

# **The Anxiety of Architecture**

*Design Uncertainty in a Subjective World*

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A thesis submitted to the Faculty of Graduate and Postdoctoral Affairs  
in partial fulfillment of the requirements for the degree of

Master of Architecture

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## **Abstract**

In the Post-Modern era of divisive critical discourse where theory is no longer willing or able to pursue the goal of absolute truth, architecture is uncertain. Without the certainty of absolute knowledge, the hope for any objective understanding of architecture is gone. In its place lies a turbulent realm of subjective experience, whose chaos threatens to make architecture a thing of anxiety.

This thesis undertakes an exploration of that uncertainty in architecture. Through a reading of Graham Harman's Object Oriented Ontology this thesis considers how a philosophy of realism can inform the architect on understanding and working within the bounds of a world where subjective experience rules. This understanding is then challenged through a reflection on the task of designing a contemporary building sympathetic the character of the Centretown Heritage Conservation District of Ottawa, Ontario. Out of the exploration of the uncertainty of that task the thesis's project of a mixed-use infill development is arrived at.

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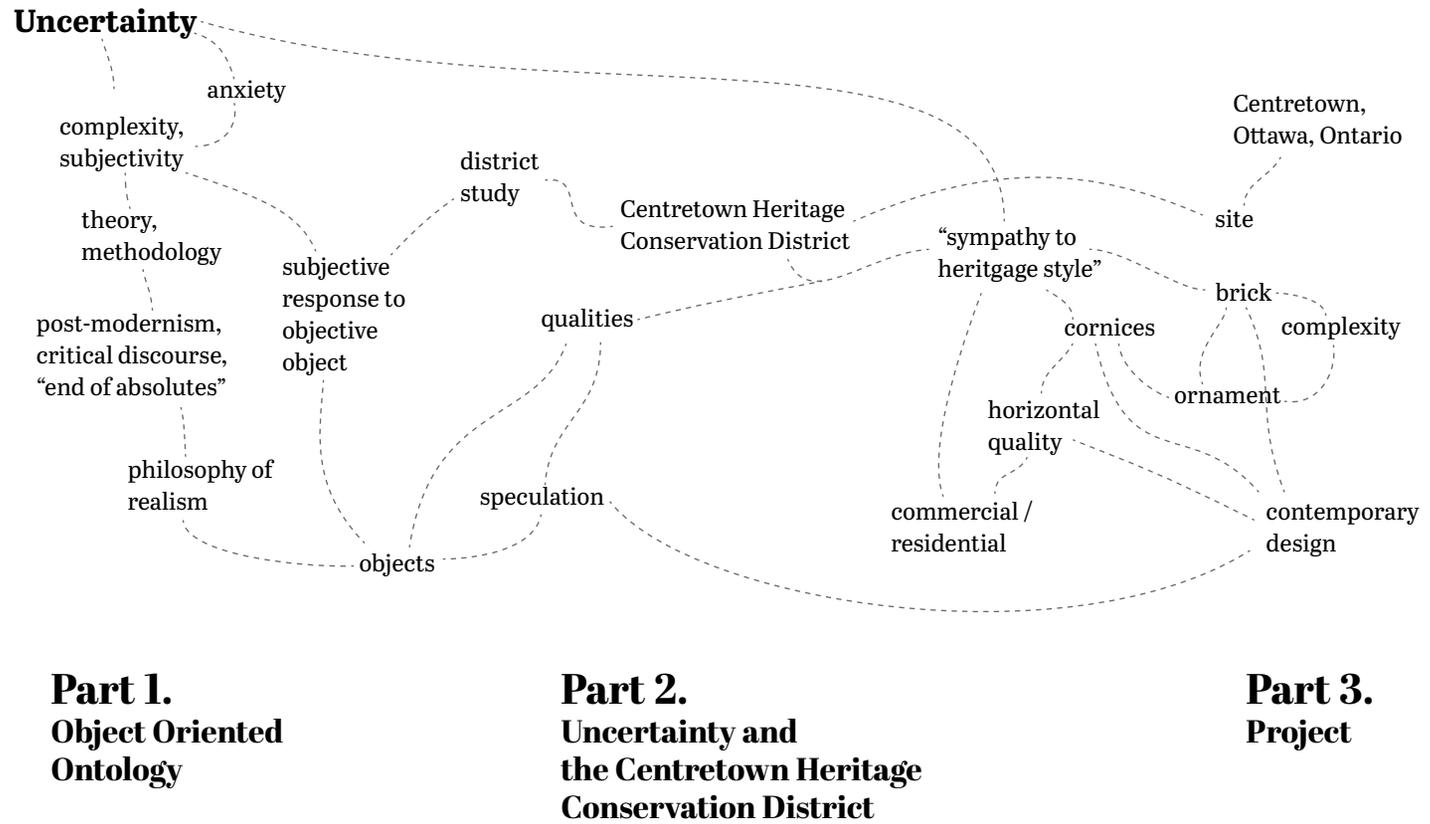
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## **Author's Preface**

*Since I began my adventure in architecture in 2011, I have grappled with its complexity. Tasked with finding design solutions to various problems, I have struggled with a profound feeling of uncertainty over the decisions I chose. In an effort to make sense of my uncertainty, I sought a variety of paths that might provide more certainty to the problem I was facing in my work. These paths ranged from an inflexible adherence to theory, to an over reliance on the feedback of my professors or peers, to even a short-sightedly bemoaning of the practice of architecture itself. Yet each one of those only offered one position on a vast and deep subject that eludes the definition required by certainty. In that regard, the following thesis is an attempt to explore and make peace with the uncertainty I have experienced in architecture by means of an admittedly amateur reading of the philosophy of Graham Harman, whose work offers a way of exploring the reality of subjective experience of the objective topic of architecture.*

## Introduction

Architecture is uncertain because the experience of architecture's products is uncertain. This uncertainty arises from the lack of an absolute sense of what a designed object entails to everyone encountering it. Rather, given the relative nature of how the object appears to a subject, the potential range of experience for an architectural object is vast. To the architect with a specific design target, that range of subjective experiences their project faces can be terrifying in its uncertainty.

In response to the described uncertainty architects theorise on what architecture is or what is most important about it. Academics attempt to devise various sets of prescriptive rules for architecture, aiming at rational certainty, and grounded in empirical method.<sup>1</sup> Yet the postmodern world in which this debate on architecture occurs is one that no longer follows a grand narrative of the "great goal"<sup>2</sup> of knowledge advancing towards an absolute truth, that approach having been replaced by a fractured landscape of competing theories. Thus for all the range of positions put forward on the topic of understanding architecture, the result has been anything but a sense of certainty. As observed by Rafael Moneo, this state of critical discourse that abhors "any desire to elaborate a systemic theory" is best summarised in one word: anxiety.<sup>3</sup>

Today's architects may find themselves adrift in this choppy sea of competing ideas. The range of topics in relation to which architecture is considered is incredible. The

increasing alarm of the threat to the environment has given rise to a green architecture that aspires to design that emphasises sustainability and energy efficiency. The mass adoption of personal computers and the growth of specialized software has empowered an increasing geometrically complex architecture as well one that arises out of the creation of complex digital systems of information. The ubiquity of the internet and international trade has resulted in debates over architecture's relationship with issues of globalisation, regionalism, and capitalism. These and other competing ideas provide no definite answer on how architecture manifests to people. Rather they add to the uncertainty of how the architectural object is experienced by broadening the discussion.

Given the quagmire of doubt the budding architect is left in over the range of positions that their design may encounter or be held against, the discussion proposed here is one of exploring uncertainty and responding to it. Graham Harman's Object Oriented Ontology (OOO), a philosophy describing subjective experiences of objective realities, might be valuable to the architect in contextualizing the uncertainty of subjective experience, to the end of contextualizing and potentially reducing the anxiety of their architecture.

The thesis will begin with an overview of Graham Harman's Object Oriented Ontology, explored from the vantage of an architect, with the intent of rendering it in plain language. Out of that reading of Harman, the topic of uncertainty will be reconsidered in new light. Upon the evolution of the understanding of uncertainty, the thesis will

advance to a case study out of which the thesis's architectural design will arise. The case study is of designing a mixed use infill project in the Centretown neighbourhood of Ottawa, Ontario. The subject of uncertainty will be explored in relation to the architect's attempt to design a contemporary building that is sympathetic to the neighbourhood's heritage style while manifesting new and different ideas. The thesis will then end with a discussion considering the journey elapsed and how it has affected the anxiety of architecture.

## **Part I.**

### **Object Oriented Ontology**

#### **I. A Speculative Realism**

Graham Harman is a member of a loosely aligned group of contemporary philosophers dubbed the speculative realists. The naming of speculative realism is in relation to the group's approach to the metaphysics of realism, a philosophical view that things experienced possess an objective reality that is entirely disconnected from their subjective consideration by the human subject.

At the most basic level, the speculative realists' position is a response to the influential Transcendental Idealism described by Immanuel Kant in his Critique of Pure Reason. Kant's metaphysics posit that while there may be an objective nature to things, their appearance to humans is heavily processed through the intuitions of time, space and causality, becoming subjective phenomena to the viewer. The consequences of Kant's position are two fold: since human thought cannot escape its own prejudiced vantage philosophy can only ever begin from a human subjective perspective and further that the objective nature of things can never be truly grasped. Thus Kant's legacy was, in a sense, to render the questions of realism, of the accessibility of an objective world, invalid.<sup>4</sup>

While the speculative realists collectively organize around challenging the conclusions of Kant's metaphysics, their individual responses vary. Within the movement there exist two rough camps, each disputing one of the previously described conclusions of Kant's metaphysics. One group, represented best by the works of Quentin Meillassoux, accepts the primacy of the human perspective for philosophy, but disputes the unknowable mystery of objective reality, arguing instead that this objective reality may be approached and known through mathematical modeling. The other group, represented here by Graham Harman's OOO, accepts the impossibility of full access to the hidden objective nature of objects, but argues that philosophy can speculate upon the interaction of non-human objects, thus broadening philosophical debate beyond the human vantage.

Harman's OOO is of potential value to the uncertain architect for a number of reasons. Firstly, it entails the engagement of objects in a manner that allows for varied, rather than restrictive, perspectives on their nature. Secondly, it provides a framework for speculation on interactions beyond the subjective perspective.

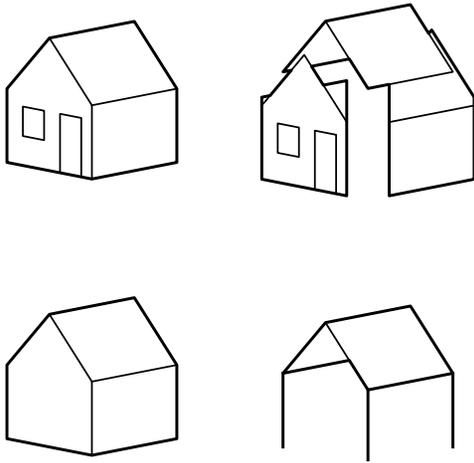
The following thesis will proceed by first exploring the dual realms of objects in Harman's philosophy, the real and the sensual, and exploration of their relevance to the practice of architecture. The second major section of the thesis will look at the Heritage Conservation District of Ottawa, Ontario. The nature of the district and its prescriptions for conservation will be considered in relation to Harman's ontology on objects. Out

of this discussion will come the thesis's project of a low-rise mixed-use development located inside the heritage district. The final section will feature the project.

## **2. A Vast Realm of Objects**

An ontology is a variety of metaphysics that is concerned with describing the nature of being.<sup>5</sup> In considering reality as it appears to the self, looking around one immediately sees a world of given things, ranging from the paper or screen upon which this document is being read, to the seat one is sitting in, to even the acknowledgment of the architectural thesis as something. In each of these cases, the object of consideration is recognized as one particular thing rather than another thing: the “thesis” is a thesis and not a toothbrush. In that regard, objects before the mind possess a unified identity that denotes them for what they are, distinguishing them from other things. OOO is concerned fundamentally with these objects and accounts for their interaction both with themselves and with other things.<sup>6</sup>

The term object used here is not limited exclusively to those with physical natures, but is also inclusive of those imagined. These objects are recognized as being equally powerful in their potential for effect on other objects, be they physical objects like rats, trains, and marmots, or conceptual and imagined objects, like love, fantastical monsters, and ideologies.<sup>7</sup> Just as much as a collapsing building is capable of physically impacting upon the people residing within it, so too is an imagined idea capable of impacting upon the physical world, as is in the case when a person is brought to tears by the experience of the character in the book they are reading.



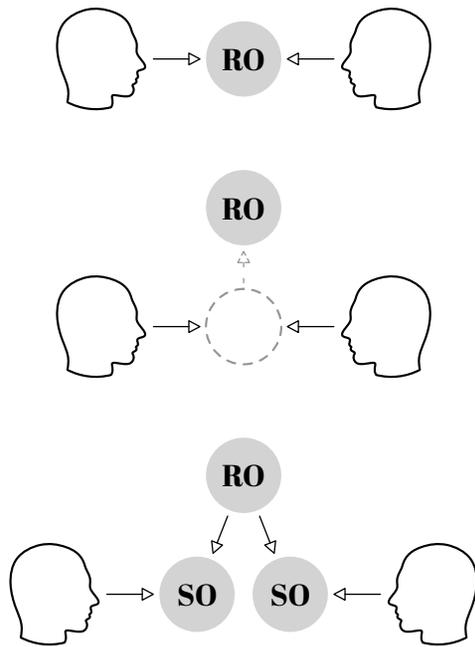
**Figure 2:** Diagram of various manifestations of a house as a unified object.

As described previously, OOO falls under the category of philosophy of realism, a position that holds for the existence of an objective state for reality. By realism, the objects one encounters in conscious experience are merely subjective caricatures of objective things that lie forever beyond the reach of the mind. The object encountered by the mind is reduced to its “use value,” how it is understood as a thing by the subject, and all of its other qualities are lost for consideration.<sup>8</sup> In that regard, objects can be said to have two states: their objective reality and the subjective expression that appears before anyone experiencing them. OOO refers to an object’s objective reality as the real object and the subjective experience of it as the sensual object.

The two realms of the object are then both further split between the object as a unified thing and the various qualities the object manifests. This point may seem contentious, as common sense would suggest that things are a sum of their parts. Yet consider the basic form of a house composed of the following seven things: four walls, a gabled roof, one small window, and a door. Common sense would say that the house is just a name for the seven items bundled together. What is suggested here is that when the parts come together they give rise to a new eighth object, the house itself. It is suggested that when encountered as an object before the mind the house is not seen merely as a bundle, confusing the thing with its properties,<sup>9</sup> but as an object in its own right, which in turn possesses the walls, roof, door, and window as qualities. These qualities in turn become objects with qualities in their own right when considered independent of the house they are a part of, just as the house may be a quality in a neighbourhood object. An important consequence of this logic of thinking is that it allows for the house as

phenomena before the mind to survive some degree of change in its qualities before it becomes recognized as something else. For example, were the window and door removed, the house would arguably remain identifiable as a house, albeit a gloomy and inaccessible one, or a house in the image of Monopoly game pieces. On the other hand, if the house were stripped of its walls, door, and window, and four posts were introduced, the object would cease to be identifiable as a house and would become some variety of basic shelter.

The distinction of an object from its qualities becomes even more complex when the divide between sensual and real objects is considered. The objective real objects that elude the mind possess an unknowable infinite quantity of real qualities that make up their being. Sensual objects appearing before the mind possess sensual qualities which are in a sense superficial to the objects experience.<sup>10</sup> Returning to the example of the house, its sensual qualities might be the colour of its walls in the sunlight, a sentiment of being at home to an observer, or the manner a tree's shadow dapples across its surface. From the vantage of philosophising on the moment of experience, these qualities are not relevant for the mind to grasp the object for what it is. For that to occur, the sensual object in the mind also possesses real qualities hidden behind its sensual profile, which can only be "inferred indirectly rather than witnessed."<sup>11</sup> In encountering a given thing one's consciousness articulates the qualities of the object and makes it manifest to the mind as what it is.<sup>12</sup> Just as the real object is far more vast than any given experience of it so too are real qualities, even when expressed as a sensual object. What is being suggested here is not that the house does not have four walls, a window,



**Figure 3:** Diagram of the engagement of one real object by two observers, resulting in two distinct sensual objects.

a roof, and a door, but rather the philosophical argument that those are superficial phenomenal expressions of an infinite number of other qualities of the object that elude definition. In Harman’s own words, “An object partly evades all announcement through its qualities, resisting or subverting efforts to identify it with any surface. It is that which exceeds any of the qualities, accidents, or relations that can be ascribed to it: an ‘I know not what’, but in a positive sense.”<sup>13</sup>

While the philosophy may explore such nuanced and deep notions, two things about objects are important for the discussion at hand. Firstly, an object appearing before the mind is a superficial caricature that expresses only limited qualities of a vastly more complex object that eludes definition. And secondly, the encounter of the same object by different observers will manifest as distinct phenomena with distinct qualities to each subject. Without the impossibility of being the other person, one can never truly know the full range of qualities they may experience in a given object. The best that can be achieved is to speculate at their experience.

Consider the opening scene of the 1980 South African film *The Gods Must be Crazy*. The movie begins with a glass Coke bottle falling from a plane into the Kalahari Desert below, where it is discovered by an isolated tribe of indigenous hunter gatherers. Having never encountered glass before, the object, which “looked like water, but was harder than anything else in the world,”<sup>14</sup> is a mystery to its discoverers. The hunter gatherers quickly find a range of uses for the object, from using its weight, shape, and smoothness to cure animal skins, to blowing on it to produce sound, to exploiting its density in

using it as an impact tool. While the bottle's discovery goes on to have disastrous social consequences for the group, what is of interest here is their interaction with the object. The Coke bottle comes to the hunter gatherers as an alien object, possessing qualities never before encountered by them, such as its transparency and incredible density. Their fictional response to the object is to explore it and find uses for it within the bounds of their subjective world. Their understanding of the bottle is not as a vessel for storing carbonated soda nor as anything to do with Coca-Cola brand. And yet the object in question would likely possess those qualities to the person watching the movie. In that regard, the fictional hunter gatherers and the movie watcher both encounter the same objective object, yet the ensuing sensual object before the mind takes markedly different forms.

The scenario of the Coke bottle serves to explain two potential errors in considering objects. The first is referred to as undermining and occurs when an object's unified experience is disregarded for "something deeper,"<sup>15</sup> such as the qualities it possesses. An example of this in the realm of architecture would be the recognition of a building exclusively for its application of various environmentally sustainable technologies or for its use of ornamental detailing and not for the project in its own right. The building would possess those technologies but its expression is far vaster than them alone. The second error occurs when objects are disregarded as "falsely deep"<sup>16</sup> and are instead emphasised for their relation as quality in another object. An example of this would be considering Le Corbusier's Villa Savoye not as important in its own right but only for its relation to the modernist movement as whole.

### **3. Uncertainty after OOO**

The ontological framework described in OOO has immediate consequences to the notion of uncertainty in architecture. As described previously, the uncertainty experienced by the architect is one of grappling with a near infinite range of phenomenal experiences of the designed object by other viewers.

The premise of subjective sensual experience of real objects described by OOO validates the uncertainty the architect feels. While all observers of a design may encounter the same absolute real object, the sensual profile that appears before each of them is their own experience of its infinite range of real qualities. In that regard, an architectural design cannot be reduced to the architect's definition of it because the design as unified object would then change with each tiny change of its qualities<sup>17</sup> brought on by its encounter by others. This quality of eluding definition further reinforces the weakness of attempts to define architecture through theory, as the real object of architecture in question is greater than any attempt to define it.<sup>18</sup> This elusiveness in turn invalidates any attempts to reduce the architectural object to specific qualities, such as its ethics, environmental impact, or innovation.

Conversely, the understanding of objects presented here does not outright deny any expertise on their nature. An expert may have more awareness of an object's qualities and thus a greater aesthetic opinion,<sup>19</sup> yet that expert can still never have absolute understanding of the object or even presume that they are aware of all its qualities

perceived by others. In that regard, expertise enshrined in theoretical content “eventually reaches a point where it is no longer liberating... [and] something new is needed to awaken us from our dogmatic slumber.”<sup>20</sup>

While OOO argues that the architect has no hope of ever grasping certainty of the real object, it does suggest that there are “better and worse translations” of it.<sup>21</sup> Taken with the caveat on expertise just stated, the architect facing anxiety over the uncertainty of their object’s perception should embrace it. Rather than submitting to the pursuit of designing an architecture that is definite in its experience, the architect should instead embrace this notion of translating the object. This would entail exploring how much “modification” the architectural program or style can tolerate while remaining within the bounds of the recognized object,<sup>22</sup> as expressed by the client, the public, and the architect themselves. This process would be a demonstration of the architectural object’s liberty from the strictures of defined qualities or relations to larger objects like aesthetic styles, ethical values, and so on.

Architects must be humble in their expectations though. In the Hans Christian Anderson fairy tale *The Emperor’s New Clothes*, a vain emperor purchases a suit from two conmen who convince him that the suit’s fabric appears invisible to anyone unfit for their position or stupid. The emperor, his ministers, and even the town’s folk all maintain the charade that the clothes are magnificent, not wanting to admit to being fools. Finally, an innocent child points out to the emperor that he is naked, embarrassing him, though not enough to end his charade. While architects should

embrace creativity, they also must be willing to acknowledge their own limitations as well as those of their designs. The incredible range of experiences manifest in the hundreds of thousands to millions of people inhabiting the average major modern city ensures that no one design will appeal to everyone or be uniformly understood as intended by its designer. Without humility, architects may end up feeling just as foolish as the fairy tale's emperor.

Ultimately, while the subjective perception of the architectural object is inescapable, reducing that object down exclusively to those subjective experiences of it is merely another case of undermining the object. In that sense, the architect's escape from the anxiety and fear of uncertainty is merely a question of embracing the subjective as just another quality of the object's infinite depth.

## **Part 2.**

### **Uncertainty and the Centretown Heritage Conservation District**

#### **1. Conserving Centretown's Heritage Style**

As an application of the exploration of uncertainty in architecture through the lens of OOO, the project portion of this thesis is to design a mixed-use building on a site located at the south-east corner of the intersection of Bank Street and Lisgar Street in the Ottawa neighbourhood of Centretown. Located just south of Parliament Hill, Centretown is one of Ottawa's oldest communities. Despite the passing of time, a significant majority of the neighbourhood's buildings still reflect the historical Queen Anne Revival and Italianate architectural styles from the turn of the twentieth century. Ongoing development had put the neighbourhood's heritage character at risk of disappearing. As a result, in 1995, with considerable community support,<sup>23</sup> the City of Ottawa began the process of establishing a historical district in Centretown under the authority of Part V of the Ontario Heritage Act.

The first step towards creating the district was the commissioning of a two-year heritage study of the neighbourhood by the City of Ottawa's Department of Planning, Economic Development and Housing. This Centretown Heritage Conservation District Study sought:

To provide a comprehensive architectural and historical analysis of the Centretown Core as well as a preliminary Heritage Resource Management Plan to assist the future management of heritage resources in the area.<sup>24</sup>

The study's initial phase entailed a physical and historical overview of the neighbourhood, which took the form of historical research. The second phase of the study saw a more detailed surveying of buildings and neighbourhood character, including an exhaustive mapping of the neighbourhood's buildings.

In 1997, following the completion of the study and the reviewing of its findings, the City of Ottawa established the Centretown Heritage Conservation District.

Designation of an area as a heritage conservation district under the Ontario Heritage Act endows municipalities with a greater degree of power on matters relating to property in the given area. Under the Act, any alterations, demolitions, or new constructions occurring within the district require specific approval in order to proceed. Attaining approval by the City of Ottawa begins with the applicant providing a cultural heritage impact statement, produced by a qualified professional.

The impact statement is then reviewed by the Ottawa Built Heritage Advisory Committee (OBHAC) who may require amendments to the proposed plan in order to better address their understanding of the district's heritage qualities. The OBHAC is not explicit in any specific requirements of design work done in the district. Applications are instead evaluated on a case by case basis in consideration of the committee's sense of

their reflection of the neighborhood's heritage character. What the OBHAC understands of the district is similarly unstated, though likely in consideration of the Centretown Heritage Conservation District Study. Once approved by the OBHAC the application is then passed to city council for review in consideration of the committee's own approval. Regulation under the heritage district is supplemental to zoning regulation in the form of heritage overlay bylaw covering Centretown. Heritage overlays are a variety of zoning regulation passed into the city's bylaws in 1978 to the end of encouraging the retention of heritage buildings. The overlays requires that where buildings are demolished and rebuilt, they must be built to the same envelope and location as their original form.<sup>25</sup>

## **2. The Uncertainty of Designing within the Heritage District**

### Centretown Heritage District Character and Prescriptions for Development

As already mentioned, the OBHAC is opaque on the terms by which it reviews cultural heritage impact statements. The best hope of acquiring a sense of the qualities the OBHAC looks for in proposed architecture within the Centretown Heritage Conservation District comes from a review of the findings of the 1997 heritage district study. The 1997 study provides both a general statement of the area's heritage character and general planning recommendations, as well as guidelines and recommendations regarding more specific topics such as renovations and infill developments.

Beginning with the general, the study provides a statement of heritage character for the purposes of guiding the evaluation of heritage resources.<sup>26</sup> This statement describes the neighbourhood's urban fabric as being overwhelmingly made up of buildings built between 1890 and 1914, with the occasional pre-1980 building, and some apartments built between 1914 through 1948.<sup>27</sup> The general planning recommendations provided are to "encourage retention of the existing building stock and ensure that new infill development is compatible."<sup>28</sup>

Turning to the specific, the study provides recommendations for a range of intervention types in the district. Of interest here are those of relevance to the project at hand: those applying to mixed use infill projects. The first recommendation is incredibly relevant to

the discussion of uncertainty (emphasis added):

1. All infill should be of contemporary design, distinguishable as being of its own time. However, **it must be sympathetic to the heritage character of the area**, and designed to enhance these existing properties rather than calling attention to itself. <sup>29</sup>

The text emphasised within the recommendation begs the question, “What would be sympathetic?” Perhaps to answer to this question, the study provides additional recommendations relative to the site of the project. The recommendations for infill projects in the Bank Street corridor are as follows:

2. Bank Street Corridor:

- 2.1. The form of new buildings should reflect the character of the existing streetscape. The building should be two, three or four storeys in height, located tight to the sidewalk, with ground floor retail and commercial or residential uses on upper floors. In most cases, the building should cover the entire width of the lot to re-establish a continuous commercial frontage.
- 2.2. Ground floor facades should be transparent and three-dimensional with large glass areas, recessed entrances, and articulated transoms. Signage should maintain existing patterns of horizontal banding. Projecting cornices can be used to emphasize the separation between ground floor and upper floors.
- 2.3. Upper floor facades should be more opaque, with smaller openings in a simple rhythm. The façade should be terminated by a substantial cornice or parapet detail at roof level. For buildings on corner lots, consideration should be given to the use of a turret or other device to acknowledge the corner presence.
- 2.4. Materials, colours and detailing should ensure continuity in the streetscape. Iron, glass and stone are traditional materials for ground level use, and brick with wood or decorative metal trim for upper floor use. These or comparable materials should be used. Colours should be rich and lighting should be vibrant but discrete, highlighting any three-dimensional detailing of the

façade.<sup>30</sup>

This list provides a general breakdown of some of the qualities that the producers of the study found manifest in the historical properties of the Bank Street corridor.

In answering what would be sympathetic, the list of recommendations provided by the study provides a helpful list of general qualities, such as material, height, etc. However, the list is also an example of what OOO describes as undermining, reducing an infinitely complicated object down to a list of qualities. Given the practical end pursued by the study, its writers can be forgiven for making such an error. However when considering the notion of sympathy, the list's exclusive nature precludes any potential designs that might also express the character of the neighbourhood by using elements markedly different than those on the list. One example of this would be a building design with which includes the use of corten steel cladding to echo the earthy red shades of the neighbourhood's brick, but not its texture. It is not difficult to imagine such a change still being able to echo the heritage feel of the district. In the absence of such a defined list and of the requirement of the committee's approval, an exploration of the uncertainty of other more far reaching changes would be fascinating.

However, for practical purposes, given that the OBHAC would be the ultimate arbitrator on a design's approval, the error of the list's undermining will be disregarded. Instead, the notion of the uncertainty of sympathy shall be considered in relation to the manifestation of the list's qualities in a contemporary design.

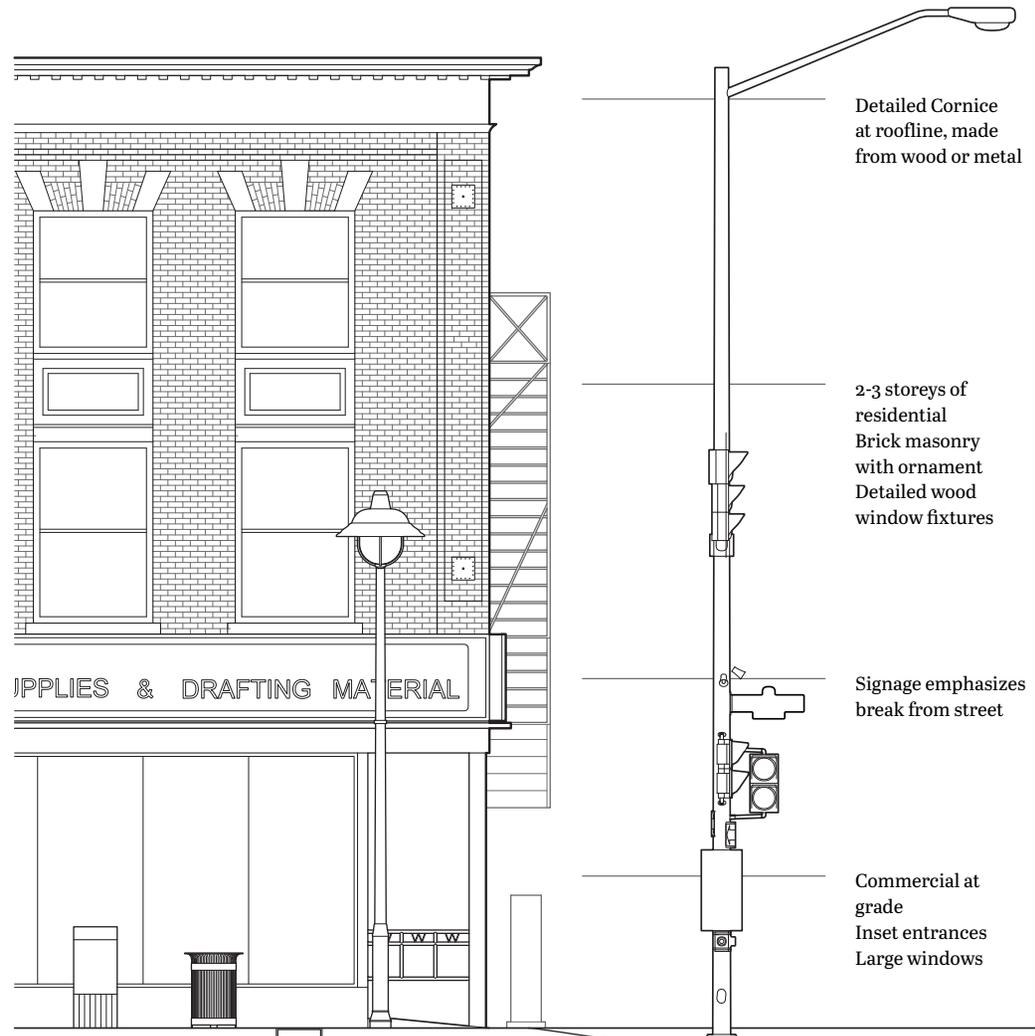
In accepting the list, consider the question of how much change the items of the list can survive as objects in their own right before they overwhelm the end of sympathy to the heritage character. The notion of real objects presented in this thesis would suggest that the range of possible expressions of a given object is vast. However any object can only take so much change before it ceases to be recognizable as the same object. In twisting the general qualities of the list into a contemporary expression, there remains a constant risk of too much change. Furthermore, the line of that threshold would appear differently to different observers. As mentioned, the OBHAC would be one group of subjects the object's interpretation would need to satisfy, however it would be hoped that the design would also appear sympathetic to the heritage style when considered by members of the public or by other professionals in the construction industry. These are a broad range of subjects to consider and thus the pursuit of a sympathetic contemporary design is fraught with uncertainty.

### **3. Speculating on Questions of Sympathy**

One must begin with a look at the heritage buildings in the Bank Street corridor. As demonstrated by the materials provided on pages 31 through 33, the qualities of the heritage district study are hopefully quite apparent, from the residential and commercial split, to the glass and brick, through to the pronounced cornice capping the buildings.

The study's first recommendation allows for the contemporary expression of the list's qualities. How much change can the qualities described in the list of the heritage district study tolerate before they cease to be recognized as what they are as objects in their own right? As the architect cannot truly escape their own mind, they are left to speculate upon what others might see as qualities in the given objects. As each object's qualities are considered in turn as objects in their own right with their own range of perceivable qualities to be speculated upon, the architect risks ending up like Alice from Alice in Wonderland and "falling down the rabbit hole," exploring the objects' depths to the point of extreme and potentially endless distraction. A reasonable limit must be drawn on the speculation of objects.

The qualities that this project aims to focus its exploration on as a test of modifying the heritage object are the building's cornice, brick elevation, and its glazed commercial ground floor. In moving from the neighbourhood's historical heritage styles to a contemporary look, the general mechanism of change is the reinterpretation of



**Figure 4:** Diagram of a typical Bank Street Corridor Elevation with notable qualities.



Figure 5: Photographs of Bank Street building elevations.



Figure 6: Photographs of Bank Street building elevations.

ornament in the detailing of the qualities. As will be demonstrated, where the heritage style features ornament in sculpted details and traditional methods of brickwork, the contemporarily reimagined design aims to focus the ornament on the complexity of one particular object, the brickwork, leaving the other objects' ornament as minimal. The aim of this decision is to disrupt the experience of the elevation; where the heritage buildings' cornices tend to dominate their look, the contemporary reimagining seeks to draw attention to the expanse of brickwork, leaving the cornices as horizontal framing devices.

Beginning with the cornices, what are their most noticeable qualities? The historical cornices on many of the neighbourhood's buildings are quite ornate in their detailing. They feature a range styles of modillions and dentils. Materials range from wood to embossed metal. Would the cornice reimagined in a much simpler form, free of complex ornament, still be sympathetic to the heritage look? The cornices also seem to promote reading of the elevation horizontally, through their own continuous horizontal nature and the way their contrasting colours and detail draw the eye. In that regard, which changes might jeopardise that horizontal framing quality of the cornice? Would changes to the massing of the cornice, its depth of projection off the building, or its profile affect its power to guide the eye?

Turning next to the brick elevation, when examining the range of photographs, one becomes again aware of a range of expressions of ornament in the brickwork's detailing. Ornament in the brickwork appears in a number of forms. Firstly, the elevations'



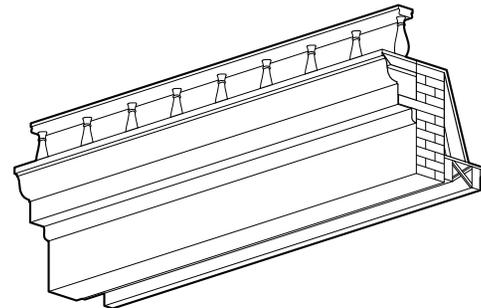
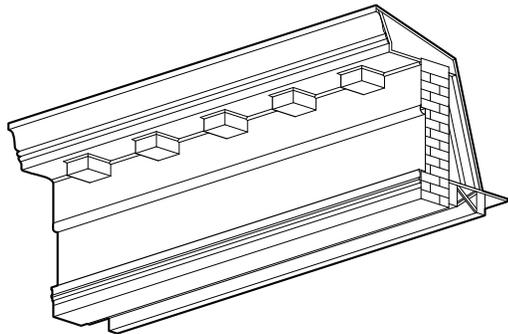
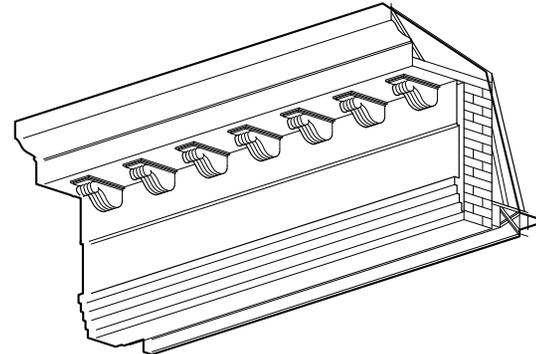
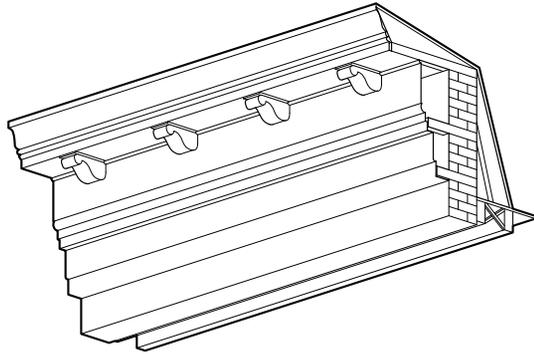
**Figure 7:** Winery Gantenbein, Gramazio & Kohler and Bearth & Deplazes Architekten.

windows feature a range of arch forms, from flat arches, to soldier arches, to semi-circular arches. Some feature keystones and some corbeling. Moving beyond the windows, the elevations feature a range of vertical and horizontal brick details. Corbel courses, dentils, and dogs-tooth dentils all create prominent horizontal lines on the elevation. Some buildings also feature vertical lines of pronounced brick between windows. Much of the ornament described serves to draw the eye to the windows and create a horizontal read across the elevation of the building. Echoing the work of architects Gramazio & Kohler, the disruption sought for the project is to utilize parametric modeling software to create a textured surface across the façade. This is achieved by rotating individual bricks in place relative to a pattern. The twisting in conjunction with an increase in the horizontal spacing between bricks creates a modulating texture of light and shadow across the brick elevation. Furthermore, unlike the buildings in the district, the brick in the project is to be a superficial screen, masking glazing behind. This allows for the creation of an interesting moment for the experience of light. During the day, the brick screen would allow some diffused light into the apartments without exposing the units to the large office building across Bank Street or to the street itself. At night, the screen would create a unique moment to those on the street when light filters out from the apartments through the brick. The intention of this disruption of the brickwork object is to maintain the same colour and material, yet present it in a new light.

Lastly, considering the commercial units at grade in the photos provided, one sees the most noticeable difference between the description provided by the heritage study and

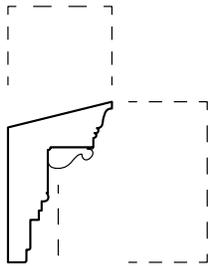
the architecture in actuality. While most units do feature a recessed entrance, many of the units appear to have been renovated in the building's history, disrupting the cohesion in the storefronts facades. The proposed contemporary expression of the units does not aim to be that disruptive, merely providing a more minimal, clean expression of the glass fronted object described in the list.

The project drawings on the following pages explore the various forms of the objects, leading to their application on the site. As the reading of OOO suggests, the only true test of these interventions can only come out of their subjective experience as part of the building as a whole by a viewer. The intent was to capture the sentiment of the heritage style and apply it in a modern context.



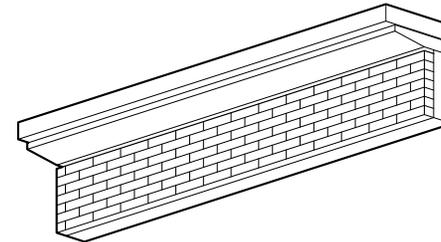
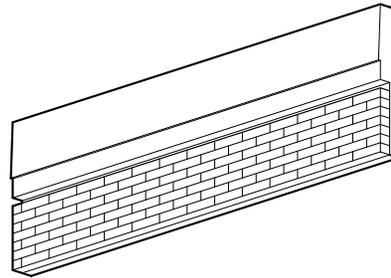
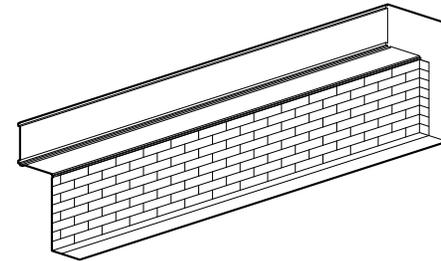
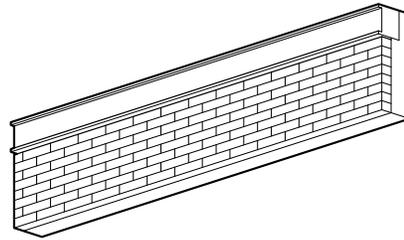
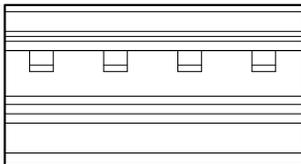
**Figures 8-11:** Examples of traditional bay windows, drawn from examples in Centretown.

Depth: How much must be expressed?

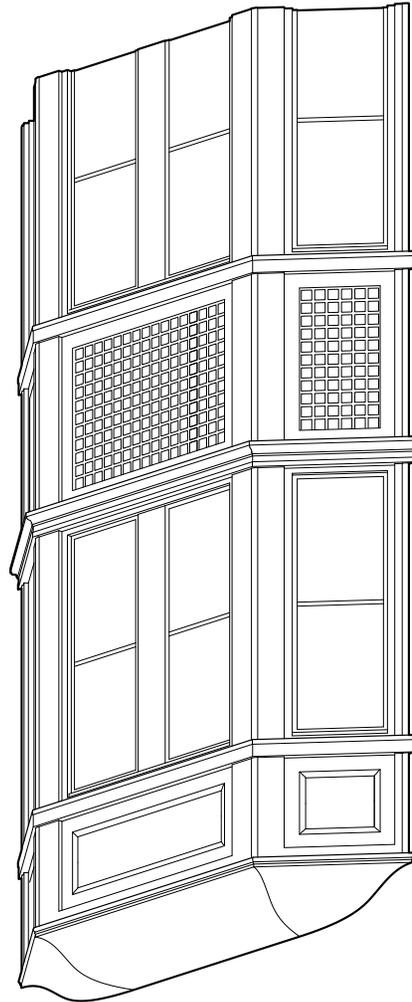
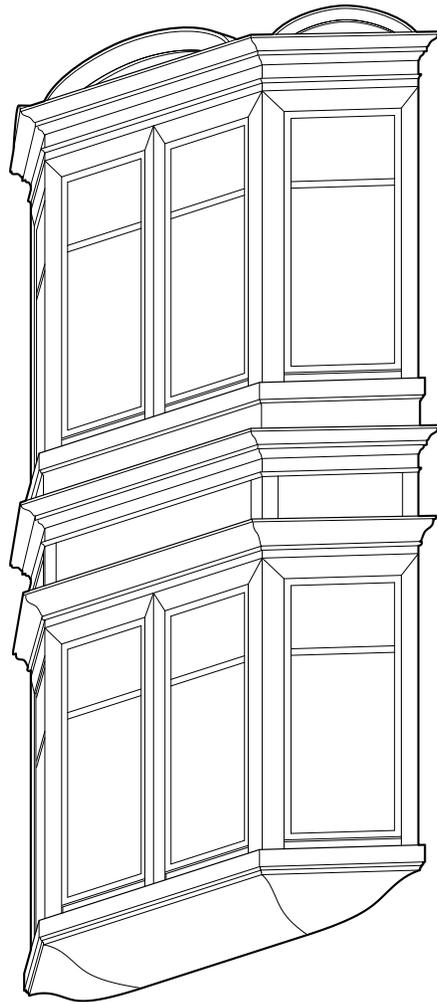


Height: How much must be expressed?

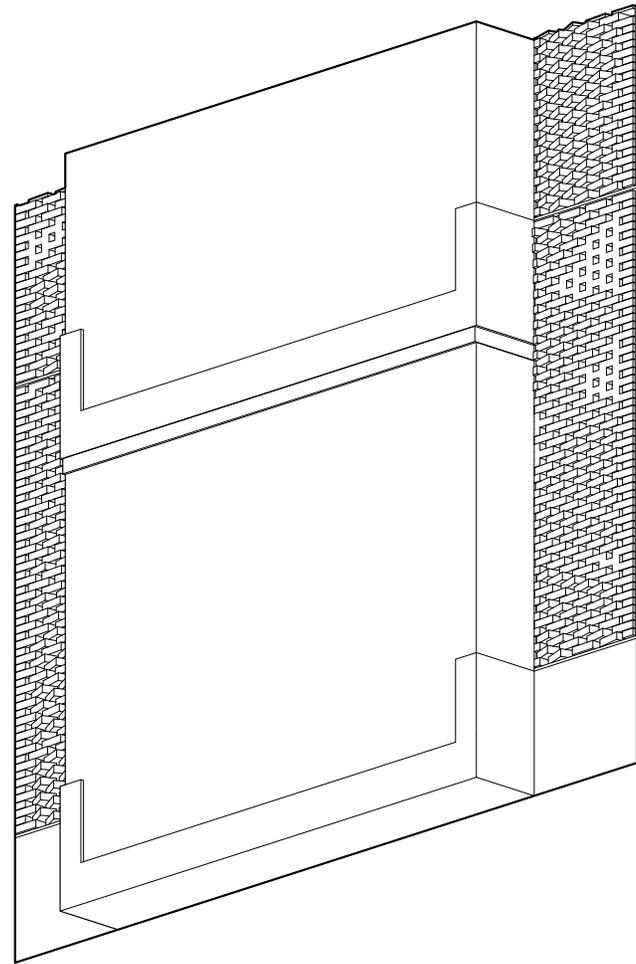
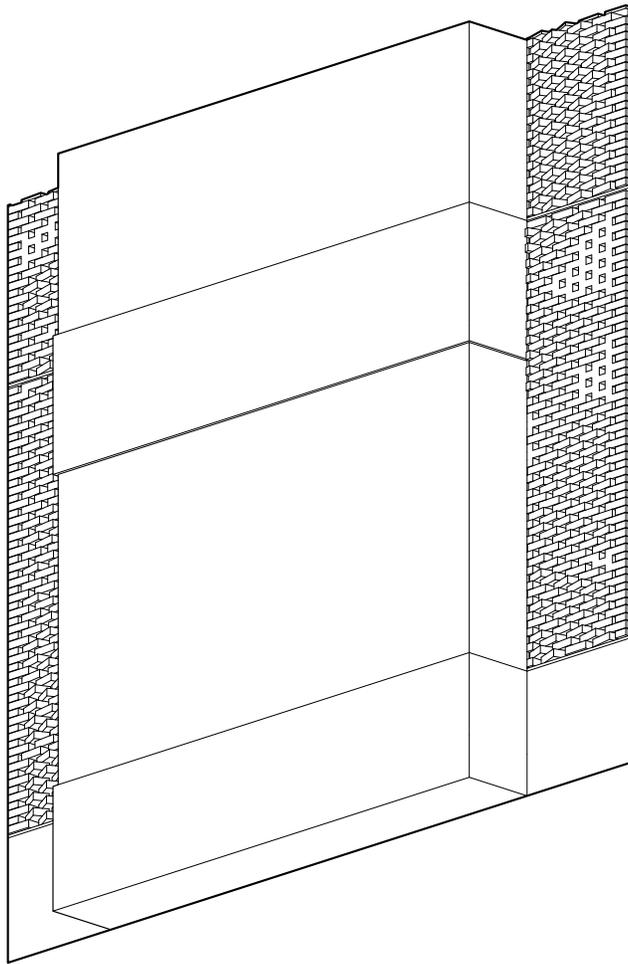
Ornament: Can it be eliminated?



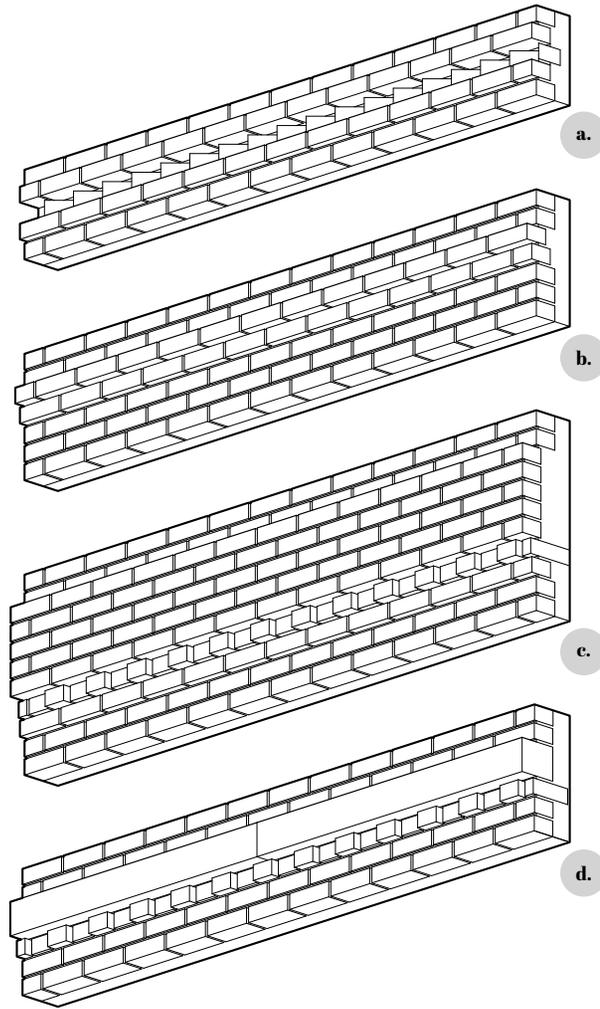
**Figures 12-15:** Contemporary details of cornices and trims.



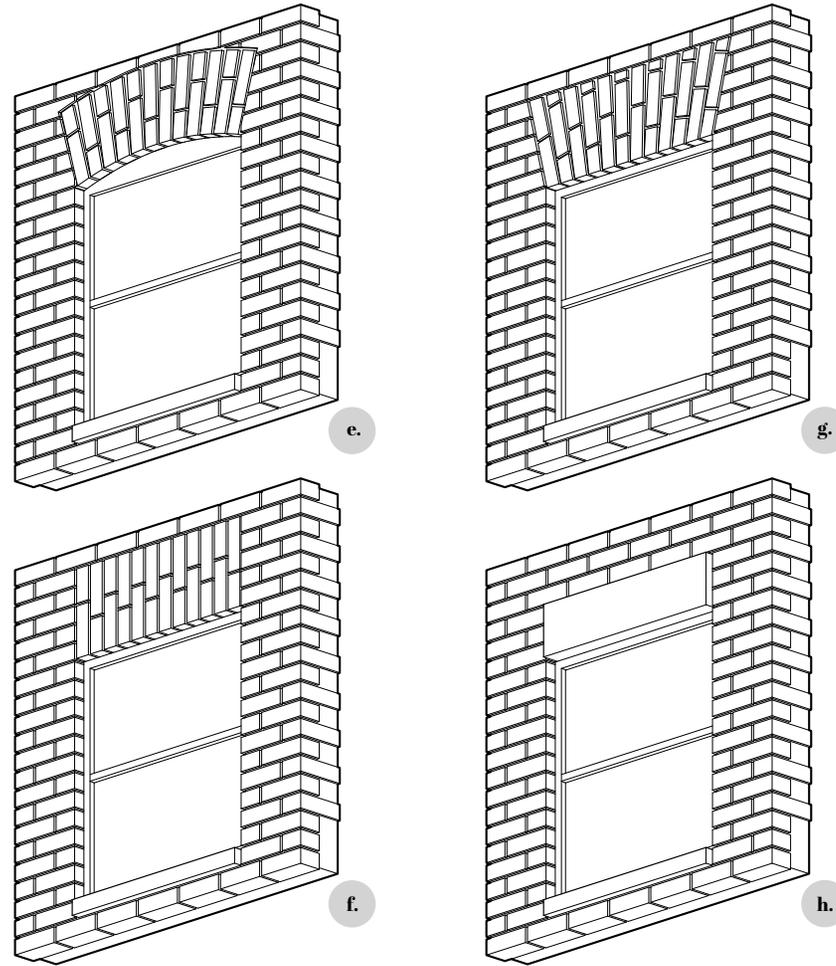
**Figures 16-17:** Examples of traditional bay windows, drawn from examples in Centretown.



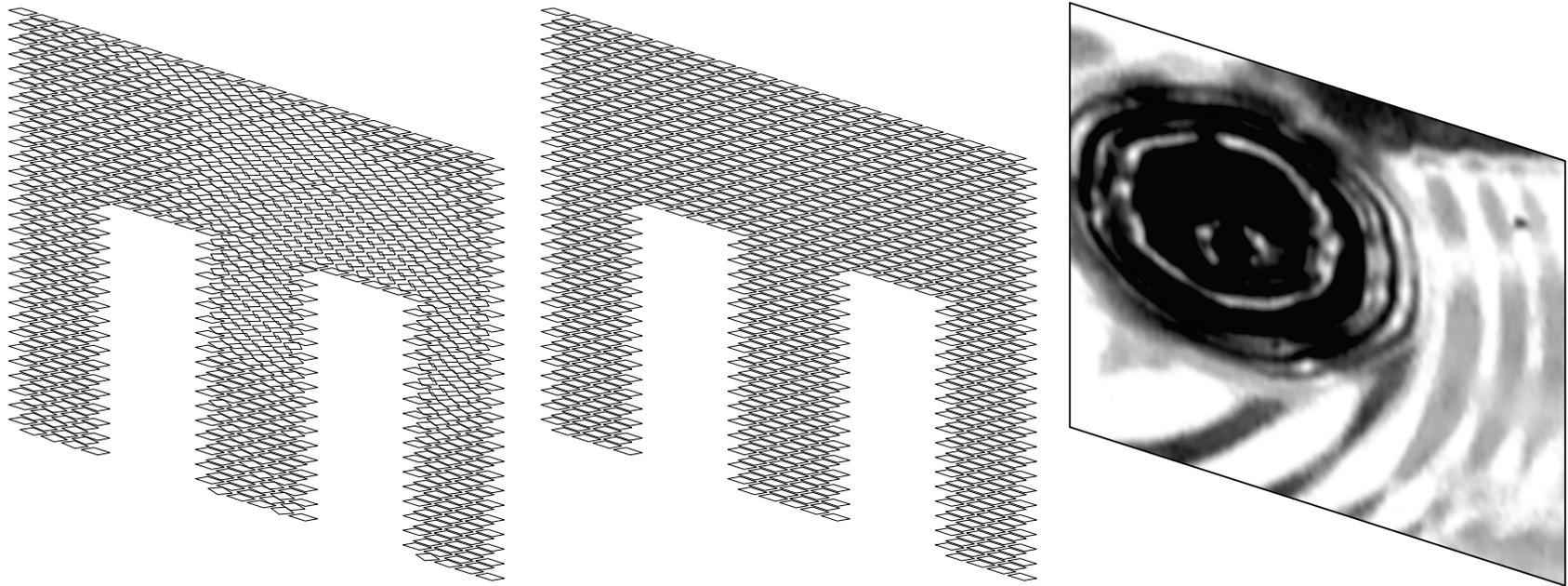
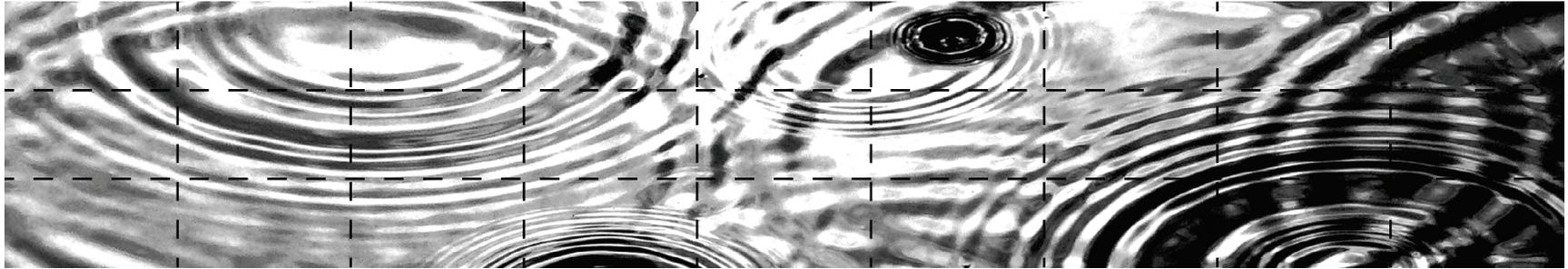
**Figures 18-19 :** Contemporary reimaginings of bay window details.



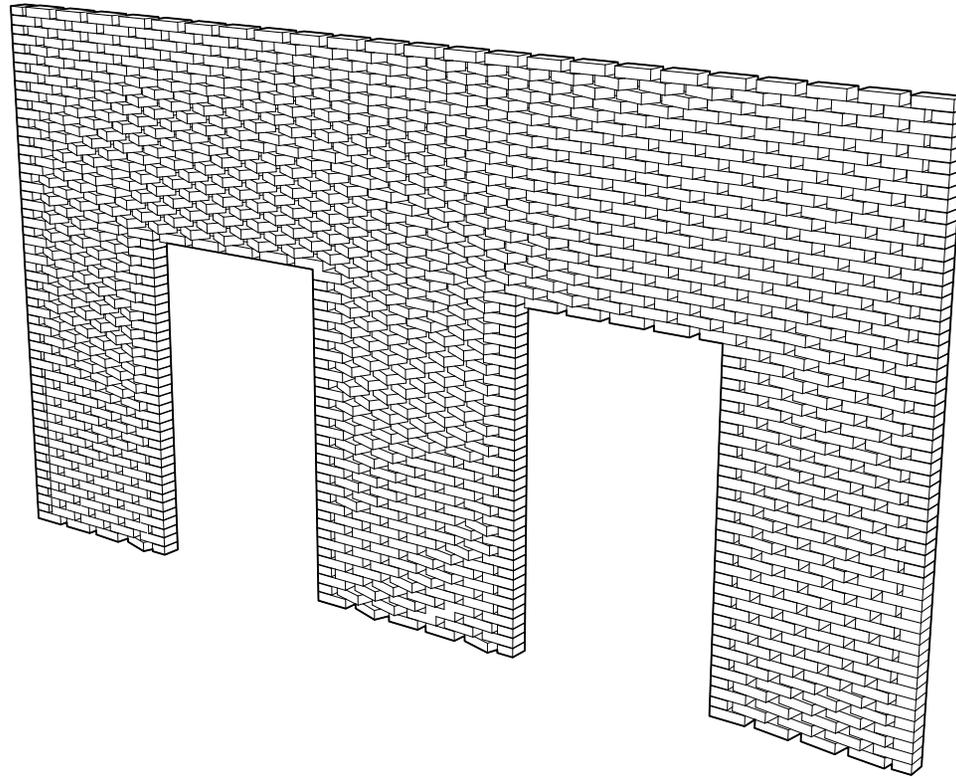
**Figures 20-23:** Brick ornament: **a.** Dogs-tooth, **b.** Corbel course, **c.** Dentilation with a corbel, **d.** Stone block with dentils.



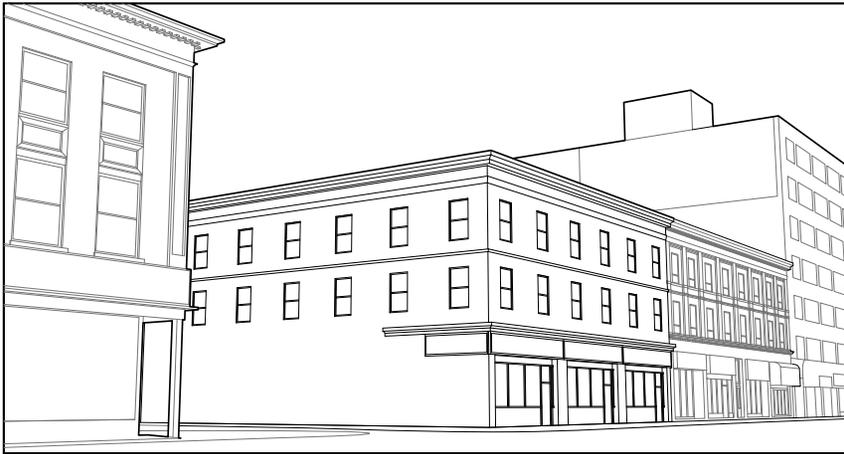
**Figures 24-27:** Window arches: **a.** Segmental arch, **b.** Flat arch, **c.** Lintel with bricks showing a stretcher face, **d.** Stone lintel.



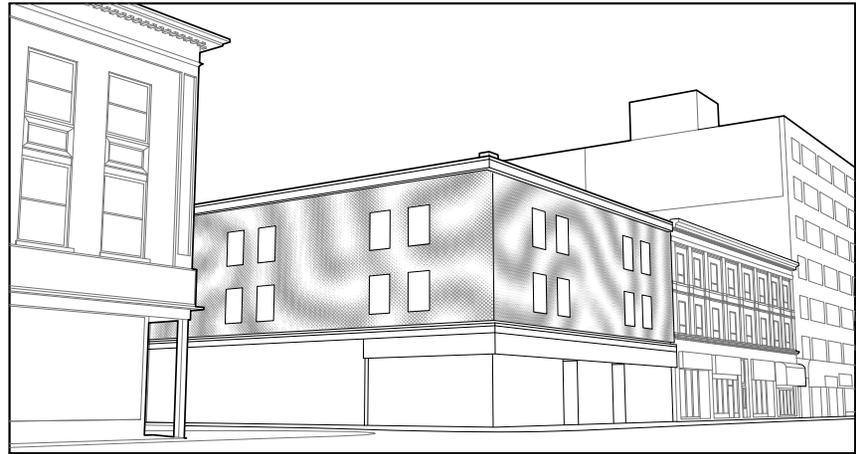
**Figures 28-29:** Diagram of the process from of generating the facade, from base image through brick rotation.



**Figure 30:** Example panel of brick facade.



**Figure 31:** Mock-up of infill on site showing typical heritage style.



**Figure 32** Mock-up of infill showing brick texture and cornice variant.



**Figure 33:** Mock-up of infill showing brick texture and cornice variant.



**Figure 34:** Mock-up of infill showing brick texture and cornice variant.



**Figure 35:** The Centretown Heritage Conservation District in downtown Ottawa, Ontario.

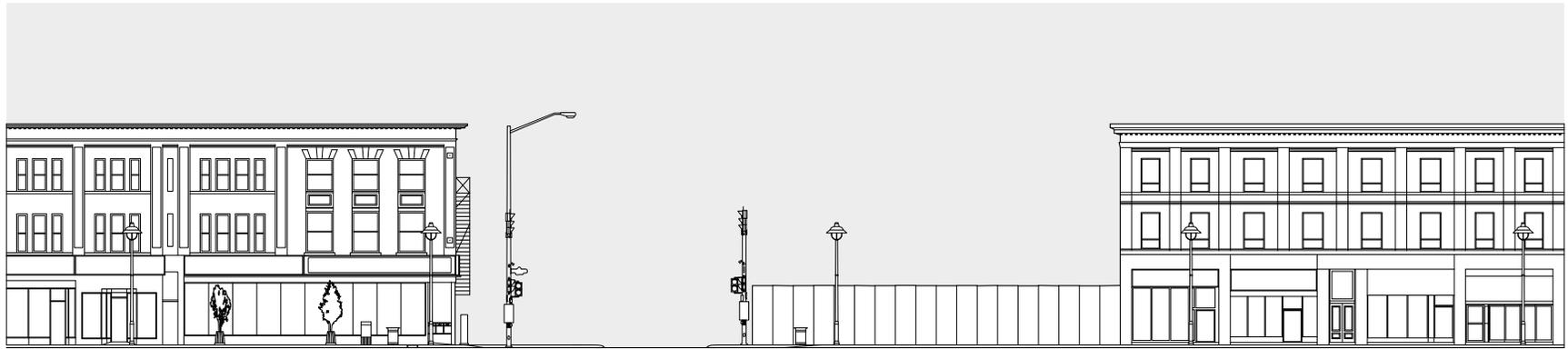
## **Part 3. The Project**

### **1. A Contemporary Imagining of a Heritage Style**

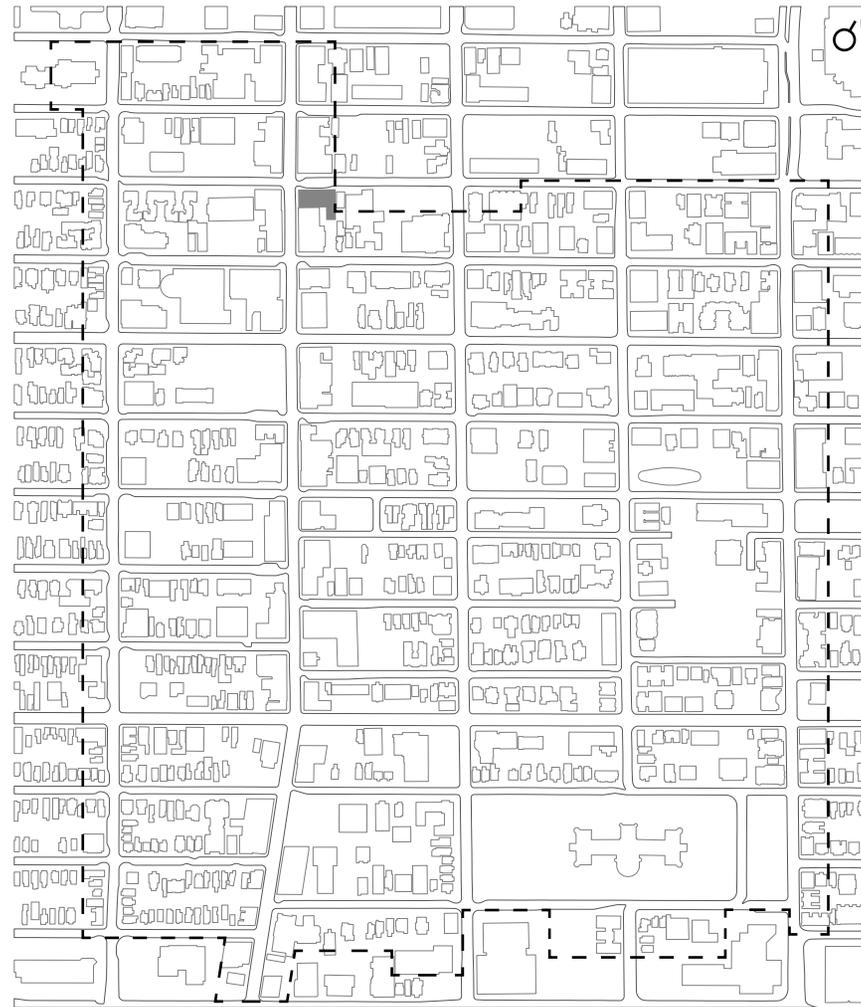
As previously explored, the intent for the project is to straddle the gulf between the qualities of Centretown’s heritage style, as defined by the district study, and contemporary style.

The continued use of brick as well as respect for both the average height parameters for the neighborhood and its explicit residential/commercial divide, all lend the design an immediate familiarity to its heritage peers. Yet on closer inspect one becomes aware of difference. The residential portion of the elevation is no simple brick bond, but rather a tapestry of texture. In this way, the design does away with the historical way of ornate carved or cast details and instead opts instead for ornament through geometric complexity. To further emphasize that change in method, the building’s other qualities reflect a sparse simplicity: Gone are the protruding cornices, window details, busily expressed commercial space, and inconsistently sized signage.

It is the author’s hope that despite the shifts in where both sparse and detailed ornament appear from the heritage style, that the design succeeds in its goal of achieving a sympathetic expression of the neighbourhood’s heritage style.



**Figure 36:** Elevation drawing of site at present day.



- - - Heritage District Boundary    ■ Site @ Bank Street and Lisgar Street

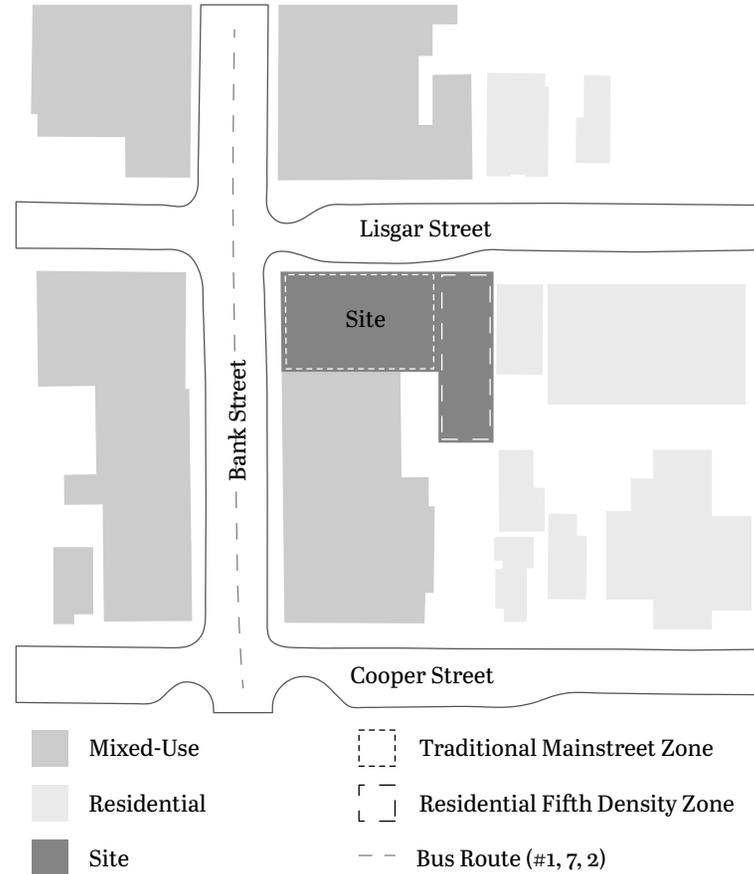
**Figure 37:** The Centretown Heritage Conservation District with site noted.



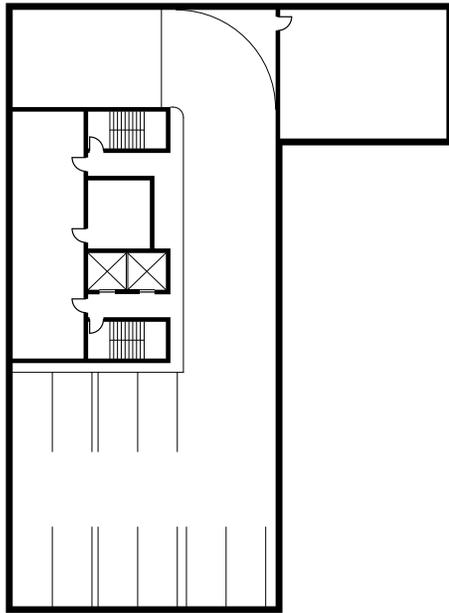
**Figure 38:** Site view facing South-West.



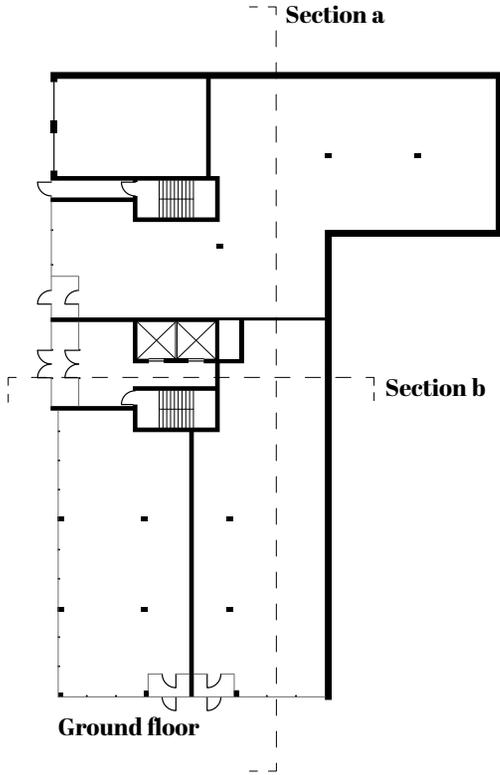
**Figure 39:** Site view facing South-East.



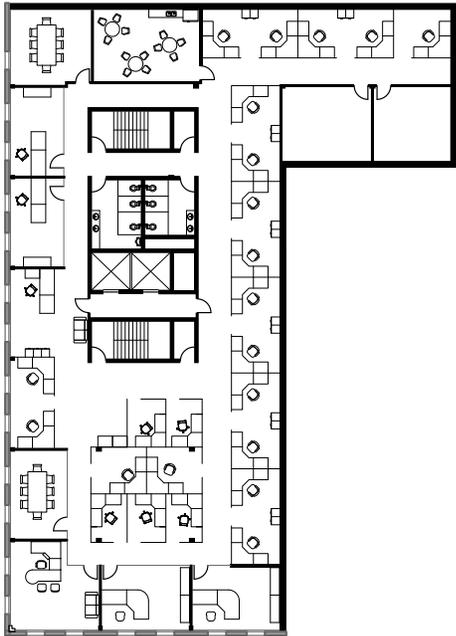
**Figure 40:** Site context.



**Basement levels**

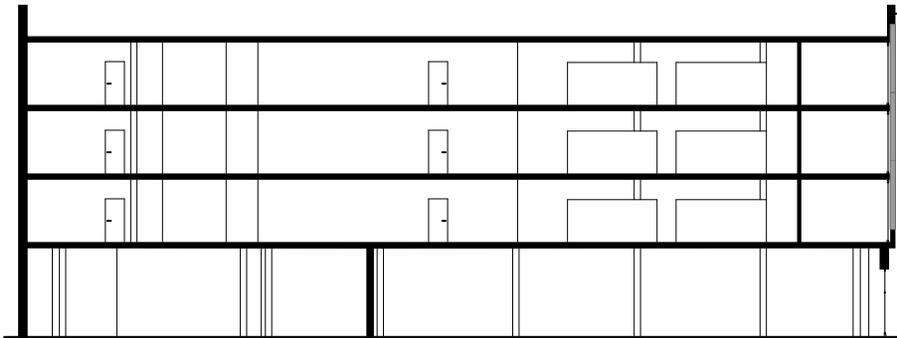


**Ground floor**

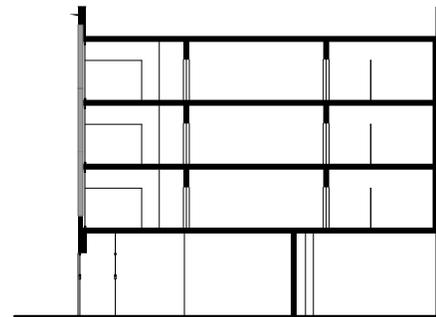


**Floors 1-3**

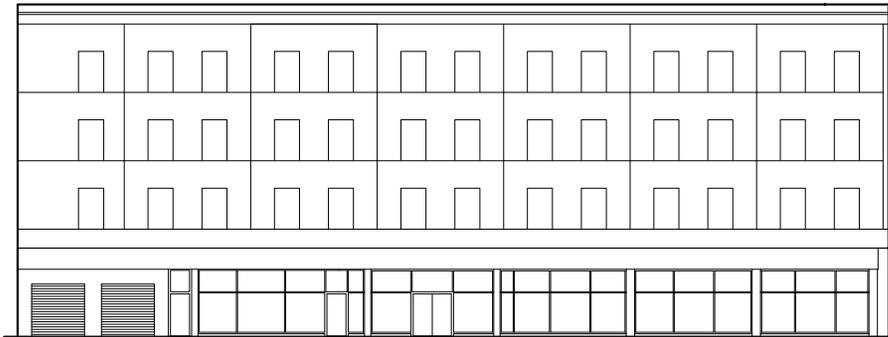
**Figures 41-43: Building plans, 1:200.**



**Figure 44:** Section a.



**Figure 45:** Section b.



**Figure 46:** Elevation, North face / Lisgar Street



**Figure 47:** Elevation, West face / Bank Street



Figure 48: Project render, Bank and Lisgar.



Figure 49: Project render, Bank and Lisgar.



Figure 50: Project render, Lisgar Street.



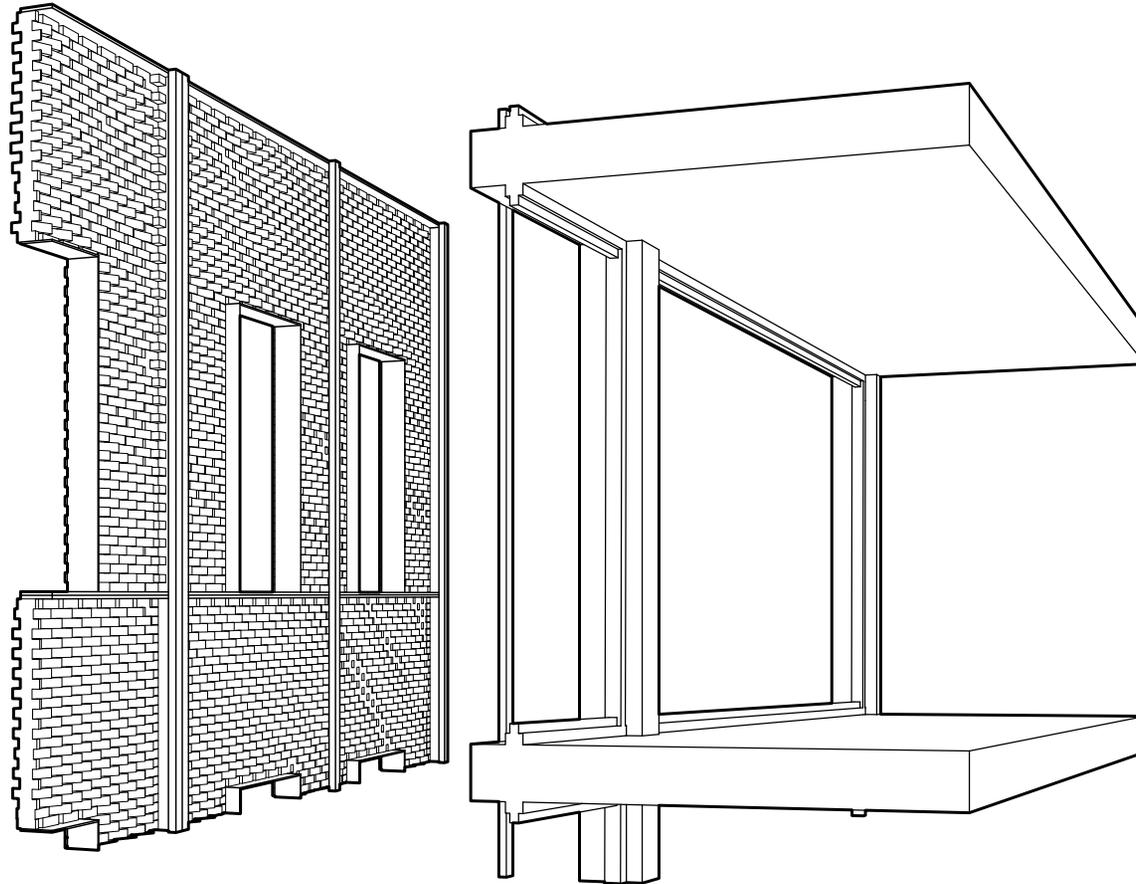
**Figure 51:** Project render, brick detail, Bank Street.



**Figure 52:** Project render, brick detail, Bank and Lisgar.



**Figure 53:** Project render, interior view facing out.



**Figure 54:** Sectional detail of brick facade and wall assembly.

## **2. Reflecting on the Anxiety of Architecture, a Post-Script**

Thus in the manner described above, the engagement of the architect with their work is uncertain. The architect can frame their work in a particular method or theory, intentionally and unintentionally assembling the sensual object of the design before them through their engagement with various other objects, but that entire process still occurs only to them. The ideal is that the two human subjects engaging the same objective real object will experience a sensual object with enough of the same real qualities such that the experience is approximate. When dealing with objects experienced on roughly simple terms, such as the enjoyment of an apple, the achievement of this ideal would seem hopeful. However when approaching objects with increasingly complexity in human culture, shared experience becomes more and more difficult to achieve. Thus the anxious state of uncertain experience described in this thesis is by no means limited to architecture, as the position explored here suggests it affects engagement with all objects. However, in architecture it finds a great potential for realisation. The experience of the apple could be reasonably be speculated to be shared between two observers as one of “red,” “sweet,” and “crisp,” but how could one ever hope to share all of one’s experience when approaching something as complex as Antoni Gaudi’s Sagrada Familia Cathedral in Barcelona, Spain?

This presents a dilemma to the architect, who operates as a specialised professional that produces objects for use by clients and the public. Design produces a sensual object before the architect that, due to its complexity and depth, cannot be presumed to be

experienced in the same fashion by other human subjects. Yet architecture is hardly the only profession dealing in complexity. However, while a scientist, accountant, or lawyer may work with incredibly dense subjects, there is little expectation that the product of their labour be understood to be enjoyed by those without the required understanding to do so. Architects do not enjoy that luxury. Architects deal largely in matters of aesthetic experience in a medium that is generally large, public, and alien to most people. While the architect may point to precedents or to general styles in an attempt to explain some of their work, such an explanation will not address every detail. Some design decisions will fall to the architect's own sense of style or taste. That is presuming that the architect even has the opportunity to explain their work at all! For these reasons, architecture's complexity, alien nature, and public expression, all make it particularly vulnerable to anxiety born of subjective experience. If architecture is so vulnerable to anxiety for the tenuousness nature of its subjective experience, what are architects to do?

This thesis began with the suggestion that this gulf between the experience of the architect and that of others is a source of uncertainty which in turn gives rise to an architecture of anxiety. Through a reading of OOO a different vantage on uncertainty was arrived at. While the logic of the philosophy validated the impossibility of objective experience in the range of subjective experiences encountered by the world's inhabitants, the manner of approaching objects in experience suggested that feelings of uncertainty and fear over how a design would be encountered by others was a flawed perspective. Reducing the architecture's experience in others to doubt and fear denied



**Figure 55:** Frank Gehry in the popular zeitgeist. The Simpsons (Episode no. 349, The Seven-Beer Snitch).

the impossibly vast range of other experiences the object might instill in others. It was, in the terms of OOO, undermining. Instead, the architect must embrace uncertainty and follow their own understanding of the object, allowing the world to react to it on their own terms.

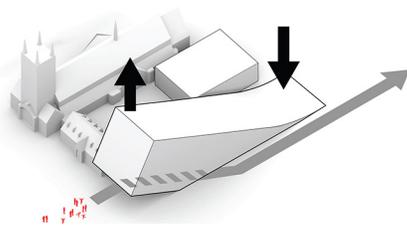
Moving beyond that conclusion, an exploration of the design of a contemporary infill project in the Centretown Heritage Conservation District provided opportunity to test these notions of possible subjective encounters with the architectural object. With the aim of producing something new and yet sympathetic, the project considered existing heritage forms of objects and explored them in new forms, testing to see whether they would continue to maintain the same experience and ensure that the new infill's design achieves its goal. While the author believes the end was achieved, this is just one view of many other possibilities.

The reading of OOO on uncertainty did raise a number of further questions in relation to architecture that were left for consideration here.

Firstly, architects and designers possess extensive training and expertise with the medium of architecture. As well, they have greater expertise on the qualities that architectural objects possess. This enables them proficiency when evaluating their own work. The public, however, holds a wide range of experiences and knowledge of the world. It is unlikely that significant numbers of the public will possess a degree of proficiency to that possessed by architects when evaluating an architectural object. In



**Figure 56:** Concept and render, World Trade Center (PATH station). Santiago Calatrava.



**Figure 57:** Diagram, Musée National des Beaux Arts du Québec proposal. BIG + Fugère Architectes.

that regard, architects would do well to consider that their expertise may be alienating. Consider Secretary of Defense Donald Rumsfeld's statement made during a Department of Defense news briefing in 2002, that "there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns – the ones we don't know we don't know."<sup>31</sup> While Rumsfeld was speaking on the subject of military intelligence, it applies equally well towards thinking about other peoples' engagement with the architectural object.

If architects are in possession of expansive knowledge on the subject of design and this knowledge in turn influences and manifests itself in the projects they create, that knowledge itself has a high possibility of falling outside the scope of what their client or the public might possess. Thus, their knowledge will remain an unknown factor to those viewing the building. In that case, the qualities enshrined in the architect's intended design will remain unknown unknowns to the general public. This is recognizable in the criticism of profoundly esoteric architecture, such as the sardonically common dismissal of the forms of Frank Gehry's work after Bilbao as mere crumpled up paper. The only hope the architect has of remedying the gulf of experience between their own perspective and those of others is communication. The more grand and esoteric the leap an architect makes in a design decision, the greater the efforts they must make in making it relatable to others outside their profession. To this end, architecture as a profession has introduced the use of diagrams, something firms like Bjarke Ingels Group have become synonymous for. Architect Mark Foster Gage criticizes this method

in the language of OOO, suggesting that architects using diagrams, what he dubs “big idea” architecture, undermine the immense complexity of the built object in question down to a trivial form.<sup>32</sup> While that might be the case were the architects to suggest that a building’s qualities be understood exclusively through the limited representation of the diagram or image, to suggest that was their original intention would be a spurious point. Architects using diagrams are not pointing to the images and saying that they are the sum totality of the building and that no other experiences of it are correct. What Gage misses is that the architects are alluding to qualities of the building that they want others to see. Gage uses the example of Santiago Calatrava’s World Trade Center train station, which the architect introduced with a water colour image of a dove with open wings, as emblematic of this flawed explanation of architecture.<sup>33</sup> Yet looking at the design of the station, there is apparent a slight allusion to a bird’s open wings. Calatrava’s painting does not render the rest of the experience of the building moot, but it does illuminate a quality that might otherwise go unnoticed. Without requiring every person in the public to pursue years of architectural education, diagrams and metaphors may be the best first step towards engaging the public and conveying architectural ideas, even if they do put the object in simple terms.

Moving from architecture and communication, in considering the Centretown Heritage Conservation District and its conservation agenda, one curious thought came up. When the heritage study mapped out the district’s buildings, they were evaluated for “heritage value” and subsequently graded on a 4 point scale, ranging from valuable to those of no value. While every demolition in the conservation district requires approval

by the OBHAC, judging by the study's findings, there are quite a few buildings of no conservation value. While the OBHAC and the study have the aim of ensuring the heritage look by ensuring that infill developments are sympathetic to the area's heritage style, what will occur as all of those buildings of no value are progressively updated to contemporary looks? Will the committee's guidance be thorough enough that each and every building built matches the look of the neighbourhood, or is there a risk that instead the intermixing of building styles will gradually erode the heritage look of the neighbourhood? Even with the best actions by the committee, will the citizens of Centretown in eighty years identify their neighbourhood with the then truly ancient heritage buildings or might they associate the look of the neighbourhood with that of those contemporary buildings allowed to infiltrate the neighbourhood?

Lastly, in considering the Centretown Heritage Conservation District Study after a reading of OOO, the very notion of conservation as an end becomes confusing. In researching the conservation district, as already explored, the study produced recommendations on the look of new buildings allowed in the area. Yet this list is composed of a limited expression of the qualities the study mentions in its research. In a sense, what this suggests is that the conservation agenda is conservation of one particular perspective on the past. One can imagine a whole range of other interpretations of conserving the past that would be quite different to the one proposed by the study. Would it not be more poignant to include as accurate an expression of the historical style, down to every possible detail? To take this point to excess, should buildings be barred from using newer lighting and electrical systems? What

of renovations and maintenance, is it possible to ensure the conservation of the past while using new materials and tools? All of that is to say that the range of experiences of what “conservation” is an object is quite large. Consensus may be arrived at on these questions, but it would by no means be the full reality of the object.

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5. Katherine Barber, *The Canadian Oxford Dictionary*, (Toronto: Oxford UP, 1998).
6. Graham Harman, *The Quadruple Object*, (Winchester, U.K.: Zero, 2011) 7.
7. Ibid. 7.
8. Graham Harman, *Tool-Being: Heidegger and the Metaphysics of Objects*, (Chicago: Open Court, 2002) 18.
9. Graham Harman, "A Larger Sense of Beauty," *Dialogica Fantastica*, 1 Feb. 2011, Web, 1 April 2015, <<https://dialogicafantastica.wordpress.com/2011/02/01/a-larger-sense-of-beauty/>>.
10. Graham Harman, *The Quadruple Object*, 29.
11. Ibid. 29.
12. Ibid. 32.
13. Graham Harman, "On the Horror of Phenomenology: Lovecraft and Husserl," *Collapse IV* (2008): 16-17.
14. *The Gods Must Be Crazy*, 20th Century Fox, 1980, Film, 11:30.
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16. Ibid. 24.
17. Graham Harman, "On the Horror of Phenomenology: Lovecraft and Husserl," 16.
18. Ibid. 200.
19. Graham Harman, "A Larger Sense of Beauty."
20. Graham Harman, "The Well-Wrought Broken Hammer: Object-Oriented Literary Criticism," 200.
21. Graham Harman, "The Road to Objects," *Continent* 3.1 (2011), Web, 17 Mar. 2015, 179.
22. Graham Harman, "The Well-Wrought Broken Hammer: Object-Oriented Literary Criticism," 202.
23. Julian Smith & Associates, *Centretown Heritage Conservation District Study*, (City of Ottawa, Winter 1996-199) 108.
24. Ibid. 1.
25. City of Ottawa, by-law 2008-250, *Heritage Overlay s. 60*.
26. Julian Smith & Associates, *Centretown Heritage Conservation District Study*, 109.
27. Ibid. 110.
28. Ibid. 114.
29. Ibid. 141.
31. Ibid. 141.
31. Donald Rumsfeld, General Richard Myers, *Department of Defense News Briefing - Secretary Rumsfeld and Gen. Myers*, 12 Feb. 2012, Web, 18 July 2015.
32. Mark Foster Gage, "Killing Simplicity: Object-Oriented Philosophy in Architecture," *Log* 33 (2015): 100.
33. Ibid. 101.

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