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Threshold: [re]acknowledging the crossing

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THRESHOLD

[re] acknowledging the crossing

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FALL '02

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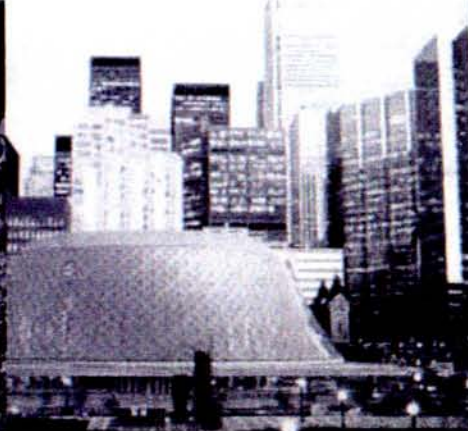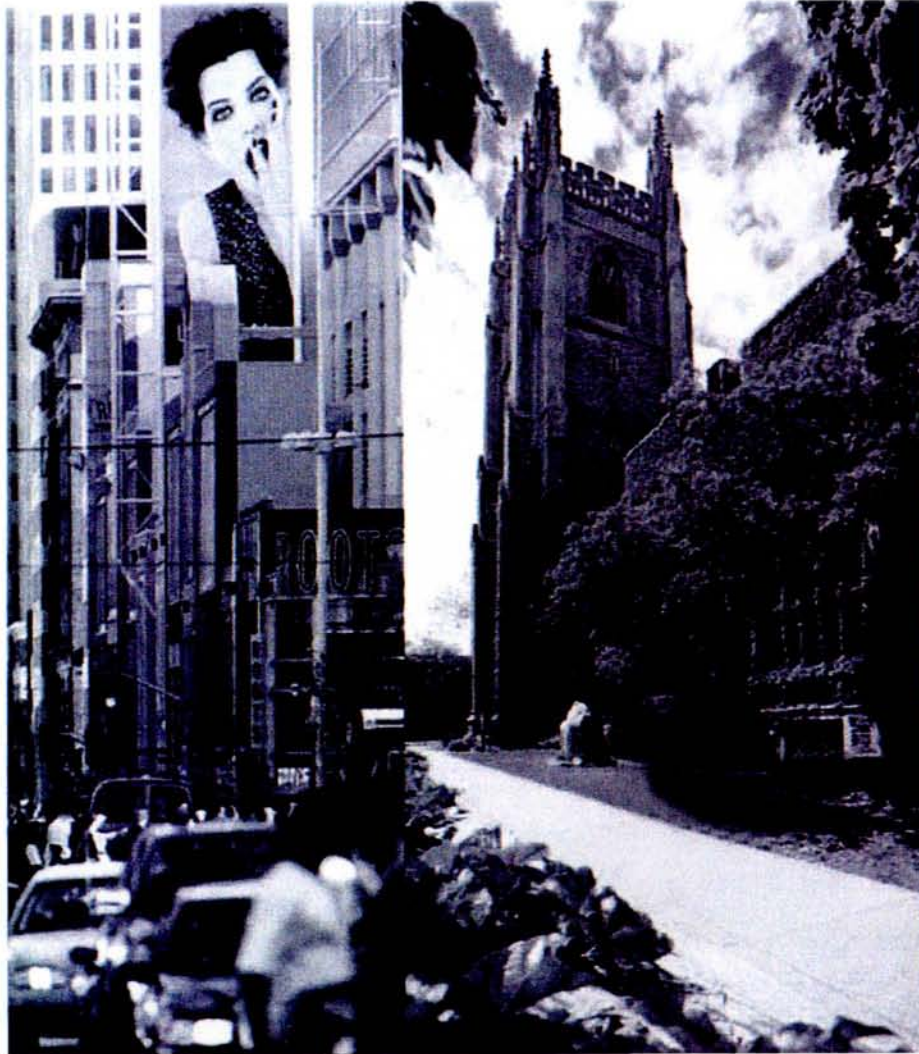
"A diversification among human communities is essential for the provision of the incentive and material for the Odyssey of the human spirit. Other nations of different habits are not enemies: they are godsends. Men require of their neighbors something sufficiently akin to be understood, something sufficiently different to provoke attention, and something great enough to command admiration."

A.N. Whitehead

contents

"...all culture, both ancient and modern, seem to have depended for their intrinsic development on a certain cross-fertilization with other cultures... sustaining any kind of authentic culture in the future will depend ultimately on our capacity to generate vital forms of regional culture while appropriating alien influences at the level of both culture and civilization."[2]
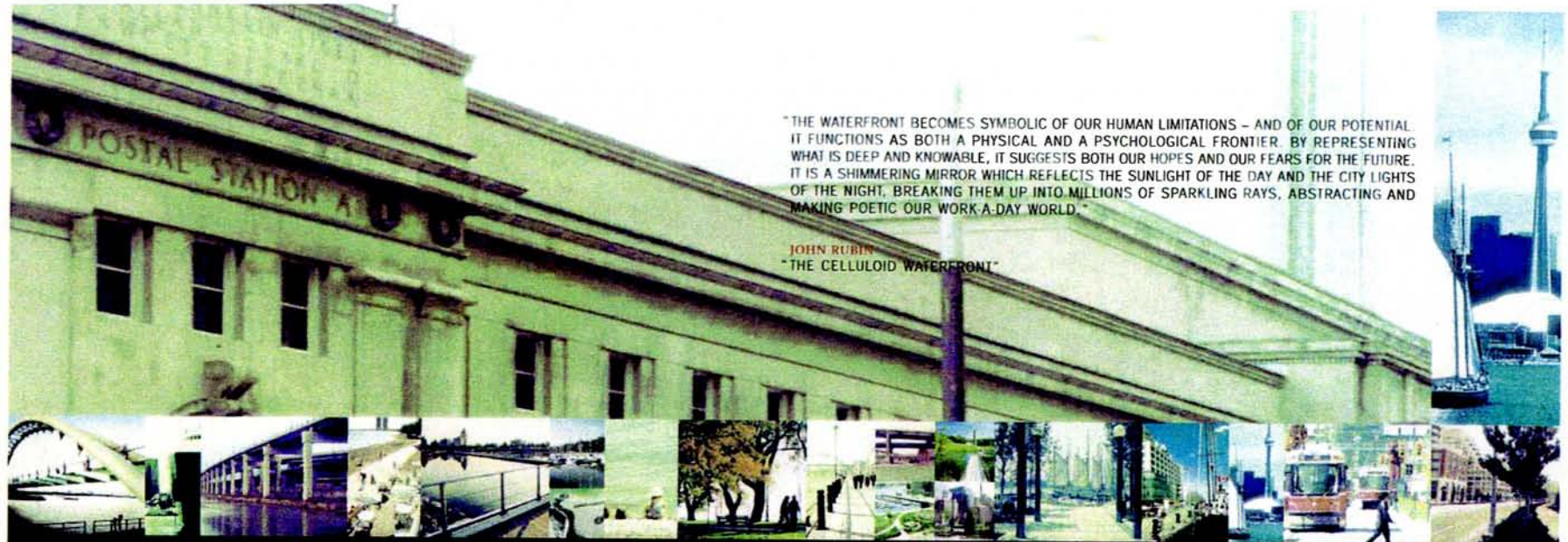
Kenneth Frampton

In the beginning, we were one. Since that time man has been in constant motion: at first separating and later reuniting. This movement is accelerated today, abetted by faster methods of communication and transportation. During these separations, man grows to have distinct differences, but this perpetual motion will always work to reunite the separated. With the discovery of other people's experiences, we come to a greater understanding of our own condition and also that of the human experience. From these experiences, people are mutually enriched through their exchange.
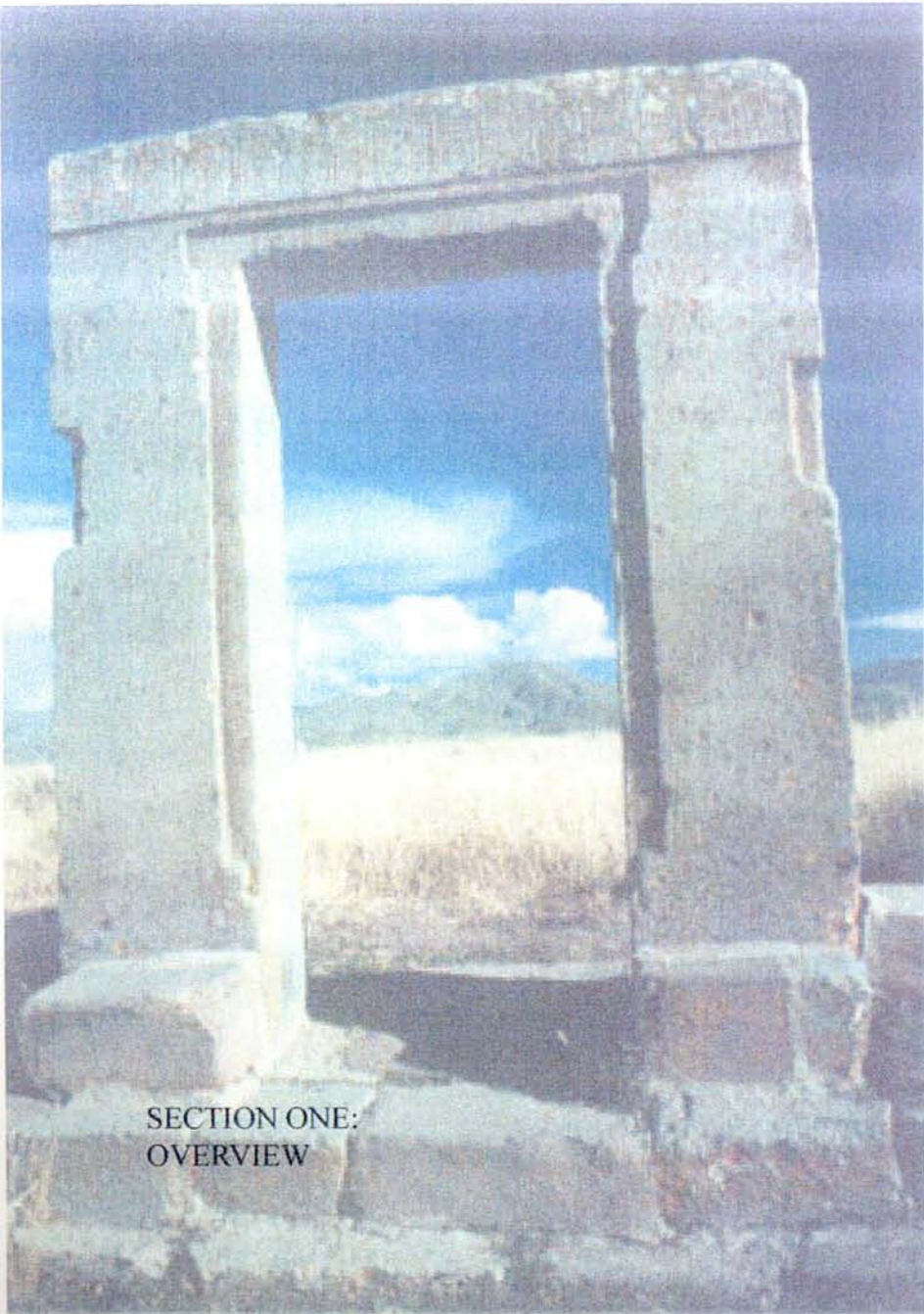
SECTION ONE:
OVERVIEW

contention

The contention of this thesis is that national and cultural borders and boundaries have become blurred and less noticeable by those crossing said borders. Ease of travel (both physical and informational). Free Trade agreements, and close national ties have all lent to the diminution of borders between two seemingly similar, yet culturally different, countries. Unless it is specifically expressed, the meaning of crossing a national threshold is lost in the whirlwind of everyday travel. Architecture must act as a unifier and agent of interaction through its becoming the physical manifestation of the filter through which this cross-cultural contact is made. This thesis will explore what it means to today's traveler to cross a specific boundary into a different culture, and how that crossing can be expressed and emphasized.
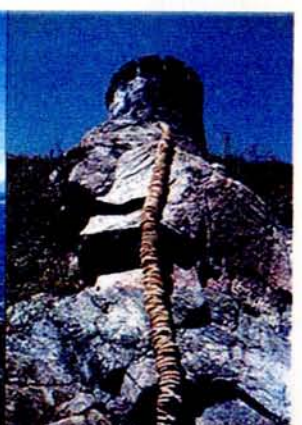
Beyond casual contact with a given place, a foreigner can begin to achieve a deeper level of understanding of a given culture, make discoveries of its inherent conditions, and incorporate these discoveries into their understanding of themselves and their own human condition. In such an understanding, architecture itself has the opportunity to become a physical manifestation of this cross-cultural contact, a nexus of contact where a mutually enriching cultural exchange can be gained, or conversely, lost. Both foreign traveler and local culture gain insight into themselves and each other through the architectural intervention, created in response to an understanding of the local and national context as filtered through the understanding and experience of the traveler.

An international border crossing through the structure of a ferry terminal is the form that the contention will take. The terminal is located within the confines of the Inner Harbour in Toronto, Ontario. The proposed ferry crossing will carry vehicles and passengers between Toronto and Rochester, New York. Currently, the shortest way to travel between Toronto and Rochester is a three-hour car trip susceptible to high volumes of traffic, paying tolls for interstates and possible lengthy waits for inspection at the border crossing. The ferry would work to shorten the travel time between the two cities, give a way for tourists to enter the city without their vehicle, or allow for passage across the lake without having to drive the three hours around the western end of Lake Ontario. The terminal will be located at the very southern end of the culturally-significant Yonge Street, the main East-West divider of the city of Toronto, and will act as both an anchor and a starting point for the street.

site

The Yonge Street Harbour represents the interaction and threshold between city and landscape, national culture and foreign conditions. It is where the mass of the city collides with the flat plane of the water. It is a threshold of masses and planes, static and dynamic, inorganic and alive. The city lives, but at times is static. The water, in opposition, is organic and changes with every day, every season. The site embodies the conditions of local and national threshold, passage and filtration into a new culture, present conditions overlapping past history, and an urban void defined by the built surrounding which determines the appearance and the function of the enclosed space. The site serves as the mediating element (physical threshold) between the co-existing elements of the man-made city and the natural elements of the lake.

**SECTION TWO:
CONTENTION**

Since the beginning of man there has been the idea of association with one's own place; a difference between "here" and "there," "inside" and "outside." The Garden of Eden of which the Bible speaks could be considered the first place on earth with distinct borders or boundaries. *"Now the Lord God had planted a garden in the east, in Eden; and there he put the man he had formed. And the Lord God made all kinds of trees grow out of the ground-trees that were pleasing to the eye and good for food. In the middle of the garden were the tree of life and the tree of the knowledge of good and evil."*[3] *"The Lord God took the man and put him in the Garden of Eden to work it and take care of it."*[4] Within the Garden of Eden there were trees, "trees that were pleasing to the eye and good for food," so God placed Adam into the garden to live and work. Inside the garden was Eden, a place of lush trees and foliage; outside the confines of the garden there was a world unknown to Adam, thus it can be argued that the first ideas of borders started here. *"After [God] drove the man out [of the Garden of Eden], he placed on the east side of the Garden of Eden cherubim and a flaming sword flashing back and forth to guard the way to the tree of life."*[5] After Adam and Eve were banished from the Garden, and cherubim guard placed at the east side of the Garden, a border was quite literally created, now with Adam and Eve being on the "outside" of the place they had previously been on the "inside."

International borders today aren't guarded by "cherubim and a flaming sword flashing back and forth to guard the way,"[5] but are still watched, and sometimes guarded, points of entrance and departure. As suggested by Paul Andreu, **without the idea of *indispensable borders*, "[the world] can only be confused, neurotic, and dominated by fear and aggression."**[6] Today there is a new condition between many borderlands; the condition of ease of travel (vehicles, boats, airplanes and information alike) brought about by the wish for facilitated trade between similar-minded countries. With it becoming easier and easier to travel across certain international borders and the European Union successfully making international borders essentially extinct, Jorge Glusberg is correct in stating, **"A borderless world appears to lie ahead, sustained by differences within an overall sameness."**[7]

This abatement brings about a dilemma for a country which, in many ways, is similar to its neighbouring country, but still strives to maintain its individual cultural identity. The idea of a border enables a crossing or passage and its rites, or conversely (in reference to many of today's European countries), it allows for that *"disrespectful leap that transgresses such a rite."*[6]

Take the myth of Romulus and Remus for example; Romulus traced the border of the future city of Rome in the earth with his plow, lifting it out of the ground for the location of the entrance, the point of crossing. Romulus had decided that no one could pass the boundary without his permission, yet Remus for envy or in jest, laughingly jumped over it. Romulus went on to kill Remus, but the myth implies that the creation of the border and the disrespect of it were both necessary. Can a shallow furrow, easily traversed, symbolize the condition of many neighbouring countries in today's age? Even with the installation of the European Union, the countries in that specific melting pot of cultural identities each have their individual distinctions- the main one being their different national languages. The geographic proximity, similarity in standards of living, and political stances between Canada and the United States make it hard to create such a distinction between the two countries, although a definite socio-political border does exist.

With air travel becoming the norm, it has now become the condition that one simply falls from the sky, directly in the middle of a different city or country. The transition space into this new culture has been greatly overlooked, but is still very important. Having crossed the national border line long before the travelers' actual arrival into this new culture, the terminal acts as the actual doorway into the country, an overlooked event and downplayed threshold in many instances. As Stringer and Barber suggest, *"One could argue that globalization makes crossing borders a less significant event and less worthy of positive cultural investment. Of course, the perceived homogeneity of travel design around the world lends weight to this view. On the other hand, in a competitive global market, the quality of cultural life a place can offer becomes paramount. So far it seems to have been enough for airports to be and look like an efficient means of getting somewhere with only the occasional, rather cursory nod to their locale."*[9] If a neighbourhood, a city, and most certainly a country, wants to make a positive cultural investment in the event of foreigners crossing their borders, it is necessary to make that decisive nod to their locale, at all possible points of crossing.

An encounter with a pronounced threshold, a deliberate entry into a new culture, acts as a marker locating one's position in relation to a socio-political boundary. Like a traveler mindlessly crossing Provincial or State lines, it is necessary to flag their attention to the fact of their crossing this geo-political boundary, because without these road side signs demarcating an unseen (implied) borderline, the crossing of that threshold would be totally unnoticed. Thus, wouldn't entering a new country, a totally new culture, *demand* a crossing of such significance as to make one consciously and subconsciously *feel* their crossover from one condition to another? This point of crossing is paramount: heavily located within its specific geographic and political conditions, it allows the procession of foreign travelers to discourse with the site's importance and history.

contention discussion

Does the homogeneity of these socio-political borderlands also lead to the diminution of a country's cultural identity? *"As biological organisms and as social agents we live our lives within spatio-temporal zones bounded by natural and artificial extensive boundaries, that is, within zones that extend in space or time up to a limit marked by a borderline. Whether we are talking about the frontiers of a country, a city or a neighbourhood, or those defining the start of an era for society or a period of our lives, these boundaries are part of what defines our identity."* Manuel Delanda suggests that these borderlines are the culminating point of a cultural identity, which leads to the question of why there is this blending of cultures along borderlines if cultural identity is still important to individual countries.

The crossing of a threshold of cultural identity has taken a diminished back seat to the progress of inter-country and inter-national trading and the mutually-stressed mass exportation of goods, communications, and services between two neighbouring countries. In reality this has started to create an imposed mass-culture between two countries that in fact strive to keep their own cultural identities. If a sustained cultural identity within a culture's borderlines is wanted, but the continuation of progress and mass trade is also stressed, there is opportunity for architecture to step in and create a threshold, a locating device, which acts much in the same way as that gaudy road sign calling attention to the crossing of a state border.

con't

A gate, since the first gate in the first city wall was made, has always acted as a point of entry into an enclosed space (demarcating a specific culture). Through this portal an implied threshold marks the actual crossing from an "outside" condition to an "inside" condition. Like the porta that Romulus left undug while furrowing the boundaries of his city, it marks the entrance into a city and a cultural mindset. The gate and threshold in this thesis marks the entry into the city of Toronto and the country of Canada. Like the gates of the earliest cities, the gate functions as funnel and control device of people and goods coming into the country.

architecture as gate / threshold

architecture as cultural landmark / icon

"[The terminal] is the most visible meeting place between the natural and the artificial, between what is local and particular and what is cosmopolitan and generic. All these transitions coexist. Depending on the time, the place and the person, one may take precedence over the others...This tangled skein of limits, from the most mysterious and ancient to the most contemporary, is what makes terminals places of change and discovery for each individual." [6] Architecture has the opportunity to use physical borders and screens (filters) as discontinuities that lend themselves to the thoughts of another person about a world that is yet to come, creating through its design a distinct landmark acting as an introspective expression of local dynamics.

The lake acts as a link and a separator at the same time, thus making the architecture (terminal) a place of partings and reunions, both of which can cause emotional and intellectual upheavals. The architecture must embrace these possible upheavals and utilize them in order to create a physical feeling of crossing a threshold. Making the terminal a place of destination also articulates the threshold, celebrating the act of traveling, creating a place where romantics can look back on the time when "travel used to be an event."

architecture as point of arrival / departure

architecture as hub of movement / procession
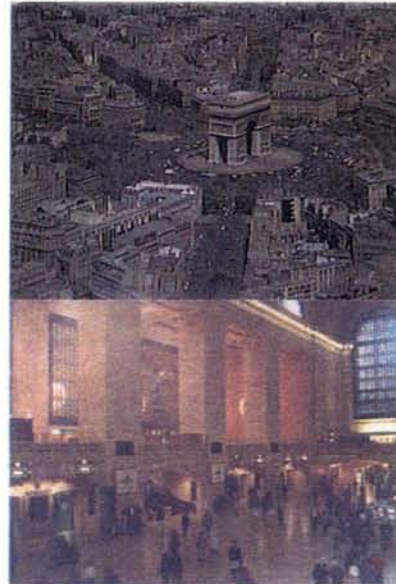
The architecture is a site of passage from one country to another, or rather to the possibility of another. It is a doorway to new discoveries or habitual customs. The processional design must take into account the movement from car (or other transportation) onto the boat, the movement from the water back onto land, the movement from boat back into a car (or other transportation), the movement through the border control, the movement through the site, and finally the movement from the site into the city of Toronto.

THREE
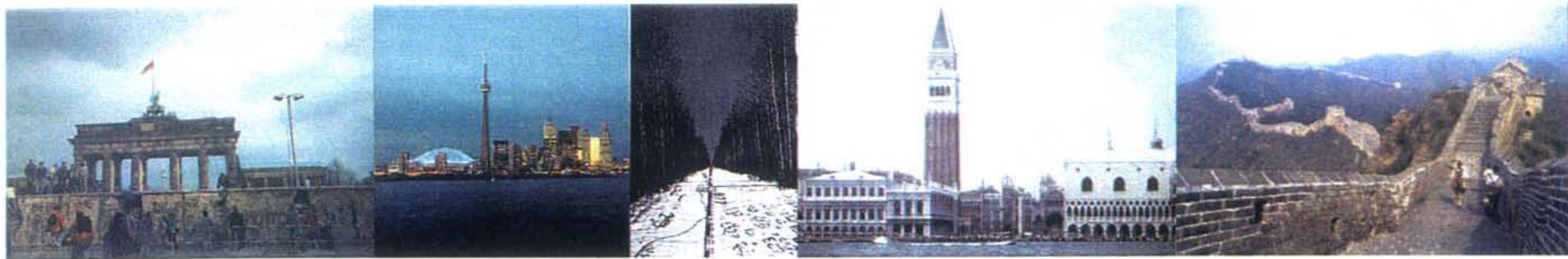
"The idea of indispensable borders is everywhere. Without it, be it absent or denied the world can only be confused, neurotic, and dominated by fear and aggression. Once the necessity of borders is understood, a need for discontinuity emerges as an equally vital force. It enables the passage and its accompanying rite, or conversely, it allows for a disrespectful leap that transgresses such a rite."[6] With the international border and individual cultures of Canada and the United States becoming less pronounced along their borderlands, especially at thresholds of implied crossing where the two countries are literally side-by-side, there is opportunity to emphasize the crossing of a border while crossing over the "neutral zone" of Lake Ontario between Toronto and Rochester. Occupation of this neutral zone will allow for impression of threshold, of the envelope between the two countries, which links and separates at the same time. A collision of cultural identities occurs upon arrival at the ferry terminal in Toronto, a place where there are vestiges of one culture stretching into another.

There is also a collision of geology on the site, where water meets with land. This collision acts as a geomorphological edge, a physical threshold. The ferry terminal acts as the arrival point, the doorstep into a country, as a door is a place made for an occasion of entrance and departure, an act that can be repeated once or many times in one's lifetime. The terminal must act as a link not only to a new country, but specifically to downtown Toronto, relating to the existing fabric of the city and the inherent characteristics of the urban waterfront. It will be an entrance from the "natural" condition of the lake into the urban condition of the city. The terminal acts as a literal connection between two places, also relating to a vehicle traveling from place to place. Travelers use rituals as tools in order to make a transition, and the architecture, through the recognition of that ritual, makes the transition apparent.

Movement and procession through the terminal and the site will address the sequence of transition of a route from both the water and city. From the water, the architecture must address the approach and arrival from the "neutral zone" of the lake, while from the city it must act as a space which acknowledges the waterfront and acts as a sequential transition through the city grids to the openness of the lake. In essence, the architecture must act as an important, dual-functioning space which both initiates a particular sequence and terminates another. Architecture that acts as a boundary becomes a type of wall, having two distinct and pragmatic sides. It is therefore the case that these conditions must function as a type of filter. Not only movement to and from the city must be addressed, but also movement through the city, for those travelers using the ferry as a means to cross the lake in a more expeditious manner. The procession through the site must interact with the cultural aspect of the site and decompress the travelers from one city into another, one country into another, responding to the existing lines of preexisting movement in the urban landscape.

program discussion

The program of this thesis is an international border crossing station within the framework of a ferry terminal. Included in the building or programmed site will be space for all the functions of the ferry terminal working in conjunction (or contradiction) to those of the Canadian customs authorities. The focus of the architectural intervention will be the significance of crossing the threshold of the international border between Canada and the United States and how that can be articulated in the sequence of spaces through which the travelers are moving. The primary function of the building will be the on and off-loading of vehicles and pedestrians from the ferry with the processing of each through the customs agencies which will act as the threshold into the country.

For the program of the ferry terminal, the travelers will be coming into and leaving the confines of the terminal via public transit (light rail, bus, taxi), their own automobiles, or by foot. It is assumed that most travelers going from Toronto to Rochester will take their automobiles, based on the premise that Rochester isn't the final destination of most Canadians taking the ferry. But because of the distinct possibility that travelers may drive to the terminal and not take their cars, plans for an adequate amount of parking must be made. Thus, those boarding the ferry will have the choice to either park their cars or get into a separate queue for boarding the ferry with their automobiles. While waiting to board the ferry, with or without a car, there is opportunity for travelers to walk through the site and terminal or to just find a place to sit and wait.

The sequence of movement while departing the ferry must be studied for the distinct progression of both vehicles and pedestrians, and their respective sequences of crossing the "threshold" while moving through customs. It also must be studied how the different systems of movement on and off the ferry take place, the different sequences that the two systems have, and how they relate to the other. It is necessary to expedite the movement of traffic (pedestrian and vehicular) both on and off the boat, so there must be ample queuing space in both directions. It is necessary to design the spaces and programmatic functions that will fit into the sequence of the queuing space after leaving the ferry but waiting for customs processing, as this envelope of neutral space can't be left as a "dead zone" in the overall sequence of spaces.

In order for the ferry terminal to be used and sustain itself year-round, it is necessary to interject some other form of program into the terminal or site. This program can include a wide range of interjections: a restaurant; cultural and education centre; housing and health club; extra parking for nearby entertainment venues; or a city celebration/ festival area to run in conjunction with the city's waterfront redevelopment plan. These extra interjections must be taken into account when the overall sequence of the ferry terminal spaces are designed. Thus, it must be taken into consideration that people may be entering the terminal and not taking the ferry, whether it be to drop off or wait for a traveler, or for another program that occurs within the confines of the site or the building. The architecture will work more effectively to tie the programmatic elements and issues of the thesis into the overall site and city as a whole if the Waterfront Redevelopment Program is taken into consideration.

program requirements

Public Areas

Room Type (usage)	# of Rooms Required	Size (square footage)
Entrance	1	800
Grand Hall	1	5000
Pedestrian Queuing Area	1	1000
Pedestrian Unloading Area	1	800
Observation Area	1	1000
Visitor's Centre	1	800
Lockers/ Small Storage Area	1	2000
Restrooms	2	1800
Snack/ Coffee Bar	1	2000

Ferry Operations

Room Type (usage)	# of Rooms Required	Size (square footage)
Operations offices	1	2000
Ticket Purchasing Area	4 Booths	200
Customer service office	1	200
Baggage handling	1	550
Ferry operations centre	1	1000

Building Staff Areas

Room Type (usage)	# of Rooms Required	Size (square footage)
Lunch / Lounge Area	1	500
Restroom / Locker Areas	2	500

Canadian Customs

Room Type (usage)	# of Rooms Required	Size (square footage)
Administration Offices	2	300
Administration Restrooms	2	100
Inspector's Lounge	1	400
Vehicle Inspection Booths	4	200
Pedestrian Inspection Booths	4	50
Waiting Room	1	400
Interview Rooms	2	250
Search Rooms	2	200
Filing / Computer Room	1	400
Mail / Copying Room	1	100
Holding Rooms	2	400
Locker / Storage Area	1	500
Secure (firearm) Storage	1	150
Vault	1	80

Building Maintenance

Room Type (usage)	# of Rooms Required	Size (square footage)
Storage / Utility Room	1	200
Electrical / Mechanical Room	1	100
Trash / Recycling Room	1	100
Custodial Room	1	100

Totals		#	Size
	public	14	15400
	administration	34	8780
	public & admin.	48	24180

Additional Programmatic Requirements

Ferry Support: refueling area; refuse / waste removal; maintenance / inspection diver's shed

Ferry Loading / Unloading: departing vehicle waiting area; arriving vehicle inspection areas; support / baggage loading area; passenger gate

Public Transit Linkages: taxi stand; TTC waiting / ticketing area; traveler drop off & pick up area; parking (long & short term)

Communications: internet stands; telephone booths; television / video conference areas; radar; radio

The largest and most important piece of the program is the ferry itself. When docked, it is essentially a building unto itself, standing approximately 30 metres above the water and 90 metres in length. The sheer size of the ferry will be the biggest proponent in the final site design, having to accommodate a slip that can easily dock the boat. How the slip is situated within the site will also be a large proponent in the site strategy.
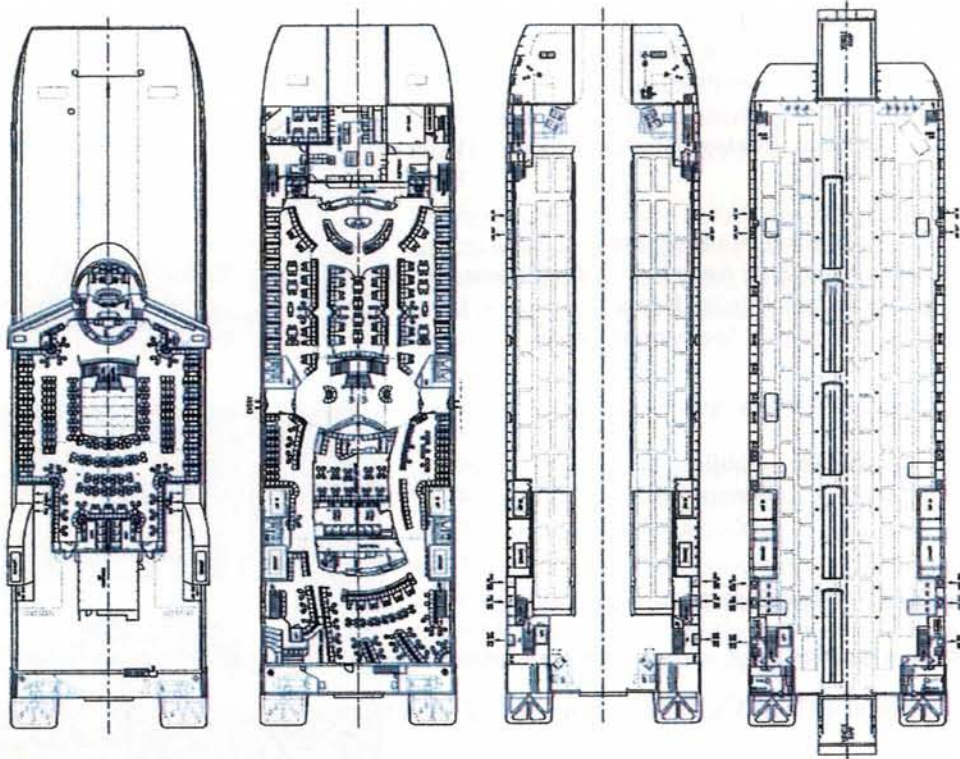
PRINCIPAL DIMENSIONS

Length Overall	86.6 metres
Length Waterline	74.1 metres
Beam (Moulded)	24.0 metres
Depth (Moulded)	7.8 metres
Hull Draft (Approx.)	3.2 metres
Vehicle Deck Clear Heights	
centre lane	4.4 metres
side lanes	2.2 metres
mezzanine lanes	2.0 metres

PAYLOAD & CAPACITIES

Passengers		1037
Vehicles		186 cars
	or	10 coaches and 144 cars
		15 motorcycles
Maximum Deadweight		abt. 500 tonnes
Maximum Axle Loads		
centre lanes		(dual wheels) 12.0 tonnes
		(single wheels) 9.0 tonnes
side lanes		1.0 tonne
mezzanine lanes		1.0 tonne
Crew		30
Fuel		140,000 litres

PROPULSION

Main Engines	2 x GE LM 2500 Gas Turbines
	2 x 18,000 kW (25°C) @ 3,600 rpm
Gearboxes	2 x Renk
Waterjets	4 x KaMeWa 112 SII

PERFORMANCE (with Ride Control and Bowthruster fitted)

Sevice Speed (485 t DWT, 85% MCR)	41 knots
Fuel Consumption (approx.) @ 85% MCR	7.4 tonnes/hr

SURVEY

DNV ✠ 1A1 HSLC R2 Passenger Car Ferry A EO ICS NAUT

FOUR
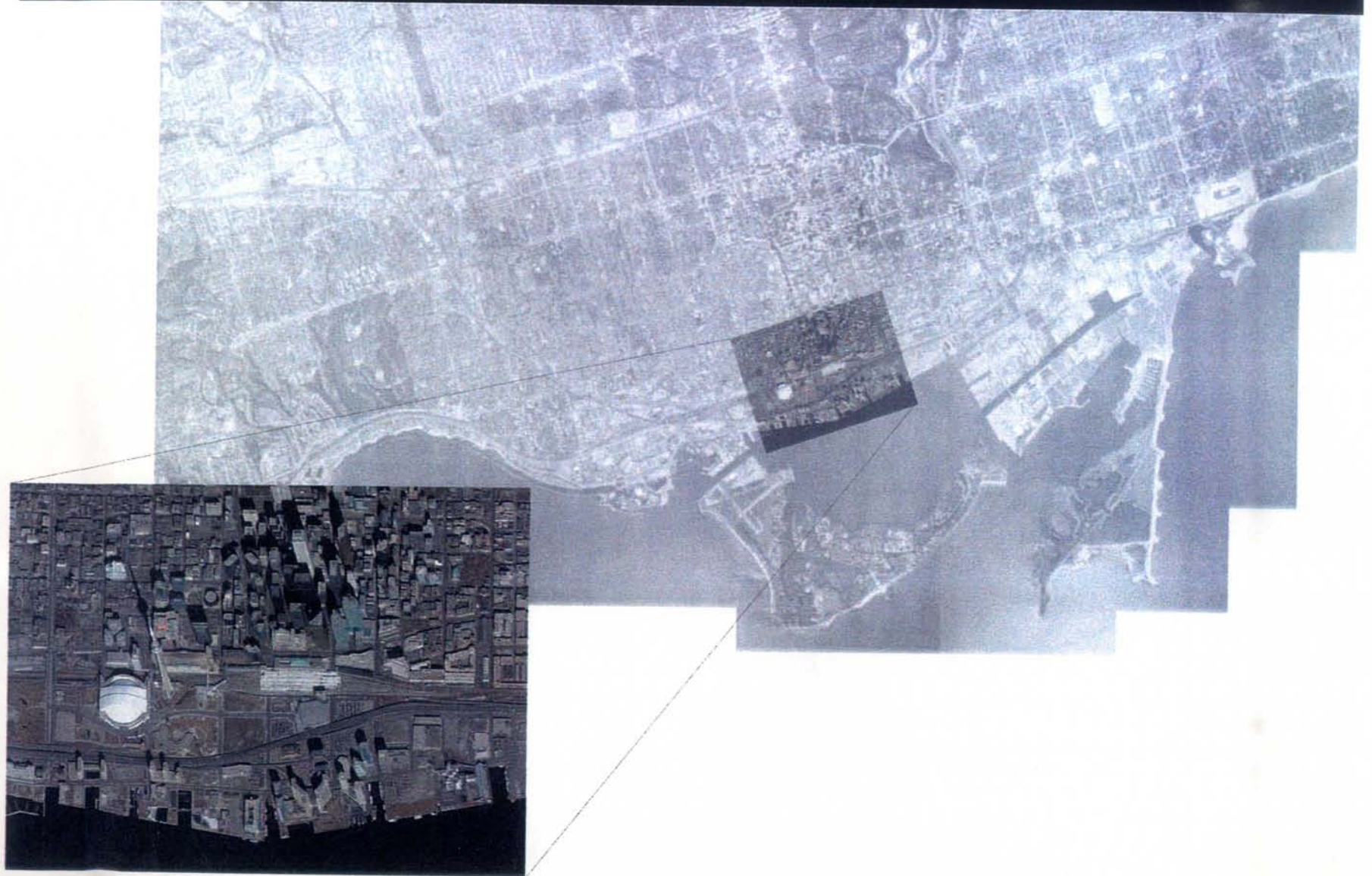
The site serves as an anchor to the strong identity of Yonge Street and must become and act as a significant link between the city, waterfront, island, and beyond. The Waterfront site has the opportunity to be a place of learning, reflection, commemoration and celebration. The landscape of the waterfront has a certain story-telling power when connected to local themes of aboriginal heritage, settlement, immigration, industrial development, ecosystem erosion and renewal, entertainment, sports history and international conflict and friendship.

Yonge Street is considered one of Toronto's most unique public spaces. No other street in the city is as open to public inhabitation as it is. In the early '90's, when the Blue Jays won the World series, there were an estimated one million people celebrating on Yonge from the south end at the harbour up to Bloor Street.

It is considered the "World's Longest Street," and is Ontario's, also to a great extent, Canada's, main street. There is continued rich cultural activity which reflects upon the urban history of the street.

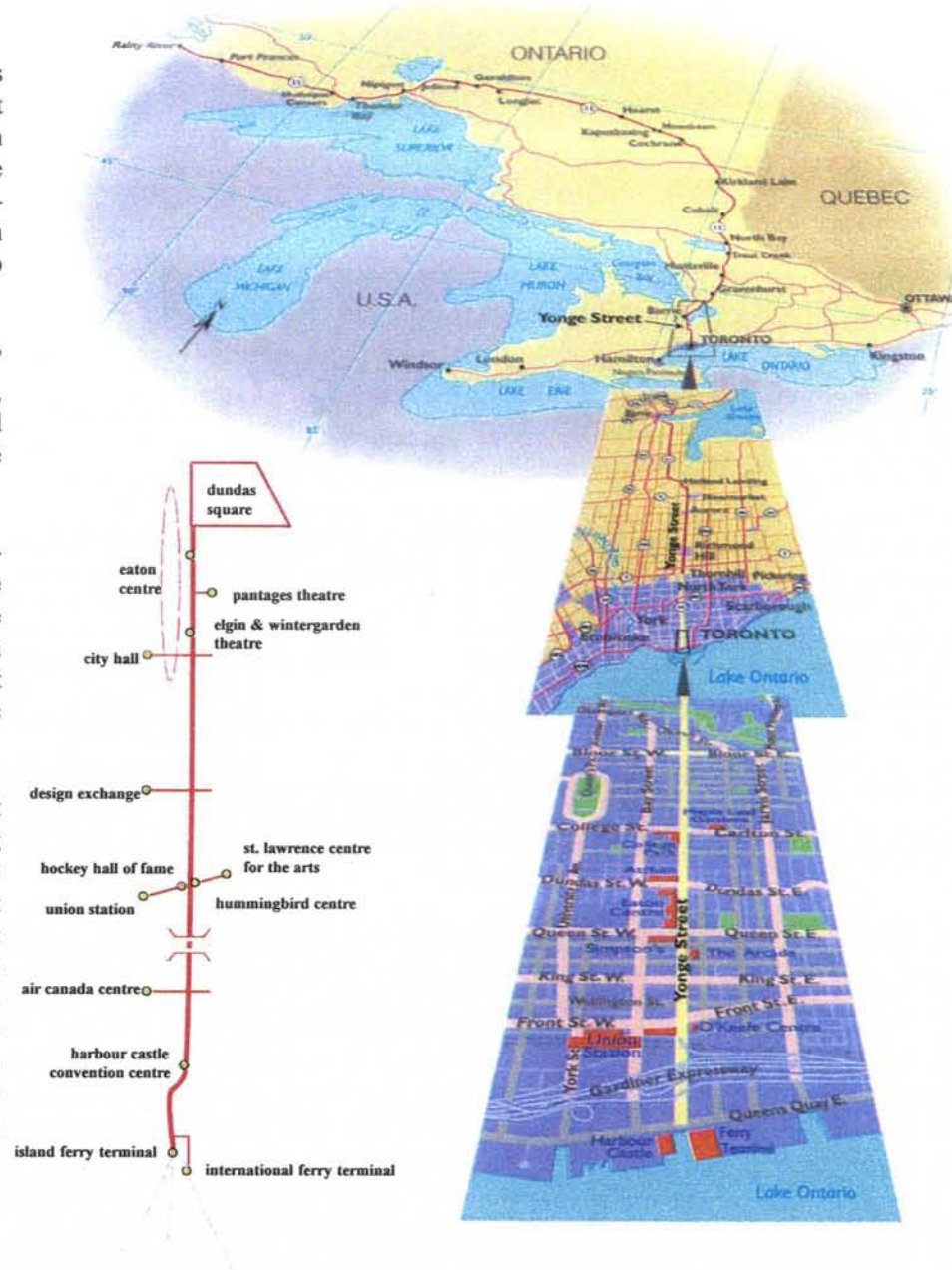There are recent rejuvenation efforts currently underway at the intersection of Yonge and Dundas streets, culminating at a more formal public space at Dundas Square. With these revitalization projects, Yonge Street will become even more the cultural and civic core of Toronto.

The vibrancy of Yonge Street transforms at the waterfront currently into the launching point for the Toronto Island ferry and the site for the thesis, but this connection is not clear. This "anchor" of one of Canada's most cultural streets seems disconnected to its own procession and disconnected to the larger city presence. With this disconnection comes an opportunity for an architectural interjection to become a literal anchor and starting point of the cultural history and future of Yonge Street.

dundas square
eaton centre
pantages theatre
elgin & wintergarden theatre
city hall
design exchange
st. lawrence centre for the arts
hockey hall of fame
hummingbird centre
union station
air canada centre
harbour castle convention centre
island ferry terminal
international ferry terminal

TORONTO.

ENJOYING THE BEACH AT SUNNYSIDE BATHING PAVILION, SEPTEMBER 4, 1922

Toronto's beginnings are traced to its proximity to the water. Long before European settlers arrived, Toronto's naturally protected harbour was used by Native Canadians as a stop along the traditional trading route. The name Toronto in the Huron Indian language means "place of meeting" or "land of plenty." Before the arrival and settlement of the "white people," the Toronto area was occupied by natives, primarily the Mississauga and Iroquois. Historical records locate some of the native settlements; the Toronto Harbour area was occupied by two Mississauga bands and an Iroquois village named three kilometres up on the West bank of the Humber River. There were also traces of the Mississauga village on the east side of the river, although the settlement was abandoned long before the founding of the city.

In the 1740's, Toronto was the site of the first French trading post in this part of North America, Fort Rouille. The fort was key in establishing a link between the lands beyond Toronto, which was rich with fur-bearing animals, and the lucrative European markets. In 1749, the first large cargo-carrying vessel arrived in the harbour, and in 1793, the Governor of Upper Canada, John Graves Simcoe, established a British military garrison nearby, largely due to the excellent harbour. Surveyor Joseph Bouchette arrived that year in Upper Canada to help create a capital city. Bouchette soon laid out the grid of streets for the Town of York, and the Queen's Rangers began to clear the forest to build roads and houses. The Town of York sat on the shores of the natural protected harbour created by the peninsula (later to erode away and become the Toronto Islands). The Bay, rich in natural resources, provided settlers with sufficient food and clean water. The fort and town were originally both called York, but were reverted to their traditional Huron Indian name, "Toronto," 40 years later.

The late nineteenth century saw the beginnings of a massive restructuring of the shape of Toronto Bay. To control its meandering, prevent erosion and protect bridges from flooding, the lower Don River was straightened and encased in concrete. In 1912, the newly formed Toronto Harbour Commission developed the first comprehensive plan for Toronto's waterfront. The Commissioners' vision included the dredging and filling of Ashbridges Bay marsh, the large estuarine marsh that formed the mouth of the Don River. The Bay itself was dredged to a ship-capable depth of ten metres and the dredged sediments were used to further re-shape the waterfront. For its industrial and port uses, landfill and the dredged sediment from the shipping lanes created the entire Central Waterfront. The area was intended to be Toronto's industrial heart, linked by ship, rail and road to the rest of the world. The plan was never to be realized however, as World War One and then the depression intervened.

The 1950's were the low point for natural systems in Toronto, when few natural features remained along the Bay's northern shore. The 1960's marked the arrival of better days to come, with toughening environmental regulations spurred on by a fledgling environmental movement and a concerned public. Improved sewage treatment, better pollution control technologies, the adoption of pollution prevention strategies and better control of municipal and industrial polluters contributed to improved air, water and soil quality and healthier natural systems.

Over the years, Toronto's waterfront grew in activity and importance, with a lively mix of industry and recreational uses. In the early 20th century, lake cruising was popular, and many steamers used Toronto as a base for their Great Lakes routes. Along the waterfront, a number of dance halls sprung up, as well as amusement parks and a baseball stadium (which was on Toronto Island, on the present-day site of the City Centre Airport). With the opening of the St. Lawrence Seaway in 1959, which provided easy access to the Atlantic Ocean, large freighters began stopping in Toronto. Harbour traffic grew steadily until the late 1960s, when road transport began to displace water as the preferred means of moving goods. As in many cities at that time, Toronto's waterfront fell into a period of decline. In the 1970s, though, local residents and government saw the potential of the area, and mixed-use revitalization of the area was spurred.

With the advent of the age of rail, Toronto temporarily lost its battle for a refined waterfront to the forces of heavy industry. Gone were the city's early 19th century plans for a green promenade, "the Esplanade" on the water's edge, replaced by rail spurs, warehouses, roundhouses, marine terminals, industrial slips, and in the 1950s, an elevated highway. For over eighty years, Toronto's central waterfront served as the home to many of its heavy industries. Many of these companies adopted a common practice of filling in the lake to provide more land for their industrial uses. Like many ports on the Great Lakes, this area is no exception and is going through an economic and environmental transition. In the 1970s the tides turned: 1972 saw the creation of a crown corporation that was handed some harbourfront lands by the federal government and charged with the mandate to develop an urban, waterfront park. Once a bustling manufacturing, bulk storage and shipping center, changes in the global market place have caused a dramatic shift in Toronto's waterfront activities.

MARATHON SWIM SPONSORED BY WRIGLEY'S GUM CO., AUTOMOTIVE BUILDING, EXHIBITION PLACE, 1930
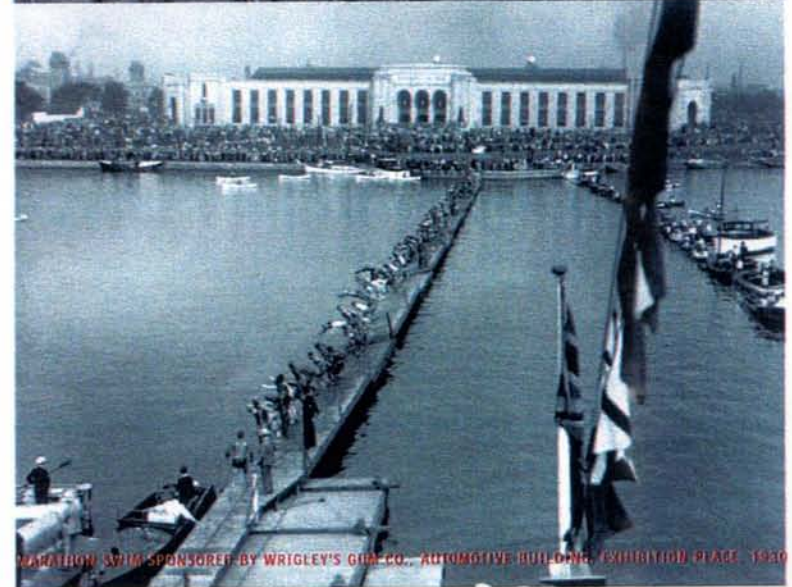
Used as a trail by the Huron Indians, Yonge Street came to be an official passage in the 1790's and was designed to create a clear route between the town of York and Georgian Bay in the case of an armed conflict with the United States. Today, this street is a beehive of activity, as one of Torontos three TTC subway lines operates along this thoroughfare. Not only does Yonge street designate Torontos east-west split, it is also the citys busiest artery, and is known as the world's longest street: it stretches from the shores of Lake Ontario to the Northern Ontario town of Rainy River (more than 1900 km north). At the southern terminus of Yonge Street, the waterfront is a thriving area of recreation, culture and industry. It is also a residential area, with a number of new highrises lining the shore. The waterfront features shopping, restaurants, entertainment facilities, and a hiking/cycling trail that stretches 22 km. It is also the gateway to the Toronto Islands, with ferry docks adjacent to the propsed site of this thesis. Toronto's harbour is roughly two miles long and one mile wide and is sheltered by the string of offshore islands.

The Waterfront Trail that runs past the site is a popular stretch of trail for walkers, cyclists and runners with a naturalist frame of mind. The trail was the Waterfront Regeneration Trust's first major project. The trail is not just a bike and walking path, but a band of interconnected communities that embodies the vision of the Royal Commission to develop a "continuous trail system [that] guarantees public access to these natural and open spaces". One of the Trust's main challenges in implementing the trail was confronting the gridlock that can result from this approach of crossing traditional local government boundaries and jurisdiction.

For decades used primarily as the citys industrial docklands, the Harbourfront area has been slowly developed over the last 30 years into a recreational and cultural attraction that now draws more than three million visitors per year. Today, the waterfront thrives. The focal point is nearby Harbourfront Centre, a multi-purpose cultural facility that also includes commercial, residential, and retail developments, in addition to parkland and some of the city's best performing arts facilities. A significant local population lives in high-rise towers along adjacent Queen's Quay, as well as a smaller residential community on the Toronto Islands. There are a number of existing marinas for pleasure boaters, and the Island is home to the historical Royal Canadian Yacht Club.

Toronto Island Climate Normals
1971-2000
Latitude: 43.37'N   Longitude: 79.23' W   Elevation: 76.5 m

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
temperature													
daily mean (C)	-4.5	-3.9	0.4	6.4	12.3	17.3	20.7	20.4	16.2	9.7	4.6	-1.3	8.2
standard deviation	2.8	2.2	1.6	1.2	1.4	1.4	1.2	1.4	1.2	1.5	1.2	2.5	
daily maximum (C)	-1.3	-0.7	3.7	10.1	16.6	21.6	25.1	24.3	19.9	13.0	7.3	1.8	11.8
daily minimum (C)	-7.8	-7.2	-2.9	2.7	8.0	13.0	16.3	16.6	12.4	6.5	1.8	-4.3	4.6
extreme maximum (C)	12.8	12.5	22.5	30.1	34.1	36.8	37.0	36.1	33.4	28.3	20.0	16.3	37.0
extreme minimum (C)	-27.8	-25.1	-20.6	-11.1	-1.1	4.0	7.2	5.5	2.6	-3.3	-13.9	-25.0	-27.8
precipitation													
rainfall (mm)	23.3	24.1	45.5	63.2	71.6	67.5	67.2	80.1	83.4	64.6	69.3	45.1	705.0
snowfall (cm)	29.5	26.0	18.4	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	27.6	112.8
precipitation (mm)	50.5	48.5	64.4	69.0	71.6	67.5	67.2	80.1	83.4	64.6	74.6	72.4	813.8
days with													
freezing rain/drizzle	1.3	1.2	1.2	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.04	1.2	5.1
thunderstorms	0.50	0.21	1.0	1.9	2.9	4.8	5.0	4.8	2.9	1.1	0.71	0.35	26.2
hail	0.0	0.0	0.04	0.13	0.04	0.17	0.0	0.04	0.0	0.04	0.0	0.0	0.46
fog	0.88	1.3	1.9	2.0	3.3	3.3	1.7	1.3	2.0	2.1	1.8	1.6	23.1
smoke or haze	4.3	5.9	6.0	5.3	8.8	10.4	12.1	12.3	8.9	6.4	5.8	4.0	90.2
blowing snow	2.3	1.4	0.83	0.29	0.0	0.0	0.0	0.0	0.0	0.0	0.17	1.2	6.2
days with wind													
>= 52 km/h	4.8	3.2	4.0	2.7	1.4	0.6	0.4	0.5	1.0	1.8	3.5	5.5	29.3
>= 63 km/h	1.6	1.0	1.3	0.9	0.4	0.1	0.1	0.2	0.3	0.8	1.0	1.9	9.6
maximum wind gust	126.0	101.0	108.0	107.0	93.0	106.0	111.0	97.0	107.0	97.0	98.0	111.0	126.0
direction	sw	sw	w	w	sw	w	w	w	w	nw	sw	w	sw

statistics taken from environment canada

FIVE

SECTION FIVE:
WATERFRONT RENEWAL
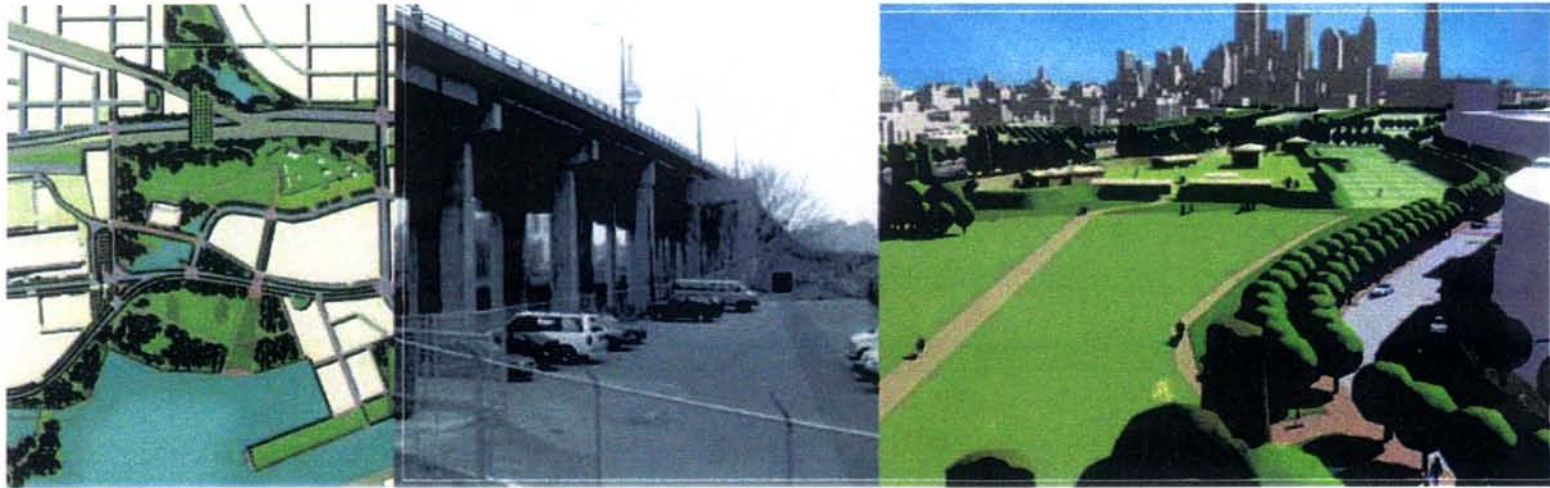
Toronto currently has a dream of transforming and re-energizing its waterfront into one of the great waterfronts of the world. A dream of building a spectacular gateway to the city, the province, and the country. There is an opportunity for the contention of this thesis to work along with this plan in order to create both a stronger contention and aid in re-energizing the waterfront as proposed. Major elements in this revitalization include the reconfiguration of the Gardiner Expressway corridor in the Central Waterfront; substantial upgrades to GO Transit and Toronto Transit Commission (TTC) services; a vastly improved, expanded and accessible public open space system; and a number of public initiatives such as soil and groundwater remediation and flood control, which will open up new areas for people to live, work, visit and play.

a) Removing Barriers/ Making Connections:

If waterfront renewal is to be truly successful, the waterfront will have to feel like and function as part of the city fabric. The first principle of the Plan is to remove barriers and reconnect the city with Lake Ontario and the lake with the city. This is the key to unlocking the unrealized potential of Toronto's waterfront. The new connections will be north/south and east/west. They are functional, thematic and symbolic in nature.

- Redesigning the Gardiner corridor
- A new waterfront transit network
- Lake Shore Blvd, a grand waterfront boulevard
- Queen's Quay, Toronto's Waterfront Drive
- Completing the Waterfront Trail
- Waterfront cultural and heritage corridors

b) Building a Network of Spectacular Waterfront Parks and Public Spaces:
The second principal of the Plan recognizes the significance of the public realm
in transforming the Central Waterfront into a destination for international tourism,
national celebration and local enjoyment. The Plan promotes the remaking of
the Central Waterfront as a special place imbued with spectacular waterfront
parks and plazas and inviting natural settings that please the eye and capture
the spirit.

- Reserving the water's edge for public use
- The Yonge St. pier
- Harbourfront Centre, an even stronger draw
- Creating a new East Bayfront Park
- The Don Greenway
- A new Lake Ontario Park
- The ship channel
- A new Fort York Park
- An expanded Marilyn Bell Park
- Ontario Place, a waterfront destination
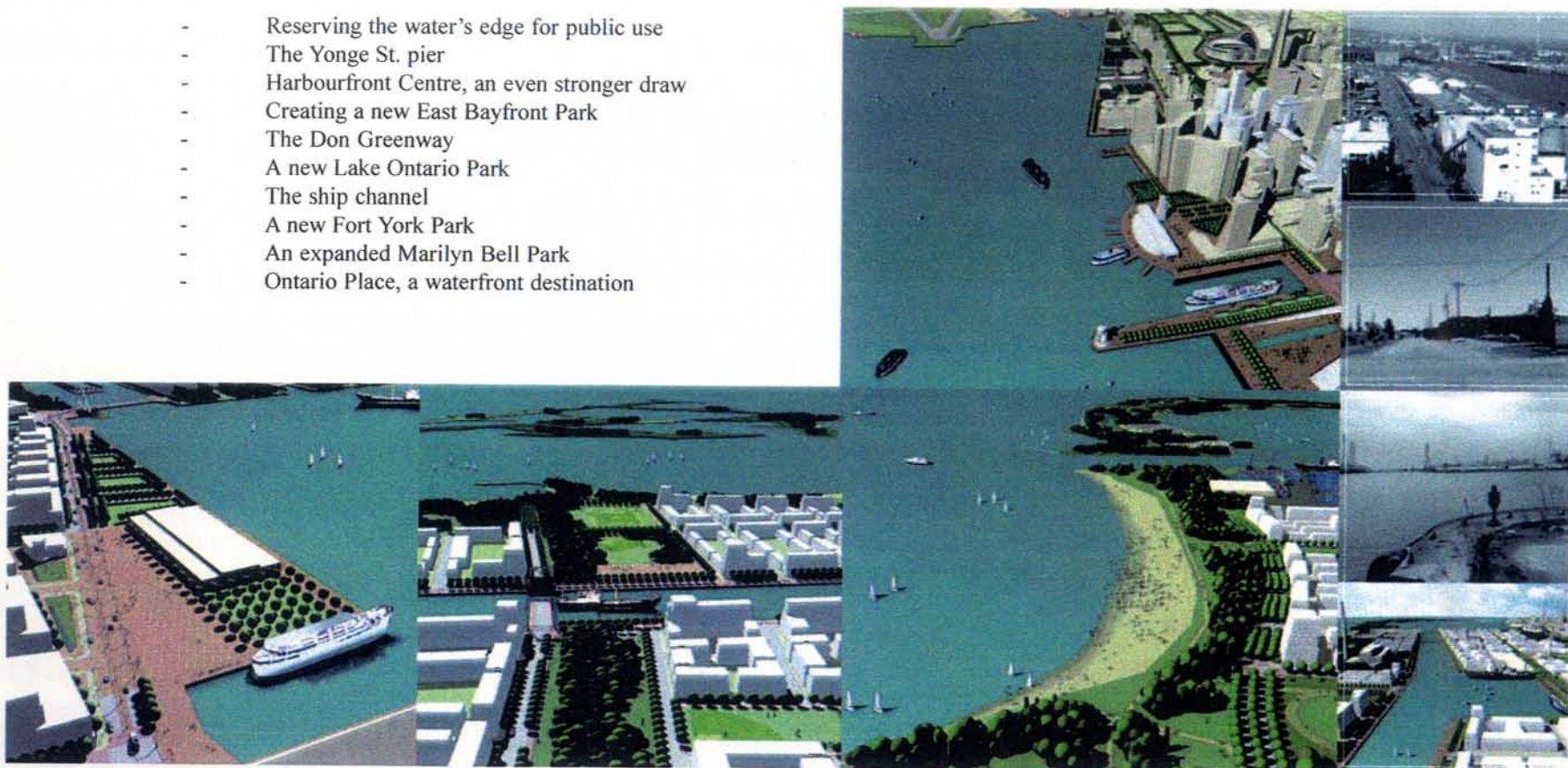
c) Promoting a Clean and Green Environment

The third principal of the Plan is aimed at achieving a high level of environmental health in the Central Waterfront. A wide variety of environmental strategies will be employed to create sustainable waterfront communities.

- Priority for sustainable modes of transportation
- Protecting the West Don Lands from flooding
- Renaturalizing the mouth of the Don River

d) Creating Dynamic and Diverse New Communities

The fourth principal of the Plan is focused on the creation of dynamic and diverse waterfront communities – unique places of beauty, quality and opportunity for all citizens. New waterfront communities will be acclaimed for their high degree of social, economic, natural and environmental health and cultural vibrancy, which collectively will contribute to the long-term sustainability of the area and the entire city.

- Opening up the Port Lands to urban development
- A new beginning for the West Don Lands
- The East Bayfront, a prominent new neighbourhood
- Exhibition Place, a place for work, celebration and living
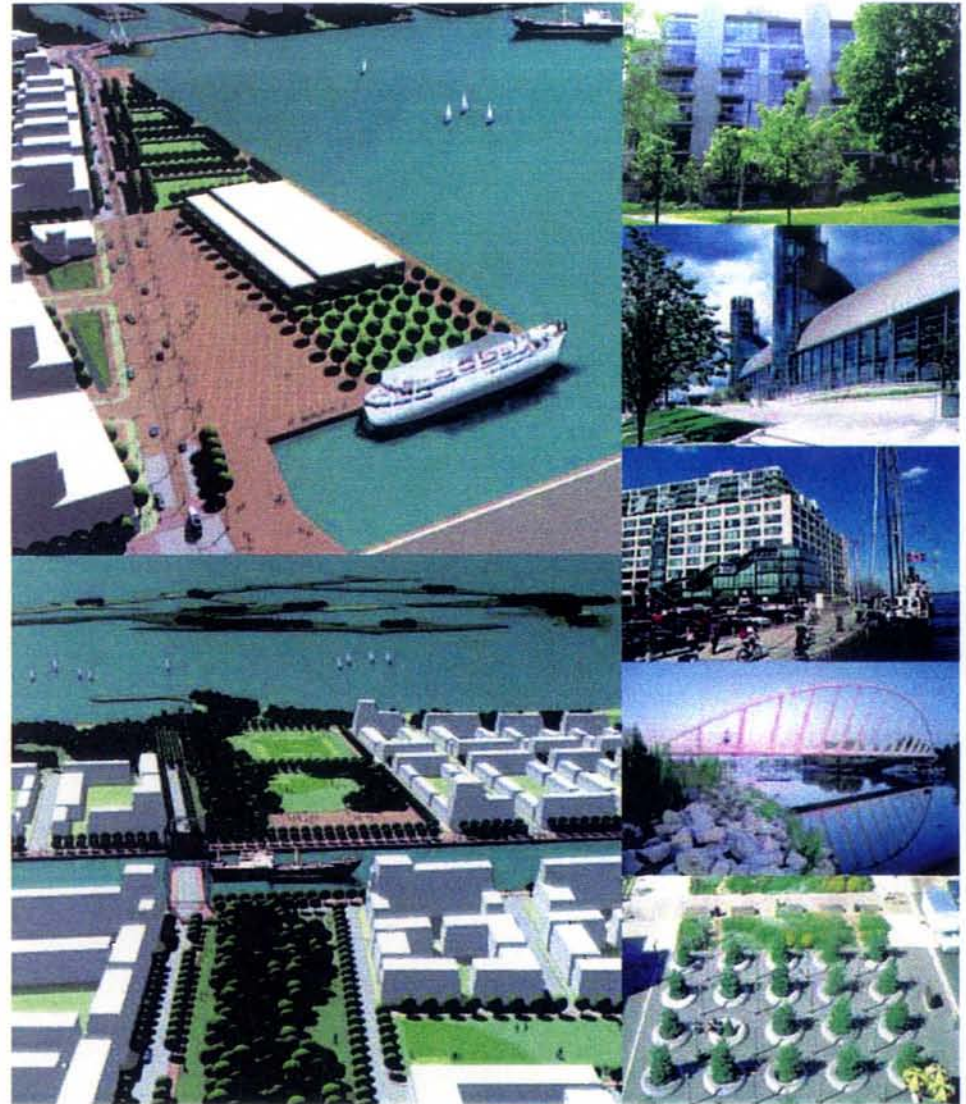
principles for building toronto's waterfront are edited
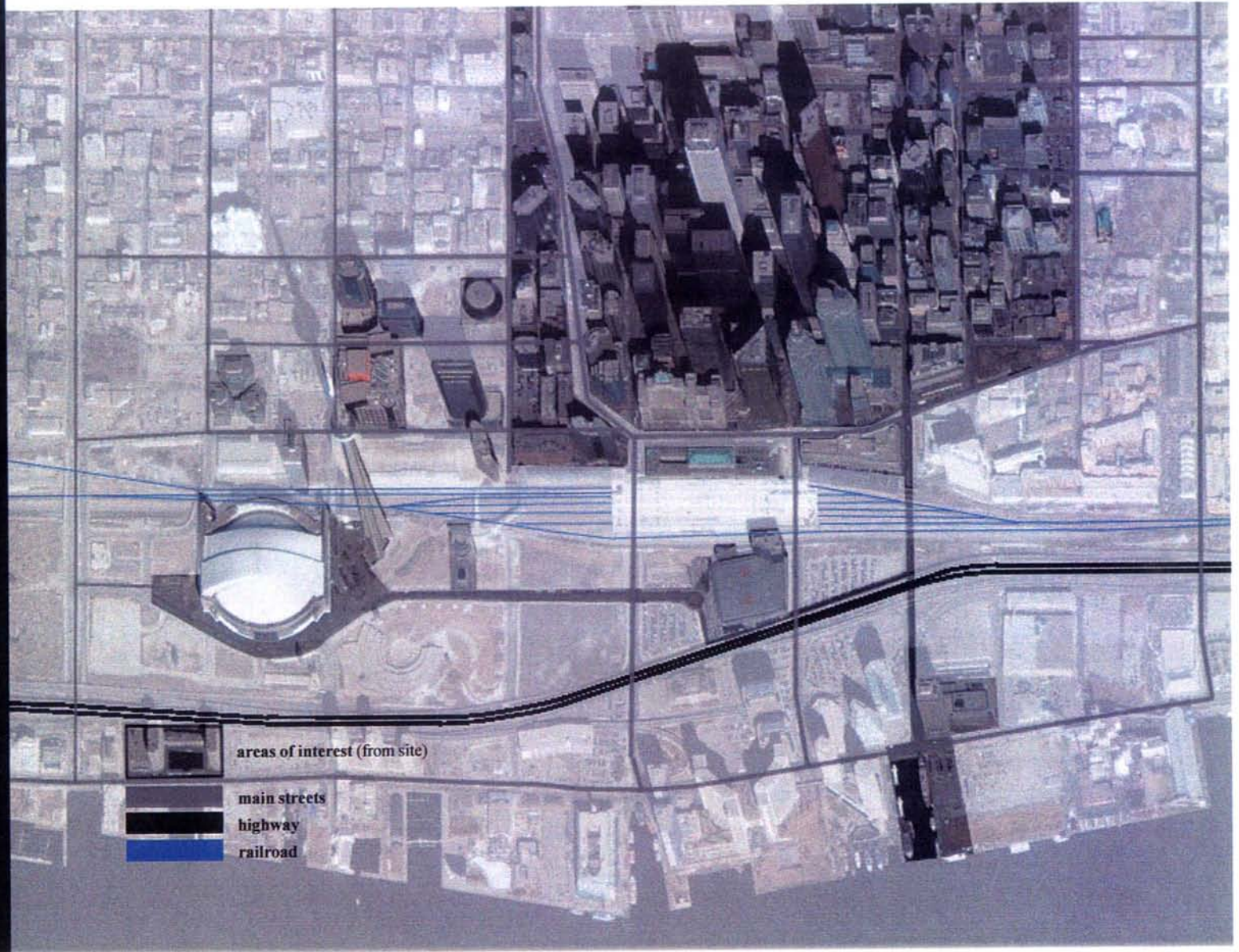from the city of toronto's central waterfront part ii plan

SECTION SIX:
ANALYTICAL STUDIES

CONNECTING ROADS

ARCHEOLOGICAL RESOURCES

CULTURAL RESOURCES

ENTERTAINMENT RESOURCES

HERITAGE RESOURCES

areas of interest (from site)

main streets
highway
railroad

RESIDENTIAL
COMMERCIAL
ENTERTAINMENT
MIXED-USE
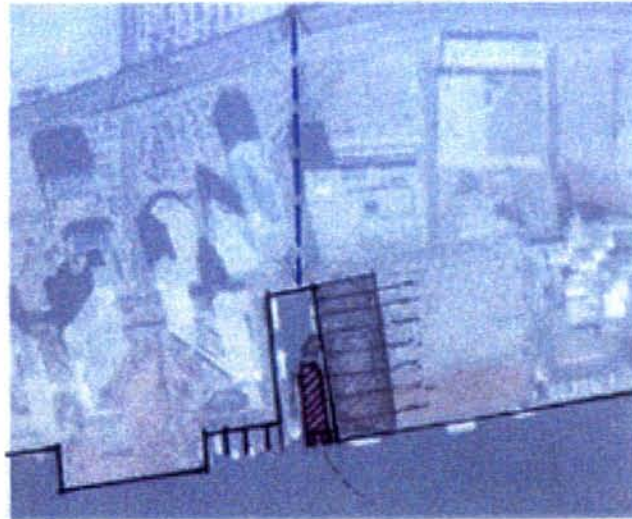INDUSTRIAL
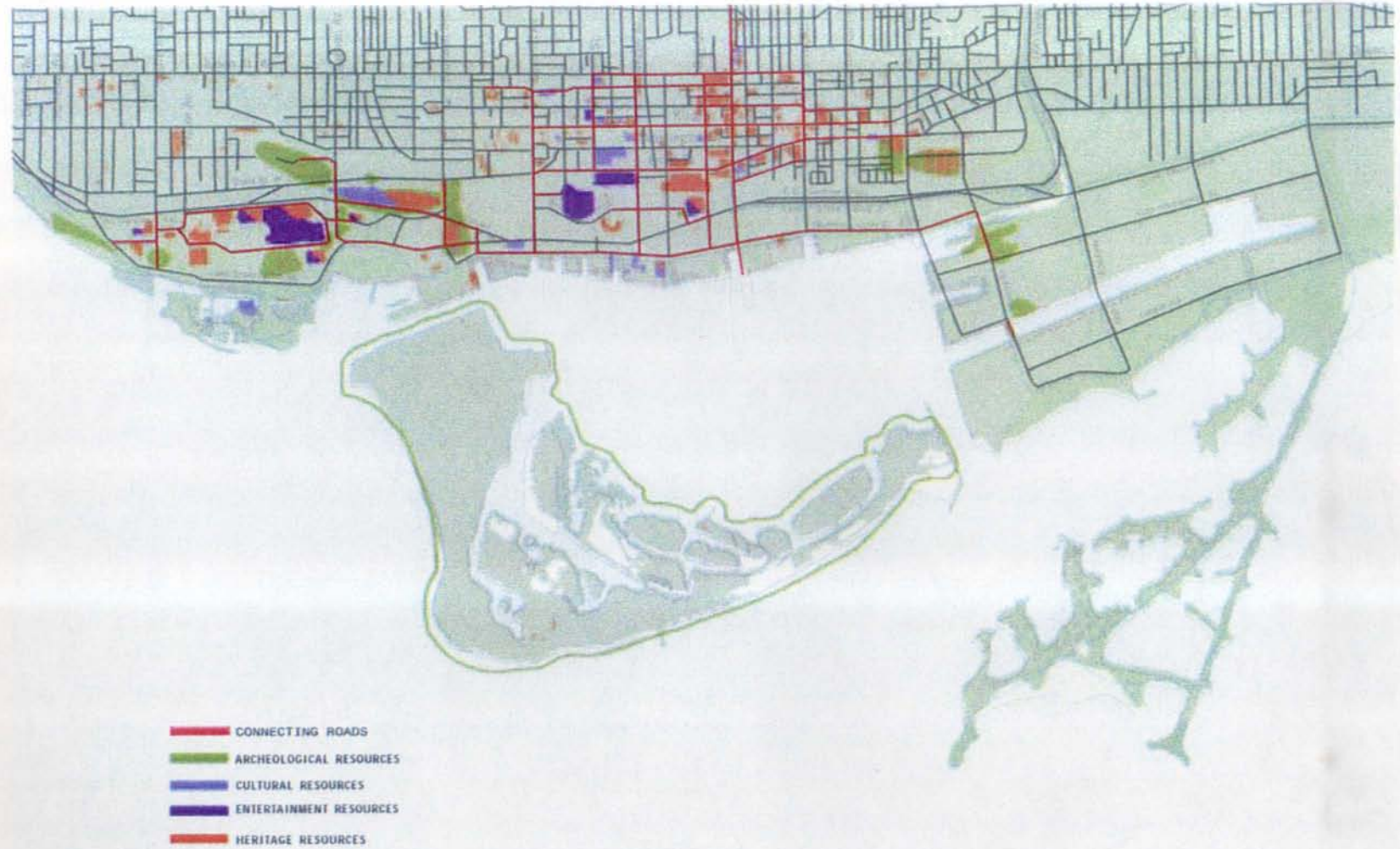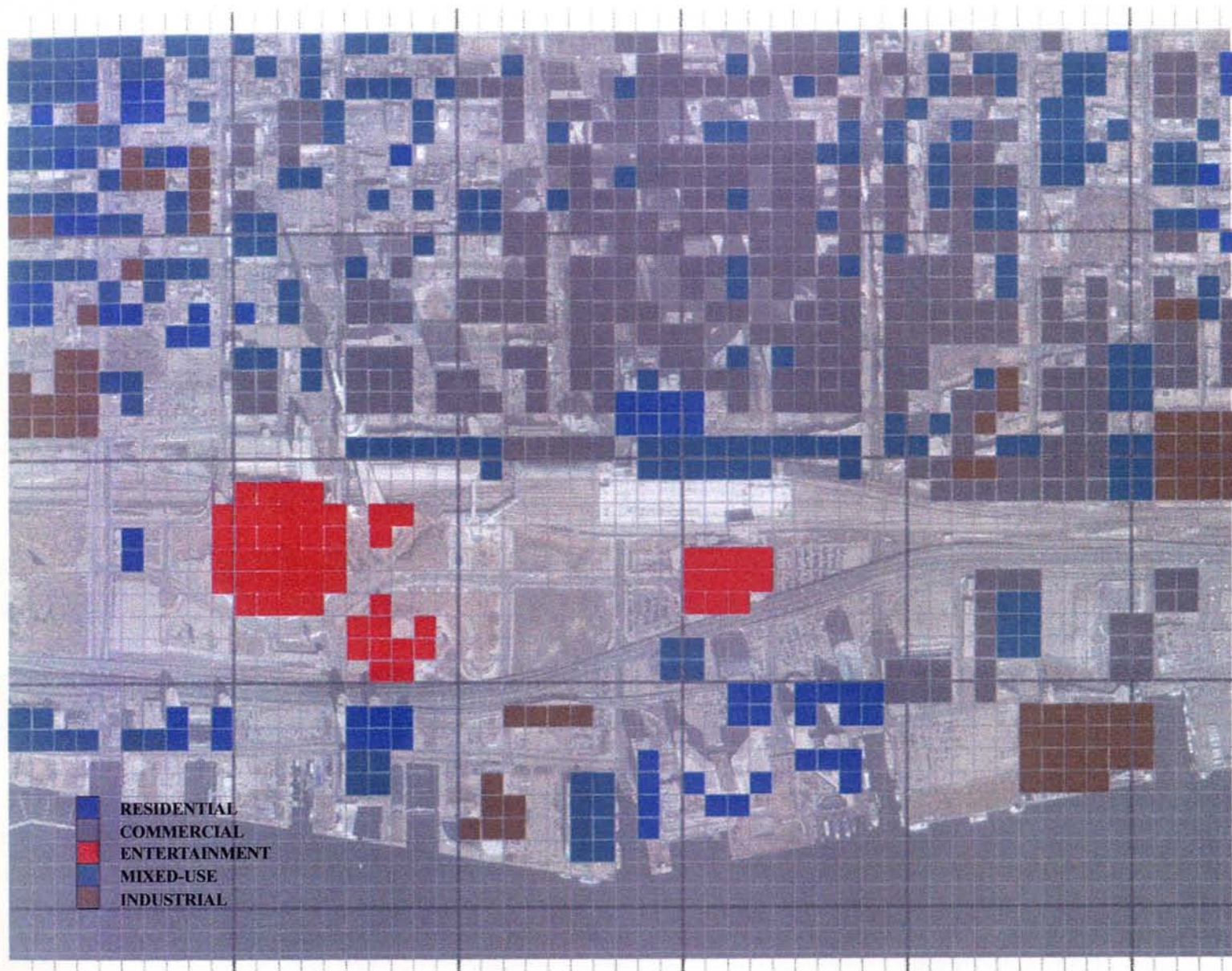
EXISTING SLIP

pros:

-come into port on axis with yonge st.
-no impedence to harbour traffic
-easy coverage from weather elements

cons:

-block visual axis of yonge st. into harbour
-take up whole slip
-difficult boat docking
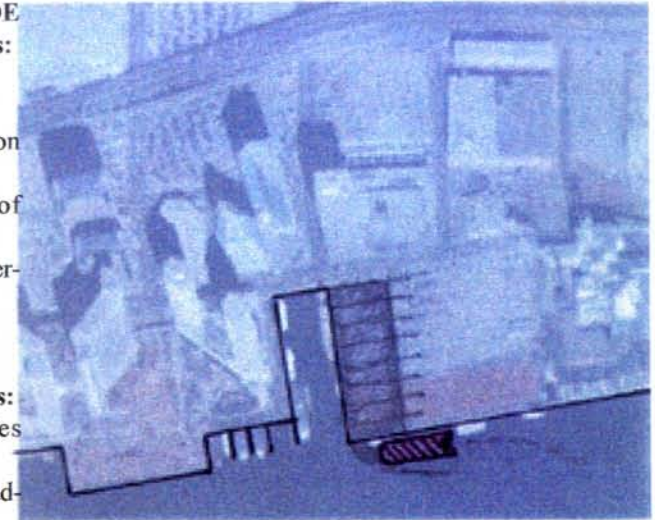-side-entry into site
-have to construct loading ramp

SOUTH SIDE

pros:

-easy boat docking
-end-entry into site
-allows for procession onto yonge st. axis
-maximize length of site
-yonge st. axis uninterrupted into harbour
-easy boat coverage

cons:

-slightly impedes harbour traffic
-have to construct loading ramp

PARTIALLY EMBEDDED

pros:

-mid-entry into site
-low impedence to harbour traffic
-no large loading ramp construction
-easy coverage from weather elements

cons:

-pier construction
-slightly difficult boat docking
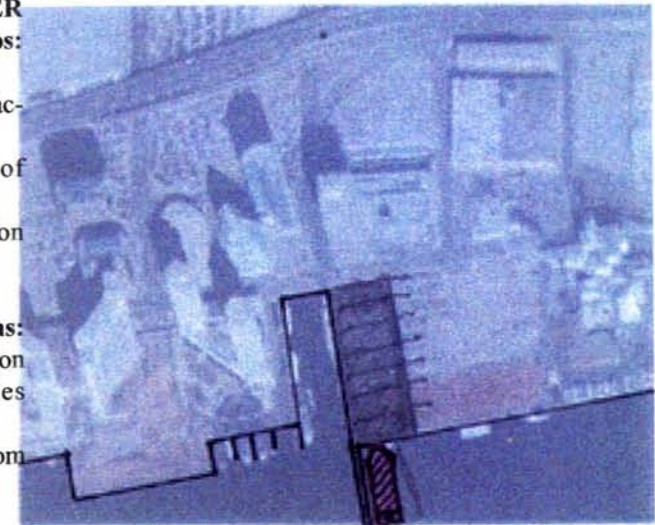
NEW PIER

pros:

-easy boat docking
-end-entry into site facing the city fabric
-maximize length of site
-allow for procession onto yonge st. axis

cons:

-large pier construction
-largely impedes harbour traffic
-no boat coverage from weather elements

Sea Terminal, Zeebrugge, Belgium. Rem Koolhaas.

"*To stay viable after the opening of the tunnel between England and the continent, the ferry companies operating across the channel propose to make the crossing more exciting. Not only would the boats turn into floating entertainment worlds, but their destinations - the terminals - would shed their utilitarian character and become attractions. The original Babel was a symbol of ambition, chaos, and ultimately failure; this machine proclaims a working Babel that effortlessly swallows, entertains, and processes the travelling masses.*"[10] This Koolhaas quote suggests one of the characteristics that this thesis will attempt to encapsule; being the terminal as a destination, an attraction in itself - for the terminal to swallow, entertain, and process the travelling masses.

The sizes of spaces and program in the Zeebrugge terminal was helpful in preliminary assignment of square footage for the different aspects of this thesis' program, as well as providing initial insight into passages of circulation and their relation to the terminal as a whole.
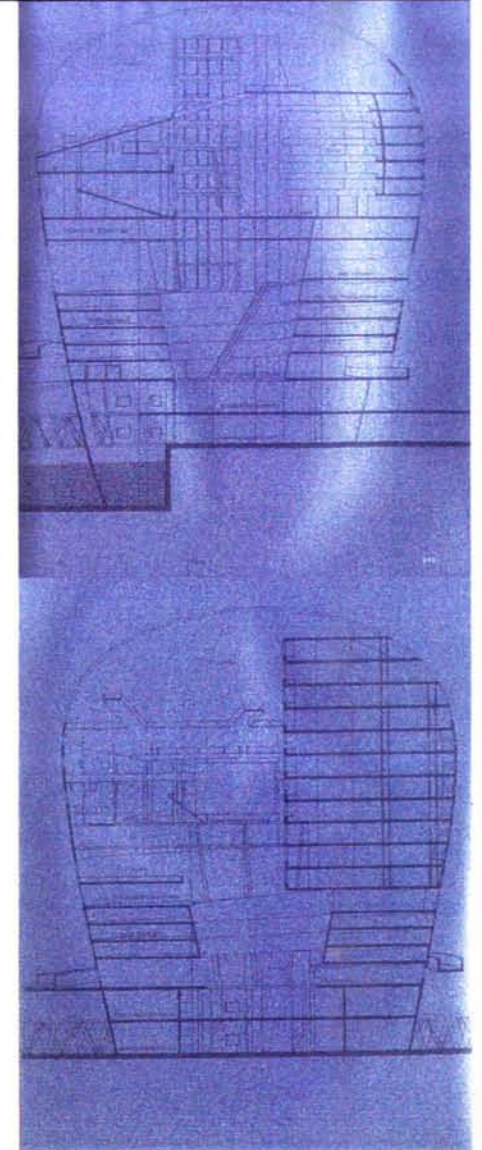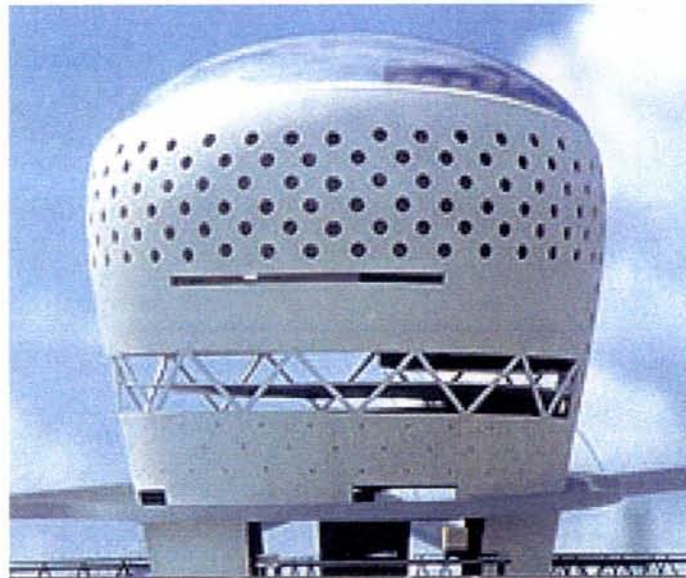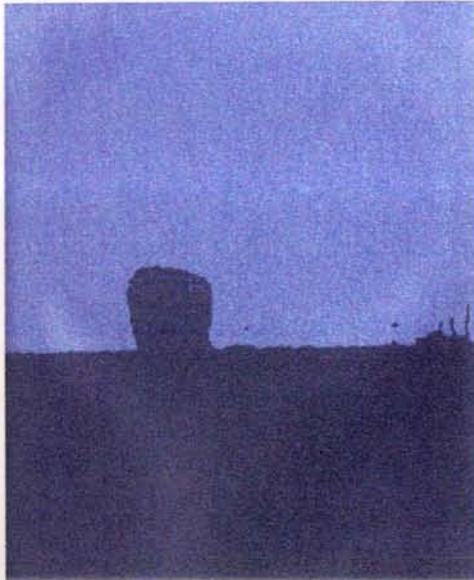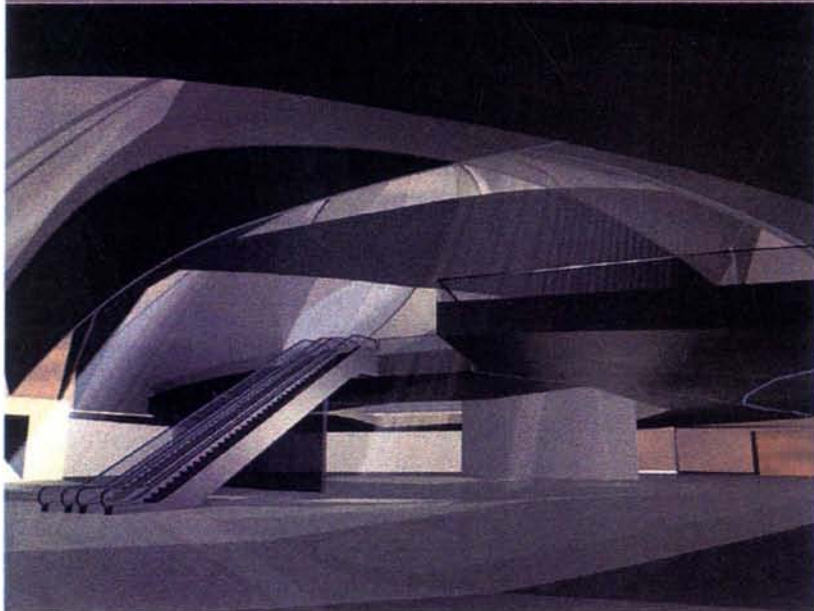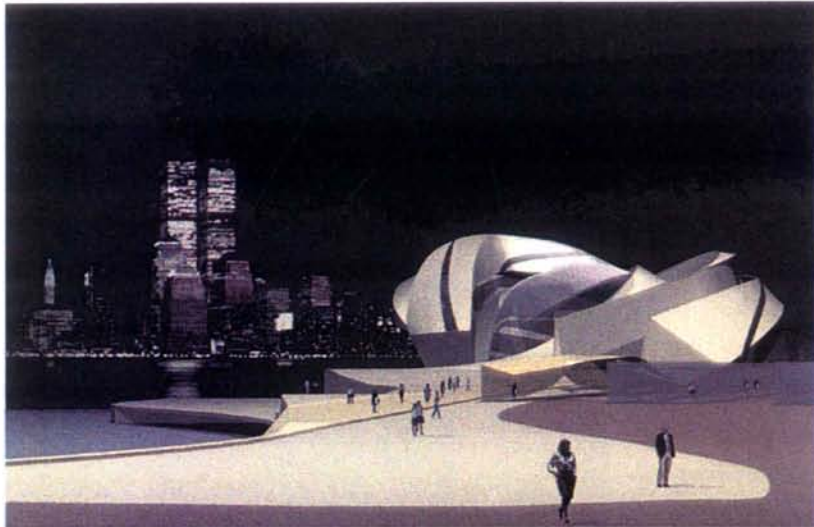
Staten Island Ferry Terminal. Staten Island, NY. Steve Eisenman.

In this project, Eisenman interjects a museum and cultural centre into the ferry terminal, making it a highly-used civic (and cultural) monument for Staten Island. The cultural aspects of the program are seen by a much wider range of patrons because of its location within the very busy terminal. Eisenman's basis for this project is the notion that cultural instistutions are becoming more and more 'consumerized' and equivalent to architectural works designed for the consumer.

Through the bringing of art and culture into the ferry terminal, the typology of the terminal is vastly redefined. The design of this terminal was made with the concept of a new cultural icon for Staten Island in mind, on a site which would see a constant flow of traffic through the intervention. The concept of designing an icon with the larger city context in the direct background is the same type of design this thesis is proposing.
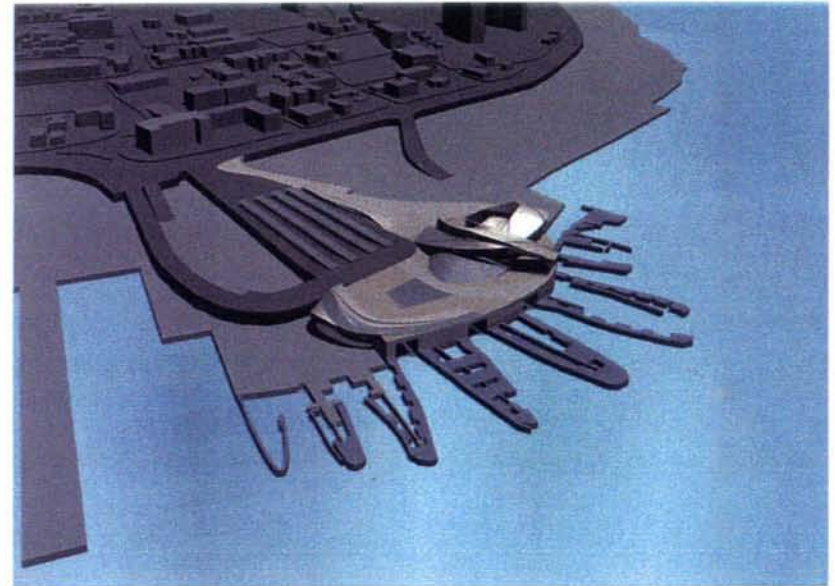
Canada Place, Vancouver. Zeidler Roberts Partnership

Canada Place is a vibrant terminal for cruise ships coming in to visit the city of Vancouver, usually on their journey up the Pacific Coast northward to Alaska. The site is a multi-use area, with conference centres, a hotel, tourism centre, exhibition space, and large convention centre. The city throws many celebrations in, on, and around the terminal, which has become a landmark on the Vancouver skyline. The plans helped to determine what type of programmatic spaces were needed for the demand of a ferry (or cruise ship) upon the site.

Upper Level
10000 Level Plan

	Port Cochere		Passenger Zone
	Baggage Area		Other Uses

Lower Level
4000 Level Plan
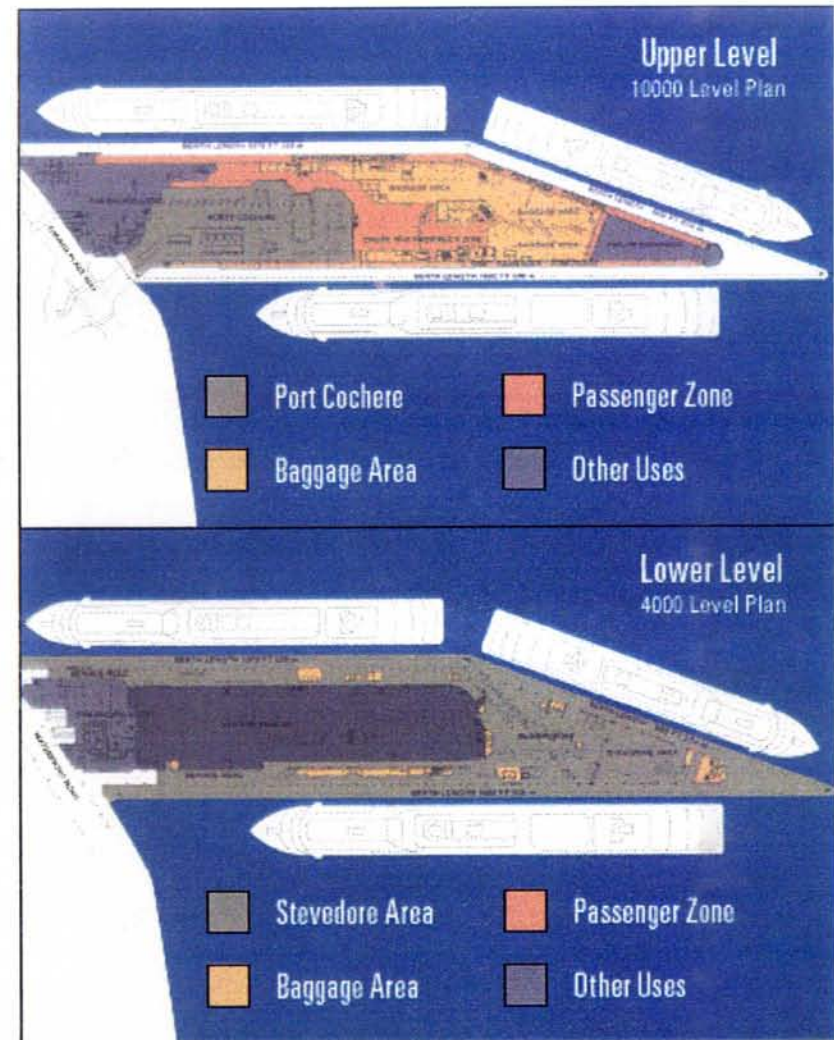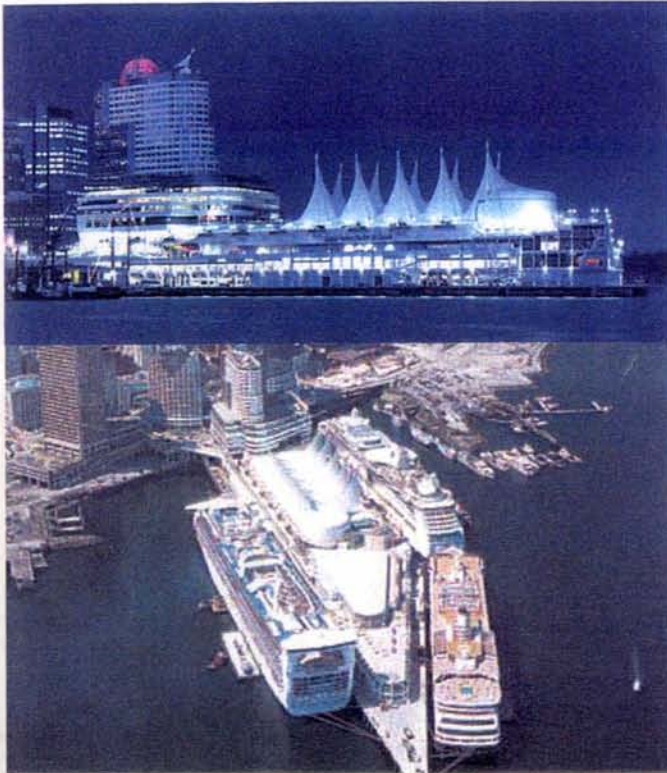
	Stevedore Area		Passenger Zone
	Baggage Area		Other Uses

Ellis Island, NY.

Ellis island, a destination for many immigrants coming into the United States, became a symbol of freedom and threshold into the U.S. Inside the large gathering hall, incoming immigrants were forced to walk up a grand set of stairs so that hidden physicians could watch for and note any visible maladies. The immigrants were made to queue in a large gathering area- reminiscent of a type of cattle pen- and had to wait for various sorts of physical, psychological, and literacy tests. Ellis island became an icon and the point of arrival for many travelers, as well as the beginning of many historic processions into the city of New York and on into the whole United States .
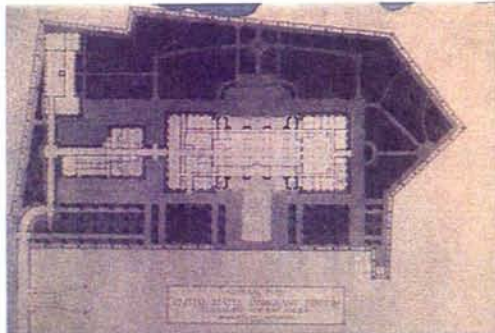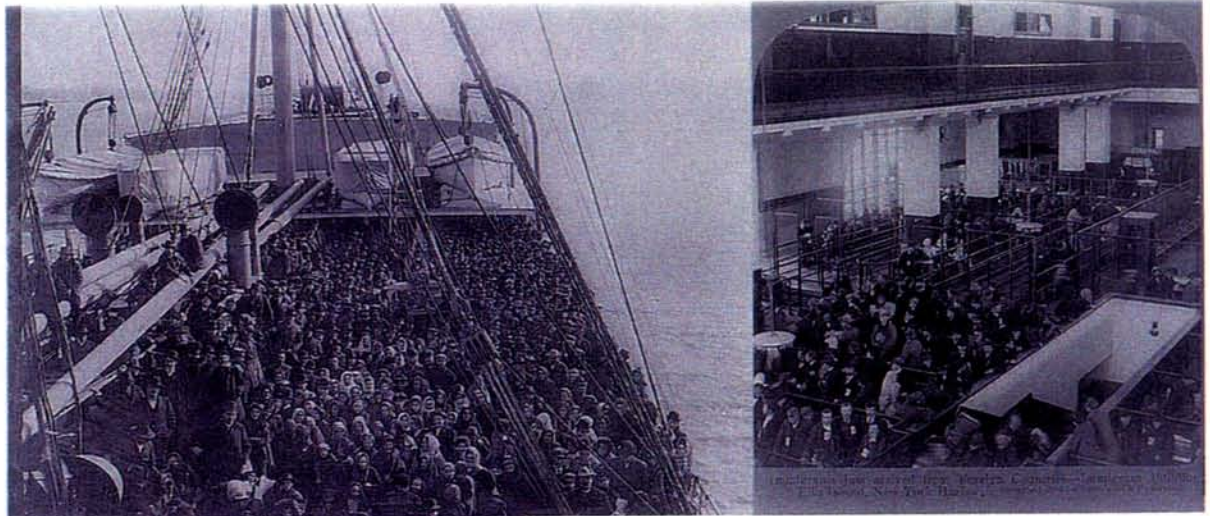
Piazza San Marco, Venice, Italy

Although not an "official" port or terminal, it can be argued that the Piazza acts as the main gate to Venice, the threshold of the ancient city. The site is located at the point of collision where the water hits (and very occasionally floods overtop) the breaker wall. The water-facing facades of the Doge's Palace and the Libreria Sansoviniana, along with the two monumental columns in the open space between the buildings, create a type of formal entry into the main piazza and gathering place in Venice. The procession through this type of entry and the implied threshold that one crosses when walking into the dense fabric are of interest to the formal aspects of this thesis.
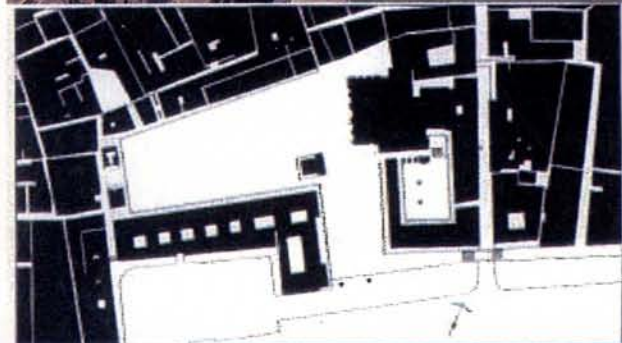
Uffizi Gallery, Florence, Italy

When the Arno River was the key transportation and trade route into the city of Florence, the Uffizi acted as a formal procession into the heart of Florence, through the repetative corridor which worked to formalize the movement across this kind of elongated threshold. The perspective down the length of the Uffizi gives the feeling of compression before the space opens up into the piazza in front of Palazzo Vecchio. The monumental gate of three arches was built by Vasari which formalized the entrance into the city and also created an end to the rigid repetition for those about to leave the city.

SEVEN

SECTION SEVEN:
APPENDIX

1. Whitehead, A.N. Science and the Modern World
        Simon & Schuster, 1997
Science and the Modern World deals more with the subject of science, but Whitehead, well known for some of his quotes, thought and wrote on the Odyssey of the human spirit and how that ties into the habits of different nations, specifically how he thought different nations and cultures alike are of great benefit to one another.

2. Frampton, Kenneth. Modern Architecture: A Critical History
        Thames and Hudson, New York, NY. 1992   p.319
Frampton speaks at certain points on the idea of certain cross-fertilization of cultures, authentic culture, and the vital forms of regional culturism. In dealing with the aspects of a specific culture, it is important to understand some of the issues surrounding the subject and what theorists and architects have said about it in the past.

3. The Holy Bible, Genesis 2:8-9
In the book of Genesis there are many referrals to the Garden of Eden, and the banishment of Adam and Eve from it, which is pertinent to the idea of being inside a given place versus being outside it.

4. Ibid. Genesis 2:15

5. Ibid. Genesis 3:24

6. Andreu, Paul. "Borders and Borderers" Architectural Design 69 #7,
        John Wiley & Sons, New York, NY. Inc. 1999 pp.57-61
An essay on some of the issues of travelers crossing international borders in today's world. Political, architectural, and geographical issues are all somewhat covered.

7. Glusberg, Jorge. "Critical Regionalism: Point of Departure and Arrival" 10x10
        Phaidon Press, LTD. New York, NY. 2000
In this essay about Critical Regionalism in Latin America, Glusberg gives the example of Uruguayan painter and philosopher Pedro Figari (1861-1938). Figari coined ideas regarding ideas of Regionalism as the way forward and ultimate goal of art, architecture, and the applied arts in Latin America. I'm taking this into account, as well as the idea that an area (i.e. a country or region) can be a geo-historical whole as well as both a socio-historic and socio-cultural region at the same time.

8. Deluda, Manuel. "Extensive Borderlines and Intensive Borderlines" <u>Architectural Design</u> 69 #7,
    John Wiley & Sons, New York, NY. Inc. 1999 pp.78-79

An essay on the crossing of physical borderlines, and how they differ from intensive borderlines, being physical "borderlines," as in ones that you can specifically feel, as in a diver feeling the pressure change while diving into deeper waters. This essay suggests that the "intensive borderline" is a subject not brought up by designers today, but could maybe be used to make a "stronger" architecture.

9. Stringer, Ben & Barber, Peter. "Turbulence in Smooth Space" <u>Architectural Design</u> 69 #7
    John Wiley & Sons, New York, NY. Inc. 1999 pp.88-89

An essay regarding the crossing of borders, especially through terms of a passport checkpoint inside the "typical" airport, how it can be designed to really pronounce the crossing of a national threshold.

10. Koolhaas, Rem. <u>S,M,L,XL</u>
    The Monacelli Press. New York, NY. 1995

The ideas behind Koolhaas' Sea Terminal in Zeebrugge, Belgium, are relevant issues to the program of this thesis.

Dendy, William & Kilbourn, William. <u>Toronto Observed, its Architecture, Patrons, and History</u>
    Toronto Oxford University Press, Toronto. 1986

This book gave me much of the historical information on Toronto, it's beginnings, city planning, problems, social issues, etc.

Frampton, Kenneth. "Place-Form and Cultural Identity" (Chapter 3, <u>Design After Modernism: Beyond the Object</u>)
    Thames and Hudson, New York, N.Y. 1988.

In this book, specifically this chapter, it is my contention to research more on the subject of Cultural Identity through the eyes of Place-Form, and see how it can possibly influence a work of architecture where Cultural Identity is the driving factor of the project.

Hayes, K. Michael. "Critical Architecture, Between Culture and Form"
    <u>ARC 500 Beginning Theory Textbook</u>. Campus Copy Centers, Syracuse, 2001.

"That architecture as an activity and knowledge is fundamentally a cultural enterprise may hardly seem a contentious proposition." Architecture as a cultural enterprise is an area of research that I am pursuing in order to understand better how architecture, specifically a piece of architecture, is and can be an instrument of a given culture.

Holl, Steven. Edge of a City pp.8-15
        Princeton Architectural Press. New York, NY. 1991
This short book explains some of the problems with trying to build on the "edge of a city" and shows examples of some of Holl's designs for different programs to bring attention to a specific edge of various cities.

Team 10 Primer
        ARC 500 Beginning Theory Textbook. Campus Copy Centers, Syracuse, 2001.
"Man is always and everywhere essentially the same." This statement, in my opinion, is only partly true- it needs to be explored more in depth as to how it is true, but at the same time, how architecture can reinforce the subtle cultural differences that in fact do exist.

www.city.toronto.ca
        This website gave all the information regarding Toronto's current Waterfront Redevelopment Program.

www.ec.gc.ca
        This website gave the information on the climate normals for Toronto Island in the Toronto Harbour.

www.waterfronttrail.org
        This website gave information on the 22 km. long Waterfront Trail.

www.torontoport.com
        This website gave some of the history and current conditions of Toronto Harbour, it's current shipping activities, and some of the local conditions.

glossary

alien - *adj.* 1. Owing political allegiance to another country or government; foreign: *alien residents.* 2. Belonging to, characteristic of, or constituting another and very different place, society, or person; strange. *-n.* 1. An unnaturalized foreign resident of a country. 2. A person from another and very different family, people, or place. 3. A person not included in a group; an outsider.

blend - *tr.* 1. To combine or mix so that the constituent parts are indistinguishable from one another. *-intr.* 2. To become merged into one; unite.

border - *n.* 1. A part that forms the outer edge of something. 4. The line or frontier area separating political divisions or geographical regions. *-intr.* 1. To lie adjacent to another. 2. To be almost like another in character.

borderland - *n.* 1.a. Land located on or near a frontier. b. The fringe. 2. An indeterminate area, situation, or condition.

borderless - *n.* Land or a specified area which has no physical or implied separating political divisions or geographical regions.

boundary - *n.* 1. Something indicating a border or limit. 2. A border or limit so indicated.

civilization - *n.* 2. The type of culture and society developed by a particular nation or region or in a particular epoch. 5. Modern society with its conveniences.

coexist - *intr.v.* 1. To exist together, at the same time or in the same place. 2. To live in peace with another or others despite differences, esp. as a matter of policy.

contact - *n.* 1.a. A coming together or touchiing, as of objects or surfaces. b. The state or condition of touching or of immediate proximity. 2.a. Connection or interaction; communication. b. Visual observation. c. Associateion; relationship.

cosmopolitan - *adj.* 1. Pertinent or common to the whole world. 2. Having constituent elements from all over the world or from many different parts of the world. 3. So sophisticated as to be at home in all parts of the world or conversant with many sphere of interest.

cross-fertilization - *n.* 2. Mutual exchange, as between dissimilar concepts, that produces something beneficial.

crossing - *n.* 1. The act or action of crossing. 2.a. A place at which roads, lines, or tracks intersect; an intersection.

crossover - *n.* 1. A place at which or the means by which a crossing is made.

culture - *n.* 1.a. The totality of socially transmitted behavior patterns, arts, beliefs, institutions, and all other products of human work and thought. b. These products considered as the expression of a particular period, class, community, or population.

dead zone -
decompress - *v.* 1. To relieve of pressure or compression. 2. To bring (a person exposed to conditions of increased pressure) gradually back to normal atmospheric pressure.

demarcation - *n.* 1. The setting or marking of coundaries or limits. 2. A separation; a distinction.

departure - *n.* 1. The act of leaving. 2. A starting out, as on a trip or a course of action. 3. A divergence or deviation, as from an established rule or procedure.

destination - *n.* 1. The place to which one is going or directed. 2. The ultimate purpose for which something is created or intended. 3. *Archaic.* An act of appointing or setting aside for a specific purpose.

diminution - *n.* 1.a. The act or process of dimishing. b. The resulting reduction; decrease.

discourse - *n.* 1. Verbal expression in speech or writing. 2. Conversation. 3. A formal written or spoken discussion of a subject.

diversify - *v.* 1.a. To give variety to; vary. b. To extend into disparate fields.

doorway - *n.* The entranceway to a room, building, or passage.

enclosed - *tr.v.* 1. To surround on all sides; close in. 2. To fence in. 3. To contain, esp. so as to envelope or package.

entrance - *n.* 1. The act or an instance of entering. 2. A means or point by which to enter. 3. Permission or power to enter; admission.

exchange - *v.* 1. To give in return for something received; trade. 2. To give and receive reciprocally ; interchange.

filter - *v. tr.* 1. To pass through a filter. 2. To remove by passing through a filter. *-intr.* 2. To come or go gradually and in small groups.

foreigner - *n.* 1. One who is from a foreign country or place. 2. One who is from outside a particular group or community; an outsider.

gate - *n.* 1. A structure that can be swung, drawn, or lowered to block an entrance or a passageway. 2.a. An openning in a wall or fence for entrance or exit. 3.a. A means of access. b. A passageway through which passengers proceed for embarkation.

globalization - *tr.v.* To make global or worldwide in scope or application.

homogenous - *adj.* 1. Of the same or similar nature or kind. 2. Uniform in structure or composition.

icon - *n.* 1.a. An image; a representation. b. An enduring symbol. 3. The object of great attention and devotion; an idol.

identity - *n.* 1. The set of characteristics by which a thing is recognized or known. 2. The set of behavioral or personal traits by which an individual is recognizable as a member of a group. 3. The quality or condition of being the same as something else.

indispensable - *adj.* 1. Not to be dispensed with; essential. 2. Obligatory; unavoidable.

inside - *adj.* 1. Inner; interior. 2. Relating to, known to, or coming from an exclusive group. *-adv.* 1. Into or in the interior; within. 2.a. On the inner side or part of. b. Into the interior of.

introspection - *n.* Contemplation of one's own thoughts, feelings, and sensations; self-examination.

landmark - *n.* 1. A prominent identifying feature of a landscape. 2. A fixed marker that indicates a boundary line. 4. A building or site that has historical significance. *-adj.* Having great import or sinificance.

manifestation - *n.* 2. An indication of the existence, reality, or presence of something. 3.a. One of the forms in which someone or something, as a god or an idea, is revealed. b. The materialized form of a spirit.

mark(er) - *n.* 1. A visible trace or impression, such as a line or spot.

movement - *n.* 1.a. The act or an instance of moving; a change in place or position. b. A particular manner of moving.

nexus - *n.* 1. A means of connection; a link or tie. 2. A connected series or group.

outside - *adj.* 1.a. Of, relating to, or being on or near the outer side; outer. b. Of, restricted to, or situated on the outer side of an enclosure or a boundary; external. 3.a. Acting, occurring, originating, or being at a place beyond certain limits. 4.a. Not belonging to or originating in a certain group or association.

portal - *n.* 1. A doorway, an entrance, or a gate, esp. a large and imposing one. 2. An entrance or a means of entrance.

procession - *n.* 1. The act of moving along or forward; progression. 2. Origination; emanation; rise. 3.a. A group of persons, vehicles, or objects moving along in an orderly, formal manner. b. The movement of such a group.

reunite - *tr. & intr.v.* To bring or come together again.

screen - *n.* 2. One that serves to protect, conceal, or divide.

socio-political - *adj.* Involving both social and political factors.

symbolize - *v. tr.* 1. To serve as a symbol of. 2. To represent or identify by a symbol.

terminal - *adj.* 1. Of, relating to, situated at, or forming a limit, a boundary, an extremity, or an end. 3. Of, relating to, occurring at, or being the end of a section or series; final. -*n.* 1. A point or part that forms the end. 2. An ornamental figure or object placed at the end of a larger structure; a finial.

transition - n. 1. Passage from one form, state, style, or place to another. 3.a. A modulation, esp. a brief one. b. A passage connecting two themes.

traverse - *n.* 1. To travel or pass across, over, or through. 2. To move to and fro over; cross and recross.

unify - *tr. & intr.v.* To make into or become a unit; consolidate.