

Respect, Acknowledge, Enhance.

Towards an ethics of adaptive reuse; critiquing the adaptive reuse of an
Ottawa monastery

by

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ABSTRACT

Adaptive reuse is a type of architectural intervention that changes the use of a building, thereby extending its life. This thesis critiques the 1993 intervention on the Monastère des Adoratrices du Précieux-Sang that saw the monastery adapted into the Royal College of Physicians and Surgeons of Canada. The building is in Ottawa, and the intervention was completed by Murray and Murray Architects.

The design process for the 1993 intervention is recreated through this critique, demonstrating a methodological approach for understanding when unable to visit places in person. The process postulates how the architects undertook an intervention that respects and acknowledges the history, while enhancing the place for its future use. The nuances of monastic design are revealed. The text explores how the existing fabric was privileged and how new elements were sensitively introduced. The ethical adaptive reuse demonstrates how architects can elaborate the value of places through skillful design.

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PREFACE

Can someone really know a place they cannot visit? Can someone understand changes they did not witness? How can we learn about a building without personally inhabiting it? How can we understand a design without seeing the drawings?

The ongoing global pandemic created the circumstance for this methodology. An alternative and arms-length approach to understanding place was necessary in light of restricted access to the site I selected. Many of the documents consulted were secondary, or even tertiary sources. Primary source drawings existed, but remained beyond reach during the time allotted for this study. Yet, it created opportunities I would not have otherwise pursued.

I recreated the design process in an attempt to imagine what might have occurred in 1993; this would not have been necessary if I had had access to the architectural drawings. I would not have amassed as many photos to review and build the picture of the interior had I been able to visit inside the building. As was pointed out to me during my defense, these restrictions juxtaposed me with the nuns that once lived in the building. The nuns experience of life outside the cloister was through the testimony of visitors. By contrast, my experience of life inside the cloister and life inside the college was entirely from the occupants. In this way, I represent a cloistered architect.

Key to this alternative study were the interviews. I would not have been able to recreate the design process were it not for Tim Murray. I would not have had floor plans were it not for Peter Smith. I would not have understood how the sisters felt about the spaces if they had not written to me. With oral and written testimony recounting memories from thirty years ago, there is an inescapable emotional element to this study. It sways the direction of my analysis, which was already far less technical than traditional critiques of architectural projects. It became philosophical, and deeply personal.

This critique represents my personal philosophy of architectural practice. I do not want readers to feel that this is the only way to complete an ethical adaptive reuse, nor is it the quintessential example of ethical adaptive reuse, nor are other adaptive reuse projects inherently *unethical* if they do not have a similar approach. Ethics, and by extension ethical architecture, is much more complicated than what is presented here. This project moves toward a clearer understanding of ethical adaptive reuse, which I have a sneaking suspicion will become more relevant and necessary as we move toward the future. That, however, remains to be studied.

INTRODUCTION

Modern conservation scholarship in Canada is informed by the *Standards and Guidelines for the Conservation of Historic Places in Canada* (2011), which tells custodians how best to go about the conservation and protection of historic places.¹ This tool was developed for places with formal heritage protections; it considers the perspective of multiple levels of government and overseeing bodies, calling itself a Federal, Provincial, and Territorial collaboration.² The thirteen standards were specifically designed to give a “[consistent and] ethical foundation to the decisions that must be made when conserving an historic place.”³ The *Standards and Guidelines* outline a clear decision-making process for projects at the micro and macro scale, where architects and other practitioners are instructed to understand an historic place, plan for its conservation, and then intervene through projects or maintenance.⁴

While this and many other excellent tools are available for architects aiming to intervene on places with heritage designations, the protocols for interventions on existing places without any designations are not as formalized. Adaptive reuse is the act of intervening on an existing structure to extend its life, changing the building function in the process. An adaptive reuse intervention can occur on any building, of any function, and in any style; as such, it manifests diversely, varying greatly between projects. The practice lacks the same tools and regulations that guide heritage conservation, and thus architects are at liberty to impact an existing place in whatever way they see fit. Interventions can add, subtract, and otherwise fundamentally alter a place so to suit the new purpose. There are many ways to intervene on existing places ethically. This thesis will explore one example of an adaptive reuse project

¹ *Standards and Guidelines for the Conservation of Historic Places in Canada* (Parks Canada, Hull, Quebec, Canada, 2010), viii.

² *Ibid*, viii. “Canadian jurisdictions at the federal, provincial, territorial, municipal, and Aboriginal levels may review and formally recognize historic places within their respective authority.”

³ *Ibid*, pp. 21.

⁴ *Ibid*, pp. 3.

that I believe was motivated by ethical design and resulted in a sensitive enhancement to a place with religious charge.

If designers wish to take an ethical approach to an intervention, I believe that a reverence for the existing fabric and history of the building should inform the philosophy of said intervention. The same considerations of understanding, planning, and finally intervening can therefore be used for any project on an existing place, not just those with heritage designations. The architect may then consider how to weave the new into the existing fabric in a way that enhances the building without obscuring its former identity. If done successfully, the result of an ethical adaptive reuse should be a candidate for recognition by a governing body in heritage conservation.

The purpose of the study is to examine and critique the design approach applied by Murray and Murray Architects Associated during a 1993 building intervention that saw a change of use, followed by an evaluation of the success of the project. The thesis explores the former Monastère des Adoratrices de Précieux-Sang, located at 774 Echo Drive in Ottawa, and its transformation into the national headquarters for the Royal College of Physicians and Surgeons of Canada.

Given unconventional restrictions regarding access to the building itself and associated historical drawings from the 1993 conversion, a somewhat unconventional analysis of the intervention was undertaken. Available historical documentation was amassed, interviews were conducted, and drawing exercises were undertaken to inform the critique. This thesis seeks to accomplish two things. First, employing a methodological approach for reconstructing the design process as a means of understanding place when unable to visit in person. Second, exploring and critiquing an ethical adaptive reuse in an effort to understand how architects can elaborate the value of existing places through skillful design.

METHODOLOGY

A Guiding Title

Acknowledging that there is no single way to intervene appropriately on a place and that different architects may produce similarly excellent adaptive reuse interventions, an ethical approach should nevertheless embody three things: respect, acknowledge, enhance. These words serve as fundamental principles exemplified in this project, where an existing building is successfully converted into something new. Similar to the conservation decision-making process, these tenets should be present in the mind of the architect while designing. Who will be respected by this decision? What is acknowledged? Does this design enhance the experience? I asked myself these questions while undertaking the reconstruction of the design process.

The words offer a lens to critique this specific intervention and I repeat them throughout the study. A single design decision may respect, or acknowledge, or enhance the existing; it may do all three. In an ethical design approach, the existing place must be respected during the development of the design, its history acknowledged and forming part of its future, and the intervention should enhance the place overall. How these words manifest in the design is the measure of the project's overall success.

Defining Adaptive Reuse

To inform the critique, many publications on the subject of conservation were reviewed, with special attention to articles focusing on adaptive reuse as the building treatment. During this period, the book *Adaptive Reuse – Extending the Lives of Buildings* (2017) by Liliane Wong became the guiding publication for the study. Wong asserts that “[b]uilding in the existing fabric, requiring more than a pragmatism and style, is in itself a design practise.”⁵ By exploring the history and evolution of adaptive reuse in architecture around the world, Wong provides an investigation of both historic and modern

⁵ Liliane Wong, *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017).

monuments, summarizing significant publications and their impact in establishing adaptive reuse as a unique design practise. These texts inform “what is lost, gained and ultimately altered”⁶ during a use-based intervention on this monastery.

To support the above analytical lens, I use James Douglas, who explores adaptive reuse from an implementation perspective in his book *Building Adaptation* (2006). He provides detailed instruction for the inspection and assessment of existing structures for their reuse. This is accompanied by descriptions of traditional and modern construction techniques for custodians to consider. He specifically targets consultants and contractors as the audience as they are ultimately responsible the development of new design and its subsequent execution.⁷

Additional sources consulted include *Adaptations: New Uses for Old Buildings* by Philippe Robert, *Built to Last* by Gene Bunnell, *Buildings Reborn: New Uses, Old Places* by Barbaralee Diamonstein, and *Re/Architecture: Old buildings/New Uses* by Sherban Cantacuzino. These books compile descriptions of various adaptive reuse projects worldwide and were used to understand the different types and results of adaptive reuse interventions.

Site Selection

The monastery-turned-college in was selected for a few reasons. First, monasteries are a unique example of religious architecture; they are common enough to be found in most major Canadian cities, yet not so common that architects are universally familiar with their design and inherent value. Additionally, the nature of monastic architecture also presents unique challenges for redevelopment: they are large, often filled with intricate spatial arrangements, and thus not easily re-inhabited.⁸

⁶ Liliane Wong, “The Mathematics of Reuse,” in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 222.

⁷ James Douglas, “Implementation,” in *Building Adaptation* (Abingdon, Oxon: Spon Press, 2006), pp.555.

⁸ *Ibid*, pp.136. Douglas describes bespoke or unusual dwellings as being fairly inflexible; I interpret monasteries to be a style of bespoke dwelling.

Monasteries also have religious charge. These places are steeped in history, ritual, and memory, and the resulting environment can be used as “an opportunity for dramatic enhancement [becoming] richer than it was.”⁹ It is important to recognize its religious charge as heritage value, even when the place is not formally protected. Which leads to another major influence in selecting this site: the Monastère des Soeurs Adoratrice du Précieux Sang was not designated or formally protected at the time of the 1993 intervention.

Understanding Monastic Architecture

The book *Life inside the cloister – Understanding Monastic Architecture: Tradition, Reformation, Adaptive Reuse* by Thomas Coomans informs my understanding of Christian monastic design. Coomans focuses on medieval European monasteries and pre-18th century North American monasteries; key commentary on the management of sacred spaces post secularization is extrapolated and applied for the critique of the 20th century Ottawa monastery.

Accounts published in *the Ottawa Citizen* and *the Ottawa Journal* newspapers in addition to publications by the Old Ottawa South Community Association were reviewed to inform the history of the site. Known interventions to the building were documented, including the renovations completed in the 1980's that were designed by Cuhaci Architects. Most critical to understanding the inherent value of the host building was the review of publications by the Order itself; as part of the research, I exchanged written correspondences with two sisters that once lived in the monastery.

The original plans of the monastery's could not be located. To compensate, the Royal College provided the circa 1990 drawings that represent the building as it was prior to the 1993 change in use. Drawings by Murray and Murray for the 1993 intervention were discovered in the Library and Archives Canada, at the Ottawa location on Wellington Street. Since these could not be reviewed during the

⁹ Kevin Lynch, “The Degree of Restriction” in *What time is this Place* (London: MIT Press Cambridge, 1972), pp. 39.

study due to the building's extended closure following the onset of the global pandemic, I endeavored to understand their contents in other ways. To satisfy the need to understand the place following the extensive building transformation, the 2021 floor plans were reviewed and compared with the circa 1990 floor plans.¹⁰

The building was designated by the City of Ottawa in 1998, and the Ottawa Archives were able to provide a copy of the Heritage Survey and Evaluation Form completed in 1997.

A visit to the interior of the building was not possible during the study. To help understand a building with restricted access, the exterior grounds were toured, and photos published during Ottawa's annual Doors Open event were thoroughly examined.

Interviewing Persons of Interest

To supplement the textual information, interviews with the past occupants and the 1993 design team respectively were planned. Interviews with the sisters were to focus on the building itself, and the nuns' relationship with it. The questions asked were to be used to better understand the heritage value of the place; then study would then endeavor to understand how these values were affected during the 1993 alterations to the building. As this was a cloistered order, the sisters declined to participate in interviews; instead, two sisters submitted written testimony of their thoughts.

Interviews with members of the design team were to focus on the decision-making process and its effect on the design development for an architectural intervention on an existing building. The questions sought to answer how the heritage value of this building was considered and consequently affected by the 1993 renovations. No interviews from members of the design team on the monastery were possible; Tim Murray, principle and founding architect of Murray and Murray Architects did

¹⁰ Peter Smith (Special Collections Administrator at the Royal College of Physicians and Surgeons of Canada), email correspondences with Amanda Lapointe, March 16, 2021.

participate. His documentation and insight on the design approach employed by the firm were extrapolated from the interview and applied to the subject intervention.

Drawings and Photography

One of the final exercises completed for this study was to imitate the preparative activities of Murray and Murray Architects. The project team would thoroughly document the existing site with extensive photography and drawing. Then, after printing copies on mylar, would annotate these photos and sketches with “enlightened comment, about what has happened, or what is happening, or what needs to be watched about a particular feature of the existing building.”¹¹

Floor plans from 1990 and 2021 were copied by hand onto trace paper. The drawings were then overlaid, and coloured marker used to analyse changes over time. The overlays focused on changes to the structure, estimations of interior lighting quality, and changes to circulation within the building. Printed photographs were used to identify details and corroborate insights from the drawing exercises.

¹¹ Tim Murray (Principal and Founding Architect of Murray and Murray Architects Associates) in discussion with Amanda Lapointe, June 15, 2021, transcript, Appendix 3.

CHAPTER 1: Adaptive Re-use and the Role of the Architect

What is adaptive re-use?

There are many terms used to describe interventions on a building that prolong its life. Renovation, retrofit, refurbishment, maintenance, modernization: the list goes on. In Canada, there is also the field of Conservation, which deals specifically with places that have historic or heritage value. Conservation in Canada encapsulates three main types of interventions on buildings: preservation, restoration, and rehabilitation.¹²

Adaptive reuse is something of a catch-all term, and various publications use it to describe any and sometimes all of the activities mentioned above. Though closely linked with heritage conservation in Canada, it is not exclusively applied to buildings with heritage value. Any building of any style, function, location, condition, and value can be adapted for extended or modified use. It can also happen repeatedly on, within, or about the same building: “[adaptive reuse] is a never-ending process in an evolving society.”¹³ This has been practised since time immemorial. For example, the Roman arena at Nîmes in the South of France, built sometime in 70 CE, it was converted into a small fortified town in the middle ages,¹⁴ and has since returned to its use as an event venue.¹⁵ Buildings often outlive their functions, adaptation of the existing places to suit the needs of the current society is neither new nor is it uncommon.¹⁶

¹² *Standards and Guidelines for the Conservation of Historic Places in Canada* (Parks Canada, Hull, Quebec, Canada, 2010).

¹³ Thomas Coomans, “The Sacredness of Culture,” in *Life inside the Cloister: Understanding Monastic Architecture: Tradition, Reformation, Adaptive Reuse* (Leuven: Leuven University Press, 2018), pp. 147.

¹⁴ Sherban Cantacuzino, “Introduction,” in *Re-Architecture: Old buildings / New Uses* (New York: Abbeville Press, 1989), pp. 8.

¹⁵ “Amphitheatre of Nîmes,” www.arenas-nimes.com, Culture Spaces, accessed September 19, 2021, <https://www.arenas-nimes.com/en/discover>. The amphitheatre hosts performances and re-enactments, escape rooms, and a bi-annual bullfight.

¹⁶ Sherban Cantacuzino, “Introduction,” in *Re-Architecture: Old buildings / New Uses* (New York: Abbeville Press, 1989), pp. 8.

Liliane Wong elaborated the definition of adaptive reuse from Merriam Webster's dictionary. What was "the renovation and reuse of pre-existing structures for new purposes"¹⁷ became "the renovation and reuse of pre-existing structures for new purposes [and] requires the introduction of the new within the established order of the existing."¹⁸ Wong's definition places emphasis on the distinct parts of the whole design challenge, and underscores how harmony between the two is paramount. This definition implies that when introducing something new, the established order ought to have a continuation rather than an interruption.

It is helpful to think of adaptive reuse and the process of intervening as a waltz; when dancers waltz, there is a leader and a follower. Applied to buildings, the waltz is the intervention, and the dancers represent the new and the existing. The architect decides who leads the dance. It can be either partner. Ultimately, it does not matter who leads, as both dancers are equal participants in the waltz. This is to say that successful adaptive reuse can occur when the new leads the design,¹⁹ just as it can occur when the existing leads the design. Regardless of who leads, when they dance together as in a waltz, the two halves are in harmony. During the development of an intervention, the new and the existing are separate pieces of a place that are coming together to create a new whole. Adaptive reuse is the process of unification between these two states of being. I believe the adaptation of the monastery is an excellent example where the existing fabric of the building is leads the design.

¹⁷ *Merriam-Webster.com Dictionary*, s.v. "adaptive reuse," accessed August 19, 2021, <https://www.merriam-webster.com/dictionary/adaptive%20reuse>.

¹⁸ Liliane Wong, "Considering DNA," in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 124.

¹⁹ "National Arts Centre Rejuvenation," dsai.ca, Diamond Schmitt Architects, accessed September 19, 2021, <https://dsai.ca/projects/national-arts-centre-rejuvenation/>
In 2017, the new addition to the National Arts Centre in Ottawa opened. To quote the architects, the "original heavy precast concrete sits in contrast with a new contemporary material palette...A glass and steel marquee tower re-oriens the building towards the city with a new entrance." The addition is in direct and deliberate contrast to the existing building so to create a new and attractive entrance to the building. For their efforts, the project won an Architecture Award of Merit from The United States Institute of Theatrical Technology.

(Re)new(ed) relevance

The motivation for pursuing an adaptive reuse project can be categorized broadly as either an economic, environmental, or social persuasion. It can also be a combination of all three.

From an economic perspective, there can be significant advantages to reusing an existing building. If the owner of an office building chooses to purchase an existing building in lieu of undeveloped land, they save on development fees; for a new build in Old Ottawa South, development fees for an office building are \$27.76/sqft, which does not include the cost of the land or cost of building materials.²⁰ The permit for changing the use of a building is \$105 per application versus a \$406 for a demolition agreement; furthermore, demolition agreements have additional fees based on the square footage of the building.²¹ Building fit-ups and adaptations can often be completed more quickly than new builds.²² Finally, working with existing structures is more labor-intensive, thereby less impacted by the fluctuating costs of building materials; this is especially relevant today, with lumber costs in 2021 three times what they were last year.²³

The collective desire of the general population is to have modern amenities in every place we occupy; this includes things like internet and other information technologies and stricter environmental controls.²⁴ Commercial spaces, offices, and residences alike are expected to offer the same level of occupant comfort. In 2017, National Resources Canada published the *Major Energy Retrofit Guidelines*

²⁰ City of Ottawa, By-law No. 2019-156, *Ottawa Development Fees* (1 October, 2020).

<https://ottawa.ca/en/planning-development-and-construction/developing-property/development-application-review-process/development-application-submission/fees-and-funding-programs/development-charges/fee-schedule-effective-october-1-2020>

²¹ City of Ottawa, Forms, applications and fees, *Comprehensive Building Code Services Fee Schedule* (January 1, 2021). <https://ottawa.ca/en/planning-development-and-construction/building-and-renovating/forms-applications-and-fees>

²² Gene Bunnell, "Introduction – Recycling Old Buildings," in *Built to Last: A Handbook on Recycling Old Buildings* (Preservation Press, 1977), pp. 10.

²³ Ed Zarenski, "2021 Construction Inflation," Construction Analytics Consulting, WordPress, 16 April, 2021. <https://edzarenski.com/2021/01/26/2021-construction-inflation-e1/>

²⁴ James Douglas, "Introduction," in *Building Adaptation* (Abingdon, Oxon: Spon Press, 2006), pp.46.

for Commercial and Institutional Buildings. This document asserts that over the next 20 years, 40% of all existing commercial buildings will be retrofitted,²⁵ both for improved energy performance and also for the improved indoor environment.²⁶ By consequence, buildings that offer poorer occupant comfort are at risk of underuse or disuse altogether, and by extension demolition. Architects are increasingly faced with the challenge to meet modern societal expectations while optimising energy performance and reducing resource consumption. Thus, adaptive reuse is in higher demand out of necessity.

To quote the *Standards and Guidelines for the Conservation of Historic Places in Canada*, “Canada’s historic places are a living legacy for all Canadians.”²⁷ Not all historic places are formally designated, and some designations are not accompanied by legislative protections.²⁸ When it comes to buildings steeped with social or cultural heritage, I believe the overarching goal should be its conservation. These places convey “some kind of cultural or civic quality that has meaning from the past, [is] significant in the present, and hopefully preserved for the future.”²⁹ Many of these places showcase positive aspects of our collective history; to quote architect Giorgio Cavaglieri, “Buildings and their grouping and assemblage are more than the shelter of our activities; they represent us beyond our life, they interpret us to posterity and they illustrate our past to us. It is in this context that the preservation of examples from the past acquires enormous importance in a culture.”³⁰ In Canada, that

²⁵ *Major Energy Retrofit Guidelines for Commercial and Institutional Buildings* (National Resources Canada, Canada, 2017), pp. 2.

²⁶ *Ibid*, pp. 3.

²⁷ *Standards and Guidelines for the Conservation of Historic Places in Canada* (Parks Canada, Hull, Quebec, Canada, 2010), v.

²⁸ “Roles and Responsibilities - Federal Heritage Buildings Review Office (FHBRO).” www.pc.gc.ca, Parks Canada. Accessed August 20, 2021. <https://www.pc.gc.ca/en/culture/beefp-fhbro/roles/beefp-fhbro>. “Parks Canada’s Federal Heritage Buildings Review Office’s (FHBRO) principal role is to advise custodian departments on how to meet their heritage obligations under the Treasury Board Policy on Management of Real Property.” As this advice is captured under a policy and not an act of legislation, it lacks the authority to ensure its implementation.

²⁹ Tim Murray (Principal and Founding Architect of Murray and Murray Architects Associates) in discussion with Amanda Lapointe, June 15, 2021, Appendix 3.

³⁰ Giorgio Cavaglieri via Barbaralee Diamonstein, “Memory’s Anchor: The Recycling Phenominon,” in *Buildings Reborn: New Uses, Old Places* (New York: Harper & Row, 1978), pp.13.

manifests in locations that housed spaces of Canadian innovation or development; places home to influential historical figures; or simply beautiful examples of Canadian design, from different periods and styles of architecture. As historic functions become obsolete, or when they lack the comforts of modern amenities, adaptive reuse can reinvigorate the place and extend its life.

There is also an opportunity to use architecture as a means of challenging difficult histories. Implementing careful adaptive reuse to certain places can serve as a counter monument to the existing without erasing or obscuring troubling pasts that might otherwise be forgotten were the building lost. This is especially important for sites of severe trauma.³¹ Architects alongside other designers and tradesmen can completely transform a place, realign the intentions, and transform its future. However, done without care, this can erase histories that society can learn from. Acknowledging mistakes and the hurt caused is an important tool for healing the affected; adaptive reuse can be used to show respect towards the people impacted by historic and unfair decisions while demonstrating that those holding power in society can learn from its past mistakes.

Adaptive reuse offers an alternative future for buildings: “in contrast with demolition and preservation, [adaptive reuse] perpetuates a continuum of growth and change.”³² Places have the option to transform; to grow, shrink, or otherwise adapt to their time. As a unique discipline of architectural practise, adaptive reuse offers a variety of treatment options with the primary goal of

³¹“Indigenous Peoples Space, Building a Future Together,” www.afn.ca, Assembly of First Nations, accessed September 21, 2021, <https://www.afn.ca/indigenous-peoples-space-building-the-future-together/> Exploring adaptive reuse as a remedial treatment for sites of trauma is beyond the scope of this thesis. That said, in consultation with the appropriate communities, adaptive reuse may be used as a remedial treatment; skillful design can juxtapose narratives. An excellent example of this in Ottawa is at the former U.S. Embassy at 100 Wellington Street. Smoke Architecture, David T Fortin Architect, and Wanda Dalla Costa Architect are a team of indigenous architects from various First Nations, Inuit and Metis communities. They are using skillful design to disrupt the colonial narrative of the embassy as it transforms into the Indigenous Peoples Space.

³² Liliane Wong, “New Order: The Frankenstein Syndrome,” in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 30.

facilitating transformation to extend the life of a building.³³ There are economic and environmental benefits in using this approach. Most important to me, the practise offers the opportunity to celebrate or challenge our collective history; “transformative interventions [contribute to the] continuation of a cultural phenomena through built infrastructure [which forms] connections across the fabric of time and space and preservation of memory.”³⁴

What happens to existing places matters. The way architects handle interventions on existing places sends a message of the ideas that society values - historically, presently, and also what waits to be seen from the future.

Adaptive Reuse as an Emerging Discipline

Gothic architecture has pointed arches, flying buttresses and rib-vaulting. Classic architecture has rounded arches, Doric, Ionic, or Corinthian columns, and is characterized by symmetry and simple, proportional geometry. Adaptive re-use can occur in and over any gothic, classic, brutalist, modernist, baroque – whatever style building. It does not matter what condition the building is in. It does not discern between uses; not a single existing *thing* is exempt from eligibility within the realm of adaptive re-use. Beyond versatility, what characterizes adaptive reuse?

An existing place is defined as “the host building.”³⁵ The host can present itself in many forms, each one falling into one of six structure types: entity, shell, semi-ruin, fragmented, relic, or group. Establishing the concept of the host structure as an entity helps to inform alterations and interventions

³³ Philippe Robert, “Architecture as Palimpsest,” in *Adaptations, New Uses for Old Buildings* (New York: Princeton Architectural Press, 1989), pp. 6.

Some of the different treatment options include: building within, building around, building over, building alongside, recycling materials or vestiges, adapting a new function, and building in the style of the existing.

³⁴ Liliane Wong, “New Order: The Frankenstein Syndrome,” in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 31-32.

³⁵ *Ibid*, pp. 104.

such that the host retains its independent existence.³⁶ Maintaining the unique identity of the host structure embodies the principle of respect.

Subsequently, Wong explores the diversity of interventions. The first category of intervention is referred to as 'actions,' which "create a new user experience through very different types of interface with the host."³⁷ In contrast with actions that are materially based, Wong dedicates a chapter to 'ghosts' and their influence on design. Ghosts represent the experiences contained within the host structure. The ghost can be broad such as when representing an event, or specific like expressing the actions or experiences of occupants. Ghosts capture elements of the history of a place, "allowing the past to co-inhabit the space of the present, without erasure or recriminations."³⁸

For buildings undergoing a change of use, the architect may consider working out the new program diagrammatically. This is to say that "the design of these different spaces – their sizes and relationships to each other – is an interpretation of the architectural program, a document translating a client's needs for a building into spatial terms."³⁹

Wong defines the types of intervention as the Mathematics of Reuse. These treatments can be replicated across many sites, and due to the nature of adaptive reuse, the same typological design strategies will yield different results every time.⁴⁰ They are described as follows:

³⁶ Liliane Wong, "New Order: The Frankenstein Syndrome," in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 106.

³⁷ Liliane Wong, "Considering DNA," in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 126. Actions can be categorized as passive, performative, and referential.

³⁸ Liliane Wong, "Ghosts," in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 138.

³⁹ *Ibid.*, pp. 148. "No matter its form or complexity, the architectural program defines a building's use by identifying all required spaces and their intended occupants, establishing the size of each space and the relationship between them and providing a framework of efficiency for accommodating these spaces within the building."

⁴⁰ Liliane Wong, "The Mathematics of Reuse," in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 223.

- Whole numbers: “the addition of discrete volumes to an existing host structure. These additions include single elements, from a dormer to additional stories, but also a new façade or wing.”⁴¹
- Rational numbers: describe “the nuances of additive interventions within the host...which add to a host structure not only through extension but also through a process of renewal.”⁴²
- Summation: “pertains to a series of related elements – stairs, walkways, ramps, corridors, steps, balconies – that are not discrete volumes in and of themselves but added together form a unified intervention to a host. These series of interventions occur both on the exterior and the interior, and at different scales.”⁴³
- Subtraction: “refers to the removal of a part of the host structure.”⁴⁴
- Absolute Value: “a variant of subtraction, this type of intervention does not result in a removal of matter in the ultimate balance...In sum, the subtractive interventions [enable] the create of [something new].⁴⁵

Designing with Existing

Gene Bunnell observed that “[all] too frequently, local leaders, planners, developers and citizens view old buildings as obstacles.”⁴⁶ That was as true in 1977 America as it is in 2021 Canada. There is an observable reluctance to work with what is already there.⁴⁷ This reluctance is accompanied by the perception that adhering to the *Standards and Guidelines* is a cumbersome, unpleasant design process. With new interventions there is no issue. Newness is attractive, there are no surprises or outside considerations. From the perspective of the architect, authorship, and by extension the genius of design,

⁴¹ Liliane Wong, “The Mathematics of Reuse,” in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 191-192.

⁴² Ibid, pp. 201.

⁴³ Ibid, pp. 206.

⁴⁴ Ibid, pp. 210.

⁴⁵ Ibid, pp. 214.

⁴⁶ Gene Bunnell, “Introduction – Recycling Old Buildings,” in *Built to Last: A Handbook on Recycling Old Buildings* (Preservation Press, 1977), pp. 7.

⁴⁷ I have observed this anecdotal evidence in various contexts professionally.

can belong to them alone. They do not have to share the creation of a magnificent place with a long forgotten, or perhaps worse, a universally celebrated and immortalized predecessor.

By contrast, developers often require explicit instruction to keep the buildings they inherit or purchase; conservation professionals have to convince developers that the *Standards and Guidelines* make the job of designers easier. The purpose of this study is to popularize the idea that designing a compatible intervention is just as important as designing from a clean slate. Sharing the creation of spaces with architects of the past is more remarkable and meaningful than if it had been designed by one architect alone.

For this reason, the 1993 Murray and Murray intervention on the monastery so interesting. The transformation of the monastery into the Royal College was far ahead of its time. Tim Murray describes a design approach that closely resembles what was later captured in the *Standards and Guidelines*. It is important to see how architects operated on existing places prior to the existence of the *Standards and Guidelines*, as it demonstrates how projects on existing places could be carried out ethically.

“[A]rchitecture and [building] practises is a collaborative effort. Practically all the associates and team leaders were all from old cities like Edinburgh, Dublin, London, things like that. So, they were all weaned with an understanding of the importance of preservation. And nourishing and maintaining those structures for the good of future history. We didn’t have to develop an affection; **it was part of our DNA.**”⁴⁸

There is a need for architects today to develop this affection. Speaking of the work that Murray and Murray completed on the monastery, it was evident that Tim Murray recognized inherent values to the place; he “thought it was solid, well built, and capable of some further use.”⁴⁹ This is not to say he

⁴⁸ Tim Murray (Principal and Founding Architect of Murray and Murray Architects Associates) in discussion with Amanda Lapointe, June 15, 2021, Appendix 3.
My emphasis in bold.

⁴⁹ Ibid.

was completely captivated by the monastery. There was no celebration, no uncertain belief that this monastery was a great piece of architecture; but “[g]ood people have had it, looked after it, and there’s potential.”⁵⁰

I believe that the mindset at the onset of the project will affect the final design. If the architect believes the existing place has no value, there can be little hope that an intervention will yield a respectful result. Framing adaptive reuse as a unique design challenge is a good thing; designing within constraints and yielding a clever architectural solution is *satisfying*. Identifying opportunities as opposed to obstacles fundamentally shifts the perspective, increasing the chances of a respectful and ultimately successful adaptive reuse.

Consume, Draw, Digest

How can an architect develop their affection towards a place? Love and affection develop through knowing. Exploring the history and understanding the existing promotes this affection; visiting, speaking with occupants and designers, and reading up on the history of a place all contribute to knowing. Architects also have drawing; documenting the existing thoroughly is part of amassing knowledge, and drawing can reveal intricacies that would otherwise go unnoticed.

Once a place is understood intimately, the architect can begin designing their intervention. The aforementioned exercises in knowing are a start, but beyond understanding the history of a place, the architect should understand the existing place as having its own entity. Returning to the waltz metaphor, new and existing are each a member of the dance. They are people, so to speak. And if the new and the existing have unique identities, the architect understands that both must be active participants in the waltz, or rather, in the design to achieve harmony. There is no waltz if there is only

⁵⁰ Tim Murray (Principal and Founding Architect of Murray and Murray Architects Associates) in discussion with Amanda Lapointe, June 15, 2021, Appendix 3.

one participant. In order to have a harmonious dance, both the new and the existing must be independent entities that come together in unity.

Tim Murray was not the project architect on the monastery; his late brother Pat was. Nevertheless, both brothers attended the final mass held by the sisters in their monastery. “It was kind of sad to see the nuns – well, we could only hear them. It was sad that they were leaving their monastery after 50 or 60 years, something like that”⁵¹ At the time of the intervention on the monastery, both Tim and Pat had extensive experience designing religious architecture. Additionally, they both completed many projects on existing structures, up to and including the complete conversion of existing places to new uses. Still, they endeavoured to understand the monastery with special attention; the final mass with the sisters is an intimate and nostalgic moment. The architects bore witness to the sisters’ goodbye to their home of many, many years.

This experience develops the relationship between an architect and the subject building and creates intimacy, which in turn inspires reverence. Knowing places makes them inviting for people, encouraging the continuation of its history; from an architectural perspective, it is the desire to weave oneself into the fabric of the building. When architects build a relationship with the places they intervene upon, they become “a little more contemplative of [how to] handle spaces and what experiences [to] afford the users.”⁵²

⁵¹ Tim Murray (Principal and Founding Architect of Murray and Murray Architects Associates) in discussion with Amanda Lapointe, June 15, 2021, Appendix 3.

⁵² Ibid.

CHAPTER 2: History of the Order & Community Connection

“Despite sound architectural, historical, technical and pathological knowledge, a heritage value assessment of a monastery without an understanding of religious life or the significance behind monastic architecture cannot lead to a successful heritage adaptive reuse as it likely overlooks key elements.”⁵³

– Thomas Coomans

Understanding a place is integral to heritage conservation; I would argue that it is equally important when undertaking an adaptive reuse project. Beyond understanding the architectural style, form and condition, understanding the historic use of a building may help inform certain design decisions. For a monastery in Ottawa, it is important to understand the monastic tradition and any nuances of the specific religious order.

Sisterhoods in Ottawa:

The history of religious orders in Ottawa is best represented by the period of time from the mid-nineteenth century up until the late twentieth century. The various orders served the community through many different activities, and the legacy of these orders continue most prominently in the areas of health care and teaching.

The Soeurs de l’Institut Jeanne d’Arc provided lodging to young, single women wishing to study or work in Ottawa. They also taught French and English to children. Their building on Sussex drive was subsequently purchased by the National Capital Commission and converted into condos. It is currently a Recognized Federal Heritage Building.⁵⁴

⁵³ Thomas Coomans, “Introduction - Understanding Monastic Architecture,” in *Life Inside the Cloister - Understanding Monastic Architecture: Tradition, Reformation, Adaptive Reuse* (Leuven: Leuven University Press, 2018), pp. 9.

⁵⁴ “Jeanne D’Arc Institute,” www.historicplaces.ca, Parks Canada, July 25, 2006, <https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=4647>

The Sisters of Charity of Ottawa, also known as the Grey Nuns of the Cross, were the first nuns to arrive in the city in 1845. Elisabeth Bruyère, the Ottawa order's foundatrice and Superior General of the order, opened a small hospital and a bilingual school in the city; the hospital grew to become one of three main institutions of the Ottawa Hospital (the General)⁵⁵ and her influence in education would see her name used for a bilingual Catholic education school in Kanata.⁵⁶

The Soeurs Adoratrice du Précieux-Sang were the first contemplative order of nuns founded in Canada and had a somewhat subtler contribution to the city of Ottawa. Originating from Saint-Hyacinthe, Quebec, the order was founded by Magistrate Joseph LaRocque and Mère Catherine Aurélie du Précieux Sang in 1861. Sixteen years later in April 1887, the Bishop of Ottawa wrote to the Bishop of Saint-Hyacinthe expressing the desire to have a branch in Ottawa.⁵⁷ Thus, in late May 1887 and only one month after the request of the Bishop, eight members of the Precious Blood community came to Ottawa, establishing themselves in the "same building which the Grey Nuns first made their residence."⁵⁸ An excerpt from the Ottawa Daily Citizen reads:

To-day at noon will arrive from St. Hyacinth eight sisters of "the Precious Blood's Community" to establish a new branch of their order in this city. "Mother of the Holy Heart of Mary" is their superioress. The ceremony of their installation will begin in the Basilica at 7 o'clock p.m. today. His Grace Arch-bishop Duhamel will deliver the sermon, after which the reverend sisters accompanied by their General Mother Superior Catherine Aurelie will be conducted to their Convent by His Grace and several members of the clergy and some sisters of the Grey Nuns

⁵⁵ "Our History" www.ottawahospital.on.ca, The Ottawa Hospital, accessed July 30, 2021, <https://www.ottawahospital.on.ca/en/about-us/our-history/>

⁵⁶ "Historique de l'École," [Elisabeth-bruyere.ecolecatholique.ca](http://elisabeth-bruyere.ecolecatholique.ca), Conseil des écoles catholiques du Centre-Est, accessed July 30, 2021, https://elisabeth-bruyere.ecolecatholique.ca/fr/A-Propos_15

⁵⁷ Sally Coutts, "Heritage Survey and Evaluation Form" (Building File No. PD-43, City of Ottawa Archives, Ontario, Canada, 1997), pp. 3.

⁵⁸ "The New Sisterhood," *The Ottawa Daily Citizen*, May 23, 1887, print edition, pp. 3. <https://www.newspapers.com/image/455924548/>. This building was located on St. Patrick Street.

Convent, and by all those witnessing the ceremony. When the religeuses will be entered in the Convent, then His Grace will lock the door of their cloister.⁵⁹

Unlike other religious communities whose work directly involved interaction with the locals, the Soeurs Adoratrice du Précieux-Sang were cloistered, living separate to their immediate community. The sisters devoted their lives to contemplation, working to fulfill a spiritual need in the city by praying in continual ritual for the redemption and conversion of sinners.⁶⁰

The sisters are obligated to take “vows of obedience, poverty and chastity, to abstain from meat, and to fast every Friday and during the whole of Lent, to recite their office at midnight and besides many other interior and exterior mortifications.”⁶¹ Despite these sacrifices, in every public expression from the cloistered order the sisters emphasized their joyous devotion.⁶² A life in silent, isolated contemplation was peaceful and, in a manner of speaking, almost utopian. They were free from the burdens of a wild and unruly society. Their prayer provided absolution of others: others that they cannot see, hear, or even know.

The Soeurs Adoratrice du Précieux-Sang describe their refectio committed to as “Lectio divina: Lectio (readings) Meditatio (meditation) Oratio (mental prayer) and Contemplatio (contemplation).”⁶³

⁵⁹ “The New Sisterhood,” *The Ottawa Daily Citizen*, May 23, 1887, print edition, p. 3.
<https://www.newspapers.com/image/455924548/>.

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Shari Jackson, “Convent is home to cloistered nuns,” www.OldOttawaSouth.ca, Old Ottawa South Community Association, originally published December 1983, republished online December 2009, revised July 2017, <https://oldottawasouth.ca/stories/item/5708-convent-is-home-to-cloistered-nuns?highlight=WyJtb25hc3RlcnkiLCJtb25hc3RlcmllcyIsIm1vbmFzdGVyeSdzIlI0=>

⁶³ “Specific Vocation - Lectio Divina,” www.Adoratricesps.net, Adoratrices du Précieux-Sang, accessed July 30, 2021, http://www.adoratricesps.net/application/content_en/voc_lectio.html

The sisters manufactured religious objects for sale, such as rosary beads⁶⁴ and also prepared the host for the entire Roman Catholic Diocese in Ottawa.⁶⁵

When the order grew in size, the sisterhood relocated to 774 Echo Drive in Old Ottawa South. A “crucial aspect of the monastic place is its relationship with the town”⁶⁶ and throughout their occupancy in Ottawa, their connection to the community was profound. Prior to Vatican II, “contemplative orders were allowed to live from of public support, so when the nuns needed something, they would ring the building’s central bell and members of the neighbouring community would bring them food or whatever they needed.”⁶⁷ They received letters from people all across the country with requests for prayer.⁶⁸ Though a cloistered, contemplative order of nuns, public mass was held in the chapel regularly; during these public sermons, the sisters participated in their adjacent private chapel. Their singing filled both rooms.⁶⁹

It is impossible to divorce the influence of religion and religious orders on the development of Ottawa. Many of the institutions founded by the sisterhoods still exist and contribute to the fabric of the city today. It is important to recognize this period especially as it relates to women’s history. In the 19th century, the gender norms in Canada relegated women to domestic and maternal duties,⁷⁰ which was

⁶⁴ Sally Coutts, “Heritage Survey and Evaluation Form” (Building File No. PD-43, City of Ottawa Archives, Ontario, Canada, 1997), pp. 3.

⁶⁵ “City Nuns Run Special Bakery,” *The Ottawa Citizen*, March 12, 1965, print edition, pp. 3.
<https://www.newspapers.com/image/459220991/>.

⁶⁶ Thomas Coomans, “Place and Stability,” in *Life inside the Cloister - Understanding Monastic Architecture: Tradition, Reformation, Adaptive Reuse* (Leuven: Leuven University Press, 2018), pp. 90.

⁶⁷ Sally Coutts, “Heritage Survey and Evaluation Form” (Building File No. PD-43, City of Ottawa Archives, Ontario, Canada, 1997), pp. 3.

⁶⁸ *Charlotte’s Town*, performed by Charlotte Gobeil (1981; Ottawa, Canada: Canadian Broadcasting Corporation, published online 2019 by the Old Ottawa South Community Association).
<https://oldottawasouth.ca/stories/item/6740-sisters-adorers-of-the-precious-blood?highlight=WyJtb25hc3RlcnkiLCJtb25hc3RlcmllcyIsim1vbmFzdGVyeSdzll0=>

⁶⁹ “Monastère du Précieux Sang,” www.historicplaces.ca, Parks Canada, October 17, 2008,
<https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=10311>

⁷⁰ Andrea Eidinger, “History of Gender Roles in Canada,” thecanadianencyclopedia.ca, Government of Canada, October 21, 2020, <https://www.thecanadianencyclopedia.ca/en/article/history-of-gender-roles-in-canada>

not considered to be gainful employment on the Canadian census until 1931.⁷¹ As far as the first half of the 20th century, the primary occupation of most women was domestic labour.⁷² I would argue that monastic life offered an alternative for women. Nuns could work as teachers and nurses, which went against the norm of motherhood and homemaking from the 19th century right up until the mid 20th century.⁷³ In the case of the Soeurs Adoratrices, they prayed for the spiritual fulfillment of the city, and were trusted to receive the prayers of its people.

Many of the buildings these sisterhoods built have historical designations and formal protections today. The contribution of these religious orders to the betterment of the city and its residents lasted beyond some of the orders themselves, and they are fondly remembered in the collective memory of Ottawa's history. Upon their arrival, the Soeurs Adoratrices de Précieux Sang were welcomed to the city. Upon their departure, their community protected the place they built; their home still stands on Echo Drive to this day.

⁷¹ Derrick Thomas "The Census and the evolution of gender roles in early 20th century Canada," www150.statcan.gc.ca, Statistics Canada, April 23, 2014, <https://www150.statcan.gc.ca/n1/pub/11-008-x/2010001/article/11125-eng.htm>

⁷² Ibid.

⁷³ Ibid.

CHAPTER 3: Monastic Architecture

Evolution of the site:

In 1898, the Soeurs Adoratrice du Précieux-Sang relocated from the heart of Bytown to a plot of land in the community known today as Old Ottawa South. The Sisters would remain at 774 Echo Drive for just over 90 years,⁷⁴ transforming the site incrementally throughout their residency. They first occupied an old stone house, to which they added a chapel. When their community grew and the arrangement no longer suited their needs, they elected to build a new monastery to support their larger numbers. The stone house was demolished, the chapel relocated to the edge of the site, and the sisters moved into a log structure.⁷⁵

The bulk of the new monastery was built between the years of 1914 and 1923. Construction was fraught with challenges; shortly after laying the cornerstone in 1915, the steel shortage caused by the First World War impeded progress. Later, when materials became available in 1916, the architect Alphonse Contant refused to continue working on the project and absconded with the funds in 1917. By 1921, it was clear that without outside intervention the unfinished structure risked imminent collapse.⁷⁶ The community rallied in support of the sisters: “money [was] raised by means of two bridge parties, a raffle, three sales of home-made cooking and a concert; besides theatricals and money collections...also through the generous donations of many friends of all denominations, interested in the work.”⁷⁷ For the

⁷⁴ The exact dates of incorporation and dissolution are *May 24, 1887 / November 30, 1990*. “History - Developments,” Adoratrices du Précieux-Sang, accessed July 20, 2021.
http://www.adoratricesps.net/application/content_en/orig_dev.html.

⁷⁵ Sally Coutts, “Heritage Survey and Evaluation Form” (Building File No. PD-43, City of Ottawa Archives, Ontario, Canada, 1997), pp. 3.

⁷⁶ Ibid.

⁷⁷ “Soldiers’ Memorial Chapel,” *The Ottawa (Ontario) Citizen*, October 31, 1921, print edition, pp. 9.
<https://www.newspapers.com/image/456358113/>.

contribution of the community, the Sisters dedicated the chapel to the soldiers of the First World War, and named the space the “Soldiers’ Memorial Chapel of Reparation.”⁷⁸

Twenty-five years after arriving in Old Ottawa South and nine years after construction began, the sisters were able to move into their new monastery in June 1924. The Chapel was consecrated and the Superior General herself, Mère Catherine Aurélie, presided at the inaugural mass.⁷⁹ August of the same year, the Superior General celebrated her Golden Jubilee at the Precious Blood Monastery.⁸⁰ At their height, the Soeurs Adoratrice du Précieux Sang had 42 monasteries worldwide. The first ten expansions beyond the Maison Mère from Saint-Hyacinthe were presided by Mère Catherine-Aurélie du Précieux-Sang, including the inauguration in Ottawa.

Though the building remained largely unchanged while used as a monastery, there were some notable interventions. The monastery

“was very austere, and some parts, such as the chapel, were not finished to their satisfaction until the 1960’s.”⁸¹

The sisters continued to save funds and complete projects incrementally.

Figure 1 is an image of the monastery

as it was in 1947. Originally, the

building had two entrances, with one



Figure 1: Monastère du Précieux-Sang, photo courtest of Fonds Champlain Marcil via the Bibliothèque et Archives nationales du Québec, Ottawa, 1947.

⁷⁸ “Soldiers’ Memorial Chapel,” *The Ottawa (Ontario) Citizen*, October 31, 1921, print edition, p. 9. <https://www.newspapers.com/image/456358113/>

⁷⁹ Marguerite Jean, “CAOQUETTE, AURÉLIE, Catherine-Aurélie du Précieux-Sang,” in *Dictionary of Canadian Biography*, vol. 13, University of Toronto/Université Laval, 1994, accessed July 20, 2021, http://www.biographi.ca/en/bio/caouette_aurelie_13E.html

⁸⁰ “Golden Jubilee of Rev. Sister Aurelie,” *The Ottawa (Ontario) Citizen*, August 18, 1924, print edition, p. 9. <https://www.newspapers.com/image/455830712/>

⁸¹ Sally Coutts, “Heritage Survey and Evaluation Form” (Building File No. PD-43, City of Ottawa Archives, Ontario, Canada, 1997), pp. 3.

steel staircase leading to the public chapel in the east wing, and another to the parlors in the west wing. The steep flights of steel stairs were a temporary solution that the sisters intended to eventually replace.⁸²

In March of 1977, then Superior General Mère Gisèle Boulay inquired as to whether the Ottawa chapter would be willing house an infirmary for the congregation. A vote in favor by the 39 sisters in the Ottawa monastery led to its implementation.⁸³ This would form part of the last major renovation of the building while it served as a monastery.



Figure 2: Entryway, photo by Cuhaci architects, Ottawa, circa 1985.

The project was completed in three stages between 1977 and 1980 by Edward J. Cuhaci and Associates Architects Inc. The work included a building fit-up and improvements to the mechanical and electrical systems, introduced a geriatric and chronic care unit, restored the chapel, and a new entryway was built. The steel staircases were removed; due to the limited funds available, the sisters could not afford to install the stairs from the original design.⁸⁴ A single entryway was introduced instead, with a frontispiece and monumental pediment, taking inspiration from the pediments above the former entrances.

⁸² Sally Coutts, "Heritage Survey and Evaluation Form" (Building File No. PD-43, City of Ottawa Archives, Ontario, Canada, 1997), pp. 3.

⁸³ Soeur Jocelyne Mainville, email message to author, June 14, 2021.

⁸⁴ Sally Coutts, "Heritage Survey and Evaluation Form" (Building File No. PD-43, City of Ottawa Archives, Ontario, Canada, 1997), pp. 3.



Figure 3: Renovated Chapel, photo by Cuhaci Architects, Ottawa, circa 1985.

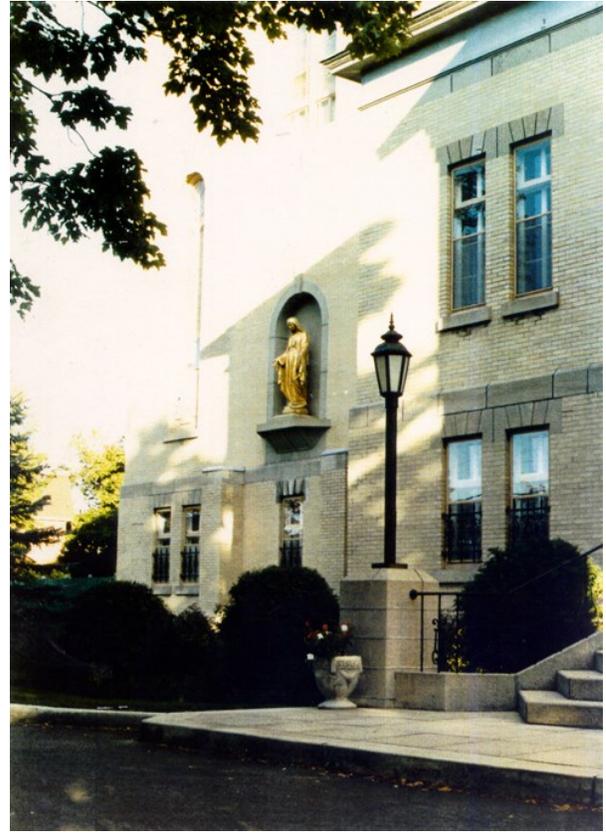


Figure 4: Niche and statue, photo by Cuhaci Architects, Ottawa, circa 1985.

The public chapel saw the introduction of a new vaulted ceiling, with defined arches landing on free imposts. Outside, a niche for a gold statue of the Virgin Mary was added where the former entrance was.⁸⁵ Following the Cuhaci intervention but at an unknown date prior to 1990, the two-storey windows lining the chapel were replaced with blue and purple jewel toned stained glass.⁸⁶ Fifty years after opening its doors, the monastery had a formal entrance and a public chapel that met the original vision of the sisterhood.

⁸⁵ "Precious Blood Convent." www.cuhaci.com, Edward J Cuhaci and Associates Architects Inc.. Accessed June 10, 2021. <http://cuhaci.com/index.php/projects/heritage/132-precious-blood-convent>

⁸⁶ The stained glass is not visible in the photograph of the chapel in Figure 3, which was taken following completion of the 1985 renovations. It must have been introduced after 1985 and prior to the decision to sell the monastery in 1990.

The building is modest and classically proportioned. Three four-storey wings are laid out in a u-shape, with a two-storey entry pavilion enclosing a central courtyard. The exterior is clad with pale yellow brick; grey stone string courses delineate the levels of the building. A metal hipped roof tops the building, punctuated with dormers on the fifth level. A cupola sits atop the roof of the south wing. Rectangular windows are regularly spaced on the east façade. These same windows as well as doors punctuate the south façade, giving access to the open, three-storey gallery. The stained-glass chapel windows are visible on the west façade. The front façade has both rectangular and round windows.⁸⁷ The ground level housed many of the service spaces. On the 1990 plan, the refectory, kitchen, and food storage are all located in the south wing. Access to the courtyard is also through the south wing, though it was not a programmed space. The west wing housed the laundry room.⁸⁸ There appears to be a parlor in the west wing, with access from a side entrance to the building.

The public chapel and private chapel were located on the second level, in the west and south wings respectively. The priest's quarters were in the south-east corner of the building, connecting directly to the public chapel. The south-west corner of the building contained a flexible recreational space where the sisters would sing, play instruments, practice embroidery and other crafts, and even play card games.⁸⁹ The west wing housed the largest parlor in the building. Although not labelled on the plans, it is assumed that the secret secretariat was in the entry pavilion, at the top of the westerly stairs. The third level housed the infirmary, and it is believed to have occupied the entire floor. The fourth level is reserved entirely for the cells where the sisters slept, read, and prayed in contemplative silence.

⁸⁷ Sally Coutts, "Heritage Survey and Evaluation Form" (Building File No. PD-43, City of Ottawa Archives, Ontario, Canada, 1997), pp. 3.

⁸⁸ This is not labelled on the 1990 plan, so it was discerned from examining video footage of the interior and comparing the window arrangement of the spaces to the plan.

⁸⁹ *Charlotte's Town*, performed by Charlotte Gobeil (1981; Ottawa, Canada: Canadian Broadcasting Corporation, published online 2019 by the Old Ottawa South Community Association).
<https://oldottawasouth.ca/stories/item/6740-sisters-adorers-of-the-precious-blood?highlight=WyJtb25hc3RlcnkjLCJtb25hc3Rlcmllylsm1vbmFzdGVyeSdzIlI0=>



Figure 5: Front facade of the Royal College of Physicians and Surgeons, photo by author, Ottawa, 2021.

For a cloistered monastery such as this one, the design of interior spaces influenced the way the people inside interact. Spaces are arranged deliberately to divide public and private areas, and certain features are designed to physically separate the sisters from outsiders. The L-shape arrangement of the public and private chapels allowed the sisters to participate in public mass away from view of visitors to the chapel; it is separated from the public chapel with a rood screen, so their singing voices could still be heard during mass while they remained concealed. The rood screen could be opened up for special occasions, such as when Charlotte Gobeil visited the interior of the monastery in 1981.⁹⁰ The importance of sound is critical; spaces were designed so the sisters could be heard but not seen.

⁹⁰ *Charlotte's Town*, performed by Charlotte Gobeil (1981; Ottawa, Canada: Canadian Broadcasting Corporation, published online 2019 by the Old Ottawa South Community Association). <https://oldottawasouth.ca/stories/item/6740-sisters-adorers-of-the-precious-blood?highlight=WyJtb25hc3RlcnkiLCJtb25hc3RlcmllcyIsIm1vbmFzdGVyeSdzIlI0=>



Figure 6: The nuns private chapel with the rood screen closed, screen capture from *Charlotte's Town, Ottawa, 1981*.



Figure 7: The nuns private chapel with the rood screen open, screen capture from *Charlotte's Town, Ottawa, 1981*.



Figure 8: Large parlor on the second level, screen capture from *Charlotte's Town, Ottawa, 1981*.



Figure 9: Sister sitting in front of frosted windows, screen capture from *Charlotte's Town, Ottawa, 1981*.

One of the only areas in the monastery where the sisters would interact directly with the public was in the parlors. The parlors have two entrances, one for the sisters and one for the public. The space is separated by grilles, which are “there to show we have the special purpose in life,’ says Sister Jeannine Cyr. ‘We pray for people, we must not get involved in worldly things and so the grills separate us.’⁹¹

Other details, like the opacity of windows and the two-way mirrors on doors, further contribute to the physical removal of the sisters from the public.

⁹¹ *Charlotte's Town*, performed by Charlotte Gobeil (1981; Ottawa, Canada: Canadian Broadcasting Corporation, published online 2019 by the Old Ottawa South Community Association). <https://oldottawasouth.ca/stories/item/6740-sisters-adorers-of-the-precious-blood?highlight=WyJtb25hc3RlcnkilLCJtb25hc3RlcmllcyIsIm1vbmFzdGVyeSdzIlI0=>



Figure 10: The Royal College headquarters building, photo by Royal College of Physicians and Surgeons of Canada. No date.

The sisters departed the monastery in 1990, relocating to the mother house in Saint-Hyacinthe, Quebec. The Royal College of Physicians and Surgeons of Canada (Royal College, RCPS) purchased the building in 1991 with the intent of converting it into their new national headquarters. Murray and Murray Architects was engaged and served as the lead coordinator of a multi-disciplinary design team.

Extensive renovations were required to meet the needs of the new use. These renovations saw structural upgrades; mechanical and electrical upgrades; landscape interventions; lighting design; acoustic, audio, and visual services; and hardware design.⁹² The team identified the chief design

⁹² Tim Murray, one-pager sent via email message to author, June 6, 2021. Appendix 4.

challenge as: “respect and compliment the proportion and formality inherent in the design, as well as its heritage and landmark qualities”⁹³

This challenge was multi-faceted. The needs to respect a place’s history while it transforms, to protect its architectural integrity, and to deliver a convenient and usable functional program were necessary. In a major renovation that involves a change of use, there is a significantly higher undertaking for code-compliance upgrades. Infractions that were permitted under grandfathering laws no longer applied, as the change in occupancy initiated a building-wide code review.⁹⁴ Upgrading the structural, mechanical, electrical, and life safety elements of the building is a challenge in any building, and during the renovations this challenge was compounded with the overarching goal of respecting the heritage character of the place. Work was carried out in two phases beginning in 1993 and ending in 1999. The monastery underwent an adaptive reuse, culminating in a design that responds to the demands of a facility befitting of a national headquarters.

Structural: Adjeleian Allen Rubeli Ltd.; Mechanical/Electrical: R.J. McKee Engineering Ltd; Cost: Hanscomb Ltd.; Landscape: Larocque Levstek Ltd.; Traffic: Delcan Corporation; Lighting: Gabriel Design; Acoustics and Audio Visual: State of the Art Acoustiks Ltd.; Hardware: Architectural Hardware Ltd.

⁹³ Tim Murray, one-pager sent via email message to author, June 6, 2021. Appendix 5.

⁹⁴ “National Building Code of Canada: 1990” (National Building Code, Ottawa, Canada, 1990), ix.

Summary of changes:

Following its adaptation into Royal College, some subtle changes are noticeable on the exterior. The Royal College maintains the same two-storey entry pavilion, preserving the monumental pediment introduced in 1985. The east side of the south façade, where the niche and statue stood, was altered to mirror the west side of the façade. A pediment and rounded windows were added. The cross was removed from the cupula. With the exception of the stained glass, all religious iconography was removed from the building.

On the west façade, the two-storey windows on the former chapel were extended down one storey. Some of the doors to the open gallery on the south façade were removed and replaced with windows. At the fifth level, additional transom windows were added on the south façade and toward the interior courtyard.

Many of the interior staircases were removed; one staircase in the south wing was relocated from the west to the east side of the wing. The central courtyard was covered and converted into a glassed atrium, and the entry staircase bringing visitors up from the ground level was pushed into the building. Meeting rooms were inserted into the ground level of the courtyard on the second level. The public chapel was converted into a board room and renamed the Council room, and the private chapel was converted into the Roddick Reading Room. The eating area was relocated to the second level of the building. The third, fourth, and fifth level were renovated and now host some meeting rooms, but mainly workstations.

CHAPTER 4: A Use That Fits

When it comes to adapting spaces into new uses, functions with overlapping similarities have an advantage. Older buildings especially were designed with only one use in mind,⁹⁵ and so they do not have the same flexibility that many modern spaces are designed for. Malls and retail spaces buildings are much easier to re-inhabit than something like a windmill; places have different degrees of flexibility.⁹⁶ Even when the use does not change, such as with retail, some places are designed to have turnover.⁹⁷ When spaces are inflexible, I believe architects are uniquely positioned to help the new use fit into the existing space with minimal conflict and disruption to the existing order. When the constraints and opportunities are determined, they can then be analysed in terms of compatibility. For sensitive places, the architect can consider “[testing] the program, at least schematically, against the existing structure and see: is it capable of digesting the request of the plans?”⁹⁸ Fitting the use is ultimately accomplished through design and executed with physical intervention, however, strategic functional programming increases the probability that the new use will integrate successfully. Robert argues that an adaptive reuse “only succeeds when there is a good match between new function and existing form.”⁹⁹ In the case of the Royal College, I would argue that the least interruption to the space best preserves the identity of the former monastery as it digests its new program.

An appropriate use is one that fits in “both the spirit and form...this means public or community use, with a degree of ritual and ceremonial attached.”¹⁰⁰ Murray and Murray Architects wanted to

⁹⁵ James Douglas, “Inflexible buildings,” in *Building Adaptation* (Abingdon, Oxon: Spon Press, 2006), pp.136-137.

⁹⁶ Ibid.

⁹⁷ Liliane Wong, “Hosts and [Guests],” in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 111.

⁹⁸ Tim Murray (Principal and Founding Architect of Murray and Murray Architects Associates) in discussion with Amanda Lapointe, June 15, 2021.

⁹⁹ Philippe Robert, “Architecture as Palimpsest,” in *Adaptations, New Uses for Old Buildings* (New York: Princeton Architectural Press, 1989), pp. 9.

¹⁰⁰ Sherban Cantacuzino, “Ecclesiastical Buildings,” in *Re-Architecture: Old buildings / New Uses* (New York: Abbeville Press, 1989), pp. 171.

preserve the entire building and were confident that the monastery could be adapted for the use of the Royal College.¹⁰¹ Despite a large scale and transformative intervention to most spaces in the building, the new use had considerable overlap with its predecessor and thus much of the building could be conserved. As Tim Murray noted:

“[T]here is a similarity in that [both uses] have an element of pomp and ceremony, they both have formal, large assemblies, like the nuns would gather in the church and the physicians and surgeons would have perhaps their new graduates in what was the converted chapel. And then both organizations – the nuns not as sophisticated, I could hardly say, or as well pronounced as the physicians and surgeons – in that they had departments, and small offices, and responsibilities to equate. Those were the similarities in that respect. And to some extent, you could sense it in the form of the building.”¹⁰²

Identifying aspects that each phase of use has in common facilitates the design development for the intervention. Similar uses can re-inhabit spaces with only minimal or minor changes. An example of clear and strategic functional programming by Murray and Murray is the gathering spaces. The public chapel became the Council Room, and the private chapel became the Roddick Reading Room; these spaces underwent minimal physical changes, and the compatible uses respect the existing form. Additionally, the use achieves a symbolic affiliation that is equivalent to what is found in the original.¹⁰³

In a more general sense, “[in] new construction, the form of the building is generated by the accommodation of program elements. The form of adaptive reuse projects can instead be

¹⁰¹ Tim Murray (Principal and Founding Architect of Murray and Murray Architects Associates) in discussion with Amanda Lapointe, June 15, 2021.

¹⁰² Ibid.

¹⁰³ Philippe Robert, “Architecture as Palimpsest,” in *Adaptations, New Uses for Old Buildings* (New York: Princeton Architectural Press, 1989), pp. 9.

predetermined by the form of its host.¹⁰⁴ The primary task lies in accommodating the program elements of use *within* this pre-existing form.”¹⁰⁵ Adaptive re-use can be more challenging when the building is definitively prescribed. This might have been the case with the monastery, where spaces have explicit and unique uses. What can become of the parlors? What of the cells? Spaces such as these can be difficult or even impossible to change use while adhering to modern codes. Beyond structural limitations, new occupancies introduce code requirements that must be changed in order to meet current safety regulations. When physical elements of the existing architecture are constrained and that interruption of the order cannot be avoided, preserving the intangible character can mitigate the impact.

This further exemplifies why the Royal College works within the form of a former monastery. “The monastic tradition has always placed great emphasis on writing and study.”¹⁰⁶ Though the Soeurs Adoratrice du Précieux-Sang were not scribes, their vocation placed a large emphasis on the study of religious texts. They performed their readings daily, and in various places throughout the building.¹⁰⁷ Additionally, the sisters received thousands of letters each year, which were collected and archived in the secret secretariat.¹⁰⁸ This is consistent with Cooman’s observation that “[l]ibraries and archives are therefore inseparable from the monastic identity, and the reuse of a monastery as a library or archive centre has a particular cultural significance”¹⁰⁹ The sister’s private chapel was converted into the

¹⁰⁴ James Douglas, “Inflexible buildings,” in *Building Adaptation* (Abingdon, Oxon: Spon Press, 2006), pp.136-137.

¹⁰⁵ Liliane Wong, “Fitting In,” in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 152.

¹⁰⁶ Thomas Coomans, “The Sacredness of Culture,” in *Life inside the Cloister - Understanding Monastic Architecture: Tradition, Reformation, Adaptive Reuse* (Leuven: Leuven University Press, 2018), pp. 150.

¹⁰⁷ *Charlotte’s Town*, performed by Charlotte Gobeil (1981; Ottawa, Canada: Canadian Broadcasting Corporation, published online 2019 by the Old Ottawa South Community Association).
<https://oldottawasouth.ca/stories/item/6740-sisters-adorers-of-the-precious-blood?highlight=WyJtb25hc3RlcnkiLCJtb25hc3RlcmllcyIsIm1vbmFzdGVyeSdzIlI0=>

¹⁰⁸ Ibid.

¹⁰⁹ Thomas Coomans, “The Sacredness of Culture,” in *Life inside the Cloister - Understanding Monastic Architecture: Tradition, Reformation, Adaptive Reuse* (Leuven: Leuven University Press, 2018), pp. 150-151.

Roddick Reading Room in the 1993 intervention, and housed a robust collection of “medical tools, manuscripts, books and other artifacts commemorating the evolution of specialty medicine and health care in Canada.”¹¹⁰ Though physically anchored in a different location of the building, the Royal College’s library and museum dialogues with the previous use of the sister’s archive.

¹¹⁰ “The Royal College Collection,” www.royalcollege.ca, Royal College of Physicians and Surgeons of Canada, accessed July 30, 2021, <https://www.royalcollege.ca/rcsite/about/history/royal-college-collection-e>

CHAPTER 5: Understanding Through the Hand

“There really is a language that is timeless that comes through [drawing].”¹¹¹

-Sarah Murray

This section reviews the drawing and photographic analysis undertaken as part of the study. Without being able to visit the interior of the building, the drawings provide an alternative visual understanding, demonstrating how the place changed from a monastery to a college and where major design decisions took place. The exercise attempts to uncover “why and how an architect might [have been] thinking about things”¹¹² during design development and reveals why the intervention for the Royal College is so well suited to the place.

Circulation

The first analysis explores circulation. The circa 1990 drawings are scaled to match the 2021 fire plans, and a copy of each plan traced. On a new layer, changes to circulation are highlighted in different shades of blue. The lightest and palest colour of blue represents circulation unique to the period of the monastery. The darkest blue represents new circulation introduced during the 1993 intervention. The mid-tone blue represents paths of circulation that have been maintained over time. The final image takes the blue circulation analysis and overlays it on the 2021 plans.

¹¹¹ Sarah Murray (Architect) in discussion with Amanda Lapointe, June 15, 2021, Appendix 3.

¹¹² Tim Murray (Principal and Founding Architect of Murray and Murray Architects Associates) in discussion with Amanda Lapointe, June 15, 2021, Appendix 3.

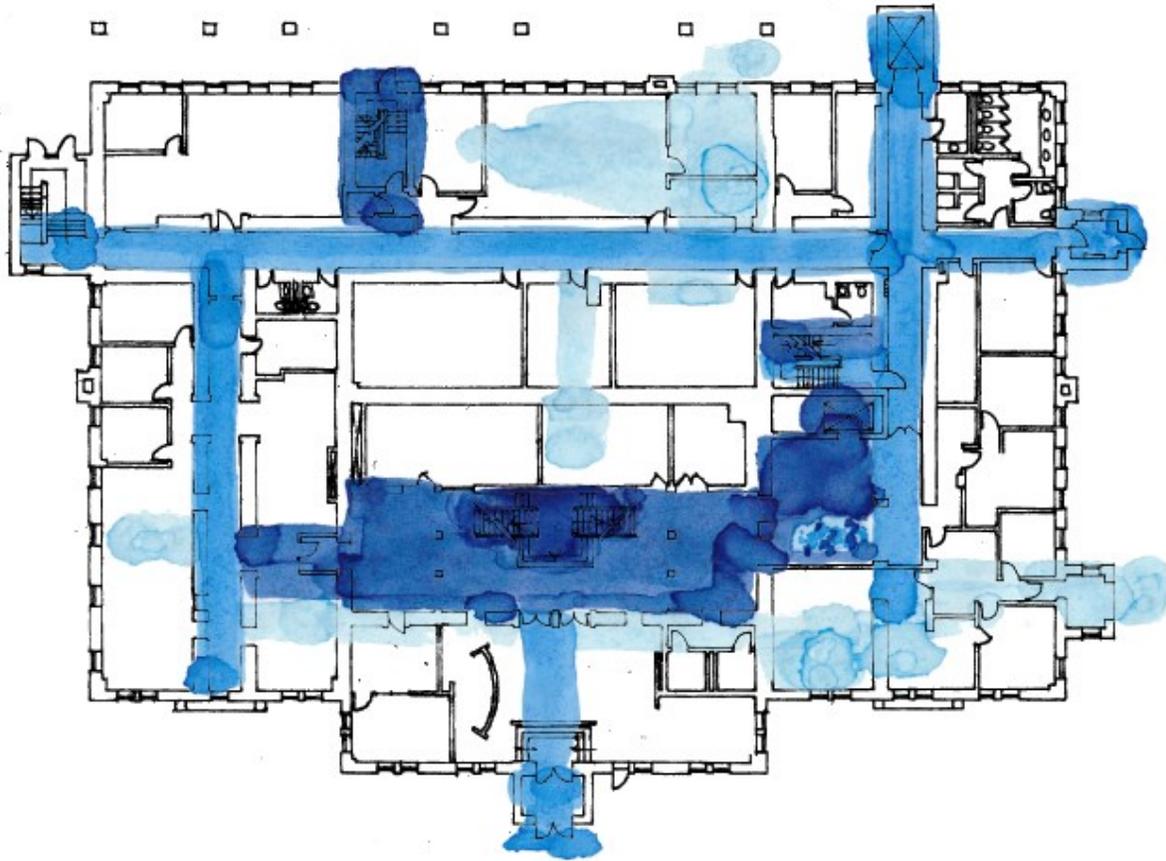


Figure 11: Ground Level Circulation, hand drawing by Amanda Lapointe, 2021.

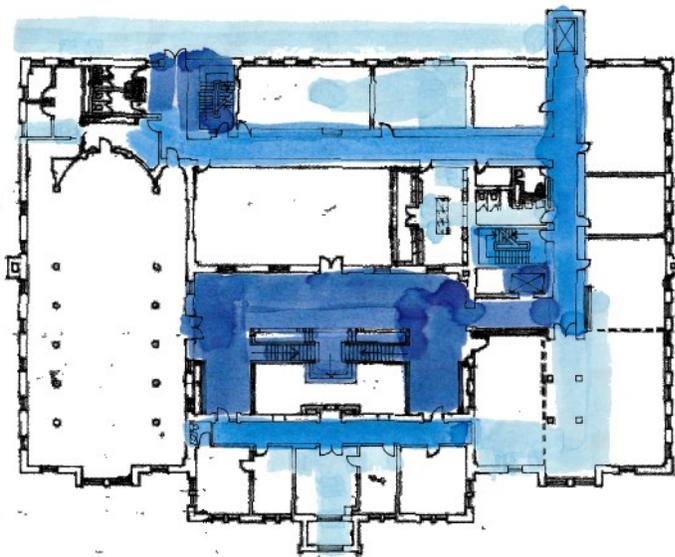


Figure 12: Second Level Circulation, hand drawing by Amanda Lapointe, 2021.

The new entrance sequence and the enclosed atrium are major changes to the circulation, as is finishing the fifth level to be occupiable space. Additionally, a staircase was relocated to meet modern egress requirements, and a second elevator added. With these exceptions, the majority of the main circulation pathways remained largely unaltered during the 1993 intervention.

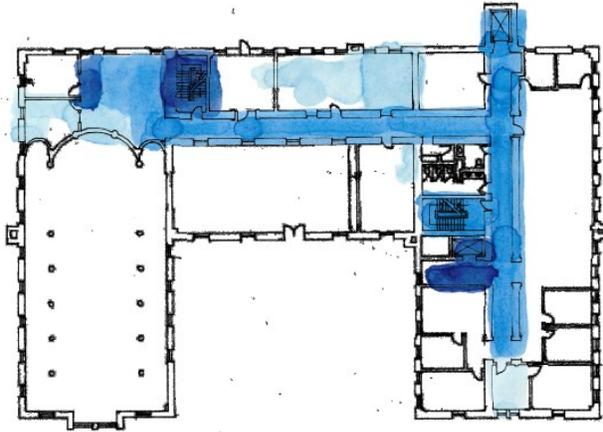


Figure 13: Third Level Circulation, hand drawing by Amanda Lapointe, 2021.

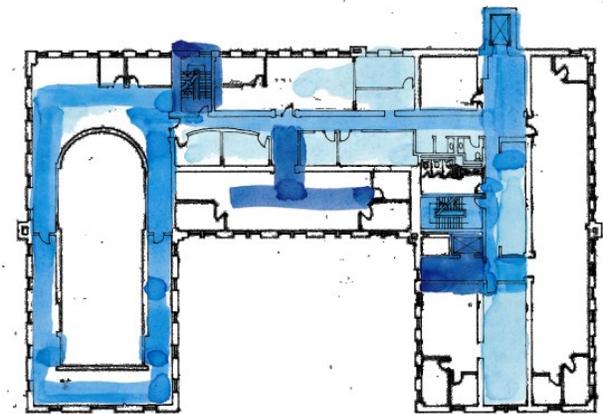


Figure 14: Fourth Level Circulation, hand drawing by Amanda Lapointe, 2021.



Figure 15: Fifth Level Circulation, hand drawing by Amanda Lapointe, 2021.

This may seem like an obvious decision; maintaining the double-loaded corridors in this axially arranged building is intuitive because it minimizes the amount of physical work required for the office fit-up. However, architects are sometimes tempted to scrape away all existing elements to create an entirely new interior experience. In the most extreme cases this manifests as facadism, where an entire building can be demolished with only the façade retained as a face for the new building. Architects unfamiliar with the complexities of adaptive reuse may find it desirable to manufacture a blank slate to work with instead of learning how to fit a new use to an existing place. This approach is not supported by the principles of conservation in Canada.¹¹³ Although significantly less common than it used to be and recognized by heritage practitioners to

¹¹³ *Standards and Guidelines for the Conservation of Historic Places in Canada* (Parks Canada, Hull, Quebec, Canada, 2010), pp. 132.

be in bad taste, it is still in practice with developers around the city of Ottawa.¹¹⁴

For the conversion of a monastery to the Royal College, the architects could have decided that the entire floorplan needed to be completely open concept. Flexible and versatile spaces are desirable in office buildings. Yet here, the architects exhibited restraint. They did not over design; they allowed the existing order of the building to lead the redesign of the floorplans. The hallways would be retained and act as a constraint for the new use; the spaces flanking the hallways could then be subjected to change.

The preservation of circulation evokes the idea of ghosts, which “make themselves known as faint outlines of the past.”¹¹⁵ The building cannot be entirely divorced from its past as a monastery, elements of its previous use still peak through the new layers. During the 1993 intervention, the hallways acted a parameter that tempered change. The use of the adjacent spaces had to evolve; the sisters had different activities compared to members of the Royal College. However, movement about the building is a requirement regardless of use, and the decision of the architect was that people today would walk the same halls the nuns walked yesterday. Respecting the integrity of the hallways is their metaphorical enhancement. This “allows the past to co-inhabit the space of the present, without erasure or recriminations.”¹¹⁶ For this reason, the decision to minimally alter the circulation about the building was truly profound.

¹¹⁴ “Ottawa receives a newly constructed heritage façade to honour Sparks Street and celebrate the launch of reOttawa and reResidences,” [www.newswire.ca](https://www.newswire.ca/news-releases/ottawa-receives-a-newly-constructed-heritage-facade-to-honour-sparks-street-and-celebrate-the-launch-of-reottawa-and-reresidences--860286699.html), CNW Group Ltd, December 3, 2020, <https://www.newswire.ca/news-releases/ottawa-receives-a-newly-constructed-heritage-facade-to-honour-sparks-street-and-celebrate-the-launch-of-reottawa-and-reresidences--860286699.html>

¹¹⁵ Liliane Wong, “Ghosts,” in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 138.

¹¹⁶ *Ibid*, pp. 138.

Structure

The structural intervention during the 1993 building transformation was extensive; “[code] deficiencies were addressed including life safety systems, egress routes and structure to meet current earthquake standards.”¹¹⁷ Due to the limitations of the study, the analysis of the structural intervention is based on circumstantial evidence. The plans from 1990 and the plans from 2021 were again overlaid, and areas that were perceived to have had structural intervention highlighted.

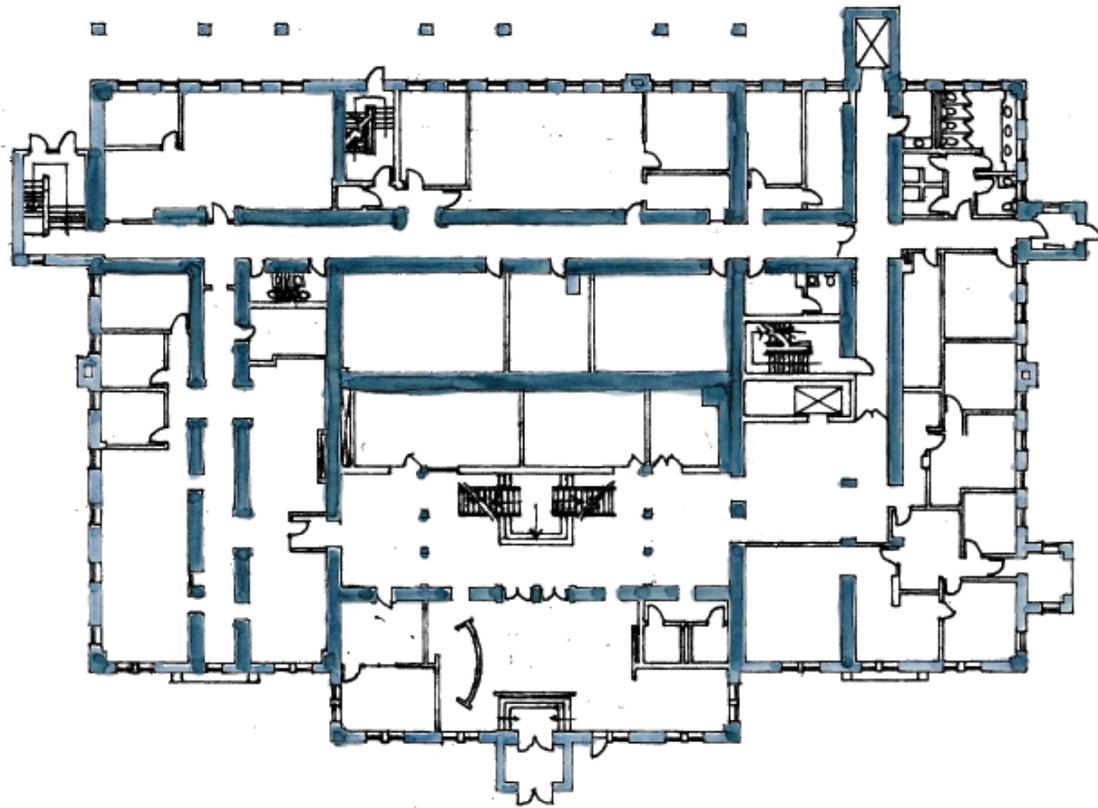


Figure 16: Ground Level Structure, hand drawing by Amanda Lapointe, 2021.

As Sarah Murray so eloquently put it during the interview with her father Tim Murray, “just because it was drawn that way on the original plans, doesn’t mean it was built that way.”¹¹⁸ The copies of the circa 1990’s plans were scanned from a notebook.

¹¹⁷ Tim Murray, three-pager sent via email message to author, June 6, 2021. Appendix 4.

¹¹⁸ Sarah Murray (architect, supporting the interview with her father Tim Murray) in discussion with Amanda Lapointe, June 15, 2021, Appendix 3.



Figure 17: Second Level Structure, hand drawing by Amanda Lapointe, 2021

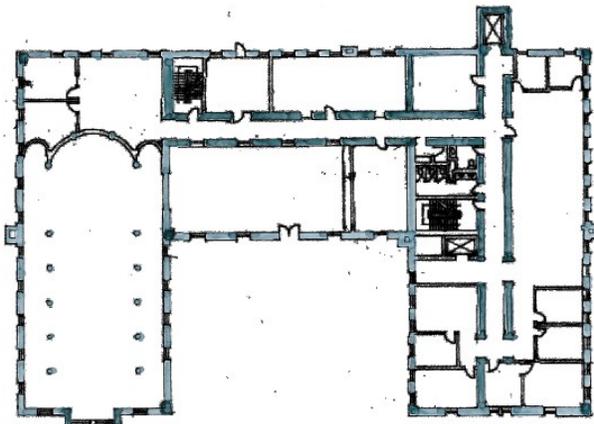


Figure 18: Third Level Structure, hand drawing by Amanda Lapointe, 2021

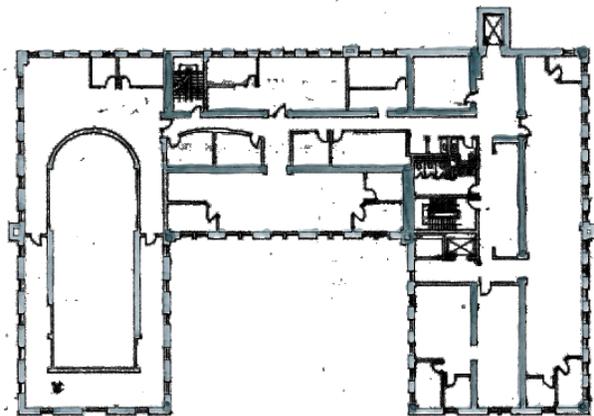


Figure 19: Fourth Level Structure, hand drawing by Amanda Lapointe, 2021

There are no dimensions, no scale, and no author – though very detailed depictions of the floor arrangements, the accuracy of their structural representation is unknown. The following observations and conclusions are drawn from informed assumptions.

To meet the design challenge, the building needed to meet modern seismic loading requirements. Of the walls on the 2021 plans, those lining the atrium and hallways are noticeably thicker than the exterior perimeter walls. Additionally, the plans show subtle articulation of columns in the hallways; it could be that these columns were always there and have been reinforced, or that the hallway walls were load bearing. This could be why the architects decided to retain or retain *and* reinforce them. Nevertheless, it can be assumed that for the most part, structural interventions were consolidated to the existing walls that lined the hallways and atrium. Based on the

descriptions of the project provided by Tim Murray and their thinner appearance on the 2021 plans,

interventions on the exterior perimeter walls were most likely envelope upgrades to improve performance.¹¹⁹ This does not preclude structural intervention but from examining the plans it appears the bulk of the seismic reinforcement occurred around the atrium. For the walls surrounding the atrium, all structural upgrades were consolidated to the 'interior' of the building; the atrium retains the exposed brick, so it must have been largely untouched during the 1993 intervention.

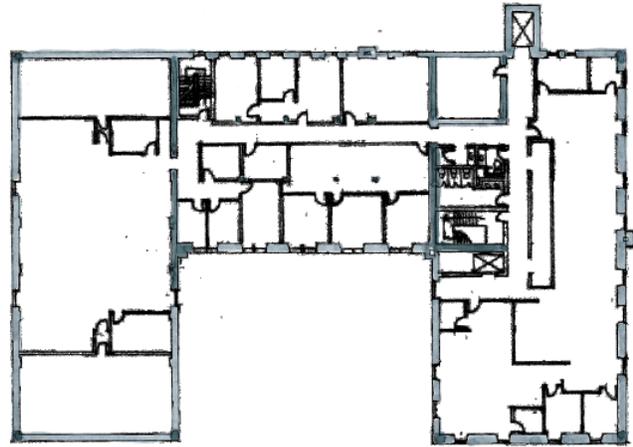


Figure 20: Fifth Level Structure, hand drawing by Amanda Lapointe, 2021.

The structural intervention is both the subtraction of certain elements, and the addition of others. This is consistent with Wong's summation that the "sum total effect [of adaptive reuse] will always require a consideration of both subtraction and addition."¹²⁰ Adding to the existing structural elements allowed for the subtraction of some superfluous elements, mostly non-structural things. In the monastery that manifested as the removal of many extra staircases (see the first-level plan in Appendix 2), as well as most of the existing partition walls. We also see the addition of another inhabited floor; people now occupy the fifth level of the building. Furthermore, the atrium would be a rational number addition to the building.

The result is thus: consolidating the majority of the structural reinforcements to the existing walls and columns is both sensitive and strategic. Sensitive in that it leaves the existing orders of key spaces such as the former chapels largely intact, and strategic because it would have been one of the most cost-effective ways to structurally upgrade the building.

¹¹⁹ Tim Murray, one-pager sent via email message to author, June 6, 2021. Appendix 5.

¹²⁰ Liliane Wong, "The Mathematics of Reuse," in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 221.

Light

The final drawing exercise completed studied light. Again, the building could not be visited; these are estimations, gestural drawings to help imagine the interior. The yellow represents an approximate quantity of natural light when the building was a monastery, and the orange represents light based on the 2021 plans.

The axial arrangement of the building with the double loaded corridors assures that nearly all occupied rooms are filled with natural light. It is evident how in most areas, the yellow and orange overlap, suggesting minimal changes during the renovations in 1993. The spaces where access to natural light was reduced or otherwise impacted are in the atrium as well as on the fifth level.



Figure 21: First Level Light, hand drawn by Amanda Lapointe, 2021.

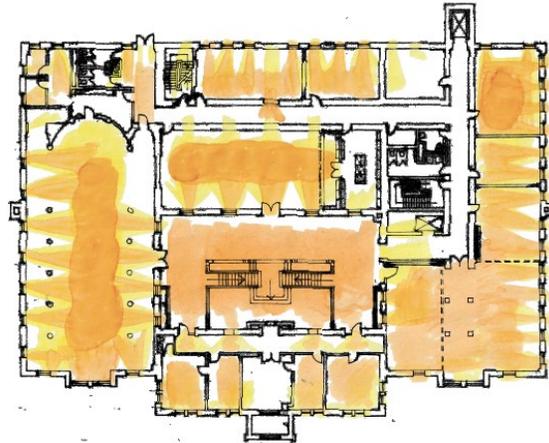


Figure 22: Second Level Light, hand drawn by Amanda Lapointe, 2021.



Figure 23: Third Level Light, hand drawn by Amanda Lapointe, 2021.

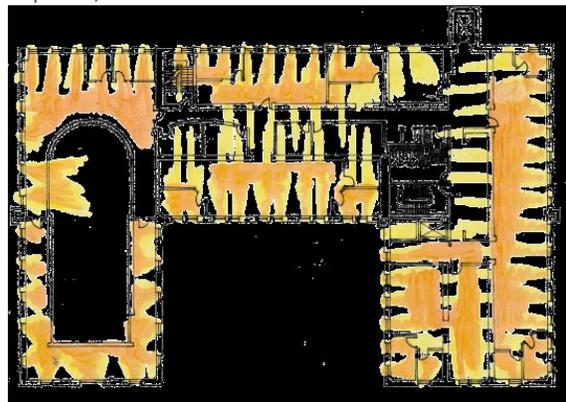


Figure 24: Fourth Level Light, hand drawn by Amanda Lapointe, 2021.

Filling in the atrium caused a few spaces on the first level to darken (Figure 21 and 22). Board Rooms C and D are shown on the 2021 plans to have glass windows and doors, but due to their location underneath the stairs, a limited amount of light would reach. There are a few rooms where the windows have been filled in, and also an adjacent room that would need to have artificial lighting. This is a fair trade for improved circulation and an entrance that is befitting of a national headquarters. Nearly everywhere else in the building, “all workstations are close to natural daylight, reducing lighting needs.”¹²¹

The uppermost level of the building was previously unoccupied, left unfinished during the building’s days a monastery. Following the conversion, more windows were added to the west wing on

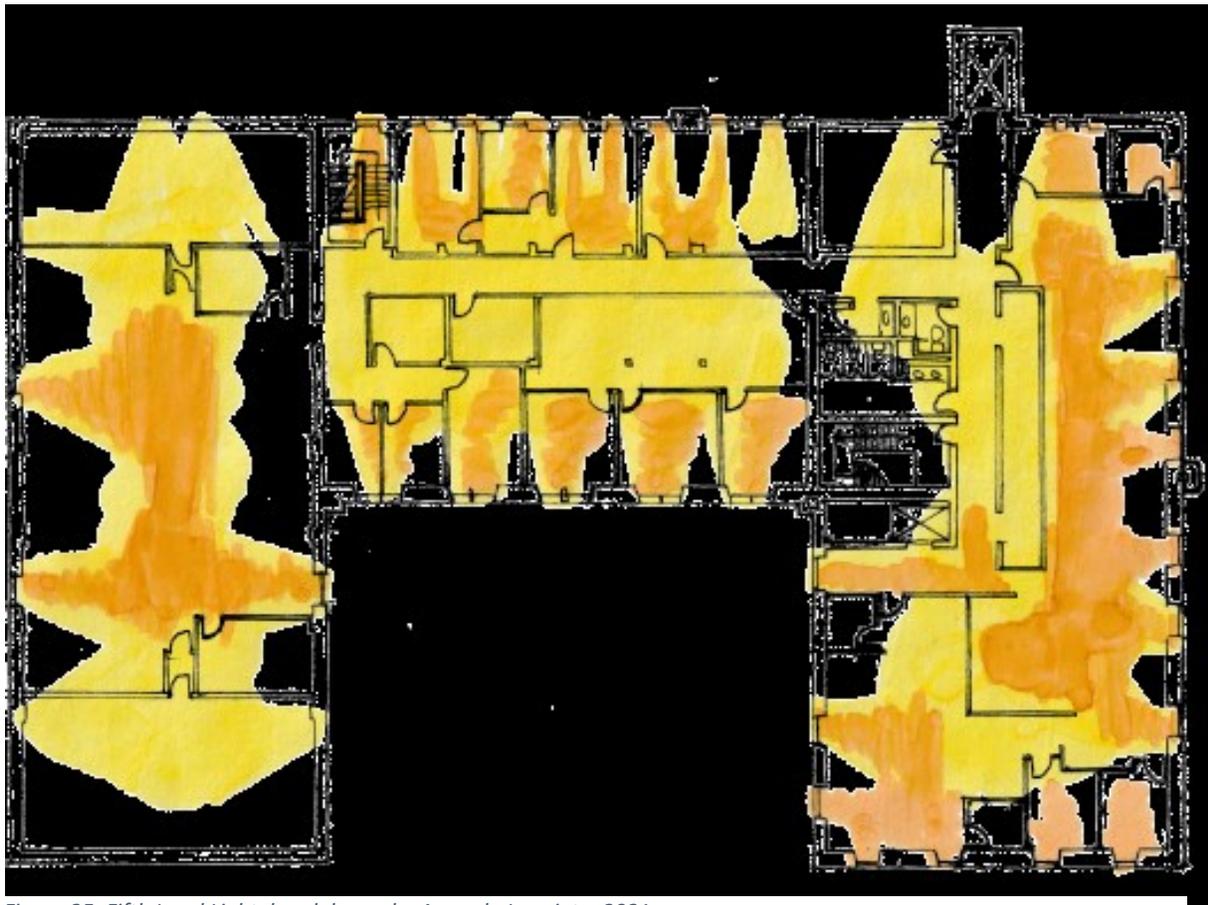


Figure 25: Fifth Level Light, hand drawn by Amanda Lapointe, 2021.

¹²¹ Tim Murray, three-pager sent via email message to author, June 6, 2021. Appendix 4.

the north façade. The only reason for changes to the amount of interior lighting are due to partition walls that create occupiable space. The architects also added more windows to accommodate the new use; the design of these windows was “in keeping with the architectural language...and [restored] the balance of the façade.”¹²² The architects recognized how the existing arrangement of the building lent itself to for use as an office, and only made minor modifications to meet occupant expectations. Locating the workstations next to the windows is the simplest solution, and adding a few new windows enhances the quality of previously unoccupied spaces.

¹²² Tim Murray, one-pager sent via email message to author, June 6, 2021. Appendix 5.

CHAPTER 6: Attention to Detail

Introducing a New Architectural Language into Existing Spaces

The details introduced as part of the 1993 intervention can be categorized as both Wong's absolute value¹²³ and summation.¹²⁴ Absolute value is in reference to elements that were altered via both subtraction and addition, such that the net value remains the same; these are visible through traces left behind during the interventions. Summation represents the micro-scale details like windows, doors, and the effort to repeat similar geometries; considered together, these small elements add up to a cohesive new layer to the place.



Figure 26: Interior courtyard, photo provided by the Royal College of Physicians and Surgeons, Ottawa, circa 1980.



Figure 27: Covered Atrium, Murray and Murray Architects, photo provided by Tim Murray, Ottawa, circa 1993.

In the atrium, one window on each level has been filled in; these windows cover the mechanical space necessary for the new elevator introduced during the building conversion. The absolute value of

¹²³ Liliane Wong, "The Mathematics of Reuse," in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 214.

¹²⁴ *Ibid*, pp. 206.

the atrium's volume has not changed; despite the windows being filled in they can still be read in the fabric of the building. Not only is it practical in that this approach minimizes waste, should there ever be a need for windows to be reintroduced, future architects will know exactly where the windows were originally located. In addition, it maintains the continuity of the facades facing the atrium, where the rhythm of the windows is a character defining element.¹²⁵

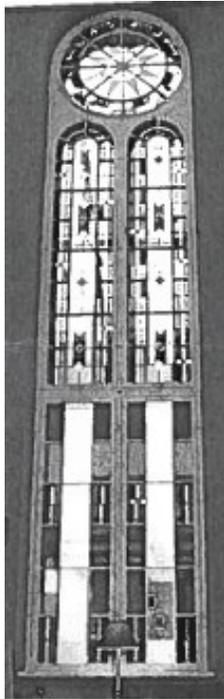


Figure 28: Council Room Window, photo by Joyce MacPhee as published in Feliciter, Ottawa, 1996.



Figure 29: Council Room, Photo courtesy of the Royal College of Physicians and Surgeons, 2020.

The most majestic windows on the building can be found in the Council Room and in the Roddick Room. These jewel-toned stained-glass windows were introduced to the building sometime in the late 1980's, shortly before the sisters departed the monastery. They were then enlarged during the 1993 intervention.

The extension of the windows was done quite sympathetically. Here, we see the architects use similar geometry as the existing element that informs the new piece without imitating it. The existing windows are long, thin, and rectangular, arched at the top. They are subdivided by rectangular windowpanes, with smaller rectangles lining larger ones that contain religious iconography or symbolism. The extension repeats the

¹²⁵ "Monastère du Précieux Sang," Canada's Historic Places, Parks Canada, October 17, 2008. <https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=10311&pid=0>

same rectangular form, down to the subdivision with smaller rectangular panes. However, the large, central pane is left clear.

The choice of colours on the small rectangles flanking the clear middle section matched the blues and purples of the existing stained glass; maintaining the same jewel tones upholds the prestige of the stained glass. The clear middle is a deliberate departure from the religious function. The transparency could be considered a metaphor for opening up the public space even further; where this space was once intended for members of the same faith in the immediate community, it now serves as a national headquarters for an institution that participates in an international community.



Figure 30: Entry portal with arched transom window, screen capture from Charlotte's Town, Ottawa, 1981.



Figure 31: Arched transom window above door, photo by Jean-Claude Dubé, Ottawa, circa 2010.



Figure 32: Filled arch above transition portal, Murray and Murray Architects, photo provided by Tim Murray, Ottawa, circa 1993.

The transom windows above the doors were retained in multiple instances; these transoms were found above the main transitory spaces, such as entering the reception area (Figure 30) and the Council Room (formerly the public chapel – Figure 31). During the 1993 intervention, new transitional openings were highlighted with an arch; again, the architects used the same geometry to signal the same function – that this will lead somewhere new. However, implementing a filled arch as opposed to



Figure 33: Glassed atrium, arched column and truss support, Murray and Murray Architects, photo provided by Tim Murray, Ottawa, circa 1993.

a new window gives the detail its own language; one arch has a language from the past, and its next-door neighbour references this language without recreating it (Figure 32).

The last example of pulling geometry from the existing forms is the arches supporting the glass roof. The rounded arches, while common throughout the building, are executed in a new material and weight in the atrium.

The background “permits [a solution] that [is] rich in form and full of contrast.”¹²⁶ Steel is used to support the structure. The shape of the circular element is pulled the existing; it is at the same height and scale as the circular glass windows and gives a satisfying repetition through the atrium.

Departing from the existing geometry are the light fixtures and the capitals at the base of the arches; these are squared, distinctly part of the new intervention. In the atrium, both the arches and the light fixtures were finished with the same green colour.

These same fixtures were used in the Roddick Reading Room, though



Figure 34: Roddick Reading Room, photo provided by the Royal College of Physicians and Surgeons, Ottawa, circa 1996.

¹²⁶ Kevin Lynch, “The Degree of Restriction” in *What time is this Place* (London: MIT Press Cambridge, 1972), pp. 38.

finished in white to better integrate in the freshly renovated chapel. There is a linear continuity between the new elements; geometries often take their cue from the existing; where something completely new is introduced, such as the capitals under the arches, the geometry is unique to associate with its own time. Finally, efforts were made to marry both the new and the existing through the new elements, by employing appropriate colours associated with the immediate spaces.

As time passed, the continuity has broken in certain places; new lighting in the Roddick Room and the Atrium have yet another new geometry, that does not reference the existing with the same care of the 1993 intervention.



Figure 35: Light fixtures introduced during the 1993 intervention, Murray and Murray Architects, photo provided by Tim Murray, Ottawa, circa 1993.



Figure 36: Light fixtures in 2017, photo by Allan McDougall, Ottawa, 2017.

CHAPTER 7: Key Spaces

Office Space – Levels 3, 4 and 5:

In this intervention, the use of subtractive design is minimal; in fact, no subtraction to the volumes of the building have occurred. However, there is the removal of certain interior parts, and while necessary, these subtractions are the key transformative actions that convert the building's identity from that of a monastery to the identity of a college.

Pictures of the upper levels were not located during the study; thus this section relies on the images of the plans.

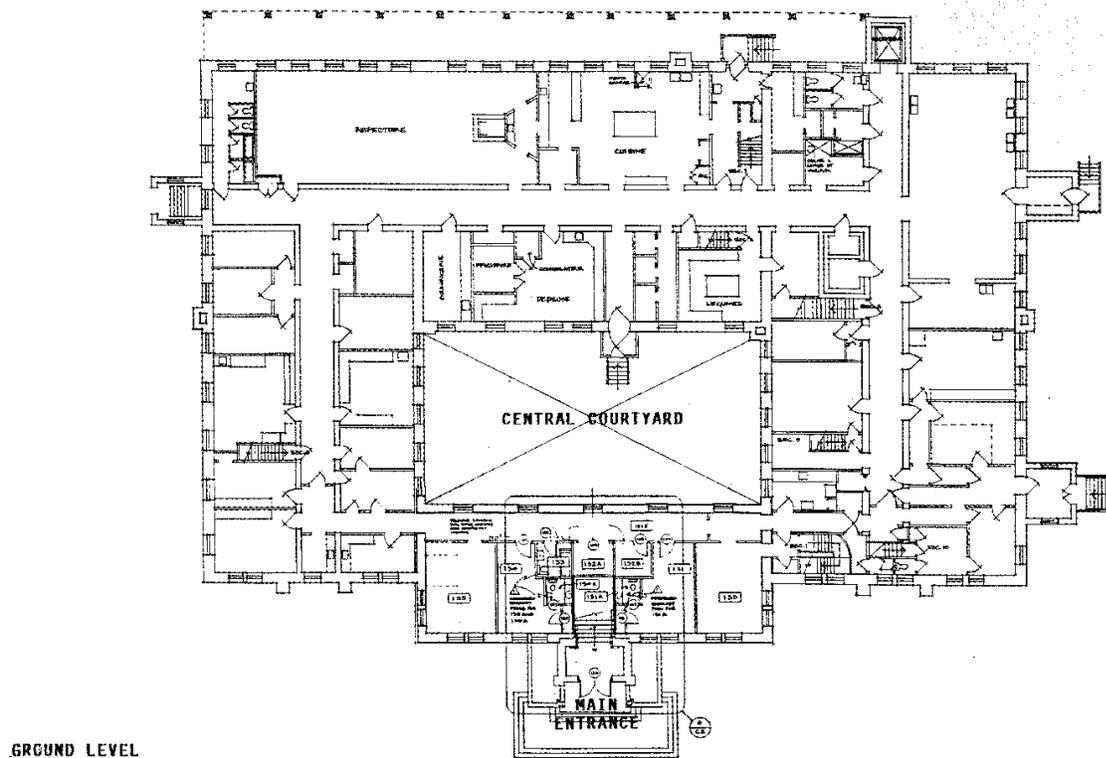
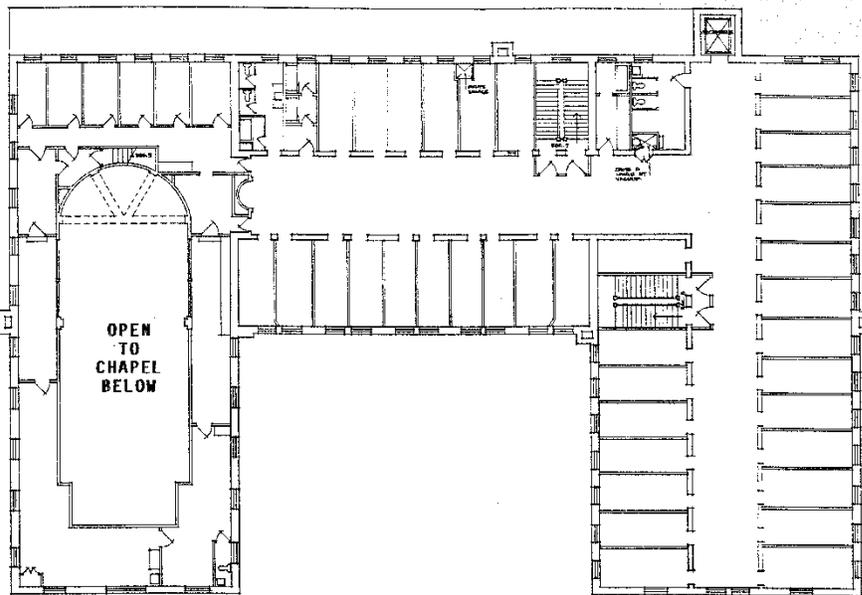


Figure 37: Ground level plan, provided by the Royal College of Physicians and Surgeons, circa 1990.

The first level had the refectory, kitchen, and all the food storage on site. It also had the special bakery for the host prepared for the entire Roman Catholic Diocese of Ottawa.¹²⁷ Today, the kitchen and lunchroom are located on the second level, adjacent to the elevators. Functionally, having the eating area on the same level as the board rooms and the Council Room works very well. Most public areas are consolidated to the same level, and it is likely intuitively arranged for visitors' navigation. Additionally, the proximity to the main vertical circulation improves access for people on all levels of the building. Yet, perhaps the refectory could have become the main lunchroom, so people today could share their meals with people of the past.



FOURTH LEVEL

Figure 38: Fourth Level Plan, provided by the Royal College of Physicians and Surgeons, circa 1990.

¹²⁷ "City Nuns Run Special Bakery," *The Ottawa Citizen*, March 12, 1965, print edition, pp. 3. <https://www.newspapers.com/image/459220991/>.

“The basic architectural component of eremitic and primitive monastic life was the cell...The first desert hermits withdrew to caves or tombs hollowed out of the mountain...Later, a similar function was fulfilled by the monastic cells arranged along a corridor”¹²⁸

-Thomas Coomans

The cells capture the very essence of monastic life; single, solitary spaces, that provide only the most basic of needs. Logically, the cells could not be retained; the spaces are too small to narrow to meet the needs of an office. Although the fourth floor was not visited nor photos found of its appearance, overlaying the image above with the 2021 plans reveals that almost all the partitions have been removed. In the hallways, the doors to each cell have been filled. It can be assumed that the walls were finished with modern materials, such as with smooth, uninterrupted drywall. It would be more meaningful to relate this space with the past; perhaps using the same technique as found in the Council Room or with the atrium windows. The ghostly outline of the former doors lining the hallway would be an enhancement worth the additional labour.

¹²⁸ Thomas Coomans, “The Cell,” in *Life inside the Cloister: Understanding Monastic Architecture: Tradition, Reformation, Adaptive Reuse* (Leuven: Leuven University Press, 2018), pp. 18.

Council Room, formerly the Public Chapel

The public chapel remains almost entirely intact to this day. Few elements of the space were changed during the 1993 intervention; since 1993, changes to the services have been subtle. The volume of the triple height space, with columns supporting a vaulted ceiling, is untouched.



Figure 39: Public Chapel, photo provided by the Royal College of Physicians and Surgeons, Ottawa, circa 1975.

In a written correspondence with Soeur Jocelyne Mainville, she says the following:

« Notre chapelle d'un beau style roman, le bleu, le blanc et l'or recouvraient les murs avec harmonie. La voûte resplendissait de grâce et de lumière enrichissant aussi l'ombre du Sanctuaire où brillait le tabernacle, ainsi était favorisé l'accroissement de la vie de prière liturgique, la prière du temps présent avec notre bréviaire et l'oraison. Le public venait participer aux différentes célébrations de culte. Tous priaient avec confiance, unis à la prière d'intercession des religieuses en leur faveur. »

Translated from French, it reads:

“Our chapel in its beautiful Romanesque style, blue, white and gold covered the walls with harmony. The vault was resplendent, and the graceful and enriching illumination also lit the shadow of the Sanctuary and the tabernacle. These favourable conditions augmented the life of liturgical prayer, the prayer of the present from our breviary and oration. The public took part in the various religious celebrations. All prayed with confidence, united in the intercessory prayer of the nuns on their behalf.”



Figure 40: Public Chapel following Cuhaci Architects renovation, photo provided by the Royal College of Physicians and Surgeons, Ottawa, circa 1985.



Figure 41: Council Room facing north, photo by the Royal College of Physicians and Surgeons, Ottawa, 2020.

There are no known colour-photos of the public chapel when the sisters left the monastery. It could be that the walls were painted a pale blue that is simply not visible in the black and white photos. Regardless of what and where the blue Soeur Jocelyn Mainville references, the conversion into the Council Room sees the colour palette modernized yet maintained.

Where there was once a rood screen between the public chapel and the private chapel, the Council Room has filled in the wall. The 1993 intervention saw the introduction of large, arched, two-story doors that replaced the rood screen; this maintained the sometimes-open-sometimes-closed connection between the two chapels. When the doors were filled in completely, the arch was maintained on the Council Room side. If it had to change, I appreciate the subtle visible link to a past functionality.

There are new arches under the arcades flanking the nave. These arches float above up lighting boxes on the walls. These volumes may also be hiding speakers, or some other mechanical equipment as

the volumes seem too large for just the lights. The architects and lighting consultant's decision to remove the dropped lighting and add the up-facing lighting above the columns is an enhancement. This decision celebrates the beauty of the architectural space using modern technology and reveals the full grandeur of the council room.



Figure 42: Council room facing south, photo by the Royal College of Physicians and Surgeons, Ottawa, 2021.

It was a decision to preserve the triple-height space. The architects could have filled in floors at the second and third levels of the building, maximizing the usable floor space. Yet, the architects identified the quality of this space; inserting floors would have obliterated its character. Again, the new use fits the spirit and form by maintaining the single volume of the nave.¹²⁹ Allowing it to remain so grand acknowledges its history as a chapel and continues its legacy as a gathering space.

¹²⁹ Sherban Cantacuzino, "Ecclesiastical Buildings," in *Re-Architecture: Old buildings / New Uses* (New York: Abbeville Press, 1989), pp. 171.

The careful changes to the window also serve to respect, acknowledge, and enhance arguably the most magnificent space in the building. Leaving the religious iconography in the upper stained-glass windows respects the sister's efforts to create a beautiful space; expanding the size of them brings in more natural light, enhancing the already splendid beauty. It is important to note that the stained-glass windows are the only religious objects left by the sisters; being fixed to the building prevented their removal with the rest of the religious objects. The stained glass was also one of the last enhancements to the space completed by the sister in their continual improvement of their monastery.¹³⁰ Their preservation in place is kind; a connection to the sisters and their monastery still reads in one of the most celebrated spaces of the Royal College.

The Council Room is especially poetic; the use remains a seat of presentation and a space for gathering. It has a continued public function. Where it was once used for the pursuit of spiritual wellbeing, its conversion into a presentation and testing space for future physicians and surgeons connects the space to physical wellbeing. In both cases, the space extends beyond its walls. The vocation in both the past and present is equally profound.

¹³⁰ Evidence is extrapolated from photographs.

Roddick Room, formerly the Nun's Private Chapel

Like the conversion of the public chapel into the Council Room, the sister's former private chapel remained largely intact during the 1993 intervention; since then, further changes to the space have somewhat eroded its distinct connection to the past.

"Contemplation is traditional to the room."¹³¹ This powerful statement was captured in the publication for Felicity and remarked upon the successful transformation of this specific space in the new Royal College. The private chapel became the Roddick Reading room; "[in] accordance with municipal bylaws, the Roddick Reading Room and Fellow's Lounge is not officially recognized as a library, but as a reading room."¹³² What a complement to the historic practise of *Lectio Devina* once observed in this space.



Figure 43: Nuns' Private Chapel facing east, photo provided by the Royal College of Physicians and Surgeons, Ottawa, circa 1980.

¹³¹ Joyce MacPhee, "Royally renovated: Roddick reading room (in the Royal College of Physicians & Surgeons of Canada)," *Feliciter* vol. 42, no. 2 (February 1996): pp. 25-26.

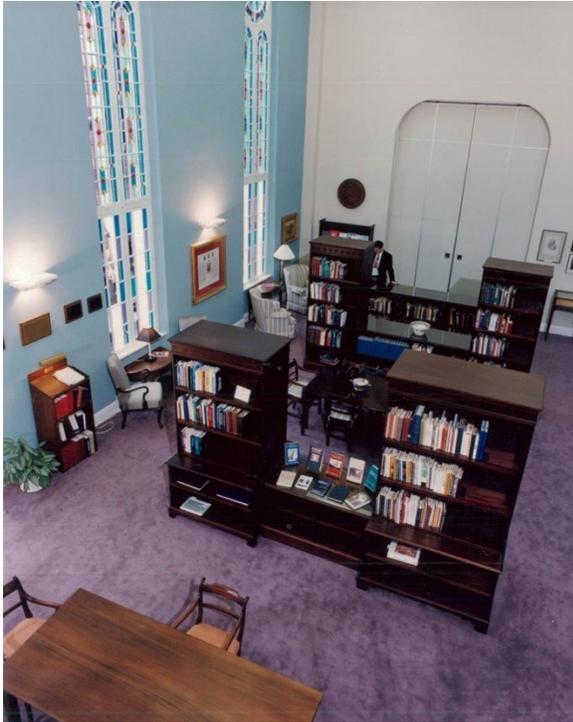
¹³² *Ibid.*



Figure 44: View from the private chapel facing west, toward the public chapel, with the rood screen open, photo provided by the Royal College of Physicians and Surgeons, Ottawa, circa 1980.



Figure 45: The Roddick Reading Room, view facing east, photo provided by the Royal College of Physicians and Surgeons, Ottawa, circa 1996.



During the intervention, the windows were enlarged to the full height of the space.¹³³ Prior to this, the windows only extended upward from the second level of the two-story space. This would have reinforced the cloister; due to the private chapel's adjacency to the public chapel, full height windows would risk visibility between the sisters and the visitors to the public chapel. Extending the windows down to the first level of the space literally opens up the cloister, transforming it from its private to public function.

Figure 46: Roddick Reading Room, view toward the Council Room, photo provided by the Royal College of Physicians and Surgeons, Ottawa, circa 1996.

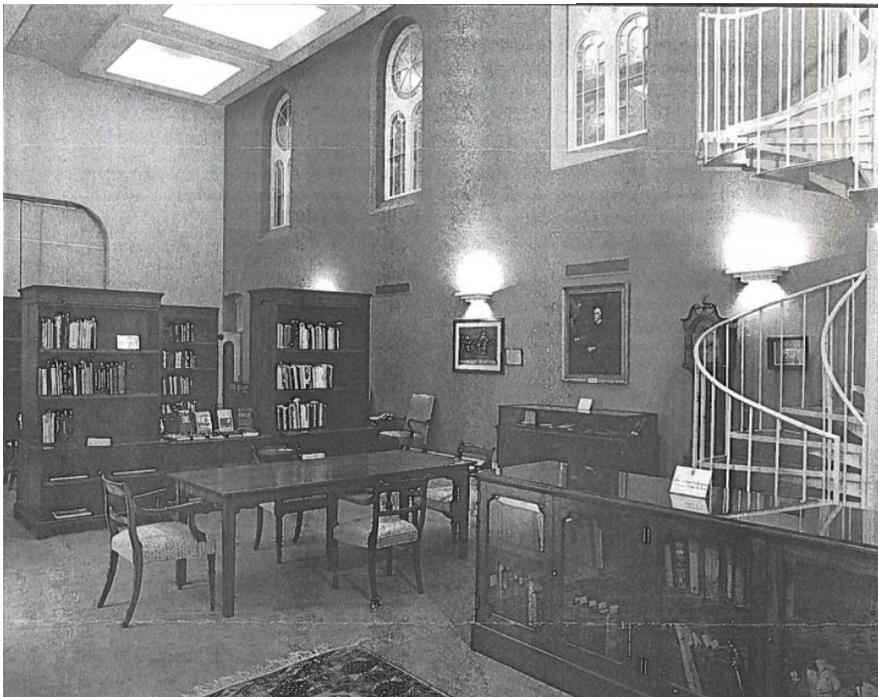


Figure 47: Roddick Room, photo by Joyce MacPhee as published in *Feliciter*, Ottawa, 1996.

¹³³ Photographic analysis shows the windows were extended. I would call this a 'rational number' addition to the space, and the staircase

On the 2021 plans, the Roddick room is depicted as a board room. The collection is now stored in a small, sectioned-off space behind a wall of glass that is not accessible via the Roddick Room itself. Where the entire room was once filled with a “treasure trove of antiquarian medical delights,”¹³⁴ all that remains are the desks and some paintings. No longer do those books or artifacts adorn the space. This decision, while maximizing the usage and meeting modern needs of the college, severs the visual representation of the intimate connection the room once had with its past occupants. Although the element of study persists, the tests, meetings, and presentations give it a more flexible character. The room’s focus and identity as a dedicated place for reading is gone.



Figure 48: Roddick Room facing east, photo by the Royal College of Physicians and Surgeons, Ottawa, 2021.



Figure 49: Royal College Collection in 2017, photo by Allan McDougall, Ottawa, 2017.

¹³⁴ Joyce MacPhee, “Royally renovated: Roddick reading room (in the Royal College of Physicians & Surgeons of Canada),” *Feliciter* vol. 42, no. 2 (February 1996): pp. 25-26.

Atrium

The enclosure of the atrium is an intervention that combines the actions involved in Rational Numbers¹³⁵ and Absolute Value.¹³⁶ Enclosing the atrium creates an additional interior space but cannot be considered a full addition, therefore it is a rational number, or fractional addition to the building. The reconfiguration of the entryway sequence involved demolition (or subtraction) of the main stairs, and the construction (or addition) of new stairs resulting in a net-zero change of one staircase, relocated.



Figure 50: Atrium stairway as designed by Murray and Murray, photo by the Royal College of Physicians and Surgeons, Ottawa, 2019.



Figure 51: Coat of Arms, photo provided by Tim Murray, Ottawa, circa 1993.

The atrium is the most radical change to the building from the 1993 intervention. It is a proper disruption to the existing circulation. The structural elements introduced are expressive and deliberately of their own time. Yet there is a clear effort to execute certain details in a form consistent with the traditional, neo-classic style of the building.

¹³⁵ Liliane Wong, "The Mathematics of Reuse," in *Adaptive Reuse: Extending the Lives of Buildings* (Basel: Birkhäuser, 2017), pp. 201.

¹³⁶ *Ibid*, pp. 214.

Many examples of glass-covered atriums are enclosed up at the level of the roof.¹³⁷ They peak above the top of the building, visible from street level. Here, the glass roof is much lower, while still offering a grand, double height space. The circumstances that led to this decision are curious. Acoustically, the limiting height of the atrium may reduce echoes and make for a more favourable interior experience. Structurally, it might have been a more cost-effective solution. Or perhaps, the architects recognized that this design was all the space needed.

The atrium is not trying to be the most majestic space in the building; that title belongs to the Council Room. However, this is the space that received the most dramatic physical alterations in 1993. The architect skillfully removed the entryway's former staircase and built a new one inside the atrium; the staircase maintains the same symmetrical split, and still leads to the Council Room. This path runs parallel to the path the previous stairs led to the public chapel.¹³⁸

¹³⁷ West Block on Parliament Hill is a recent example of an atrium roof that is visible at street level outside the building.

¹³⁸ The new doors into the Council room were realigned with the stairs, as can be seen when comparing the 1990 and 2021 plans. (Appendix 1 and 2)



Figure 52: Atrium stairs under construction, photo provided by the Royal College of Physicians and Surgeons, Ottawa, circa 1992.

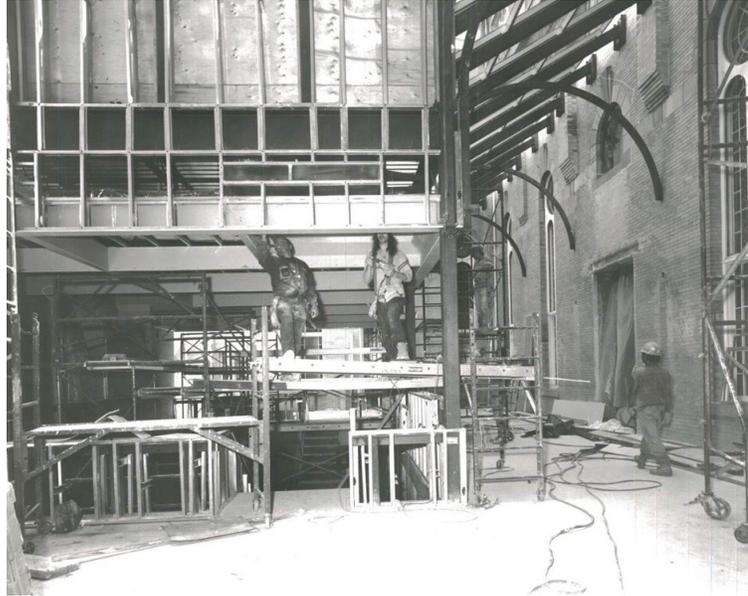


Figure 53: Atrium roof under construction, photo provided by the Royal College of Physicians and Surgeons, Ottawa, circa 1992.

Why do the lobby and atrium embody the three principles of *respect*, *acknowledge*, and *enhance*?

The lobby and atrium together are the only spaces in the entire building that are new and unique to the Royal College, and they fit in seamlessly. Instead of an austere character,¹³⁹ the lobby and atrium have an aura of prestige and nobility. The materials selected to finish the floors, the Royal College's coat of arms, and the stairs are noble and high-quality materials, but executed in a colour palette that is smooth and unobtrusive. In this regard, the choice of materials reinterprets the modesty of the monastery. Here, subtlety respects the previous identity of the building and uses that characteristic for its evolving identity.

Where some spaces such as the Council Room, and to a lesser extent the Roddick Room and adjacent museum space, are instantly recognizable as belonging to a former monastery, there is a

¹³⁹ "Monastère du Précieux Sang," Canada's Historic Places, Parks Canada, October 17, 2008. <https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=10311&pid=0>

moment in the lobby where the only identity of the space belongs only to the Royal College: in front of the coat of arms.

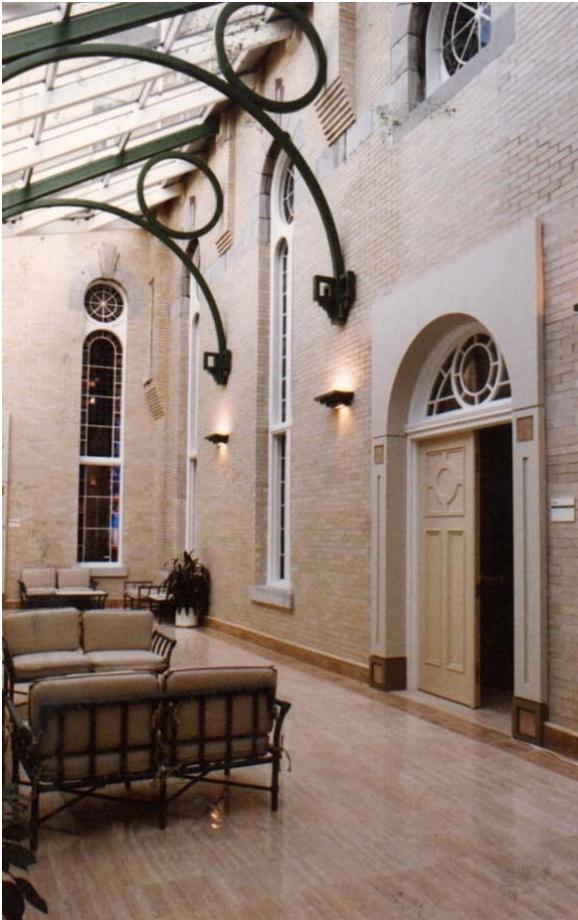


Figure 54: Glassed atrium in 1993, Murray and Murray Architects, photo provided by Tim Murray, Ottawa, circa 1993.



Figure 55: Glassed atrium in 2017, photo by Allan McDougall, Ottawa, 2017.

The second level is reminiscent of an arcade, but open above instead of to the side. It is truly beautiful, modest, and restrained. It is worth imagining what this space might look with a blanket of snow - soft winter light filtering through. This building was once a home to many nuns; there is an intimacy that manifests in residences that can be felt long after that function changes. The scale of the glassed atrium maintains that intimacy.

CONCLUSION

Murray and Murray Architects had extensive experience working with religious architecture. They designed multiple churches and monasteries, including the Capanile Campus in Ottawa. They understood the nuances of monastic design. I endeavored to do the same through this critique, and without visiting the building in person.

My understanding of an inaccessible place hinged on the pursuit of oral testimony. Historical research and the review of existing documentation reinforced that knowledge, but the consulting the former occupants and the designers provided an alternative way of knowing. Through these testimonies, I was able to reconstruct the design process of the 1993 intervention as described by Tim Murray.

Through this reconstruction, I was able to observe how preserving the tradition of spaces maintains a symbolic affiliation. This is evidenced by the integrity of the hallways, and the converted chapels. Retaining the hallways in their original locations allows people today to walk alongside the women of yesterday. The Council Room remains a gathering place. Although the function has since changed, the adaptation of the private chapel into the Roddick Reading Room was arguably the most profound. The space witnesses a translation of *Lectio Devina*. Here, the nuns studied scripture. In 1993, the doctors studied medicine. The rigorous study in earnest was preserved.

I also observed how changes to the volumes of spaces were minimal, and that this in turn helps maintain the identity of a monastery as it transitions to its new use. In the Council Room, the volume of the space contains remnants that allude to a past use, including the nave, the arcades, and the apse. These deliberate decisions to respect the existing order ensured that the new use suited it with minimal intervention. Related to the effort to maintain volumes was the effort to preserve existing elements with minimal alteration. The stained-glass windows in the chapels were preserved in place, and the enlargement through careful extension did not remove any of the original fabric. Opening the cloistered

spaces in this way poetically transitions them from fully private religious spaces to semiprivate secular spaces.

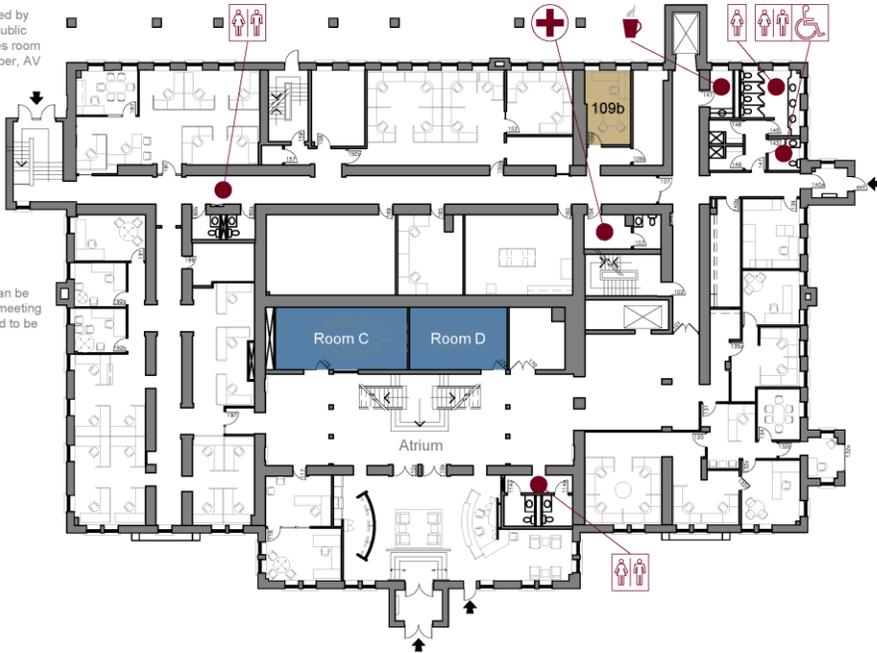
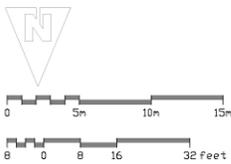
Skillful design allowed newness to be woven into spaces so that it interacts with the past. The careful design of the window extensions, which reuse some of the geometric forms and jewel tones, acknowledges the beauty of the design and reinterprets it for the extension. The geometries introduced in the atrium are expressive and deliberately of their own time, yet interact with the past by recreating similar forms in new locations. This is further evidenced in the arched transoms, and the circular structural elements holding up the glass roof.

Murray and Murray Architects successfully completed an ethical adaptive reuse project. During the 1993 intervention, the existing place was respected during the development of the design, its history is acknowledged so to inform its future, and the intervention enhances the place overall. They elected to preserve the building almost in its entirety. They drew on existing shapes, forms, and materials, reinterpreting them for new design elements with their own compatible identity. We see this most clearly in the atrium, but it's evident in the Council and Roddick rooms as well. For their efforts, the Royal College received a certificate of Merit for Adaptive Use from the City of Ottawa in 1993. It was also formally designated under Part IV of the Ontario Heritage Act in 1998. The contribution of the architects during the 1993 intervention ensured this building would be canonized as a historic place in Canada.

APPENDIX 1: 774 Echo – Floor Plans – 2021

Shared Spaces - 774 Echo - ground floor

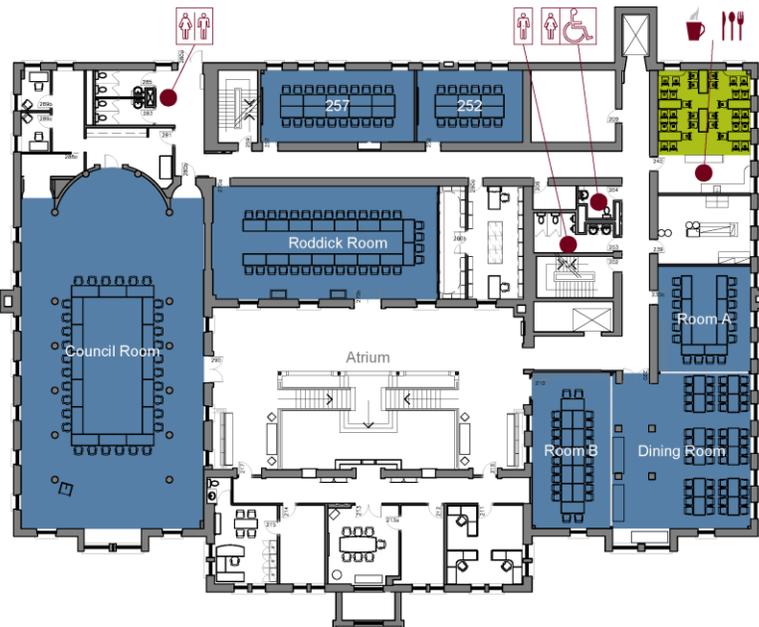
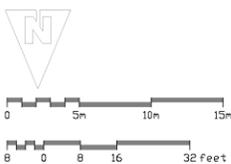
- self-serve meeting room**
Meeting spaces that can be booked by employees through the Outlook Public Calendars. Each calendar includes room number, capacity, extension number, AV set up.
- full-serve meeting room**
Meeting spaces that must be booked through EMHS using the form on the intranet.
- hoteling**
Touchdown spaces provided for staff working between sites. Must be booked by employees through the Outlook Public Calendars.
- flex space**
Open-concept staff spaces that can be used as a lounge, lunchroom, or meeting space. These spaces do not need to be booked in advance.
- coffee station**
- staff kitchenette**



intempo design studio: 19-05-21

Shared Spaces - 774 Echo - 2nd floor

- self-serve meeting room**
Meeting spaces that can be booked by employees through the Outlook Public Calendars. Each calendar includes room number, capacity, extension number, AV set up.
- full-serve meeting room**
Meeting spaces that must be booked through EMHS using the form on the intranet.
- hoteling**
Touchdown spaces provided for staff working between sites. Must be booked by employees through the Outlook Public Calendars.
- flex space**
Open-concept staff spaces that can be used as a lounge, lunchroom, or meeting space. These spaces do not need to be booked in advance.
- coffee station**
- staff kitchenette**



intempo design studio: 19-02-06

Shared Spaces - 774 Echo - 3rd floor

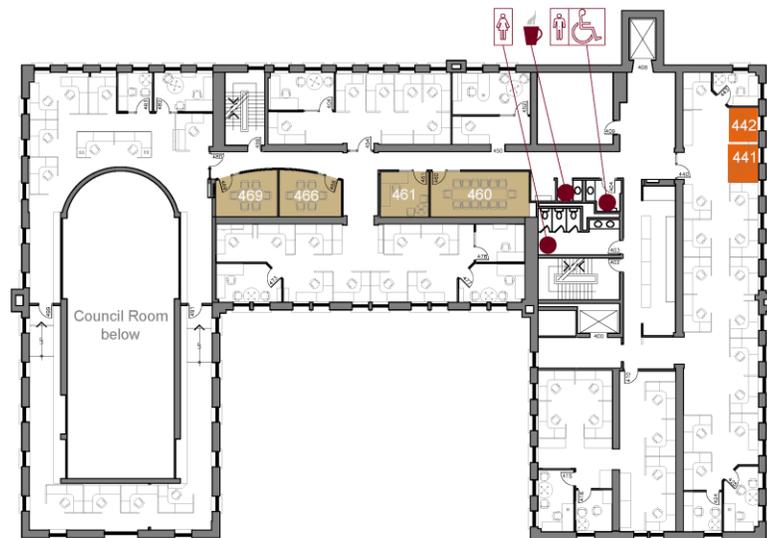
- self-serve meeting room**
Meeting spaces that can be booked by employees through the Outlook Public Calendars. Each calendar includes room number, capacity, extension number, AV set up.
- full-serve meeting room**
Meeting spaces that must be booked through EMHS using the form on the intranet.
- hoteling**
Touchdown spaces provided for staff working between sites. Must be booked by employees through the Outlook Public Calendars.
- flex space**
Open-concept staff spaces that can be used as a lounge, lunchroom, or meeting space. These spaces do not need to be booked in advance.
- coffee station**
- staff kitchenette**



intempo design studio: 18-07-23

Shared Spaces - 774 Echo - 4th floor

- self-serve meeting room**
Meeting spaces that can be booked by employees through the Outlook Public Calendars. Each calendar includes room number, capacity, extension number, AV set up.
- full-serve meeting room**
Meeting spaces that must be booked through EMHS using the form on the intranet.
- hoteling**
Touchdown spaces provided for staff working between sites. Must be booked by employees through the Outlook Public Calendars.
- flex space**
Open-concept staff spaces that can be used as a lounge, lunchroom, or meeting space. These spaces do not need to be booked in advance.
- coffee station**
- staff kitchenette**



Shared Spaces - 774 Echo - 5th floor

- self-serve meeting room**
 Meeting spaces that can be booked by employees through the Outlook Public Calendars. Each calendar includes room number, capacity, extension number, AV set up.

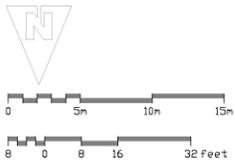
- full-serve meeting room**
 Meeting spaces that must be booked through EMHS using the form on the intranet.

- hoteling**
 Touchdown spaces provided for staff working between sites. Must be booked by employees through the Outlook Public Calendars.

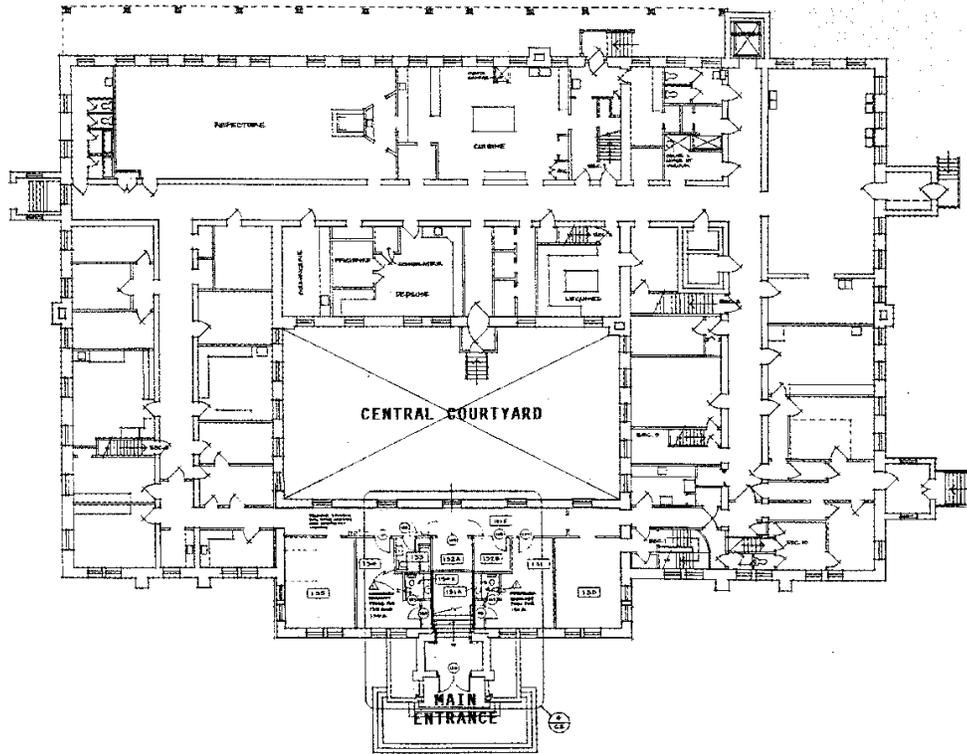
- flex space**
 Open-concept staff spaces that can be used as a lounge, lunchroom, or meeting space. These spaces do not need to be booked in advance.

- ☕ **coffee station**

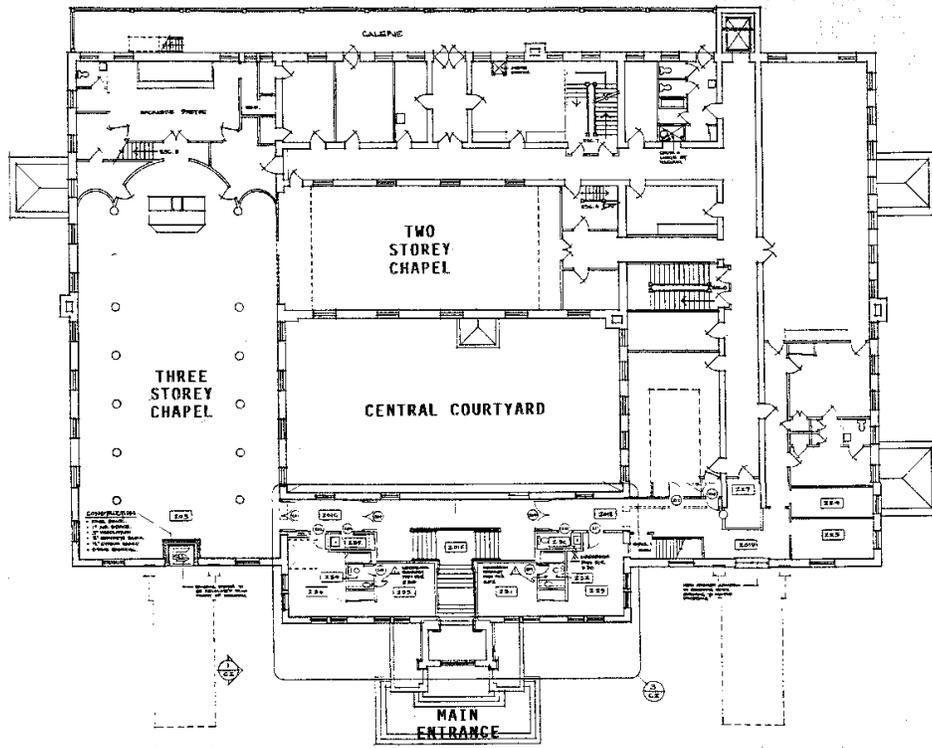
- 🍴 **staff kitchenette**



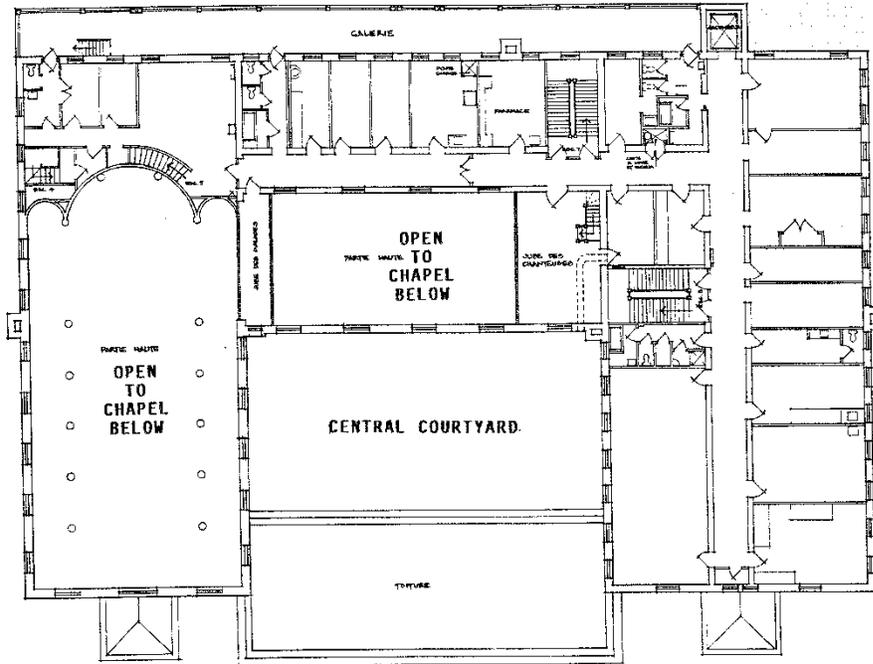
APPENDIX 2: 774 Echo – Floor Plans – 1990



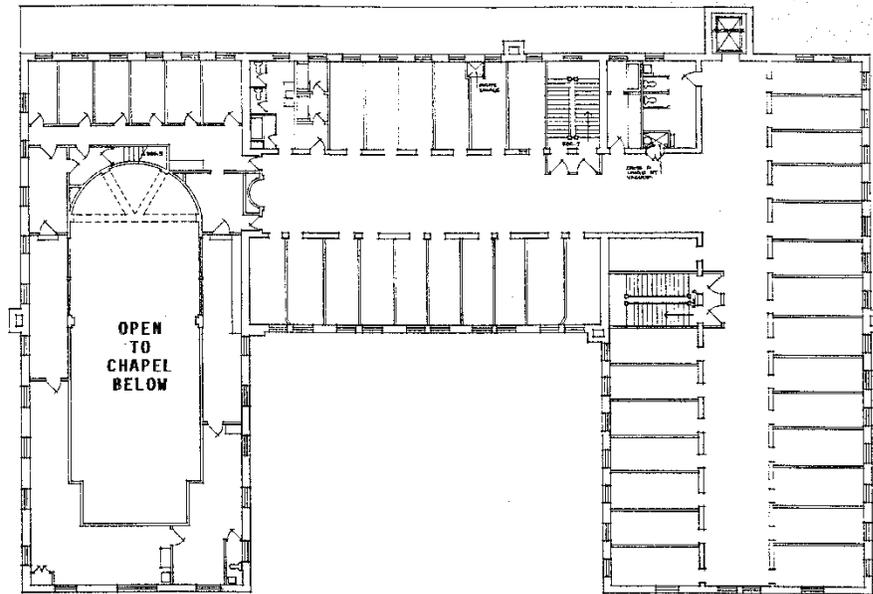
GROUND LEVEL



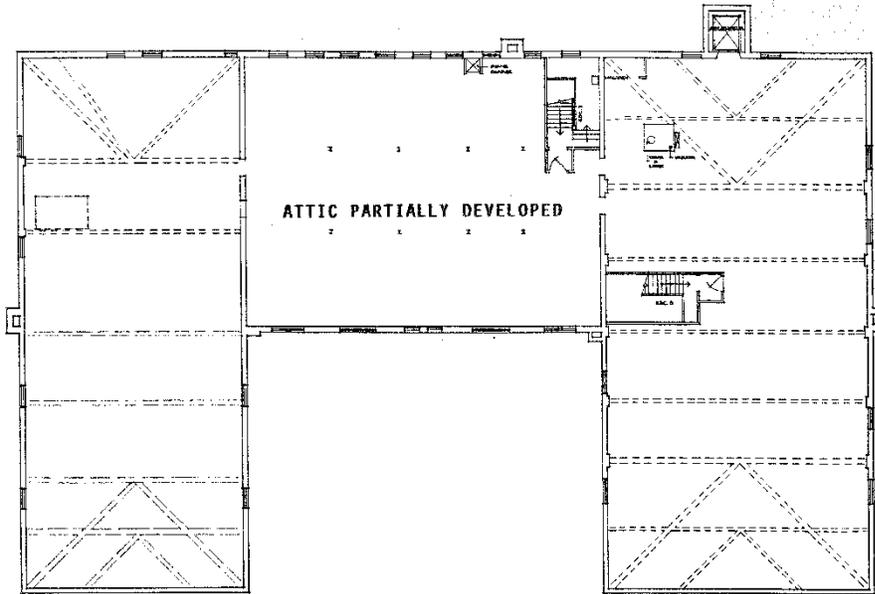
SECOND LEVEL



THIRD LEVEL



FOURTH LEVEL



FIFTH LEVEL

APPENDIX 3: An Interview with Tim Murray

I spoke with Mr. Tim V. Murray over the telephone on June 15th, 2021. He was accompanied by his daughter and fellow architect Surah Murray for the duration of our discussion. The text has been edited for clarity when appropriate, with effort to preserve the cadence of Tim and Sarah's thoughtful responses.

AMANDA: The first series of questions are about architecture and architectural philosophy.

You established the practise with your brother in 1961. What was your motivation to start a firm after moving to Ottawa, as opposed to joining or continuing with an existing firm?

TIM: Well, first of all, I started a firm in 1959; that was T. V. Murray Architect. And then my brother came to Ottawa, at my request, and he joined me, and we called the firm Murray and Murray in 1961.

The motivation was bright new horizons and prospective work, and it seemed a good place to try it out. We had no great, despite being architects and planners, no great blueprint for the route to successful practise. You know, the very first job I got was a Lutheran Church, part of a Lutheran School. So that was, they were all happenstance. There was no formulated plan about anything.

AMANDA: For your firm, did you have specific goals or philosophies that you wanted your practise to pursue?

TIM: Well, we both had done both architecture and both of us had done a master's degree in planning - urban planning. And we wanted a mixed practise that would combine both. One of the more obvious plans seemed to us to be academic plans, universities, schools that would involve master planning and buildings.

AMANDA: Can you describe your practise to me? As an example, what were the roles and responsibilities of the partners and architects, and how were the teams selected and deployed?

TIM: Well, you know, it's a voyage of discovery once you start out. My daughter sitting alongside me here, and she's gone through the same process 10, 15 years ago. You hope to [make it work] sometimes it doesn't. It's a game of fluctuating fortunes. I know of very few young firms that have a strict mandate and a route just to how they're going to acquire work. My first jobs in which I gained experience and a little confidence were some jobs for [others] where I came from, from Ireland. You know, Farmhouse, doctor's house and surgery, [mechanics] shop. Then it came with some notion that you had [good] experience. And that's a good enough incentive to go out and try for bigger and better things.

AMANDA: How many projects were ongoing at one time?

TIM: Oh, several. It depends on [the] size of the practise. I remember one time when we had a new business school at Algonquin College, which I think is still the biggest building there, [and] it was the first building. And we had the library at Ottawa University, and I think the administration building at Carleton. They were the primary commissions, but then, we had what we call – and no disrespect – what we call vernacular work. And that would be schools, parish halls, warehousing and things like that.

AMANDA: Lots of diversity of projects; I find it really interesting the diversity of projects that you worked on. I think it's cool. And I don't take offense to vernacular architecture. It's probably my favourite to look at - I love houses and school design.

Many of your projects involved religious architecture. Was that a specific focus of the firm?

TIM: No, no! No, no. No, that was as we were requested, you know, we were asked to do it. The first church, Saint Basil's, that was when I was in practise by myself just before my brother joined me. And I just happened to be a member of the parish and we happened to be asked if we, if I, was interested in doing it and 'sure I was.' Then I did that, and Saint Morrison's, and then I got Saint Ignatius. That's the way the ball rolls.

SARAH: So, what would be interesting for you, Amanda, is that a lot of the religious architecture was done in conjunction with a good friend and artist whose work is at the Ottawa Art Gallery and Ben Gianni knows a lot about the artist's work: Gerald Trottier.

TIM: He has, in the building at Carleton, he has that big Mural.

SARAH: Gerald Trottier did the big mural in, I think it's in the...

AMANDA: The Tory Building, right?

SARAH & TIM: That's right.

SARAH: And so along with the architecture, Gerald would do the elements like the Stations of the Cross, the baptismal font and the altar, and the things like that. Just because we're talking about religious architecture.

TIM: So, he and I worked quite a bit, there then. I engaged him on the very first job we had. I had seen his work through Hart Massey, who was a distinguished architect here for whom I worked. After I left [Ireland] – I came to Canada to work for one year in the Department of Public Works. I was literally on the point of going to Iraq to Bagdad and thank God that I turned the other way and said 'no, go West, young man.' Shortly after I was married in this parish, they – the church – they approached me and said you know "would you be interested?" and I said "Yeah, sure" and that was the start.

I think we tend to underestimate what an important part luck plays. Not only in life, generally, but I can tell you that it plays a great part in practise too. And luck I can define as "Going in a revolving door with a Conservative and coming out with a Liberal."

And you know, the harder you work, the luckier you get. And then to have some skills at identifying luck when you see it appear. If you're taken as a fishing partner by the Prime Minister, that's a piece of luck.

AMANDA: I like your line "the harder you work, the luckier you get." I like that.

TIM: Yeah, and the other definition is when the two graphs of research and opportunity, when they cross, that's luck.

AMANDA: Oh, that's great.

How would you define heritage value?

TIM: Oh! The structure, or the environment, or the built form. That conveys some kind of cultural or civic quality that has meaning for the, from the past, and significant in the present, and hopefully preserved for the future.

AMANDA: That's an excellent answer.

Conservation in Canada became more prominent from the 1960's onward; what was the impact of architectural conservation on your firm?

TIM: Well, as you know architecture and [building] practises is a collaborative effort. Practically all the associates and team leaders were all from old cities like Edinburgh, Dublin, London, things like that. So, they were all weaned with an understanding of the importance of preservation. And nourishing and maintaining those structures for the good of future history. We didn't have to develop an affection; it was part of our DNA.

AMANDA: You were ahead of Canada in that respect.

TIM: Oh yeah, yeah. Well, I don't know how your undergrad does it, but it was mandatory in our architecture course fourth year, at least half was devoted to measuring what would be called 'heritage buildings' and then drawing them up meticulously. So, you know, we were quite experts at column caps and bases, and dentils, and Georgian glazing and all that. So, perhaps a little overconfident but we figured that we had a bit of an inside track on coping with fortunate heritage discoveries.

AMANDA: It was different when I went and did my undergrad. Heritage conservation was a separate focus. Students could either major in design, or they could major in conservation and sustainability. I opted for conservation and sustainability, personally, because –

TIM: A choice.

AMANDA: Yeah, I had the choice, and also because I like old buildings. And frankly, I know this of myself, I'm an *okay* designer, but I'm really good at fixing things.

TIM: Good for you, good for you. You see, now, the majority of my colleagues all had to do summer work, that was mandatory over the five years of architecture. And it would be most unusual to work in an office and not be exposed to Georgian buildings, or regency houses, or you know. It was an integral part of the mix.

AMANDA: I think it has fallen a little bit to the wayside, but I can't say that for certain because I haven't worked in that many firms. I've mostly worked [for] the government.

Do you have the same approach to designing when working with an existing structure versus working with a new structure?

TIM: Oh no. You have to determine with an existing structure the constraints and opportunities. You define them, first of all, quite distinctly and second of all, in terms of compatibility. And you don't enjoy the freedom. You have to test the program, at least schematically, against the existing structure and see: is it capable of digesting the request of the plans?

SARAH: Amanda, can I put in my two cents worth here?

AMANDA: Yes, absolutely.

SARAH: So, I've renovated a number of – I guess they'd be called heritage – I've done a number of renovations for houses in Rockcliffe, and things like that. One thing that I've discovered is often when I get plans, like from the archives or something, and I draw them, and I draw them again, and I sketch on them...I start to see and feel what the architect might be thinking. So, it's really interesting to take the plans and, you know, and transcribe them into, say, AutoCAD or Revit, whatever. And if you are actually doing it, physically, you begin to see why and how an architect might be thinking about things. You know, taking an element from the plan and putting it on the elevation, or the division to the structure, with things like that. I've found that really interesting when doing restorations or additions, things like that.

AMANDA: That's amazing. In a lot of the research that I've done on adaptive re-use [that exercise is undertaken]. One of the more prominent examples, [is by] David Chipperfield and [for] the Neues Museum, [in Berlin].¹ That's what he did. He had those existing drawings from the building that had been bombed during the Second World War, and they mapped the damage. His drawings on top of it. It's quite profound. I think that's part of the reason, from a process perspective, of why that was so successful; he really understood what he was working with and that has – what you've spoken of just now is a very – it's a common thread that I've observed.

SARAH: There really is a language that is timeless that comes through [drawing].

AMANDA: Do you prefer to work from a clean slate or work with existing buildings?

TIM: Oh, I much prefer a clean slate.

SARAH: I actually have a problem with old buildings because I love working with old buildings.

AMANDA: I like working with old buildings. I'm too intimidated to design myself, so I like working with old buildings, and following the lead of the previous established orders. It's comforting for me.

SARAH: Well Amanda, when I work with brick and stone, I always think, 'oh my god, you know, somebody put this brick here, a hundred and fifty years ago. It's just amazing.

AMANDA: Yes, yeah. And I get caught up [in] 'who walked these halls' and what not. The memory that is steeped in places, I quite enjoy.

TIM: When I see an existing building which, you know, it could be an exciting thing to work on. But working on a brand-new site, you have the options of orientation on site, how you're going to mass the building, and etcetera, so I rather the new start.

AMANDA: Awesome. To each their own, I appreciate that.

How did the design philosophy of your firm change from when it was first incorporated up until the intervention on the monastery?

TIM: Well, I don't think that the design philosophy changed at all. We still did the same kind of analysis of what the problem was. We discussed at great length with the client, always. And then in a collaborative way, we had design meetings every second Monday and business meetings the other Monday, so there were four Mondays, usually, in the month. And that's the way we did it. And it was cart blanche. Of those attending, usually it was my brother, myself, and three or four associates. Who were very good, competent architects in their own right. They fairly often challenged the approach, we'd discuss it, and maybe modify it and, finally, depending on the size of the building, we'd settle into it and bring back the recast versions to the next design meeting.

How that affected the change, technology had an impact on the change. Rules and regulations and departmental ordinances with respect to "you can't do this, and you can't do that."

For instance, we tried hard in academic buildings particularly in Canada to come to terms with the weather, the winter, and getting from one faculty to another, from one building to another, from the library to your class. But the department of education, probably quite rightly say, "we haven't got that kind of money for circulation. You've got to put your shoes on when you go out and take 'em off when you come in."

You have to make concessions on your design approach and your philosophy changes partly from intuition and partly from the pressures of finance and official dictates. Somebody refers to it as learning to collaborate with the inevitable.

AMANDA: The next series of questions are about the design at 774 Echo Drive.

How involved were you on the adaptive use of the monastery at 774 Echo Drive (Adorers of the Precious Blood)?

TIM: Not very, I have to say, I wasn't very involved, but I have a little experience in working in similar organizations, and of course we have done, and it was published in the Canadian Architect, we had done a scheme for a contemplative order, the Redemptoristine nuns, and I think they were moving to Barry Ontario from where they were.² I can't remember – I know we went to where they were and they got special permission to allow [a visit from] another chap and myself, he was an English chap, an associate in the office, and it's interesting like, it has some bearing on the design, I think. But we met a nun there, she was from Ireland, and when she heard my 'paddy accent', she immediately lit up. And we went in, and the nuns were assembled, and to my amazement they all had the bright red and white collars or bibs, you know, front pieces, and a lovely rich blue habit. And it was such a delightful surprise to come in and see these lovely women, who were confined. And this particular nun said that she got off a boat in Halifax and drove, oh, I don't know, 180 miles or something like that, and that's all she had seen of Canada. And she was in the order there at that time about 15 years.

AMANDA: Wow.

TIM: So, I'm not quite sure what bearing that has on your design approach, but it makes you be a little more contemplative of about how you'll handle spaces and what experiences you will afford the users. However, we weren't designing a monastery. We were designing the headquarters of a very sophisticated organization. Surgeons and physicians.

But there is a similarity in that they both have an element of pomp and ceremony, they both have formal, large assemblies, like the nuns would gather in the church and the physicians and surgeons would have perhaps their new graduates in what was the converted chapel. And then both organizations – the nuns not as sophisticated, I could hardly say, or as well pronounced as the physicians and surgeons – in that they had departments, and small offices, and responsibilities to equate. Those were the similarities in that respect. And to some extent, you could sense it in the form of the building.

SARAH: Something that dad told me that I just wanted to make sure got into your notes is that my dad and my uncle, his partner, went to the last mass at the college of Physicians and surgeons before the sisters left.

AMANDA: Oh wow.

TIM: It was kind of sad to see the nuns, well, we could only hear them, because they were still cloistered. It was sad that they were leaving their monastery after 50 or 60 years, something like that, 1922. Of course, they weren't there at that time, some of them, most of them. And I do believe that the church, the Catholic church - my church - anyway, had really treated the nuns badly. And I wouldn't say leaving the monastery and selling it was a first choice. But I know that's not the question you're asking; that was my impression. I know that my general feeling was that having read the program for the physicians and surgeons, the monastery was quite adaptable to their uses. And we'd had a limited exposure to what physicians and surgeons in another places –

Like for instance, re-doing from top to bottom, Canada House, on Trafalgar Square in London – which I was in charge of, and pretty well had to do alone because it was overseas. So, we do it from here and over there, that had been the Royal College of Physicians and Surgeons in England. We went to Regent's Park, the design by [Denys] Lasdon. And we did a conversion of the Spanish Embassy here on Stanley Street [in Ottawa] and that had been the College of Physicians and Surgeons before we did that.

Now, I cannot say that there was any strong bind between the previous experiences and the new job, but maybe it was somewhere in the bloodstream.

AMANDA: Very interesting.

TIM: Pure coincidence.

AMANDA: What motivated your firm to pursue the project? Were you approached or was there a competition for the design?

TIM: Usually they shortlist a number of firms and interview them. If you're on the shortlist, every one of the firms, like the government regularly would assemble five firms. Well, any one of those firms could do a good job. They could do a good job. It's just a question, then, of at the interview, whether it was your day or not. We architects – us architects, all three here – we tend to underestimate how important

it is to articulate your ideas before you put pencil to paper. Then when you've done the first sketches and that, you can't convey across them. And very often, 50% or more of the average committee and board of governors and school boards and that, their powers of visualization are obviously considerably less than your own. After all, you're an architect and they're teachers or whatever they are. If you can't get your intention across in words, the chances of going beyond that to paper and production, are slim.

So, they assemble five people and the one that speaks most articulately to the challenge and the project that's put before them, I think usually stands the best chance of appointment. Combined with a past track record. And budget. If you've done comparable buildings, you've done other buildings and your track record is good from them, that counts for a lot too.

I remember one time, this just comes to mind now, I think back. I was one of five or six architects being interviewed for the new library for, now it's the University of Ireland in Cork. And the officer came from the board meeting where the board of governors were interviewing the architects [to meet us]. We're all seated in a waiting room and we're having good chatter, asking [about] each other, some of us knew each other, that sort of thing. And then the clerical assistant to the board, or the secretary to the board came out and said, "do you want to show your slides before or after your presentation?"

Apparently, that had [varied], see? I was with a young man from our cork office, and he was obviously brighter than I was, and he said "before, before, Mr. Murray!" And of course, when I looked back, if your slides are worthy of being seen, and worthy of making an impression, you've already planted some very useful imagery in the minds of the board before you say your piece. If you start with saying your piece and you fail to impress, then showing your slides afterwards is of little impact. And lesson learned. And I got it from a much junior chap in the firm than myself.

AMANDA: That's a good tip.

TIM: Show your slides first!

AMANDA: Did you know of the building, or had you visited the building prior to engaging in the design project? I know you attended the last mass.

TIM: No, we hadn't. I just knew that somewhere up there off Echo Drive there was a religious congregation, but no, we hadn't been there before that.

It was something of a discovery.

AMANDA: What were your first impressions of the building?

TIM: Well, I thought it was quite a handsome building. It struck me of a particular era. I've seen so many religious buildings, particularly Catholic buildings, were done in a yellow, warm brick. There was a kind of architectural language that was fairly popular at the time. Certainly between the wars. And I just thought it was solid, well built, and capable of some further use.

SARAH: I have a question for you Amanda. And maybe this is in the architectural thing, but I'm often curious about, we talked about the vernacular earlier, but so the Ottawa area has a great proliferation of Red Brick houses, and I find that that has a lot to do with, what is it dad, Renfrew Clay?

TIM: No, the Arnprior brickwork, were very popular.

SARAH: Arnprior, right. But when you go down to southwestern Ontario, you see a lot more of that yellow brick. I'm just curious if there's information for why they chose yellow brick versus a red brick.

AMANDA: I haven't encountered [a reason] in my research. And I actually found the yellow brick unique so I'm a little surprised it was quite popular during that time. Because the other monasteries of this order, the ones that I looked at had red brick. That's anecdotal.

SARAH: Right. So, all I'm saying is that this area, a lot of red brick is because it was local and in Southwestern Ontario you see the gold brick because that was the local clay colour. That's just interesting.

AMANDA: It is.

TIM: Generally, my impression, or our impression in the profession was – and geologists told us – that Ontario is really not the best place to get a good clay suitable for brickmaking. That it's very weak, it's coefficient of absorption for moisture renders the freeze-thaw sequence highly suspect. And I suffered on two buildings from the brick breaking off the face. Suffered badly as a matter of fact. The brick just didn't withstand the freeze thaw.

AMANDA: You'd think that we would have bricks that could address that a bit better, so it's interesting [that clay from elsewhere works better up here].

TIM: Well people forget that bricks are breathers. They take water in, and they push water out. If you take water in and then the mercury suddenly goes down ten or fifteen degrees, when [the water is] coming out it takes a piece of the brick with it. The coefficient of absorption – I learned always after that get the brick tested; consult, preferably, another scientist as to the feasibility of the brick. The best bricks, clay bricks, come from places like Massachusetts and down in the middle of the east coast and then towards the centre. There's a very good yellow brick from out west, Alberta, somewhere there, that was [inaudible], and exemplary.

AMANDA: Can you describe your first visit to the monastery?

TIM: I was generally impressed with it. I mean, you know, I didn't celebrate saying, you know what a great piece of architecture this is. Here's a solid building. Good people have had it, looked after it, and there's potential here. That was about it.

AMANDA: Some of the documents you shared with articulated what role heritage played in the approach to the design. Does that approach change when you are working with religious heritage versus other types of heritage?

TIM: No, no, no. No. I mean, heritage is heritage no matter what. We carefully annotated specific elements and features of the building that were sensitive and very worthy of being reinforced, you know, visually, and emphasized you know, appropriately in their context.

We would photograph the building extensively. And then we would transfer the photographs to mylar sheets. Mylar was a form of tracing paper, I don't know if you've ever come across it, have you?

AMANDA: I have, yes.

TIM: Unlike velum it doesn't [decay]. And I know that the digital world is not sure if they'll be able to hold on to everything that's recorded, no, but mylar, you can go back to it 20 years later and it's like the day it came off the drawing board.

So, we would photograph everything, turn the photographs onto a sheet of mylar, and then annotate the sheet in black ink as to what's this, top form, ogee is missing, repeat the other side of the volute. And we'd have all kinds of, we hope, enlightened comment, about what has happened, or what is happening, or what needs to be watched about a particular feature of the existing building.

AMANDA: For the intervention on the 774 Echo, Sisters of the Precious blood where did you start?

TIM: We'd start by doing a set of drawings of the existing ourselves, as we saw it. We'd send a technical crew from the office and devote whatever it took, two to three weeks, and measure out the building. We'd then get a set that, as we knew, set the size of spaces, clearances, and what was accurate. And then we would combine that with all the notes that I've just referred you to with respect to particular features. Then we would core critical walls and areas to see what the cross section was made up and what kind of constraints were imposed on the final solution in terms of bringing it up to code. And you know, we would probably be introducing air conditioning, having an impact on an existing building that never had air conditioning, and its impact on the fabric.

So, we would build up an extensive inventory of written, visual, and physical information, and even bring back pieces of the building to the office. You know, like if in the coring we got two courses of brick, we'd bring back the brick. And the team that would be working on it had their own area, all those things were assembled like museum pieces, so that later on during the job, you're producing [drawings] and say, "now how did that, where was that," and then you just turn around and say, "there's one there, right there!"

I don't know if I've answered you, but that's how we'd go about it. And we'd ask the same of our consultants, by the way.

AMANDA: For the monastery, were there elements that you felt merited preservation immediately upon viewing the building?

TIM: Oh absolutely, we were for conserving the whole thing. We thought that we could adapt that to the use of the physicians and surgeons had. And I would say that in a building that's not going to be demolished or seriously altered, that would always be our objective.

I was talking to one of my sons the other day about a building that involved it, and I said, "Any chance you can keep the old building and do the whole thing inside?"

When I was doing Canada House in Trafalgar Square, after I graduated from planning, I had a job at London County Council, and county hall – I could read Big Ben from my drawing board. Buildings were

classified [as a] a Grade 2 building, a Grade 3 building. And depending on the grade it was [inaudible]. Canada House had a very high grading. And the people at public works who were very good, very generous, very accommodating, but they didn't seem to have a clue that they were not free to just go in and pull the place apart. They wouldn't get a permit, and they'd be fined. Even as a federal building [for] a foreign embassy.

So, when I came on the job, I said I have some familiarity with this situation; "you have to know, you can't do everything you're wanting to do."

"Oh, well that's our building, Mr. Murray."

"Well, I know it's your building, but the reason that they have Westminster Abbey is that, you know, subsequent Deans and Archbishops didn't come in and shove it around like how they thought it should look."

The art gallery [at Canada House] I did by building a separate wall, of timber and drywall, and all that. I never went near the mouldings up at the junction between the wall and the ceiling. And I never went near the ceiling. That was all there from the time of the physicians and surgeons, which was way back in the early 1800's.

We managed to deliver the program that Canada wanted, and I think it's gotten a fair amount of praise. The Queen came to open it, the Queen Mother. So, the objective there was accommodated, and I would say much of that principle can be adapted in many worthwhile adaptations, without ruining the existing building. Assuming the existing building is very worthy of being kept.

AMANDA: The property was not designated at the time: how did that affect your approach to the design?

TIM: Well, with no disrespect to public institutions for whom I've worked as an employee – I was in federal government like yourself, and I was in London County Council – with no disrespect, you don't need the rules, regulations, and constraints to be defined by a public body to tell you to treat the situation sensitively. So, I don't think we would argue one bit with the City of Ottawa in their aspirations and intentions to preserve what was a perfectly good building.

And it adds to the fabric and the colour of the neighborhood. We'd be all for that.

AMANDA: Working in Federal Government, myself, sometimes the rules and regulations can really impact us, but on the other hand sometimes we really need them. I appreciate that your firm, especially as you speak of these other projects, understood the value of an existing place, even if the values were different from place to place.

TIM: We did a rehabilitation of the town of Perth. We were appointed to do it by the Ontario Association of Architects as a gift to Perth. We photographed all the main streets, talked about the buildings, reorganized the fasciae, and adjusted some windows that were adjustable, things like that. So, I'd rather come to a scene informed of the regulation that exists, rather than have cart blanche – cause then, God knows what would happen. Then the client gets out of hand. So, we don't want that, we'd like a record or you have no defense.

It's nice to be able to go back to the official authorities and say "well, you may elect to do that, but I'm telling you these people won't do it, and we would support that."

AMANDA: Did you encounter challenges specific to working with monastic architecture? (As opposed to working with a church).

TIM: No, no-no. No, no, not at all. We were very fortunate, that most of the way we got very reasonable clients. I don't ever remember having a really – well that's part of explaining the rationale before you get things on paper. There's nothing worse than going in with a set of plans and telling them that 'this is what we'd like to do.'

You have to go in and talk about the patient's problems. What the backgrounds were, what they're feeling here, and what they're feeling there. And it all comes out – then you begin to gather a kind of image.

Now when we used to take on big projects, we regularly took people on trips. Down to the States, or down to Quebec City, or down to Toronto and that, and show them similar buildings. And voice our opinion as to success and failure. And when they'd come back after that, this would be sometimes two or three days, when they'd come back after those trips, we found they spoke the same language as yourself as to how you approached the problem. That was before, I remember, I don't know if you're familiar with the Minto Place?

AMANDA: I am.

TIM: Well, I was the third architect, I wasn't the first at that time. The first two [imminent] architects, both of whom you'll know well. I have no illusions that they came to me as the number one. Irving Greenberg, whom I knew, was tough, rouge, since dead...and he said, "when can you get into the project?"

I said, "we're not getting into the project until we go and look at some others."

"What do you mean, look? Do you know how to do it?"

"Well, I do, I think I know how to do it, but if you come and look at some similar attempts at similar projects, we'll see some of the 'dos and don'ts' and that."

So, we went up, we went to New York, we went to Baltimore, we went to Boston, and when we got back, we agreed about some of the major things about the project. And it's a whole city block; it's not a small job. And it went just like a charm, beginning to end, and I think the end result for the city complex is not bad. And we got well paid.

AMANDA: It's interesting to me, because a lot of this really aligns with the official philosophies of conservation, it's music to my ears knowing how that was informed, and how that was practised before it was formalized for young architects – well aspiring architects like me to have. It's very interesting from my perspective.

TIM: My daughter is much better at conservation than I am. She did a very nice building, I think, down on Bank Street. Bank near Sunnyside.

SARAH: Oh no, Dad, I wouldn't mention that. That's not conservation.

TIM: Well, I know, but you picked up some of the language of the local scene, which is good.

AMANDA: What tools did you use for the design? For your documentation you mentioned photography and doing technical drawings.

SARAH: Measured drawings, use of original drawings, measurements, photographs. Did you do any testing, dad?

TIM: Oh yeah, yeah.

SARAH: What sort of testing would you have done?

TIM: Well, we had a lot of asbestos, a lot of asbestos to remove. That alone was a major job. And we took down ceilings and had pleasant discoveries as a result.

SARAH: And I'm sure you know this, Amanda, but just because it was drawn that way on the original plans, doesn't mean it was built that way. So, you'll have to check everything.

TIM: You're so right.

AMANDA: That concludes my interview questions! Thank you very much for your time today.

SARAH: Fantastic, well you can make your notes and if you have any follow-up questions, we'd be happy to give an opinion.

TIM: We're not lacking in opinions, whether they make sense or not, that's debatable!

APPENDIX 4: Three-Pager, courtesy of Tim Murray

Project Name: Royal College of Physicians and Surgeons Headquarters

Location: Echo Drive, Ottawa, ON

Client Name: Royal College of Physicians and Surgeons

Description of the Project: (type, size, complexity, etc.)

This project consisted of the renovation of a 1920 heritage convent and carriage building to executive, administrative, dining and conference space for prestigious national headquarters. The project was constructed in two phases. Key elements within this commission included executive office space, a library for rare books, conversion of a chapel to council chambers, creation of dining room and kitchen, removal of extraneous elements added over the years, building envelope upgrade and conversion of courtyard to atrium with development to a compatible aesthetic with the existing surroundings. The library contains artefacts depicting the history of the institution, and the collection is comprised of journals of renowned physicians, and rare documents from the RCPSC. Building envelope upgrades were undertaken. Code deficiencies were addressed including life safety systems, egress routes and structure to meet current earthquake standards. New energy efficient M/E systems replaced obsolete. Asbestos and PCB ballasts were removed. Client satisfaction with our services was reiterated by our 1999 appointment to renovate the carriage house on the project grounds to provide additional office space. The project was a competition winner and received a *City of Ottawa Heritage Award*. As a conversion of an existing convent to office building, the entire building has been recycled. Two contracts consisting of demolition and construction, working with Canderel as Construction Managers.



Designated Specializations: ([Heritage Conservation](#) / [Sustainable Development](#) / [Visitor Centres](#) / [Services](#) / [Museum](#))

Est. Completion Date (Mo/Yr):	September 1999	Actual Completion Date (Mo/Yr):	September 1999
Estimated Construction Value:	Phase 1 – \$5.0 M	Construction Award Value:	\$6.9 Million
	Phase 2 – \$2.0 M	Final Construction Value:	\$7.0 Million

Reasons for not on budget/schedule if applicable: Rectifying existing conditions cost marginally more than anticipated, as the full extent of these conditions uncovered during demolition/renovation required slightly more remedial work.

Relevance of the Project:**General**

- High profile executive office accommodation
- Sophisticated acoustic, lighting and audio visual design in council chamber

Heritage

- Early 20th century masonry building that was restored and renovated, achieving a City of Ottawa Heritage Award.
- Extraneous elements removed
- Sensitive upgrades to building materials and systems
- Windows in keeping with the architectural language were added to the dining room for more daylight, and to restore the balance of the facade

Sustainable Development

- Adaptive reuse of existing building
- Reuse/recycling of as much of the building fabric and assets as possible.
- High ceilings enhance the use of natural ventilation
- All workstations are close to natural daylight, reducing lighting needs
- A combination of indirect/direct lighting reduced watts/square foot required
- Exposed existing masonry, in the atrium and elsewhere throughout the building, reduced the amount of finishes required, and acts as thermal mass

Museum/Visitors

- Visitors come from world-wide, as this is the Canadian headquarters
- Library is in fact a museum and contains rare books and artefacts

IBI Group's Specific Role:

Preparation of facility program; space planning; furniture selection, specification, procurement and installation; and interior design. Design, contract documents, and contract administration including, coordination of specialty consultants, and coordination with government officials and obtaining of approvals from authorities having jurisdiction. Our firm was responsible for the coordination and leadership of the design team, and we led a multi-disciplined team of consultants. Deliverable included a schematic design and detailed packages complete with sample boards, furniture selections and cost estimates, two construction document packages with Class A cost estimates, and contract administration documentation (certification of payments, change orders, site instructions, review of shop drawings, and site visit reports).

Challenges:

- Respect and complement the heritage and landmark qualities of the site
- Increase usable floor space
- Convert chapel to a council chamber
- Upgrade of mechanical systems
- Added elevator

Resolutions:

- New detailing complemented the proportion, materials and formality inherent in the design.
- An existing courtyard was converted into an atrium which functions as elegant entrance and gathering space, and an attic was converted to office and mechanical space..
- Religious symbols were removed in a dignified manner and new and sophisticated systems were introduced. Stained glass windows were restored.
- In most areas, new ceilings were introduced to conceal building services. In some areas, barrel vault ceilings uncovered during demolition were left exposed with new exposed ductwork.
- Extensive design work was needed to find a suitable location, and then solve the associated structural issues.

- Change of use from cloistered space to inviting high-profile space
- New entry was created by introducing an inviting atrium. Minor modifications to façade reintroduced balance of aesthetics. New entrance and removal of stair to chapel improved access.

IBI Group's Staff on this Assignment

Patrick Murray – Principal in Charge

Diane Phillips – Senior Project Architect

Diane Phillips – Contract Administration

Philip Black - Senior Design Architect

Role of Key Staff

Directed the project, took professional/financial responsibility on behalf of IBI (formerly Murray & Murray); was available for as required and for key meetings/issues; and reviewed/sealed all deliverables

Responsible for day-to-day direction and management of the project; client, sub-consultant and in-house personnel liaison and coordination; architectural and interior design aspects of the project; monitored and maintained standards, progress and execution of project; reviewed all deliverables for submission; and chaired Project/Design Team meetings.

Responsible for review of architectural and interior design contract documents for continuity; contract administration; site review to verify/advise on conformity/problems during construction; attended construction meetings; and assisted construction manager with expertise.

Responsible facilitation and development of client requirements into design/built form; coordinated in-house production of architectural and interior design contract documents for continuity throughout phases of project; and attended Project/Design Team meetings.

Sub-consultant's on this Assignment

Adjeleian Allen Rubeli Ltd.

R.J. McKee Engineering Ltd.

Hanscomb Limited

Larocque Levstek Ltd.

Delcan Corporation

Gabriel Lighting

State of the Art Acoustiks

Role of Sub-consultant

– Structural Engineers

– Mechanical & Electrical Engineers

- Cost Consultant

- Landscape

- Traffic

- Lighting Design

- Acoustics & Audio Visual

General / Main Contractors on this Assignment:

R.E. Hein Construction (formerly Mueller-Hein Corporation)

29 Edgewater Street, Kanata, ON K2L 1V7

Tel: (613) 738-9899

Fax: (613) 738-6196

Reference:

Mr. Glen McStravick, Director, Corporate Affairs

Royal College of Physicians & Surgeons

74 Echo Drive, Ottawa, ON K1S 5N8

Tel: (613) 730-8177

Fax: (613) 730-8830

Email: glen.mcstravick@rcps.edu

APPENDIX 5: One-Pager, courtesy of Tim Murray

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS HEADQUARTERS - Echo Drive, Ottawa, Ontario

Project Client: Royal College of Physicians and Surgeons **Completion Date:** Nov. 1993

Total square meters: 78,000 ft² **Construction Cost:** \$5 M (phase 1), \$2 M (phase 2)



Comparable/Relevance to Requested Project: This project consisted of the renovation of a 1920 heritage convent and carriage building to executive, administrative, dining and conference space for prestigious national headquarters. The project was constructed in two phases (1993 and 1999). Key elements within this commission included office space, a library for rare books, conversion of a convent to council chambers, creation of dining room & kitchen, removal of extraneous elements added over the years, building envelope upgrade and conversion of courtyard to atrium with development to a compatible aesthetic with the existing surroundings. Client satisfaction with our services was reiterated by our 1999 appointment to renovate the carriage house on the project grounds to provide additional office space. The project was a competition winner and received a *City of Ottawa Heritage Award*. As a conversion of an existing convent to office building, the entire building has been recycled. The Reuse/recycling of as much of the building fabric and assets as possible. High ceilings enhance the use of natural ventilation. All workstations are close to natural daylight, reducing lighting needs. A combination of indirect/direct lighting reduced watts/square foot required. Exposed existing masonry, in the atrium and elsewhere throughout the building, reduced the amount of finishes required, and acts as thermal mass.

Description and Stages of Delivery: Two contracts consisting of demolition and construction, working with Canderel as Construction Managers.

Disciplines Coordinated: Structural: Adjeleian Allen Rubeli Ltd.; Mechanical/Electrical: R.J. McKee Engineering Ltd; Cost: Hanscomb Ltd.; Landscape: Larocque Levstek Ltd.; Traffic: Delcan Corporation; Lighting: Gabriel Design; Acoustics and Audio Visual: State of the Art Acoustiks Ltd.; Hardware: Architectural Hardware Ltd.

Challenges and Resolutions:

- Our challenge in renovating this 1920's masonry Ottawa building was to respect and compliment the proportion and formality inherent in the design, as well as its heritage and landmark qualities. The renovation also had to achieve an appropriate, functional and attractive facility befitting a national headquarters building.
- Other challenges included adaptation to current standards of office space, as well as upgrades to mechanical, electrical, life safety and building envelope in a heritage context.
- One of the major challenges was the resolution of the adaptive re-use from convent space to office space.
- The project was divided into 2 separate contracts demanding familiarity with contract coordination to reflect results while under construction.
- Complex approvals were co-ordinated with National Capital Commission and the City of Ottawa.

Scope of Services and Deliverables: Preparation of facility program; space planning; furniture selection, specification, procurement and installation; and interior design. Design, contract documents, and contract administration including, coordination of specialty consultants, and coordination with government officials and obtaining of approvals from authorities having jurisdiction. Our firm was responsible for the coordination and leadership of the design team, and we led a multi-disciplined team of consultants. Building envelope upgrades were undertaken. Code deficiencies were addressed including life safety systems, egress routes and structure to meet current earthquake standards. New energy efficient M/E systems replaced obsolete. Asbestos and PCB ballasts were removed. Deliverable included a schematic design and detailed packages complete with sample boards, furniture selections and cost estimates, two construction document packages with Class A cost estimates, and contract administration documentation (certification of payments, change orders, site instructions, review of shop drawings, and site visit reports).

Budget Control & Management: **Contract price:** \$4.9 M **Final construction cost:** \$5.0M (Client changes)

Schedule Control & Management: **Initial schedule:** June 1992 **Final schedule:** June 1992

Key Personnel and Responsibilities: P.J. Murray, Principal in Charge of Project, Diane Phillips, Senior Project Manager; Philip Black, Senior Design Architect

Client Reference: Mr. Glenn MacStravick, Royal College of Physicians & Surgeons Canada, 74 Echo Drive, Ottawa, ON, K1S 5N8, Tel: (613) 746-8177, Fax: (613) 746-8833

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