Identity and Access: The Capital Library

by

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ABSTRACT

As a capital city, Ottawa is a national and international icon. On one hand, its inhabitants are players in a larger spectacle of national identity. On the other hand, they still have the requirements of an everyday life, which is the foundation of civic identity.

This thesis explores this paradox in Ottawa through the design of a public building. It proposes to site the new Capital Library in Ottawa in the midst of an underused space in the Parliamentary Precinct, where the civic vitality of the downtown core meets the institutional zone. The siting has both clear political and urban agendas, and the program has a clear cultural agenda. The execution of the building uses an architectural language to promote participation, provide waterfront access, reveal a vista, cap an important axis and strengthen the quality of life in our capital city.

ACKNOWLEDGEMENTS

Special thanks to Christine Macy and Diogo Burnay. The success of this thesis is entirely due to their guidance and patience.

Thanks to my loving wife; you are my inspiration in all things. Without your support, wisdom and perseverance I would never have had the strength to make this dream a reality.

To the innumerable friends and family members that have lent their support, time and skills to my cause: I thank you from the bottom of my heart. I am truly blessed to be surrounded with such a wonderful support base.

CHAPTER 1: INTRODUCTION



Arkadi Lavoie LaChappelle, "La Chorale." 2012.

An aged couple shares their tandem rocking chair. It is their prized possession. Neither one has the capacity to rock the chair independently; it will only function when both partners work in unison. Over the years, there has been much acrimony over the possession of the single, centre armrest. It is the type of steady low-grade warfare known to married couples and has become a familiar, if not friendly, fixture of their daily life together. Despite their differences, they continue to sit together and rock together. But there is still blood on the handle.

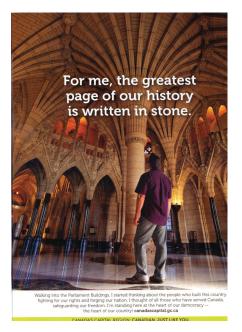
As a native of Canada's national capital, I have experienced that curious tension where the daily life of the city dweller intersects with the symbolic nature of the capital. On one hand, a capital city is a national and international icon, and its inhabitants are players in that larger spectacle of national identity. On the other hand, residents still have the requirements of everyday life: they shop for groceries, go to schools, engage in recreation, etc. This daily life is the foundation of civic identity. This thesis is a focused exploration of this paradox in Ottawa, through the design of a public building on a site where the civic vitality of the downtown core meets the institutional zone of the Parliamentary Precinct.

The site is the strip of land that separates the intersection of Bank and Wellington Streets from the banks of the Ottawa River. The land falls within the Parliamentary Precinct, and currently serves as parking lots and service space. The program proposed is the Capital Library – an interpretation of the Ottawa Central Library project; a much-needed municipal project that has been shelved since 2010 due to financing and political issues.

Ottawa – A National Image

Ottawa is Canada's seat of national power, and as such it receives disproportionate amounts of both scrutiny and privilege compared with other Canadian cities. Part of that privilege is access to national institutions of arts and culture as well as the care and thought that goes into formulating the built environment of the city as an icon. This is especially true for the institutions of the Parliamentary Precinct. A large segment of Ottawa's population is employed either directly or peripherally by the federal government and its assorted institutions — just one example of the intersection of civic and national identity.

The institutions of federal government are housed in buildings that symbolize their power and importance, emphasizing an architectural language of symmetry, tradition and authority. This architectural language has shaped, to a large degree, the identity of Ottawa. It forms the core of the national image that is projected to Canadians and the international community — Parliament Hill, the canal, well-kept greenbelts, sedentary neighbourhoods and picturesque landscapes.





Canadian Geographic (October 2011), advertisements depicting the relationship of the Capital to our national identity. These focus on our federal institutions and the natural environment.

The major buildings of the Capital district are "texts" (symbols) that express concepts and theories about what it means to be Canadian.

Like painting and sculpture, architecture is part of a discourse that includes both a practice (with its traditions and references) and a critical and theoretical commentary. Virtually all aspects of a building communicate bigger ideas: from the way the plan is laid out and the building facade is composed, to the materials used to make the building, how people's movements are orchestrated through space, how rooms are named and distributed, who gets the corner window and so forth. Some buildings communicate a belief in progress through technology, others communicate ideas about democracy, respectability, power, wealth or impregnability.1

The progenitors of the formation and subsequent shaping of Ottawa were certainly aware of the symbolic impact of the capital city and had definite ideas about the direction that the city should take to fulfill these symbolic roles.

Frederic Todd, author of the 1902 report *The Ottawa Improvement Commission* (Ottawa's first strategic planning document), was adamant about the need for planning to regulate, beautify and release the potential of the city:

The Capital of an extensive country, rapidly growing in population and wealth, possessed of almost unlimited water power for manufacturing purposes, and with a location admirably adapted not only for the building of a great city, but a city of unusual beauty and attractiveness. It does not require an unreasonable amount of faith to believe that the Ottawa of to-day is but the infant Ottawa of fifty years hence, and that the end of the present century will see Ottawa grown to such proportion, that we of to-day would hardly recognize it.²

It is ironic then, that many of the proposals in Todd's report were made manifest only some fifty years hence in the planning document that has been largely responsible for the shaping, preservation and characterization of the Ottawa we know today:

Jacques Gréber's 1950 *Plan for the National Capital*.

Gréber's plan outlines many of the characteristics that define modern-day

Ottawa: preservation of the greenbelt, setting aside land for parks, zoning for industry,
removing the downtown rail lines and creating a master plan for the urban core. It also
proposed developing strategies for expanding residential areas in keeping with his

¹ Christine Macy and Sarah Bonnemaison, *Architecture and Nature* (New York: Routledge, 2003), 5.

² Frederic G. Todd, *Report for the Ottawa Improvement Commission* (Ottawa: Ottawa Improvement Commission, 1902), 2.

philosophies of planning. Gréber was an adherent of the City Beautiful movement, and as such had strong opinions about the role of nature in the city:

The valley of the Gatineau River, the innumerable lakes surrounded by rocky and wooded escarpments, the picturesque Masham Valley, the pastoral river banks of the Mississippi, Ottawa and Rideau Rivers, the Rideau Lakes and the numerous tributaries of these waterways provide a system of green spaces for rest, hiking, cycling, motoring, boating, fishing, hunting, camping, picnicking, horseback riding, skiing and, the most salutary of all recreations, living close to nature.³

Gréber was concerned with creating a city of viable communities and not just with designing a viable capital. In particular, he was concerned (even then) with the mounting evidence against urban sprawl:

If the city continues its expansion without proper control provided by adequate zoning, there is little doubt that those residential areas will continue to deteriorate. Such conditions are frequent in large cities, especially of commercial or industrial characters. The search for space, the constant pressure from various activities, together with the improvement of roads and public transportation, are factors which have fostered the expansion of suburban areas. As distances increased, outlying areas have shown a tendency to spread promiscuously, rather than to form outside nuclei.⁴

Gréber understood then, that despite its overarching role as capital, Ottawa is still a city. People live, work and raise children in the city. Ottawa is far more than an abstract notion of "Capital" that is projected to the rest of the nation as part of our national image and character.

Within Gréber's proposal there is no recognition of civic identity beyond the national scope. Perhaps it was a function of the day, in the nationalistic pride of the post-war era, when there was a truer sense of national unity. Perhaps these particular concerns about civic identity are a function of contemporary Canada, where civic pride is a matter of course, and Ottawa is struggling to define itself in relation to its siblings: Toronto, Montréal, Vancouver, Halifax and more recently, Calgary.

It is worthwhile to note that some, but clearly not all, of Gréber's noted deficiencies were remedied after the implementation of his plan. The institutions that fall under federal purview he noted as lacking have generally been built and maintained

Jacques Gréber. Plan For the National Capital (Ottawa: National Capital Planning Service, 1950), 10.

⁴ Ibid. 46.

at a level suited to a capital city. These include the National Library and Archives, the National Gallery of Canada, the National Arts Centre and three major museums.

However, the institutions that he noted as lacking that fall under municipal jurisdiction — a city stadium, a zoological and botanical garden, community centres and a central library — have all suffered problems. The gardens were never built. The stadium (Lansdowne Park) and the library (main branch) are antiquated facilities that are no longer capable of serving the city in the manner for which they were designed. It is perhaps a function of the presence of the amenity and prestige offered by the federal institutions that has allowed for the absence or decay of what would normally be high-priority municipal services and attractions.

Neighbourhood Renewal

Ottawa is a city of rivers and greenbelts. In the last fifteen years, it has also increasingly become a city of distinct neighbourhoods and their associated "high streets." Like most cities, Ottawa has always had neighbourhood economic centres, but the last decade and a half has seen an increasing amount of reliance and pride in these long-neglected social and economic zones. These are the "nuclei" that Gréber spoke of, which have finally begun to materialize after 60 years. In the map below, the importance of Bank Street can be seen in the orientation of several of Ottawa's most distinct neighbourhoods, from Alta Vista in the south to the business district in the north.



Map showing the location of notable Ottawa "nuclei," 2013; from Google with legend by author

The evidence of these nuclei can be seen in the municipal efforts to beautify and revitalize street life. Wellington Street between Holland and Somerset is perhaps the most striking example. Formerly a long-neglected and crumbling roadway with narrow sidewalks in the blue-collar Mechanicsville neighbourhood, an influx of chic boutiques, higher-end ethnic restaurants, and pet- and baby-related shops has led to a massive infrastructure renewal that has in turn created a bustling urban district of what was once a no-go area for many Ottawans. Nearly every neighbourhood in the city can be paired to a similar story (if not always as dramatic). Vanier has Montréal Road, Westboro has Richmond Road, New Edinburgh and Lindenlea have Beechwood Avenue, Chinatown has Somerset Street and Little Italy has Preston Street. Bank Street serves as the high street for Centretown, the Glebe, Ottawa South, Alta Vista and the Hunt Club neighbourhoods, making it the longest continuous zone of economic activity in the city. Each of these neighbourhoods contains unique services that draw clients from all corners of the city, serving not only as localized amenities, but also as regional destinations.

Rivers and Greenbelts

The rivers and greenbelts have their role to play in the lives of Ottawa's inhabitants, although perhaps not in precisely the way an outsider may initially suspect. Part of the mandate of the National Capital Commission (NCC), the federal crown corporation that is largely responsible for policy surrounding parks, waterways, views and the preservation of Ottawa's historical character,⁵ includes the "Greenbelt." It provides a buffer of near-continuous green space on both sides of the Rideau River and on the Ontario side of the Ottawa River.⁶

This greenbelt has many positive consequences for the city: it preserves and stabilizes riverbanks, it filters water and toxins, it preserves a space for wildlife in the city and it houses various recreation zones and pathways. However, it also has the negative consequence of reinforcing a disconnection between the waterways and the neighbourhoods that border them. At the urban scale, greenbelts work as important recreation corridors, but they are corridors without "nodes." These corridors lack meaningful destinations and proper integration with the urban fabric, resulting in spaces that do not fulfill their potential to enrich the lives of the inhabitants — essentially a result of a lack of both access and associated amenity.

The Downtown Core

When Todd drafted his plan in 1902, he predicted unparalleled growth for Ottawa as a manufacturing and industrial city. While he noted the need for beauty and the preservation of Ottawa's natural setting, he was also explicit that these considerations must be pushed aside to make room for the necessities of industry and capitalism. It is in his willingness to make such concessions for industry that most prominently separates him from Gréber:

⁵ National Capital Commission, "Mandate and Organization," October 21, 2012. http://www.canadascapital.gc.ca/about-ncc/mandate-organization

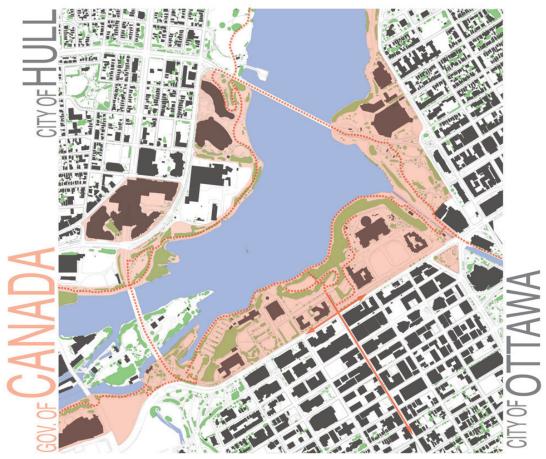
⁶ National Capital Commission, "The Greenbelt," October 21, 2012. http://www.canadascapital.gc.ca/places-to-visit/greenbelt

If Ottawa is destined to become a great manufacturing city, of which there is no doubt, then, although not considered as important to the beauty of the city, we must face the fact that these interests are still very important and require large and careful consideration. We should not wish to take land for parks which will be needed for manufacturing purposes, nor should we wish to build a boulevard through land, be it ever so attractive now, which is certain to be built up with factories at some later date.⁷

Ottawa had a brief life as a port city. It simply has not retained a heritage of industrial waterfront activity like Montréal, Halifax, Vancouver or Toronto. The Hull region of Gatineau, just across the river, has an industrial heritage on its waterfront, linked to the region's historic industries of logging and pulp and paper, whose vestiges still remain. The effect on the city is that the economic drivers that create the physical points of access between the urban core and the waterfront simply don't exist. Instead of industry, Ottawa has government, and the way in which its institutions have physically negotiated the waterfront has led to a very different downtown condition than that of other major Canadian cities.

With the exception of two formal access points to a waterfront recreation pathway and a couple areas with views of the river, the downtown core has been essentially severed from the waterfront. The planning strategies for the Parliamentary Precinct are as much to blame for this condition as is the topography. While it is a necessary condition for our institutions to engender our national identity through their architectural form, it is the position of this thesis that their institutional nature and identity does not (and should not) preclude ideas about community, permeability, access and democratic participation.

⁷ Todd, Report for the Ottawa Improvement Commission, 6.

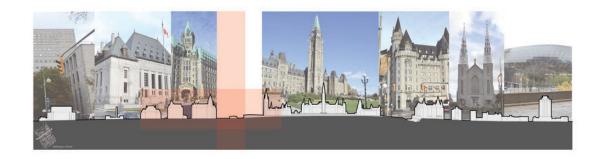


The Parliamentary Precinct and federally controlled lands create a barrier to the river that separates Ottawa's densest areas from the recreation path. Even at the level of figure/ground, there is a clear separation of urban and architectural languages. The red arrows indicate the central axes of the site, while the dotted line marks the recreation paths including the new routes in this proposal; map from the City of Ottawa

CHAPTER 2: SITE ANALYSIS

The Site

The site chosen for the Capital Library lies between Parliament Hill and the Supreme Court of Canada, at the intersection of Bank and Wellington Streets, running from Wellington Street to the Ottawa River. It sits directly between the West Block and the Confederation Building, both of which are Gothic revival structures.





Top: Wellington Street from the National Archives to the Rideau Centre. Bottom: Bank Street from Gilmour Street to Gatineau. The site is highlighted in both.

The site is currently being used as a parking lot and a service space for security vehicles. As viewed from Wellington Street, the site is dominated by an open-sided steel shed that provides snow and rain protection for these vehicles. Needless to say, this use does not contribute in a meaningful way to the language of the Parliamentary Precinct, the quality of the urban core or the activation and potential of the waterfront.



An unsightly service area greatly detracts from the quality of the Parliamentary Precinct and the city core.

Investigating the Site

The disconnection between the downtown core and the waterfront contains an opportunity for architectural design to address the issue. In fact, Ottawa and the NCC planners have already recognized that the waterfronts could provide more amenity, and that the city could benefit from increased activity levels.⁸

The location of this site means that any architectural intervention will need to respond not only formally with its context, but symbolically as well. In so doing, site and program must be considered together, each informing the other to achieve the full symbolic dimension of the project.

⁸ In 2011 the NCC held a competition for proposals to activate five waterfront zones in Ottawa. One of the accepted proposals was the canal-side "pop-up patio," which also included a beach volleyball court.

Three concepts inform the project's symbolic role:

- Node: The site is a node at the intersection of three urban elements: the city, the Parliamentary Precinct and the landscape. (What are the architectural ramifications of building on such a potent site?)
- Institution: Using this site requires inserting a municipal institution into the Parliamentary Precinct. (What are the architectural implications of such a loaded program?)
- Access: The site provides access to information, serves as an open venue for community exchange, and secures public access to the riverfront. (What opportunities does architecture offer to activate these aspects of the site?)

Despite its uninviting nature, the site is surprisingly well used as an access point to the waterfront recreation path. Cyclists, joggers, strollers and people looking for a quiet place to eat lunch cross the site's parking lots and police barricades to reach the river. They are drawn by the terraces that descend the escarpment, making access possible, and by the site's proximity to the densest part of the urban core. The more official access points straddle either side of the Parliamentary Precinct. Their distance from downtown makes them poorly used.

The site's location recommends itself to the placement of the Capital Library for several reasons. It is well served by public transit. It is within walking distance from the existing location of the main branch library. The site offers spectacular views and a location rich with history and cultural significance befitting a world-class institution. This preliminary analysis of the symbolic and physical aspects of the site provides us with the groundwork for an urban strategy. The site (and the building) must work toward three goals:

Node: A place for public gathering

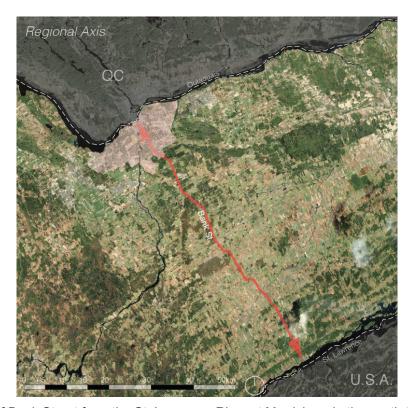
Institution: A contemporary library facility

Access: A corridor for urban circulation

Of these three goals, the existing language of the Parliamentary Precinct addresses only that of the institution. The Capital Library would open up new meanings for the Parliamentary Precinct by addressing all three goals.

Bank Street: Urban Axis

The importance of Bank Street to the urban condition of Ottawa is paramount and warrants further discussion. Bank Street serves several important functions within the city. As a straight north-south axis, it runs continuously from the banks of the St. Lawrence River (and the Canada/USA border) at its southern tip all the way through Ottawa to the Ottawa River at its northern tip, where it terminates at Wellington Street (the site). It begins at one natural river boundary (which is also a political boundary) and ends at another natural river boundary (which is also a political boundary).



Aerial view of Bank Street from the St. Lawrence River at Morrisburg in the south to the Ottawa River behind the Parliamentary Precinct to the north. Ottawa city limits are highlighted in pink.

Map by Google with legend added by the author

Bank Street begins at the town of Morrisburg,on the American border, and travels northward, across farmland and small towns before it reaches the edge of Ottawa's

city limits. Once there, the journey north to the Ottawa River reads almost as a perfect reversal of Ken Greenberg's introduction in *Walking Home*. ⁹ In this text, Greenberg tells the tale of a pedestrian beginning a walking trip from the centre of a city out to the city limits. In an experiential style, he describes in detail the changing landscape and its impact on the traveller as he moves us through a century's worth of urban expansion. The journey along Bank Street tells the same tale, chronicling in a very real way the architectural and planning philosophies that governed the expansion of Ottawa throughout the last hundred-plus years.

Aside from its role as an urban storyteller, Bank Street also serves as an important delineator and orienting device within the city. It allows passage over or under) the major east-west axes that also tend to serve as neighbourhood boundaries. Travelling north across Heron Road, you pass from the Hunt Club neighbourhood to Alta Vista; crossing the Rideau River, you pass into Old Ottawa South; crossing the canal, you enter the Glebe; passing under the Queensway, you cross into Centretown; and Centretown gives way to the business district until you arrive at Wellington Street and... what exactly?

That is the question. To understand the importance of Bank Street — its impact on the urban fabric, economic activity of the city, and the daily lives of neighbourhood inhabitants, transit users and the like — is to understand that its culmination in a parking lot, beside Parliament Hill and on prime land on the Ottawa River is grotesquely inappropriate.

The site's relationship to Bank Street provides us with another part of the urban strategy for the site: the design must address its status as the cap of an important axis. The design of the library will accomplish this through the creation of a prominent public square, an institutional presence, and a grand stair to continue the axis to its logical resolution at the waterfront.

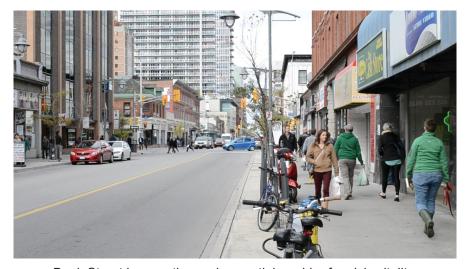
⁹ Ken Greenberg, *Walking Home: The Life and Lessons of a City Builder* (Toronto: Random House, 2005), 1.

Approach and Arrival: Existing Conditions

There are three means of approach to and arrival at the site: each method contains a unique experience and the potential to improve this experience through an architectural intervention.

Approach and Arrival from Bank Street

Approaching the site from Bank Street offers a very strong linear single-point-perspective experience. From as far away as a kilometre, we can see the horizon line on the Quebec side of the river, which is framed by the tall buildings in Ottawa's downtown core. The closer to the site we get, the more obscured the view becomes, until finally we arrive at the site and discover that the view across the river has been blocked by trees. The promise of a spectacular view at the end of the road becomes a parking lot.



Bank Street is an active and essential corridor for civic vitality.

Approach and Arrival from Wellington Street

Approaching from Wellington Street (in either direction) we pass by the buildings that house our federal institutions of power. The architecture is grand and monumental, and the sidewalk is wide and lined with trees, which provides a sense of enclosure and rhythm. The predominately masonry architecture and accent fences of wrought iron detailing provide a sense of weight, grounding and permanence. As we arrive at the Bank Street intersection, we turn toward the river expecting a view or an invitation of some sort — but in fact are rewarded with a psychological dead space that interrupts

the sense of place with an ill-conceived parking lot. We walk right on past, as there is nothing to see there.



Wellington Street is an important part of Ottawa's identity as "Capital."

Approach and Arrival from the Recreation Path

Walking (or cycling) along the waterfront we are treated to a series of spectacular views — of Gatineau, the river, the bridges and the cliffs and buildings on the Ottawa side, which reveal themselves and disappear again as the path winds along the shoreline. There are very few access points that connect the path to the city. There are benches for resting and iron lamp posts, as well as forested cliffs with areas of exposed bedrock that climb steeply, providing a sense of enclosure that contrasts with the wide-open views. We approach a paved pathway that leads up toward the city and we turn. After several paces we arrive in a parking lot that is an unbroken paved oval at least 150 metres long, with no indication of destination or use. As we walk upward, we pass through a series of connected parking lots until we are unceremoniously deposited in the service area behind a masonry building between Parliament Hill and the Supreme Court.



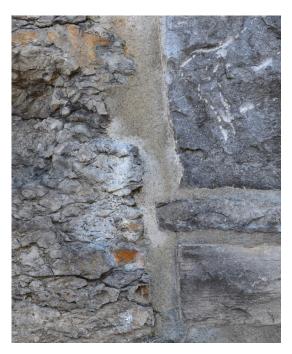
The waterfront trail system plays a key role in both civic life and the identity of the "Capital."

This understanding of the importance of arrival and procession through the site provides us with yet another input in an overall urban strategy: the building must negotiate multiple approaches and multiple conditions (natural, urban) relative to its sense of institutionality, massing and facades.

Linking

Despite its current state, which does not enrich the urban condition, the site contains some strong experiential elements that could be used to begin building a sense of place and identity. Of particular interest is the repeated intersection of hewn stone and natural bedrock





Several areas of the site exhibit the intersection of living bedrock and hewn masonry, making the dual nature of the site apparent. The union of these two languages across the site has a poetry that can be used as a design input.

The site is anchored by stone outcroppings, which serve as a rustic foundation to the gothic masonry of the Parliament buildings. It also offers ever-changing views of the river and the forested greenbelt.

If we examine these important site elements, we can see a strong correlation to the paintings of the Group of Seven, whose depictions of stone, water and forest have become emblematic of Canadian identity.¹⁰

¹⁰ The Group of Seven was an affiliation of Canadian painters best known for their depictions



A.Y. Jackson, *The Red Maple*, 1914; from David Silcox, *The Group of Seven and Tom Thomson*



Tom Thomson, *The Jack Pine*, 1916–1917; from David Silcox, *The Group of Seven and Tom Thomson*

These same elements are all found in the site, but with the critical addition of man's dominion over nature, manifested in the architecture of our federal institutions that govern the landscape.

This realization of the site as a broader metaphor for Canadian identity is a key component of the design strategy. At this point the design inputs move from data gathering and analysis of existing conditions to a proposal that takes a clear position on the issues of Canadian identity. At its core, this thesis is a call for change and forward movement in the way Canadians view their relationship with the urban environment, democratic participation, and connection to the landscape. Understanding this core intention, it is possible to consider design strategies that will craft the library and site.

The concept of participation requires an urban and tectonic strategy that seeks to initiate a dialogue with the neighbouring institutions (as opposed to a strategy of outright rejection, which would seek to overwhelm, replace or mask the existing language). This is a strategy of counterpoint: the differences in architectural language not only provide the potential to reinforce the "positions" of the various buildings, but also provide a rest or sense of relief from the Parliamentary Precinct. What symbolism can be generated

of the Canadian landscape. The members of the group included F.H. Varley, A.Y. Jackson, Lawren Harris, J.E.H. MacDonald, Arthur Lismer, Frank Johnston and Frank Carmichael. The group was also associated with Tom Thomson and Emily Carr. Their work is generally considered to be crucial to the formation of Canadian identity in the post-WWI era.

by inserting a municipal library that celebrates public access into a precinct of national symbols of power and authority? What dialogue might be initiated?

Similarly, the library's response to its natural setting offers an opportunity to express the value Canadians place on our land and natural resources. Do we seek to dominate it? Do we steward it? Is it merely a source of profit? How might our approach to building in nature express our values and psychology?

The built form of the Capital Library responds clearly to these questions: it reacts to the landscape, taking its cues from the city and the bluffs. This hybrid response is sensitive to the three conditions it seeks to bridge — city, precinct and landscape. Through its response, it creates new views and areas for gathering, which in turn makes a statement about our culture and value system. It expresses that Canadians both shape, and are shaped, by our environment and by our culture.

By recognizing this reciprocity, the design of the library can contribute to the city, the Parliamentary Precinct and the landscape. In doing so, the thesis stands as a critique of the status quo and asks the question: how might design enable these three elements to simultaneously improve each other?

CHAPTER 3: DESIGNING

During the early phases of the design process, several case studies were performed. Of these, the most informative was that of the Seattle Central Library. Program, relationship to the urban fabric, a cultural stance and a firm placement within architectural historical theory¹¹ all make the library a useful case study against which to frame the intentions and outcomes of this proposal.

In her essay *Seattle Central Library: Civic Architecture in the Age of Media*, ¹² Amy Murphy explores how new media and digital technologies are changing the roles of civic libraries. Key issues include the role of new (digital) technologies in the fabric of urban social space, the storage and stewardship of information, access to different types of media, and the impact of the built form on the experience of information access and exchange. Murphy concludes that there is no possibility (or desire) for a neutral stance on these issues. The Seattle Central Library must consciously resolve its relationship with the issues mentioned above or run the risk of assigning unwanted or unintended meaning to its built form.

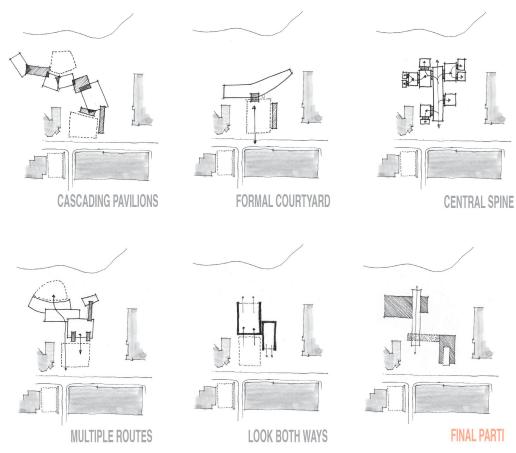
The design strategy for the Capital Library must likewise do the same.

Urban Strategy

The urban strategy developed to address the issues identified in the site analysis was first articulated in six different massing schemes. These were evaluated for their massing and urban impact.

¹¹ Amy Murphy, Seattle Central Library: Civic Architecture in the Age of Media, 2006, http://places.designobserver.com/feature/seattle-central-library-civic-architecture-in-the-age-of-media/813/.

¹² This essay, originally published for the *Design Observer* is a thorough yet succinct analysis of many of the discourse streams that the Seattle Central Library touches on. It makes apt use of the theories of Marshall McLuhan and Walter Benjamin to assign meaning to the design elements of the library. It also contains an excellent bibliography for further investigation.



A selection of parti studies taken from the exercise; each one is an attempt to explore a particular concept. Many key elements from this study can be seen in the final urban strategy (bottom right).

The final urban strategy incorporates elements from each of these. It has a formal courtyard on Wellington Street, a central spine which descends the slope, a dual address to the site (city and river), and it incorporate cascading terraces and multiple pathways through the building and the site.



A central spine (dotted red line) provides access through the site, joining the Bank Street axis to the waterfront via a grand promenade. A large plaza creates a space for events and meeting and acts as the "node" or gateway to the rest of the site's spaces and services. Not to scale.

In this scheme, a central spine serves as urban-level circulation, providing access through the site, allowing the Bank Street axis to reach its conclusion at the waterfront via a grand promenade. The program zones of the library are pushed in two directions. One zone provides the institutional facade to Wellington street, while the second is pushed toward the river, integrating with the topography and spilling down the cliff. Similarly to the site phenomenon where masonry meets bedrock, there are two massing strategies in the building. These are joined together by the "mortar" of the main circulation routes.

Program Strategy

The need for a municipal library was identified in Gréber's 1950 plan, but when the library was constructed, it failed to accommodate the city's growth or changing needs. It is ironic, since the report so clearly detailed the city's growth rate associated

with its role as capital.¹³ The current library is located close to the proposed site, at the intersection of Laurier and Metcalfe Streets. It is a prime example of Canadian Centenary Brutalism, which has led to escalating maintenance costs and concerns about sustainability and energy efficiency.¹⁴The library is designed to serve as the main branch for a city of 250,000 inhabitants, but with Ottawa approaching 1 million inhabitants, and with a daily visitor load of over 3000, the facilities are overtaxed.¹⁵The City of Ottawa is aware of these issues and has, for some time, supported the construction of a new central library. The city set aside money and came close to purchasing land. However, when the land deal fell apart in 2010, the project languished and was eventually put on indefinite hold.¹⁶

The project left behind a comprehensive set of reports outlining the programmatic and functional requirements of a new central library for Ottawa. 17 By interpreting and building on these requirements, this thesis proposes a program of distinct zones for the Capital Library that target different user groups. This consumer-oriented approach clearly reflects the changing cultural ideals about the role of a library in the community. It emphasizes community, access and service, rather than the traditional values of the library as a fortress of knowledge and prestige.

Sou Fujimoto has theorized that libraries are manifestations of the two competing needs of "searchability and strollability." ¹⁸ In this strategy for the library, the searchability aspect targets the end user before the they enter the building by putting the most active areas of program on display from the street. The various modules include the children's library, a browsing library for popular and high-circulation items, a digital hub with

¹³ Gréber, Plan for the National Capital, 98.

¹⁴ Maria Cook, "Not Closing the Book on New Library," The Ottawa Citizen, December 26, 2011.

¹⁵ CBC, "Library Board Wants Main Branch Assessment," 2011, http://www.cbc.ca/news/canada/ottawa/story/2011/09/13/ottawa-library-main-assessment. html.

¹⁶ Cook, "Not Closing the Book on New Library."

¹⁷ Ottawa Public Library, "Project Parameters: Ottawa Public Library – Central Library," 2008, http://biblioottawalibrary.ca/sites/biblioottawalibrary.ca/files/PDFs/Draft%20Project%20 Parameters.pdf.

¹⁸ ArchDaily, Sou Fujimoto: Musashino Art University Museum & Library, 2011, http://www.archdaily.com/145789.

hundreds of computer workstations, learning centres (associated with non-fiction), the teen zone, technology and A/V labs, and the fiction stacks.

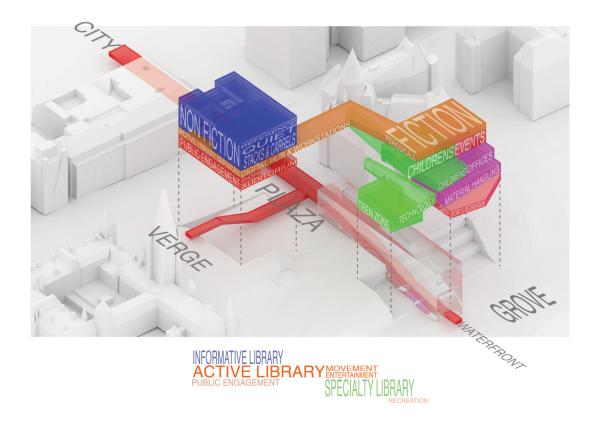
Strollability in this context can be understood as the way in which the built form of the library crafts the experiential elements of the journey through multiple routes to the waterfront. The Capital Library brings together a number of components — the revealing of a particular view, the changing quality of interior light, the difference in acoustics from one space to the next or the changing density of the crowd with whom the route is shared — to craft a memorable experience out of the element of strollability.

The library must also address the needs of the community in other ways, by providing an auditorium for lectures and public forums, gathering spaces and recreational and educational facilities. It also needs to provide revenue-generating leasable space for cafés, restaurants and events.

This approach to program has been designed to reinforce the key concepts of the thesis — access and identity. Through the functional program, the site's full potential to engage with its federal neighbours becomes clear. What are the implications of putting a community forum in the midst of our governmental institutions? What are the implications of an urban gesture that emphasizes connectivity and access in the midst of a federal precinct? What meaning can be assigned to a program that is rooted in serving the broader community by recognizing the unique needs of individuals?

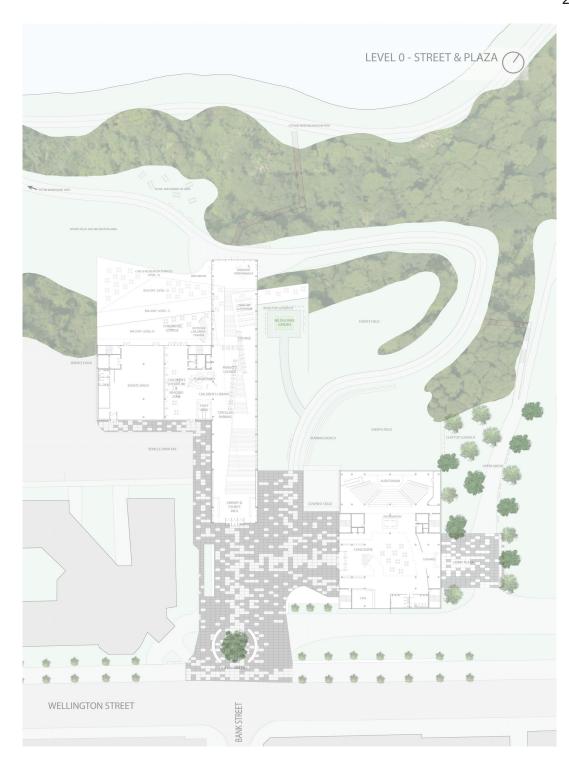
The strategy to resolve the library's program requirements with its urban strategy on the site is relatively simple and can be articulated in four categories of space utilization: Informative, Active, Specialty and Amenity.

The Informative programs are related to research, education, and individual and collaborative work. The Active programs are related to access, leisure, movement and entertainment. The Specialty programs are highly targeted zones dedicated to specific user groups (such as the children's library, teen zone, A/V labs, and staff zones). The Amenity programs contain services for the public that enhance the experience of the site and provide additional enticement to visit the library. They also contain facilities for public engagement.

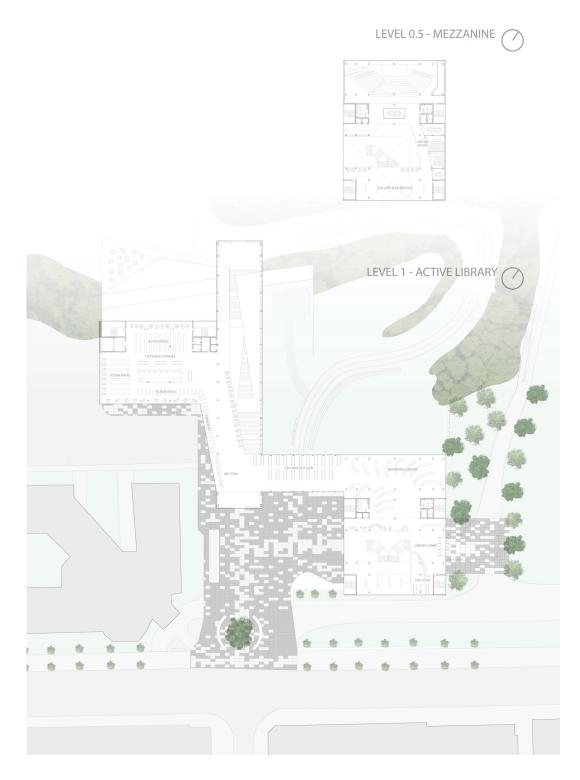


The four program elements: Informative, Active, Specialty and Amenity.

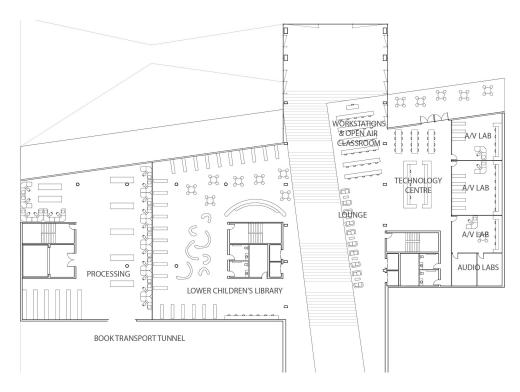
The Informative program elements have been pushed toward Wellington Street in the city. The Active programs link the upper and lower portions of the site and activate the circulation spine. The Specialty programs are clustered along the spine to create an atmosphere of activity, reinforcing the concept that the spine is a continuation of Bank Street. In this way, the open floor plates and access points are like commercial storefronts, pulling the user from the street to look at the offerings. The Amenity programs have been scattered throughout the building, always connected with access at grade to the various outdoor spaces created on the site. The activity- and movement-generating programs weave through the site, combining areas for rest and viewing to bring a sense of promenade and spectacle through the site and building.



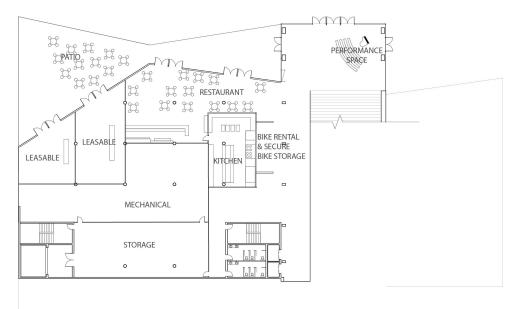
Plan of the site and ground level showing activities along the circulation route and principal outdoor areas as well as the auditorium and adjacent concourse.



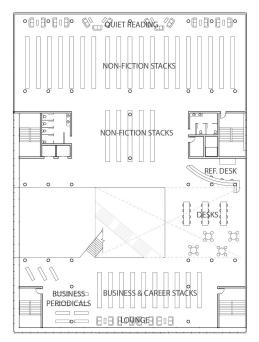
Plan of Level 1: The "indoor street" of the active library linking both library blocks and furnished with activity nodes along its length. The mezzanine contains bookable classrooms and meeting rooms, as well as a large art gallery.



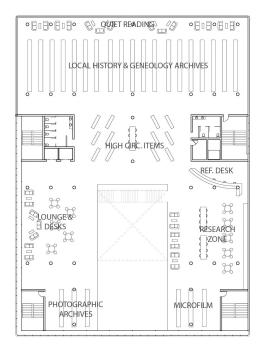
Plan of Level -1: The lower children's library and technology centre are both "specialty" program zones whose activities activate the circulation spine.



Plan of Level -3: "Amenity" program at the riverfront: a restaurant and patio, leasable commercial space and a bike rental kiosk. A performance space at the bottom of the grand stair takes advantage of the circulation spine as a natural theater – complete with balconies.



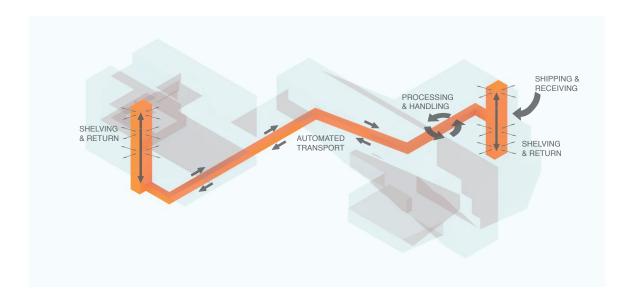
Plan of Level 3: Part of the "informative" program, the business and careers floor offers areas for research and learning with an emphasis on professional development.



Plan of Level 5: Anticipated as one of the most frequented "informative" zones, the local history and genealogy floor also boasts some of the best views of the landscape from the quiet reading area.

Book Circulation System

A crucial component to any library is the book circulation system, including returns, loans, inter-branch requests and new book processing. This requires the movement of tens of thousands of books each day. A library of this scale cannot rely on carts to truck the books across the length of the library. This issue is of particular concern in the proposed design, which separates the bulk of the stacks from the processing and handling areas. The solution is simple: an underground artery connecting two service cores. In what amounts to two automated dumbwaiters connected by a central conveyor, the books are returned to processing and received for shelving at a central point on each floor. This level-by-level distribution/receiving point is supported by the service and reference desks on each floor, with the main reception desk in the library lobby (level 1) acting as the principal area for hand-delivered book return and checkout. A service elevator connected to the waterfront core allows for easy receiving/shipping of materials arriving by truck for processing.

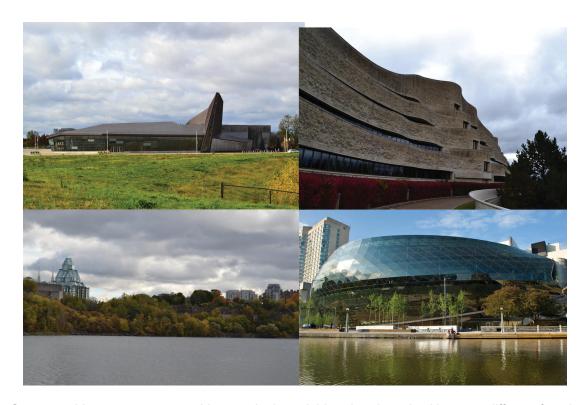


The automated book circulation system is not unlike those currently used in other large libraries.

Facade Strategy

The fundamental question of how to "speak" to the architecture and landscape of the Ottawa River and Canadian Shield has resulted in some very different strategies for

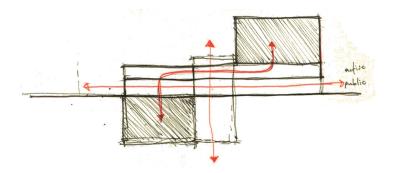
significant buildings in the Capital District. In the National Gallery, Moshe Safdie created a transparent monolith that engages directly with the Library of Parliament through its form. In the Museum of Civilization, Douglas Cardinal used organic shapes and layers to evoke the stratified bedrock of the region. In the Canadian War Museum, Moriyama & Teshima built into the land, but also flared toward the sky, evoking the verticality of the Peace Tower. In the Ottawa Conference Centre, BBB Architects created a faceted prism that reflects the city back onto itself.



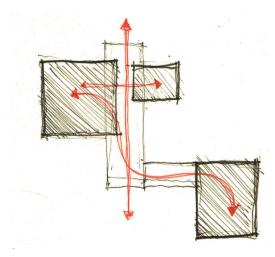
Some notable contemporary architecture in the neighbourhood, each with a very different facade strategy. Clockwise from top left: Canadian War Museum (Moriyama & Teshima), the Canadian Museum of Civilization (Cardinal), Ottawa Convention Centre (BBB Architects), and the National Gallery (Safdie).

This thesis's proposed design for the Capital Library configures the library facade with two primary addresses: the manufactured city (adjacent to Wellington Street) and the natural waterfront (the Ottawa River). Each face presents a library block and the central circulation spine. The program has added two additional elements that are expressed in the facade: the areas of public engagement and the active library level.

All together, these four elements create the material template for the facade. The library blocks are clad in limestone to address the masonry buildings of Parliament Hill and the native bedrock on the site. The circulation spine is a transparent corridor with its own structure and rhythm. The public engagement areas are all at street level and form a transparent ground plane. The active circulation level has been demarcated with an orange frit, which creates a continuous visual motif linking the library components.



The facade strategy in section at its most basic components: stone and glass relative to the areas of program and circulation.



The facade strategy in plan at its most basic components: stone and glass relative to the areas of program and circulation.



Stone panels on the plaza block provide a scale to the Wellington Street address. The stone relates the building to its neighbours, while underscoring that the Capital Library is an open, accessible institution. The pixelated pattern reflects the city grid and references digital technologies. The "Canada Tree" establishes a meeting place that is a counterpoint to the Eternal Flame, up the street.

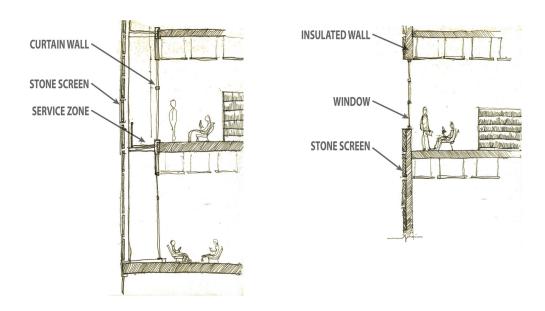
The Use of Stone

The buildings of the Parliamentary Precinct express massiveness, opacity and impermeability. Their Gothic revival style also provides them with a fine-grained and dense facade that is consistent across the site. The design strategy for the Wellington Street block accepts the use of stone as a defining element across the site, but uses it as a screen, supported outside the glass curtain wall. Louis Kahn's concept of "wrapping a building in ruins" is applicable here. The stone filters light, defines transparency, and creates permeability. In certain areas, it also becomes an interior finish and the defining lighting element of the interior through the method by which light is filtered between the separated panels.

¹⁹ Louis Kahn refers to this concept numerous times in his writings. See Robert McCarter, *Louis I. Kahn*.



An interior rendering of the hung limestone panel. The panels control the light penetration into the library and acts as an interior finish and lighting feature.



These sketched sections show the two different strategies at work in the south block of the library facade. On the left, the masonry panels suspended between vertical steel fins act as a screen and are entirely separate to the curtain wall system. Aside from the aesthetic intentions, this assists with light control and thermal gain. This is used on the south and west walls of the facade. On the right is a typical hung masonry system with insulated walls and punched window openings. This strategy appears on the north and east walls of the south block of the library as well as on all of the north facing walls of the north block, facing the river. In a climate such as Ottawa's the need to insulate these elevations is crucial. In all cases, the joints have been widened to articulate the individual panels.



The north elevation uses the stone cladding, which is expressed as an extrusion of the bedrock of the cliff face. This rendering also depicts the visual relationship of the library to Parliament Hill.



An example of the bedrock on site: sedimentary limestone. The natural processes of the site have resulted in some unique and beautiful formations. This particular formation was the inspiration for the north facing facade seen above.

Inhabitation and Circulation

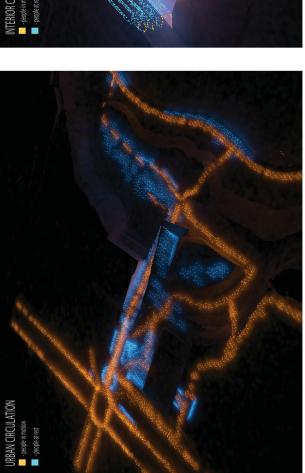
Aldo van Eyck's writings on the "In Between" have particular relevance to this thesis. The site has many threshold conditions: Land to Water, Street to Pathway, Work to Recreation, and Vertical to Horizontal. This in-between realm, to paraphrase van Eyck, is the place (or dimension) where we find meaning through the relationships of people and spaces.²⁰ In this case, the architecture of the library takes on the role as a "place for an occasion," it is van Eyck's "doorstep" that is also a place of dwelling:

What is a door? A flat surface with hinges and a lock, constituting a hard and terrifying borderline? When you pass through a door like that are you not divided? Split in two — perhaps you no longer notice! Just think of it: a rectangle two inches thick and six feet high! What hair raising poverty — a guillotine is kinder! Is that the reality of a door? Well, perhaps the greater reality of a door is the localized setting for a wonderful human gesture: conscious entry and departure. That's what a door is, something that frames you coming and going, for it's a vital experience not only for those that do so, but also for those encountered or left behind. A door is a place for an occasion that is repeated millions of times in a lifetime between the first entry and the las exit. I think that's very symbolical. And what is the greater reality of a window? I leave that to you!²¹

What van Eyck suggests is architecture to elevate human experience from an encounter with utilitarian functionality to a resonant and integrated experience one of meaningful relationships and integrated experience that can accommodate contradiction and associative meanings.

²⁰ Aldo van Eyck, Vincent Ligtelijn, and Francis Strauven, *The Child, the City and the Artist: An Essay on Architecture – The In-between Realm*, (Amsterdam: SUN, 2008), 54.

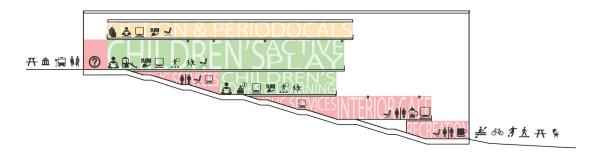
²¹ Ibid, 62.



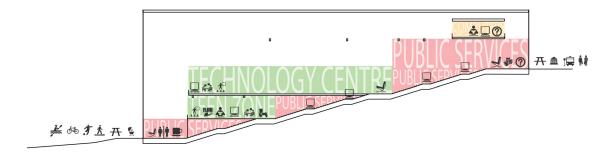


the left) connecting the city to the landscape and the continuing the Bank Street axis. The courtyard as a major zone of inhabitation is also van Eyck was interested in: the dynamism that occurs between inhabitation and circulation. Of particular note is the circulation spine (on points represents concentrations of people throughout the day. In this representation, we can begin to see the types of relationships that present. On the right, the main circulation of the Active Library is clearly present, as are the lounge zones with their various prestigious These illustrations show people in motion and people at rest across the site (left) and within the building (right). The concentrations of views.

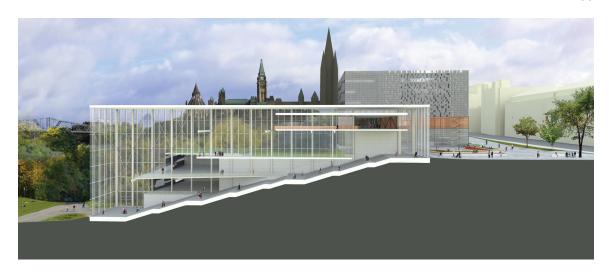
This thesis design reinforces the value of in-between spaces by arranging the program areas to intersect with the central circulation zones. By drawing the active program into the busiest routes, the design creates many opportunities for searching and strolling to be paired with the use of library services, effectively creating boulevards for people watching and spectacle. The visual connections between the main zones —the bridge (digital hub), the plaza, the concourse, the central spin and the mezzanines — are vital to the success of this design strategy.



Program Diagram: Section looking west through the spine. This diagram illustrates the programmatic elements with direct access to the circulation spine. The variety and intensity of program is designed to keep a high level of human activity present within the spine at all times. This section also illustrates how the western exposure of the spine's curtain wall was been minimized by the intrusion of the floor plates; Icons courtesy of The Noun Project



Program Diagram: Section looking east through the spine with activity zones highlighted; Icons courtesy of The Noun Project



A sectional perspective of the circulation spine depicts the connection between Bank Street and the riverfront. The section reveals the visual connections between Parliament Hill, the city and the library. It also shows the materiality of the circulation spine, the projection of the programmed balconies into the space and the relationship between floor levels.

A section through the spine reveals the terminus of Bank Street in a magnificent descent from Wellington Street to the river. This carries the vitality of the city through the Parliamentary Precinct.

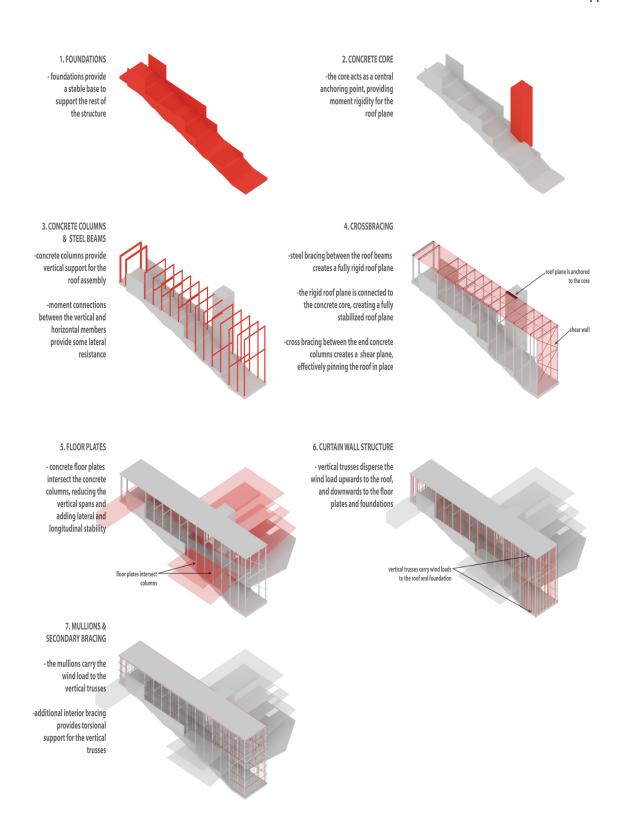
The circulation spine, therefore, transects the competing symbolic and physical elements of the site. It is a space of both transition and inhabitation. It is neither city nor landscape, neither street nor plaza, neither federal nor municipal — yet it is connected to all of these conditions simultaneously. In the spirit of van Eyck, it is a space of inhabitation and usefulness whose precise relationships and symbolism remains ambiguous and open to interpretation.



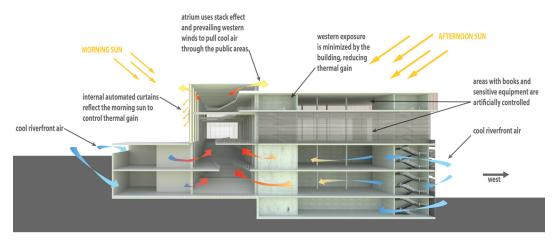
The circulation spine is a place where the needs and interests of individuals meld together in the public realm. "Specialty" and "amenity" program components project into the grand stair, creating an atmosphere of promenade and spectacle.

Building

The proposed structural system for the library is relatively straightforward. Both main library blocks are concrete slabs supported by a grid of structural columns, with lateral stability being provided by concrete cores. The column grid is visible in the floor plans in the appendix. The structural strategy for the atrium contains several components.



These diagrams show the components of the structural strategy for the circulation spine.



This diagram illustrates the strategy for cooling the circulation spine adjacent areas in the summer, and maximizing natural air flow throughout the building. The thermal control for the east elevation employs reflective curtains.

Because this a library, much of the interior space will need to be environmentally regulated. However, the circulation spine, as well as much of the Amenity program have the ability to be naturally ventilated in the summer, greatly reducing the building's energy consumption. Using the mass of the building to greatly reduce the western exposure of the circulation spine to afternoon sun, and making use of the cool, riverfront air offers the opportunity for the spine to become a cooling, rather than a heating factor in the building's overall summer functioning. Sun control and insulation have already been addressed earlier in this chapter for both the library blocks.

Approach and Arrival: The Designed Experience

Approach and Arrival from Bank Street

I rest my foot on my bike's pedal while I wait for the light to turn green. Looking straight down Bank Street I can see a tall tree, with hints of the landscape beyond. The distance afforded by the view is a nice relief from the traffic, people and enclosure of the street.

After several blocks, the office buildings give way to the heavy pedestrian traffic of the Sparks Street Mall. I arrive at Wellington Street and hop off my bike. I walk across the plaza and notice that the regular Saturday buskers have been replaced by a jazz

combo that is just setting up on the stage under the orange bridge. I make a mental note not to take to long inside so I can catch some of the music.

I lock my bike and enter the doors under the pixelated facade of the library. I stop at the small café and grab a coffee; normally I would linger at a table in the concourse to drink it, but I'm in a hurry so I make my way up the stairs. As I round the stairs past the mezzanine level I notice that a new exhibit has gone up in the gallery, but architectural photography is not my thing so I continue one more level up to the main lobby and reference desk.

The books I have reserved are waiting for me there, and after picking them up I take the elevator to the fifth floor. This is the highest point in the library, and I'm thankful that my favorite chair is empty. I settle in at the back corner, where it's quiet and the view is great, for a nice read.

Approach and Arrival from Wellington Street

I pause for a moment at the Eternal Flame to snap a photograph of the Peace Tower before continuing west down Wellington Street. Tour groups are boarding buses, and people dressed for both business and leisure line both sides of the boulevard. Up ahead I can see the West Block's tower. I can see quite a distance down Wellington Street; the wide sidewalk is lined with trees and the gothic wrought iron fence on my right contrasts nicely with the neoclassical pillars across the street.

As I approach a busy intersection, the wrought iron gives way to a low wall where various groups are lounging, watching the street. Up and to the right, a new building appears from behind the West Block — something with a very different attitude than its neighbours.

I arrive at a circular bench with a tree at its centre, demarcating the entrance to a generous and bustling plaza. Straight ahead is a transparent building, and from where I'm standing I can catch a glimpse of river and the Gatineau Hills. This interests me more than the pixelated box marked "Capital Library," so I decide to take a look. The

flow of people into and out of the building clearly marks this as a public space and I feel comfortable as I pass through the doors.

An atrium of breathtaking scale encloses a gentle stair that drops several levels in a straight shot. From the top of the staircase I can see many people engaged in different activities on each of the large balconies that intrude into the space.

I descend the stairs to the sounds of children playing and people chatting in the background. I decide to stop for a light meal at the restaurant at the bottom of the stairs. I grab my sandwich and head out onto one of the exterior balconies facing the river and eat my lunch with the Ottawa Valley spreading out in front of me.

Approach and Arrival from the Recreation Path

"Dad can we stop at the library?" asks Oliver. He's breathing hard trying to keep up with me on his new bike, and I can tell he needs a rest.

"Sure!" I say, and when the path forks, we turn right. After a short distance we are off the waterfront path and next to a field that's being used for a game of Ultimate Frisbee. The Capital Library seems to grow right out of the cliff face. There are people lounging on the patio and the lower balconies, eating and drinking. The transparent bulk of the atrium rises several stories ahead of us, its glass blurring the view of the West Block, but contrasting nicely with the Peace Tower and the Parliamentary Library in the distance. By the concentration of people on the upper balcony, I can tell that there is an event taking place at the outdoor theatre for the children's library.

We drive our bikes right into the bottom of the atrium and lock them beside the elevators.

"I wanna cinnamon bun! And then I wanna read books!" he pleads. His shrill voice reverberates in the atrium and is lost in the hum of other noises. I decide to humour him, so we grab some pastries at the take-out counter and take the stairs to the upper level. It's almost lunch time, so the flow of people is heavy in the opposite direction — civil servants heading down to the waterfront to eat their lunch and have a stroll.

As we reach the top, Oliver takes off down the balcony, into the children's library. That's ok, this is a well monitored and safe area. By the time I track him down again he's already engrossed in the performance taking place on the balcony, a french-language puppet show.

I grab a seat where I can keep an eye on him, and pull out my laptop to get some work done.

CHAPTER 4: CONCLUSIONS

This thesis asks one to rethink the relationship between a capital city and a capital precinct. It aims to employ architecture as a strategic tool in this goal. This thesis — through the design of the library and its ability to highlight and propose solutions to certain problems — can be a catalyst for discussion and debate. Yet because this thesis is directed toward generating a dialogue rather than presenting a manifesto, it needs to be engaging without being polarizing.

The siting of the Capital Library has a political agenda, and its program has a cultural agenda. The site strategy has an urban agenda, and the execution of the building responds to the issues outlined in this proposal. While the siting is perhaps the most provocative element of the thesis, its design attempts to ground this move within the realm of the possible and even the desirable.

If a capital city is to reflect its people, we need to be very careful about the language of the institutional precinct at the urban and the architectural levels. Clearly this is no groundbreaking revelation, yet this thesis takes the view that culture is dynamic, that politics are ever-changing, and that urban life is inextricably linked to democratic participation. Why then should we not have an architectural language that welcomes change, promotes participation and strengthens the vitality of the civic life of the capital city?

And what of the program? The inarguable fact is that the land of the Parliamentary Precinct belongs to all Canadians. What then is to be accomplished by the proposal of a building that provides services oriented toward the local population? One train of thought tells us that any institution proposed for this site must be in the business of serving all Canadians — a national institution. But there is an issue with this idea: if this institution is to embody the ideals of access and participation, then the key is to activate it! This means that the location and the program of the building must be a draw for the largest number of people possible; and this means that it must contain services for locals, as well as be an attraction for tourists and visitors. Through the combination of the location, the waterfront access, the much-needed library program

and the plaza acting a hub, the site can release its potential both as a symbol and as an urban activator.

What questions does this thesis raise? Would governments welcome this proposal that argues for more transparency and access on Parliament Hill? How would legislators and MPs react to bringing the life of the city into their realm? Might these daily interactions actually influence the attitudes of law makers as to their roles and responsibilities toward the Canadian public?

As architects we must strive for the betterment of the public realm. If we hold true to the idea that architecture has a profound influence on quality of life, then we can see why the architectural language of our federal institutions might be problematic. What impact do these impermeable monoliths have on the minds of parliamentarians? What do they say to the public who must engage with them?

At the time of writing this thesis, governments have made internal surveillance a priority. This is segueing into a drastic rearranging of the meaning of our national institutions as symbols. What was once an icon of strength and unity has slowly been warped into a symbol of elite power, exclusion, dominance and dystopia. in these times when the rights of citizens are being ever-more eroded, we need an institutional architecture that can serve as a reminder — a reminder to ourselves of our responsibility to educate and participate and a reminder to those in power of the true purpose of their positions.

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