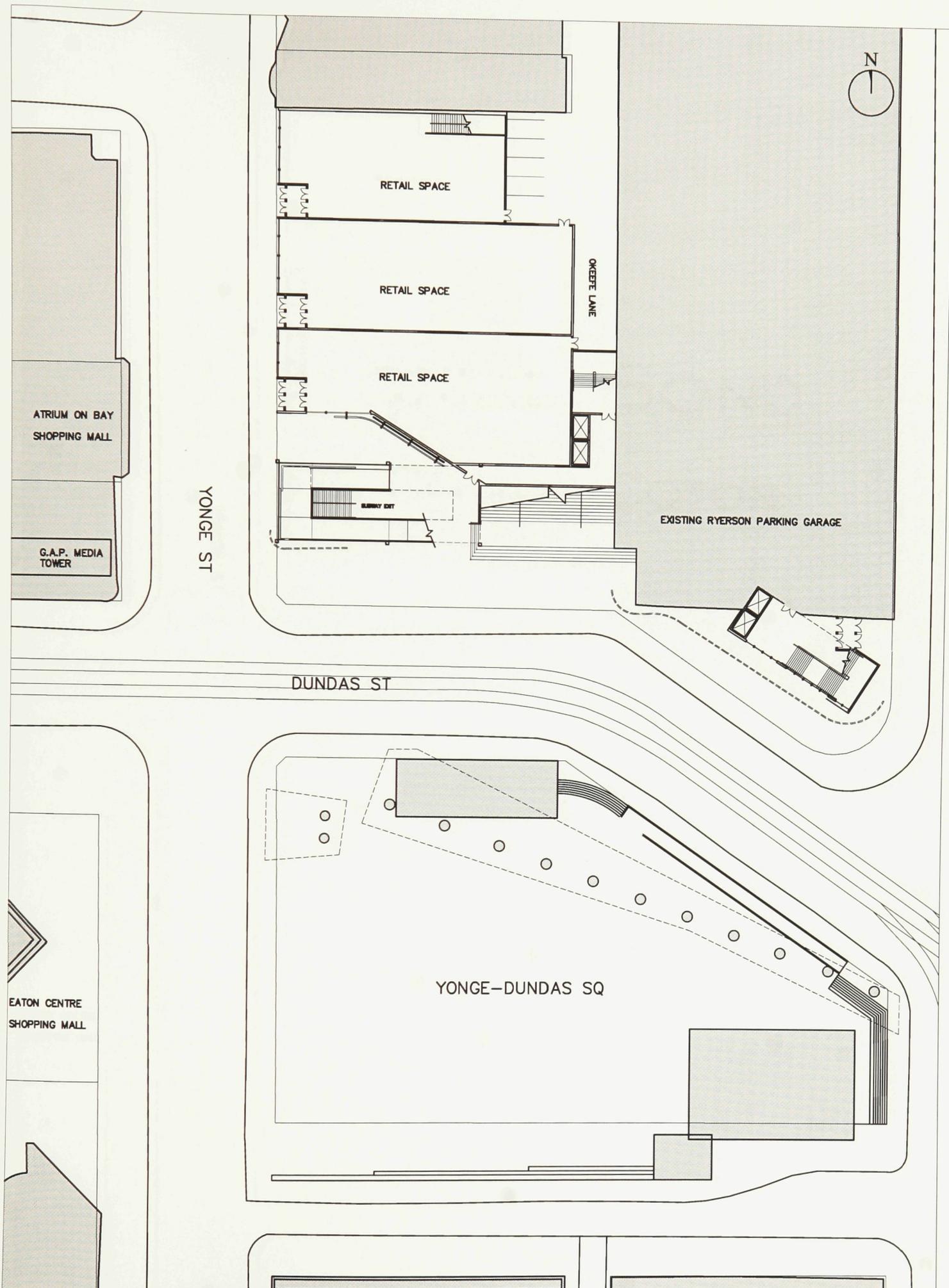


Fig. 51 - Ground Level Plan (1:700)

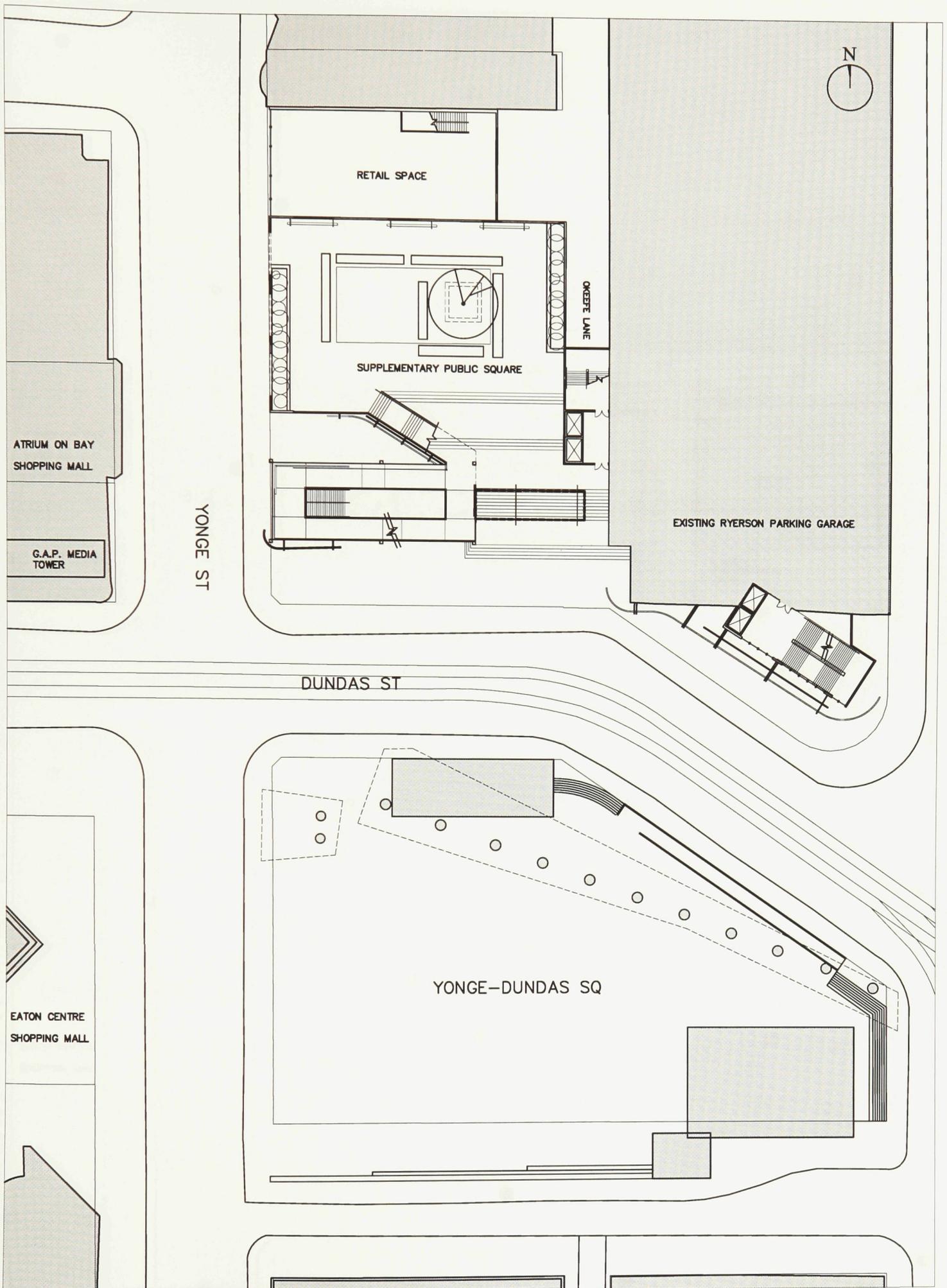


Fig. 52 - Level +1 Plan (1:700)

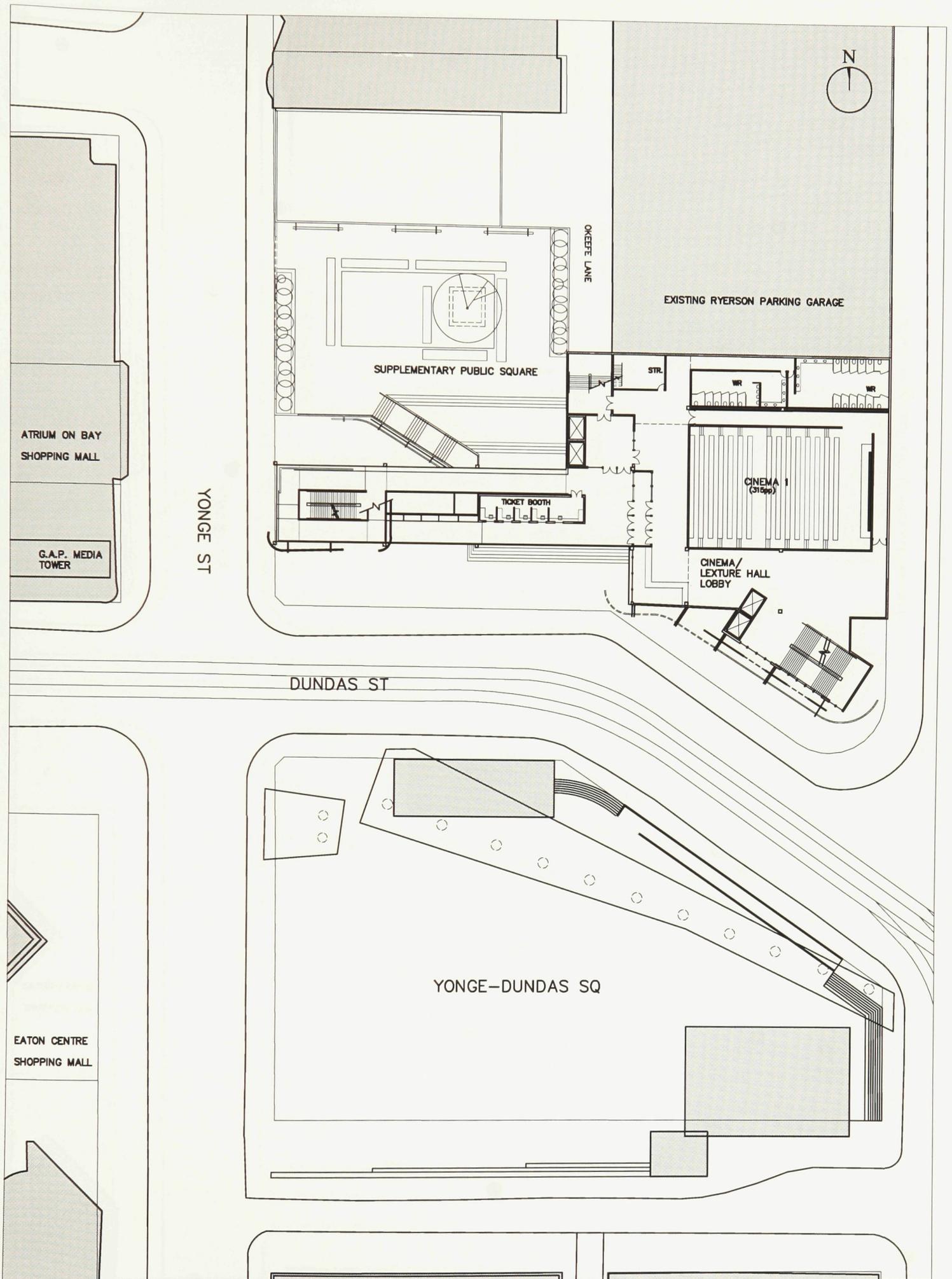


Fig. 53 - Level +4 Plan (1:700)

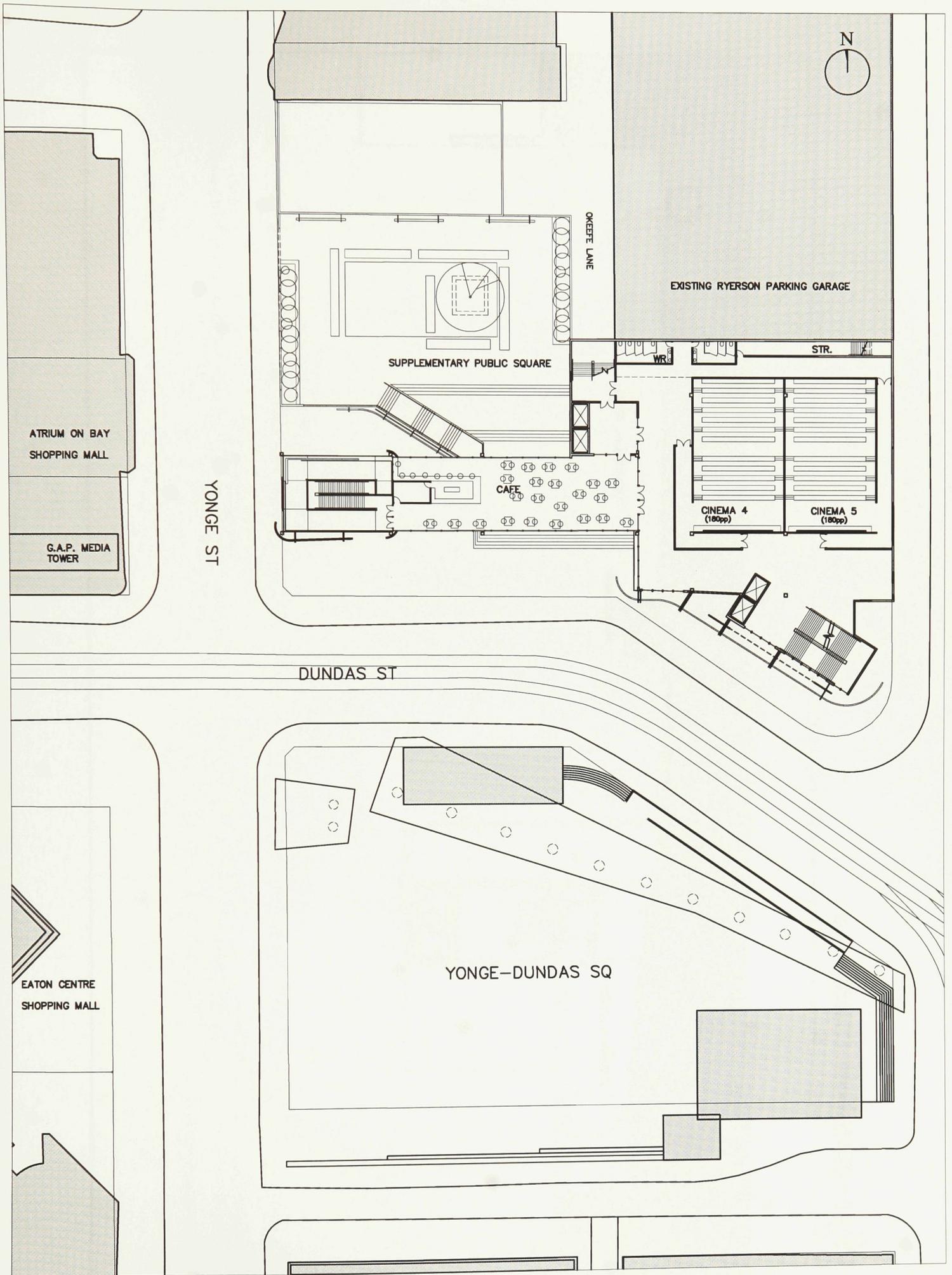


Fig. 54 - Level +6 Plan (1:700)

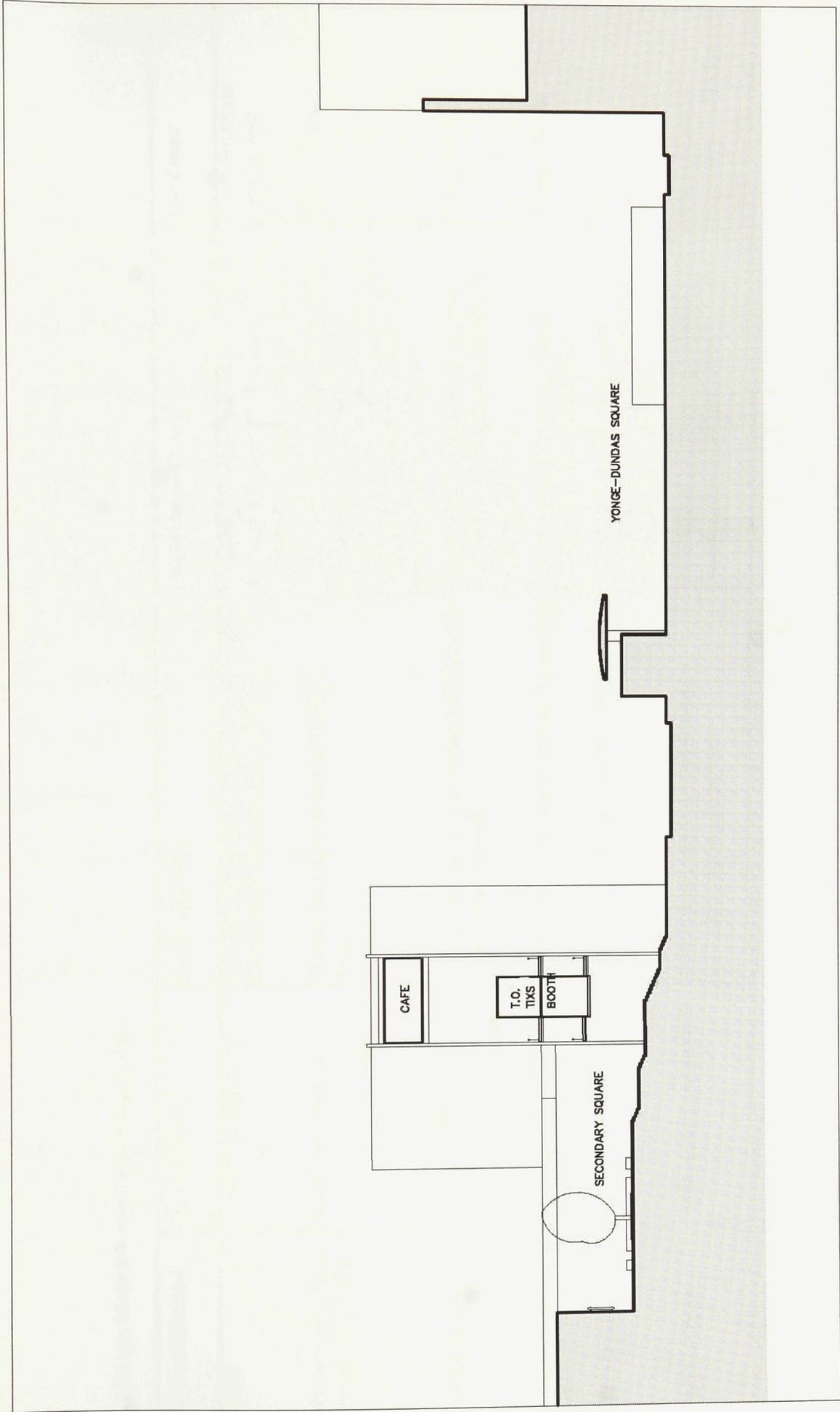


Fig. 55 - Site Section (1:700)

1.1 Image, Materials and Time of Day Table

System/ Material	Characteristics	Day Image / Use	Night Image / Use	Use Zones
Scrim	Opacity / Transparency	Opaque when front lit by natural light - images silk screened onto scrim visible by day	Transparent when back lit by interior building illumination - highlights interior activity and building structure	Ramp Structure/ Ramp Tower
Movable Partition/ Projection Screen	Opacity and Mobility	Opacity for projected and/or attached images	Opacity for projected and/ or attached images. Can be moved to act as security wall to close off parts of complex when not open or as backdrop when structure is used as a stage.	Ramp Structure
Louvre System	Opacity/ Transparency	Closed - can be used as mechanical billboard or as projection surface	Open - allows for a framing of views into and out of building depending on angle of louvres	Ramp Tower
Glazing	Reflectivity/ Transparency	Reflectivity - reflecting images of surrounding site	Transparent, highlighting interior building activity and structure	Cinema Façade
Glazing w/ Film	Reflectivity/ Translucency	Reflectivity - reflecting images of surrounding site	Translucency acting with interior lighting allows for shadow projection showcasing interior activity	Café
Digital Screen	Various image projections	Advertising images/ art installations/ community messages and text	Surveillance images to supplement building and square activities	Cinema Façade/ Secondary Public Square/ Ticket Booth

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