layers of old and new

the adaptive reuse of mid-20th century modern architecture

Damien Kitto
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The adaptive reuse of mid-20th century modern architecture

By

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ABSTRACT

This research portfolio explores the role of adaptive reuse to support the preservation of mid-century modern architecture and facilitate new needs. Technological transformations of the 21st century have changed needs, making certain building typologies obsolete. Post offices are one impacted building typology currently declining. This project uses a mid-20th century post office in suburban Wellington to explore the creative opportunities presented by the adaptive reuse of such structures. Key authors argue that a critical synergy and layering of the old and new can create a dialogue in the architecture which is arguably more innovative and regenerative than any construction that disregards the existing. In many cases, continuing use of the old buildings is also a more sustainable approach. The project also contributes to the challenges and ongoing development of conservation approaches to modern heritage. In this project, through analysis of the context and case studies an adaptive reuse framework specific to modern architecture heritage is developed to build a strategy for reuse. The framework is then applied to the chosen mid-20th century post office to aid the design of the buildings reuse. This forms an argument that the dialogue developed between old and new elements transform vacant modern architecture to living heritage ensuring continual use.

Keywords: adaptive reuse, modern architecture, building reuse, heritage preservation, living heritage, post-war modernism
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1.1 INTRODUCTION

“Over the last generation, attitudes towards the existing building have radically changed. Collective memory and the desire for a sense of continuity with the past have meant the built environment is now expected to have the quality of adaptability through time, problems and opportunities” (Brooker & Stone, 2018, p. 1)

In the last 50 years the advancements of technology, particularly the digital realm has transformed many aspects of human lives, resulting in a decline in the need for a number of physical amenities and social infrastructure in our communities. The New Zealand post office is one such institution which has become susceptible to this decline. Left behind is a legacy of vacant buildings whose use is no longer required. This portfolio explores what to do with this infrastructure.

Many pieces of vacant architecture are significant architecturally, historically, socially or culturally therefore have inherent heritage value.

In the past for a heritage building to be seen as worthy of preservation they needed to be in an unspoilt state (Allan, 2007, 16). Consequently this approach left heritage architecture in a static state, remembered for a single time period (Allan, 2007, p. 16-17; Upton, 1993, p.14). However, in recent years the approach has shifted to heritage architecture being understood as dynamic (Merlino, 2014, p.76). The intention of this contemporary approach is for buildings to become living heritage, revising the existing to ensure longevity. Adaptive reuse, the process of
adapting an existing building for new uses (Bullen & Love, 2011b, p. 412; Brooker & Stone, 2004, p. 11), is introduced as a design process that can lead this shift in heritage preservation.

The adaptive reuse design approach becomes important in ensuring respect to the heritage values of the existing infrastructure while simultaneously integrating new architectural elements required by the reprogramming of the building (Bullen & Love, 2011b, p. 413). This approach believes that working for the existing qualities of the building and context can best support the new use of the building (Brooker & Stone, 2004, p. 14). A reuse scheme dictated by a programme that is ill informed and unsuitable could be detrimental to the ongoing future of the building (Brooker & Stone, 2004, p. 67). Therefore critical consideration is necessary and leads to a dialogue developing between the old and new, respectful of history while allowing the building live on dynamically through new uses.
1.1.1 THE SITE

The New Zealand Post Office and supporting infrastructure was seen as an institution currently experiencing a decline. Their legacy of mid-20th century post offices sitting neglected and vacant was evidence of this transformation (figure 1.1). The importance of modernism in New Zealand’s architectural history (see section 2.2.2) made the post office one of the most suitable building typologies for an investigation on the contemporary approach to preservation.

The former Naenae Post Office was selected as the site for the research investigation (figure 1.3). It is located in Hillary Court, the main pedestrian mall of Naenae, Lower Hutt (figure 1.4). The site was chosen because of its recent decline and Naenae’s important role in New Zealand modernism. The post office is the centre piece of Hillary Court situated on the prominent corner with the clock tower the master piece of the building, it has become an icon for the suburb (see section 2.3).

The short history of Naenae’s post office provides an interesting challenge to the role of heritage preservation. This is relevant because even experts note that a proportion of contemporary population and decision makers still remain unconvinced of the relevance of preserving modern architecture (Brosnon & Jester, 1997, p. 4; Purdon, 2017, p. 29). Modern architecture conservation group DOCOMOMO lead the way in working towards shifting this perception (Guillet, 1996, p. 152)(see section 2.2). The post office typology is worthy of preserving because they were some of the pioneering pieces of modern architecture, particularly Otto Wagners Imperial
Post Savings Bank in Vienna (Livesey, 1983, p. 15) and now the profession is faced with a programme associated with modernism declining itself. An architectural style that itself disengaged historicism is now requiring a new approach to heritage preservation in order to maintain the legacy of modernism.

Figure 1.3: The Former Naenae Post Office as existing. March 2019.
Figure 1.4: Site plan of Hillary Court and the former Naenae Post Office.

1. Naenae train station
2. Naenae library
3. Naenae pool (closed)
4. Community hall (closed)
1.1.2 RESEARCH QUESTION

This research portfolio asks:

- How can adaptive reuse support the preservation of mid-20th century modern architecture and facilitate new uses?

1.1.3 AIMS

- To contribute to the development of strategies for responding to the adaptive reuse of modern heritage in New Zealand suburban context

1.1.4 OBJECTIVES

- Develop a dialogue between old and new elements to enhance the notion of living heritage.
- Use design as a method to explore the opportunities of how a new programme occupies an existing fabric.
- Develop and test a design framework for the adaptive reuse of modern heritage architecture in a New Zealand suburban context.
1.1.5 DESIGN LED METHODOLOGY

This project uses a series of design led research methods which in their nature explore architectural issues and involve a constant interchange between history, theory and design. The early stages of the research was led by history and theory to build the context for subsequent design explorations. However, as a way to tie the early research stages back to design the history and theory was reflected upon through design visualisations, (see sections 2.2.6; 2.2.9 & 2.2.12).

The methodology was heavily built upon the research method proposed by key authors Graeme Brooker and Sally Stone (2004, 2018). Their methodology, which is paralleled in this research project, looks to build an analysis of the specific conditions relevant to the existing situation, to then use this as a way of informing the design strategy taken to the reuse of an existing building, finally the strategy is then applied to the design of the reuse through various design tactics (Brooker & Stone, 2004, pp. 14-15). “The premise is that to establish a satisfactory symbiotic association between the new and the old, the factors influencing the condition of the existing need to be comprehended and an appreciation of why a particular approach was taken has to be established” (Brooker & Stone, 2004, p. 13). It was believed that this design approach would best unpack the design intentions of the research because it follows a pragmatic design process. Therefore unpacking practical methods to thinking about building reuse design and how to approach working with existing situations. As a result of this approach the research sets itself in this 3 step method.
The methodology of this research portfolio (figure 1.5) has analysed the context relating to the research agenda, strategized a design approach through a development of an adaptive reuse design framework and then applied the framework, through design, to the Naenae Post Office to explore the reuse of modern heritage.

In the early stages, access to key historical documents, photography and drawings was crucial to building the analysis of the existing context. For this, research was conducted at the National Library of New Zealand and Archives New Zealand.

The use of precedents has been particularly important in the development of an adaptive reuse design framework because they provide practical examples of applications of building reuse strategies. A case study provides “grounded-in-lived reality” exemplary outcomes” (Sugden, 2018, p. 44) (Robiglio, 2017; Brooker & Stone 2004, 2018; Jager, 2010).

Design methods of collage, sketching and CAD modelling where used in this investigation to explore and reflect upon multiple avenues of this 3 part design methodology.
Figure 1.5: Design research methodology diagram.
1.2 CONCLUSION – THE ROLE OF DESIGN

The research agenda brings together two ideas, one of the heritage preservation of modernist architecture and the other the adaptive reuse of vacant infrastructure. The application to a mid-20th century post office in Naenae tied the two ideas together through iteratively exploring design ideas for the reuse of a vacant modern building. The introduction sets the basis for the research agenda. Design is embraced in the portfolio as a method to critique modern heritage preservation by identifying adaptive reuse as a design process that allows buildings to live on into the future. This design research methodology highlights the complexities involved in a research project, following practical methods of design thinking in order to unpack the best possible solutions to this architectural problem.
CHAPTER TWO: CONTEXT

Chapter Two is separated into three parts breaking down three key areas of the research context.

1. Heritage preservation and adaptive reuse
2. Modern architecture
3. Building typology and site

This chapter will enable a thorough understanding of the architectural problem, setting a research position for the reuse of modern architecture. This three part study formed the theoretical understanding that aided the design research explorations in chapters three and four.

Figure 2.1: Former Naenae Post Office Clock Tower in its existing state.
PART ONE

2.1 HERITAGE PRESERVATION & ADAPTIVE REUSE
2.1 HERITAGE PRESERVATION AND ADAPTIVE REUSE

2.1.1 INTRODUCTION

Chapter two part one frames the current thinking and practice in heritage preservation and adaptive reuse, and contributes to setting a clear research agenda for this research portfolio.

2.1.2 MODERN VS CONTEMPORARY HERITAGE PRESERVATION – ADAPTIVE REUSE

Key author in the field, Katherine Rodgers Merlino, is critical of the preservation theorists, such as Alois Riegl, of the late 19th early 20th century, arguing that their theories saw architecture as a static entity (figure 2.2). The views of modern preservation theorists has resulted in a “tradition of valuing the exceptional over the ordinary” (Merlino, 2014, p. 75). During the period when architectural significance was the main criteria for assessing heritage value, vernacular buildings were commonly not preserved because they did not have a significance in terms of architectural styles which could be monumentalised (Merlino, 2014, p. 76; Brosnon & Jester, 1997, p. 5). This apparent lack of significance distanced vernacular architecture from the preservationist’s agenda. Consequently this thinking was formative in much of the heritage polices today.

Conversely, Merlino describes the importance to shift a higher importance on the evolving heritage of the vernacular as the approach which values meaning in artefacts (2014, p. 76). Scholar and art historian Dell Upton supports Merlino in this arguing that artefacts, including...
architecture, are not singular representations of their designers' and makers' intentions, because people experience and interact with artefacts in different ways (1993, p. 13). Here Merlino and Upton are introducing the idea of recognising buildings as living heritage, rebelling against the desire to retain heritage architecture in a static state. This highlights a clear discrepancy between contemporary and traditional modern preservation theory.

Similarly, David Lowenthal observed that “we must acknowledge that heritage is a living and flexible body that needs continuous revision and addition to remain healthy and vibrant” (2011). As such adaptive reuse of our existing building stock can allow for heritage to remain current whilst engaging with architecture from a 21st century viewpoint. Adaptive reuse brings together the new and the old in critical ways revising the architecture that is respectful of the past and simultaneously ensuring an ongoing future – or “revision is essential, and static preservation folly” (Lowenthal & Jenkins, 2011, p. 36).

Adaptive reuse is described in the literature as a process of altering an existing site, building or infrastructure that are vacant, disused or ineffective, into a revitalised architecture that can support new uses (Bullen and Love, 2009, 2011a; Bullen, 2007; Brooker & Stone, 2004, 2018; Robiglio, 2017). The programme is the most obvious change that occurs to the building, in doing this the redesign requires a critical adaption to the building itself to suit the needs of the new use (Brooker and Stone, 2004; Bullen & Love, 2011). Through this process a critical reflection upon the existing building has to occur at a range
of possible levels from simple restoration of the existing fabric to major spatial reconfigurations or extensions to the existing building. However, through either a subtle or drastic approach the process of adaption develops dialogues between the old and new which ultimately evolves the architecture to living heritage (Jager, 2010, pp. 8-9; Robiglio, 2017, p. 182; Bullen & Love, 2011b, p. 413) (figure 2.3).

For architectural heritage to be seen as living our role is to re-evaluate its dynamic nature and to see that the living force of the past is continually remade (Lowenthal & Jenkins, 2011, p. 36). In fact, from this position the only true stewardship is that which adds his own fresh stamp (Lowenthal & Jenkins, 2011, p. 36), allowing the heritage to evolve. This also means that we are learning from our predecessors and adapting. When this notion is applied to architecture it conforms because buildings are dynamic bodies that rely on change, use and time to survive, an idea which modern preservation failed to address. They were afraid the new would be less desirable than the existing (Merlino, 2014, p. 83).

Similarly, observing architecture as dynamic Merlino argues that it positions “buildings in another way: as repositories of energy worth preserving for their environmental value in addition to their cultural significance” (Merlino, 2014, p. 72). Not only does this position architectural preservation away from monumentalizing architecture but aligns heritage reuse as an agent of the sustainability movement. As such we are in a period where critical re design of architecture can actually preserve the building for generations to come, whilst offsetting environmental benefits.
2.1.3 EXISTING INFRASTRUCTURE

STAKEHOLDERS

It has been identified that there is an issue with scepticism, by stakeholders, surrounding adaptive reuse, primarily due to the costs involved (Bullen & Love, 2010, 2011a). However Bullen and Love argue that “adaptive reuse has been identified as a process that can significantly improve the financial, environmental and social performance of existing built assets” (2011c, 33). This argument identifies that there is value in the existing building stock, using adaptive reuse as a method to revise environmental failings while occupying it with a programme relevant to current needs. The work done by key authors in this field towards decision making around built assets is playing a strong role in positively contributing to sustainability (Yung & Chan, 2012, p. 360; Bullen & Love, 2011b).

2.1.4 OLD AND NEW DIALOGUE

There is a clear focus in adaptive reuse literature on the design professionals working with existing infrastructure, and discusses frameworks and approaches important for the process of adaptive reuse, with overall conclusions that this process ensures a rich dialogue between the old and new (Jager, 2010; Brooker & Stone, 2004, 2018; Robiglio, 2017).

Frank Peter Jager argues that when an existing building is reused the designers decision to bring the old elements in dialogue with the new, the resulting new building will profit from the fusion of historical traces with a modernised use (2010, 9). Contemporary additions to existing buildings therefore enhance the historical traces whilst
endowing modernised function. The hybridity that occurs in this process adds further layers to the heritage narrative of the building. Matteto Robiglio supports the idea raised by Jager, however he builds upon this arguing that the coming together of new and old has always occurred in humanity. “For the most of their time on this Earth, humans have produced most of their space by adapting existing [artefacts] to emerging needs and reused old stuff for new purposes” (Robiglio, 2017, p. 182). Here the process of adaptive reuse is acknowledging the fundamentals of architecture by developing the rich dialogue between new and old which is critiquing as well as celebrating the previous authors of the building.

Similarly, Graeme Brooker and Sally Stone argue how a coming together of the old and new “produce[s] a multi-layered complexity impossible to replicate in a new building” (2004, 9) which can have important cultural value aiding revitalisation of urban areas (2004, 12). Here Brooker and Stone are acknowledging the importance of adaptive reuse as a process that builds layers within the architecture. As such the designer’s role is crucial in bringing new and old elements together in order to revitalise dilapidated architecture. To achieve this Brooker and Stone develop a framework which breaks the process of adaptive reuse into three components - analysis, strategy and tactics - as previously discussed in section 1.15. Their approach, which is also shared by Jager (2010) in his research, explores the different levels of intimacy between the old and new architectural elements (Brooker and Stone, 2004, 14). Brooker and Stone classify this relationship into three different levels – intervention, insertion and installation (figure
2.4), likewise Jager defines transformation, conversion and addition as levels of intimacy.

When this process is applied to heritage architecture Merlino sees design professionals as key problem solvers who can create new sustainable architecture out of the existing infrastructure (2014, p. 83). To the designer the existing fabric becomes the constraint that requires critical design decisions to transform the architecture to a state suitable for present needs. The layering of old and new approach ensures the architecture is evolving with the times; a process which preservation theorists acknowledge is inevitable to occur again (Upton, 1993; Merlino, 2014; Jager, 2010). Thus highlighting the need to view architecture as dynamic.

2.1.5 SECTION CONCLUSION

The undertaken literature review into heritage preservation and adaptive reuse theories highlighted a consistent set of views in the field for an ultimate goal to transform vacant existing architecture into living heritage. Ultimately the sustainable, aesthetic, social and economic benefits associated with adaptive reuse of existing infrastructure positions the field at the forefront of innovate architectural design of today. Figure 2.5 visualises these findings exploring the range of adaptive reuse architecture and anticipates a research agenda for this project. The next section of this chapter refines the literature situating it towards the field of modern architecture to develop a strong basis for design research explorations of living heritage, relevant to the research agenda of this project.
Figure 2.5: This brainstorming exercise visualised the current practice of architecture as living heritage.

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PART TWO

2.2 MODERN ARCHITECTURE
2.2 MODERN ARCHITECTURE

The initial literature review, section 2.1, was refined further in order to draw in the research scope. This required three specific literature fields to be explored that related to the notion of living heritage through the reuse of mid-century modernist architecture, specifically the former Naenae Post Office the site of this investigation. The three literature fields explored through this stage of the research were:

1. The New Zealand modern
2. Organisation and proportion in modern architecture
3. Adaptive reuse of modern architecture.

Each of these fields were reviewed relevant to the research agenda and then design was used as a way to respond to the literature and tie the ideas from the literature with the context of the design project.
THE NEW ZEALAND MODERN

2.2.1 IMPORTANCE OF THE EMIGRE ARCHITECTS

World War Two [WW2] saw a number of European architects escape Nazi Germany, New Zealand was one of the countries that provide a safe refuge (Sarnitz & Ottillinger, 2004, p. 135; Tyler, 1996 p.33; Beaglehole, 1996, p.29). The immigrant architects of this period who included Ernst Plischke, Fredrick Newman and Henry Kulka epitomised the extended connections of modern architecture in New Zealand. They brought a range of architectural interpretations to the modern trends. For example “Plischke and Kulka attempted to continue the manner of their rather different pre-war European work in a new context [whereas] … Newman embraced the challenge of designing for the infrastructure of a rapidly
developing country” (Clark & Walker, 2000, p. 55). The range of practicing professionals in New Zealand during the post-WW2 period highlights the difficulty in determining the distinct roots of the New Zealand modern. As a result this may influence why much of New Zealand’s modern architecture is overlooked as being significant, though this is the exact reason why it should be. The contrasting architecture of this period did however develop a critical discourse which has shaped the New Zealand architecture of today. For the country was opened up to architecture of international proportions, resulting in architecture built directly in the European modernist style as well as regional adaptions suited to the New Zealand conditions (Gatley, 2008, p.4; Clark & Walker, 2000, p.38) (figure 2.6).

Both of these approaches saw modernist architecture as intending to help make the world a better place. Julia Gatley argued that this idea highlighted the “relationship between modern architecture and progressive political and social ideals” (2008, 2). As such this era of modernism reformed not only New Zealand’s architectural fabric, but social and cultural thought in the country. The impact of WW2 forcing some architects away from Europe towards New Zealand directly lead to two strands of modernism dictating New Zealand architecture during the middle of the 20th century. Architects from both of these realms worked on the development of Naenae, Ernst Plischke – European modernism, and Gordon Wilson – regional adaptation (Plischke, 1989, pp. 280-281). This makes the Naenae Post Office an important building in the history of New Zealand modernism. Section 2.3 highlights evidence of both approaches in the post office.
2.2.2 MODERNISM AS THE NEW
ZEALAND VERNACULAR. – REGIONAL
APPROACH

Nikolaus Pevsner acknowledged that the regional
versions of European modernism was clearly
evident and successful in New Zealand’s built
environment at the time of his visit in the 1950’s
(1961a). He writes, “[m]odern clichés have been
absorbed naturally and vulgarized with disarming
success” (1961b, p. 15). The principles of
European modernism were derived with less
complexity in order to suit the nation. This lead
to modernism becoming the new vernacular style
of New Zealand because its newness suited
societies thinking of the time, while its flexibility
to regional derivatives was attractive, particularly
for public infrastructure (Gatley, 2008; Clark &
Walker, 2000).

To support this notion, Justine Clark and Paul
Walker recount the conversation between Pevsner
and William Toomath; “[w]hat Pevsner called
crude, Toomath described as straightforward. It
was, he argued, an appropriate practice for New
Zealand architecture” (Clark & Walker, 2000, p.
35). Pevsner’s criticism conveyed the directness
approach to design as the defining characteristic
of the New Zealand version (Clark & Walker, 2000,
p. 36). The newness of the nation meant there
was not a concern with ornamentation such as the
cornice, unlike countries with long architectural
histories, but a pioneer attitude concerned with
serving the user (Pevsner, 1961b, p.16). The
approach was itself vernacular concerned with
finding New Zealand’s own identity from the
resources available. This approach translated to
the public architecture that appeared during the
middle of the 20th century (Gatley, 2008, 1).
The qualities of the early settlers institutional architecture was often ignored by the moderns because the settlers had “deployed materials in ways that were antipathetical to mid century modernists (timber emulating stone)” (Clark & Walker, 2000, p. 67). The settlers had attempted to emulate the public infrastructure of Europe, consequently the translation to New Zealand conditions differed significantly to that of Europe. The domestic buildings of the early settlers typified more closely to the straightforwardness, connection to site and economical construction that the modernists achieved in their new architecture (figure 2.7). What modernism managed to do was to achieve clear identities between the domestic and public buildings though grounded by the same modern thinking (figure 2.8).

The social ramifications of modernism also strengthened the resulting public infrastructure. In the context of the mid-century Ministry of Works architecture Clark and Walker argue that “[t]hese government projects were often concerned with a more expansive idea of nation building and with representing New Zealand as technologically modern” (2000, 60). The architecture commissioned by the government was designed not to be just pragmatic but as architectural opportunities for reform. Therefore New Zealand found an identity for its public infrastructure that projected a unified nation. Typifying the significance of this architectural identity, the middle of the 20th century saw the NZIA Gold award awarded to a public building for the first time in the organisations history (Lloyd-Jenkins, in Clark and Walker, 200, 61).
2.2.3 ERNST PLISCHKE & EUROPEAN MODERNISM – APPROACH TWO

Austrian immigrant and architect Ernst Plischke (figure 2.9) was seen as perhaps New Zealand’s greatest proponent of European modernism. Born, trained and practiced in Europe, Plischke escaped Nazi Germany along with his Jewish wife Anna Lang and her son in May 1939, seeking refuge in New Zealand (Tyler, 1996, 33). Once in New Zealand his work for the Ministry of Works as well as his private practice with Cedric Firth made Plischke a household name in the New Zealand architectural scene (Sarnitz & Ottillinger, 2004, p. 158). He retained his European modernist thinking in the architecture he designed in New Zealand. This architecture in direct opposition of New Zealand modernist’s vernacular approaches (Tyler, 1996, p. 34). This ideology of Plischke’s was seen as coming from his European background, Pevsner identifying “this loving pursuit of the detail” (1961, p. 44) was likely from his training in Vienna. Furthermore in his architecture he showed the universality of European modernist architecture (Clark & Walker, 2000, p. 40). Plischke therefore thought that European modernist architecture was applicable right throughout the world and climate and location should not impact the ability to achieve it. Other immigrants such as Henry Kulka followed this same approach as Plischke (Sarnitz & Ottillinger, 2004, p. 137).

2.2.4 PLISCHKES’ INFLUENCE TOWARDS NEW ZEALAND’S ARCHITECTURAL SCENE

Plischke worked for the Ministry of Works from
1941-1947, during this time Plischke both practiced and published under the direction of the government. “His activity in the Department of Housing Construction, the newly established housing ministry, helped considerably to realise modern architecture in an institutional level” (Sarnitz & Ottillinger, 2004, p. 136). Through his work for the government Plischke's learnings from Europe filtered through the channels of the department introducing this opposition to regionalism. This effect was felt when in 1947 the Prime Minister asked Plischke to publish a book about housing, continuing on from an early publication of Plischke's in 1943 titled About Houses (Plischke, 1989, p. 299; Sarnitz & Ottillinger, 2004, pp. 155-156). This book, titled ‘Design and Living’ discussed a modern approach to living, housing and urban planning (Plischke, 1947) (figure 2.10). This converted many to his views of modernism. Linda Tyler discusses that his urban planning designs, which were not defined by regional concerns, separated him from the vernacular modernists (Tyler, 1996, p. 38). Plischke's work in designing numerous urban schemes for the department at the end of WW2, including Naenae, informed his strong influence on the industry both through discourse and architecture.

2.2.5 HOW DID PLISCHKE’S APPROACH REMAIN INFLUENTIAL IN NEW ZEALAND?

The European modernism approach during the post-WW2 period in New Zealand generally played second place to regionalism. Sarnitz and Ottillinger discuss that “[b]oth Plischke and Kulka had to adapt their high European modernism to
the local conditions of their adopted country; both suffered frustration in the process” (2004, p. 137). Never did the lineage to the International style falter in their designs, enforcing the belief by Plischke of universality in modernism (Sarnitz & Ottlinger, 2004, p. 139; Clark & Walker, 2000, p. 40). Both overcame this and managed to produce some phenomenal modernist architecture in New Zealand. Plischke’s include Massey House, Sutch House, Kahn House and Khandallah Community Centre (figure 2.11). Although some climatic design responses were required, in general these buildings could have as easily been one of Plischke’s Vienna designs (Tyler, 1996, p. 37). If it wasn’t for the European immigrants influence, especially from Plischke, it is hard to imagine if European modernism would ever have taken a strong position in New Zealand.

Figure 2.11: Examples of Plischke’s buildings in New Zealand. Massey House, Sutch House, Kahn House, Khandallah Community Centre
Figure 2.12: Sketching of the existing condition of the western facade.
Figure 2.13: Sketching of the existing condition of the southern facade.
2.2.6 DESIGN RESPONSE TO NEW ZEALAND MODERN

Sketching was used to speculate on the original design intention. It was observed, from reading about Plischke, that the composition of the post office shared a resemblance to Plischke’s 1942 Abel Tasman Memorial (figure 2.14). “Plischke designed a ten-metre-high concrete stele [vertical element], as well as a marble slab with inscription [horizontal element] that emanated a monumental abstract simplicity” (Sarnitz and Ottillinger, 2004, 187). The vertical to horizontal composition leads one to wonder whether original architect J. Blake Kelly was inspired by the work of Plischke in his design for the Post Office.

Collage and sketching was used as a design methodology to begin to analyse certain details of the existing building (figures 2.12 – 2.13; 2.15 – 2.17). This process highlighted similarities to other modern buildings in New Zealand, the clock tower shared similarities to the clock tower on the Hutt City Council building, and intersections were similar to that used by Plischke in his domestic architecture. This process analysed critical architectural features important to mid-century modernism.

Figure 2.14: Speculating upon Plischke’s influence in the design of the Naenae Post Office through its similarity to the Tasman Memorial.
Figure 2.15: Sketching to explore existing architectural features of the former Naenae Post Office.

Figure 2.16: facing page - collage exploring the importance of the clock tower.
layers of old and new layers of old and new

Proportion of Clock Face.

Brick infill between clock tower structure.

Clock Tower: G Arch

The impressive, 47ft clock tower atop the new Naaman Post Office, which is nearing completion after more than 12 months' construction. The tower is made of reinforced concrete with white plaster finish and lattice brick infill. A silent clock is to be installed in the tower opening and will operate as part of the electric clock system in the building which covers an area of 5276ft.
Developing a lightness between multiple architectural elements.

Case Study: Park Hill, Sheffield

Junction of new + old elements - elegance

Structure disappearing - intersection of planes

Similar junctions to Plischke

Glass reflecting structure

Extremely disappearing into rest of structure

Simplified Detail - Functional - Seamless

Spatial opportunities

Intersection of different planes

3 elements intersecting.
Each bay of structure filled with infill allows for flexibility with the reuse.

Is the brick infill still relevant today? Is there contemporary alternatives that could influence reuse?

Case Study: Park Hill, Sheffield.

Infill prior to re-use.

Contemporary change to modernist building method.
ORGANISATION AND PROPORTION IN MODERN ARCHITECTURE

2.2.7 REGULARITY

Henry-Russell Hitchcock and Philip Johnson in their text The International Style argue that regularity is important to modernist architecture; “good modern architecture expresses in its design this characteristic orderliness of structure and this similarity of parts by an aesthetic ordering which emphasizes the underlying regularity. Bad modern design contradicts this regularity. Regularity is, however, relative and not absolute in architecture” (1995, p. 70). This identifies the criticality of organisation for the premise of modern architecture. However this notion also reflects reality by acknowledging that regularity cannot be absolute when you consider contextual elements affecting the building, such as site boundaries. Therefore buildings of the international modernist style evidenced a generally regular rhythm in their structure, this which is likely seen before surfaces are applied (Hitchcock and Johnson, 1995, 71). As is the case in the former Naenae post office (figure 2.18).

2.2.8 INSTITUTIONAL ORGANIZATION

The standardization of modernism made it a style ideal for the corporate image. Reinhold Martin discusses that “hundreds of office buildings constructed in the decades following the war [WW2] did attain the nearly complete fusion of aesthetic techniques advocating modular coordination with extant technical means for implementing it” (2003, p. 98). The architecture became symbols of the standardized, ordered, stable image that corporations wanted to display to the public following WW2. The module
became a technique for organizing architecture and conveying the internal organization of institutions. Furthermore, the new technology of curtain walls used in most modernist architecture further helped convey the corporate image. Martin argued that all various types of curtain walls shared a common visual display of a system of internal organization (2003, p. 101)

It is important to acknowledge in this review the organisational discussions surrounding the post office as a corporate architecture. The modulation that became synonymous with modern architecture was capitalised on by institutional architecture. Martin described “[t]he corporation as family” (2003, p. 93). What he inferred here was the form follows function mantra of modernism had turned the architecture of institutions towards having a more social function, not just a place of work. Regularity in modernist architecture meant that the module allowed for efficient and logical organization of a range of functions (Hitchcock & Johnson, 1995, p. 71). When considering the post office, it also shared this notion having to provide for numerous functions.
Modernist painter Piet Mondrian used orthogonal lines and primary colours to represent “the harmony on an unrealized utopia” (Frampton, 2004, p. 148) in his art. His approach to visual composition was used to analyse the original planning design of the former Naenae Post Office (figure 2.19). The diagramming allowed for an understanding of organizational strategies in modernist design.

The proportion diagrams responded to the literature by showing the rhythm within the façades, identifying the modular organization of the former post office building (figure 2.20 – 2.23). This analysis highlighted the regularity within the facades and the points in which it varies due to site conditions.
Figure 2.20: Diagram abstracting key primary and secondary wall separations in the existing plan of the former Naenae Post Office.
Figure 2.21: Mondrian inspired organizational diagrams looking at the existing public vs private planning of the building.
layers of old and new
Figure 2.22: The diagrams explore the regulation of the facades. The red lines show locations where the original function was more permeable whereas the yellow lines identify where private spaces were. The types of glazing used changes at these transitions too.
Figure 2.23: These diagrams are exploring the proportions in the facade, they identified a 2:1 proportion in the facades generally. Transitioning at points of programme change.
CONSERVATION OF MODERN MOVEMENT ARCHITECTURE

2.2.10 DOCOMOMO

In the late 1980’s the heritage value of architecture from the modern movement began to be realised and discussed (Normandin & Slaton, 2018, p. 20; MacDonald, 2013, p. 4; Bronson & Jester, 1997, pp. 4-5). In 1988 the organization DOCOMOMO, the International Committee for the Documentation and Conservation of Buildings, Sites and Neighbourhoods of the Modern Movement, was founded (Guillet, 2007, p.151)(figure 2.24). The establishment of DOCOMOMO positioned the conservation of architecture of the recent past a key area of practice (MacDonald, 2013, p. 4). DOCOMOMO along with other similar organizations aimed to take a different approach to the conservation of heritage architecture compared to what had previously occurred in heritage preservation. DOCOMOMO was formed under the premise “that the sharing of expertise on an international scale would be crucial to the development of a common vision and conservation philosophy with respect to Modernist architecture” (Guillet, 2007, 152). This showed a shift from the sole concern on the aesthetic value of the heritage, but an equal importance on the impact and significance modern architecture had had on society.

2.2.11 CONSERVATION ISSUES

The literature that has been written since the inception of DOCOMOMO has identified two key conservation issues of modern heritage that support adaptive reuse as aiding the preservation of modern architecture.
Firstly, unlike heritage architecture of era’s prior, modernist architecture fails to be effective as a ruin (figure 2.25). John Allan argues that “modern architecture generally needs to look new in order to look good” (2007, p. 16). Susan MacDonald continues this discussion by claiming modern architecture does not share the romanticism of age which traditional preservationists desire (1996b, p. 94). Both authors are identifying aesthetical issues with modern heritage. It is here that adaptive reuse becomes a key conservation strategy in revitalising the declining architecture through innovatively introducing new elements in a way that retains the essence of the existing but does so in a way that finds a suitable function and aesthetic that is contemporary (Purdon, 2017, p. 31).

Secondly, it is believed that the main reason for the decline of modern architecture is due to the buildings much shorter life spans (figure 2.26). “[T]he pioneering techniques and materials they [modernists] often used involved unforeseen problems … due to the high level of experimentation involved in their use” (Guillet, 2007, p. 151) which Kyle Normandin describes led to the buildings showing signs of obsolescence within 20 to 30 years (2018, p. 48). Material problems, poor maintenance and changing social and political conditions have also resulted in the shorter life spans (Normandin, 2018, p.48; Allan, 2007, pp. 16-17; Guillet, 2007, p. 151, MacDonald, 1996b, p. 97). This unfortunate trend for modernist architecture has resulted in questions of how to deal with the legacy of the modern infrastructure. MacDonald believes that “the conservation of twentieth-century heritage offers the opportunity to reassess approaches
used in the past and rethink some of the ways we deal with buildings generally” (1996b, p. 98). Important critiques of the existing building allows the reuse to ensure an extended life. John Allan writes, “[a]llow the original design to suggest and govern future use rather than the other way around” (1996, p. 136). Critically we are learning from the approaches of the modernists in their architecture and letting it define new use while using new design approaches to failures of the existing building.

2.2.12 DESIGN RESPONSE TO CONSERVATION OF MODERN ARCHITECTURE LITERATURE

Diagrammatic explorations looked at potential opportunities in the former Naenae post office building (figure 2.27). These diagrams began to explore how existing conditions of site could govern the new use potentials.

2.2.13 SECTION CONCLUSION

Section 2.2 has unpacked three specific areas that are key to the reuse of modern architecture in New Zealand. The short history of modernism challenges traditional debates towards heritage preservation (Purdon, 2017, p.29) however the discussions above have identified modernism as significantly important in New Zealand’s architectural history whilst situating adaptive reuse as a method for instigating the preservation of modern architecture. This sets a clear conceptual agenda for this research portfolio. Therefore the next part of chapter two analyses the post office building typology and selected site to progress this agenda into implementation.
Figure 2.27: Diagrams exploring potential opportunities in the existing architecture that could influence new programme.
PART THREE

2.3 BUILDING TYPOLOGY & SITE
Figure 2.28: Naenae post office 1959
Figure 2.29: Collage of vacant infrastructure currently across the Wellington region.
2.3 BUILDING TYPOLOGY AND SITE

2.3.1 INTRODUCTION

While part one and two summarised the current practices of adaptive reuse, contemporary heritage preservation and modern architecture establishing a clear conceptual research agenda for this project, part three takes that basis to a higher level of resolution by introducing a building typology and site for the subsequent explorations. Important to note is the final search for site was limited to the Wellington region, New Zealand so that the site and historical resources would be easily accessible during the entire duration of the research.

2.3.2 WELLINGTON VACANT INFRASTRUCTURE

The exploration for a building typology began with a photographic study of vacant architecture across the Wellington region. (figure 2.29). This study identified numerous industrial and commercial architecture in states of decay. Some were completely in disrepair whilst other were vacant through years of ill maintenance or earthquake risk. However, neglect due to programme redundancy was the most dominant observation. This observation aligns with the current literature that recognises that during the 20th century, due to many technological advancements, some specialised architectural programmes have become more susceptible to becoming obsolete faster than architecture built prior to the 20th century (Normandin, 2018, p. 49; Henket, 1998, p. 14; MacDonald, 2013, p. 8; Bronson & Jester, 1997).
2.3.3 MODERN HERITAGE AS A DECLINING TYPOLOGY

The photographic study observed a number of vacant modern buildings in Wellington built around the early to the mid-20th century. Buildings such as the Naenae and Taita Post Offices, Newtown Tip Top Factory, Mt Crawford Prison and Karori Teachers College were just a few of the buildings identified in the initial study, which have declined over the last quarter of a century (figure 2.30).

These buildings clearly evidence the decline of modern architecture trends discussed in section 2.2.11.

2.3.4 NZ POST OFFICES AS A DECLINING INSTITUTION IN NEW ZEALAND

Following the study of vacant architecture in the Wellington region the obsolete modern post office building typology was selected as a good example of this. Furthermore, the post office buildings often possess rich architectural, cultural and contextual significance which makes the typology a strong example to question the role of heritage preservation of modern architecture.

The technological changes of the last ten years have led the decline of the post office as an institution and subsequently making the existing infrastructure obsolete. Recently New Zealand has seen many purpose built post office buildings closed, outsourcing their services to existing businesses (Gaynor, 2018)(figure 2.31).

This decline was predicted by Former NZ Post CEO Harvey Parker almost 20 years ago, “the generation coming behind is computer literate. … we are going to see electronic communications
replace hard copy mail” (Parker, in Gaynor, 2018). Therefore, the post office is no longer required in the same capacity. The post office architectural legacy is now falling into decay with an unclear approach on how to revitalise these once central places of community.

As a whole, there is considerable value in the existing typology post office buildings. The “post office in New Zealand was the heart of each community. In smaller communities the post office was the one place where the people called regularly. In towns or cities it was the main centre of commercial activity” (Startup, 1993, p. 1). The central role post offices held in community leads one to speculate on the consequences the obsolescence of post offices will have on other services in the community. Will they survive?

Architecturally the post office infrastructure in general took two significant forms during its history (figure 2.32). The first post offices built in New Zealand took the form of the colonial houses, vernacular in style and fast to build (Napier, 1956). This resulted in post offices throughout the country having a similar style (Nash, 1959, p. 3). This consistency meant that the post offices had little aesthetic relationship to the community they sat in. Following WW2 the Ministry of Works occasionally placed greater emphasis on the design of post offices, as is the case for the Naenae post office. This has led to a legacy of mid-century modern post offices throughout New Zealand, built specific to the function, creating a new type of almost vernacular.

### 2.3.5 MID-CENTURY POST OFFICES

The influx of mid-century modern post offices across New Zealand was the government’s
Figure 2.33: Historical traces of the former Naenae Post Office.
Figure 2.34: Naenae Post Office and Hillary Court in November 2019
response to years of uncertainty during WW2. The post office was a way to return order and stability to communities. Referred to by the government as the big building programme, 1959 saw 13 new post offices and 25 telephone exchanges open throughout the country (Moohan, 1959b, pp. 7-8). The post WW2 post offices modernised the department bringing it into the accelerating social and industrial conditions of the time (Startup, 1984, p.24). Furthermore the architectural profession following WW2 was concerned with a nationalist agenda, and a desire to tie the architecture to ideas of Englishness (Clark & Walker, 2000, pp. 17, 19). The resulting architecture showed respect to England but related platonically (Pevsner, 1961b, p. 44). Therefore public infrastructure built during this time, under the nationalist premise, helped support the perception of New Zealand being an extension of the motherland, Britain, despite the distance. Perhaps the post office strengthened this through its direct relationship as a place of communication.

2.3.6 EVELYN MCLAUGHLIN COLLECTION OF POST OFFICE BUILDINGS.

The Alexander Turnbull Library in Wellington holds a collection of photographs of post offices compiled by Evelyn McLaughlin between 1965 and 1976. This collection highlights the post office building typology evident in New Zealand throughout the 20th century (figure 2.35). The collection brings to attention the architectural styles aligned with the post office as an organization. It is clear from this visual record that the post-WW2 period saw several modernist post offices be constructed. These buildings
layers of old and new
clearly shared several similarities, but also showed variation which was an architectural response to the specific context. Many of the post offices photographed by McLaughlin have since been caught in the decline of the post office, presently sitting vacant, neglected or poorly reused (figure 2.36). As a result, a period of architecture with significant physical, cultural and social influence on New Zealand communities is rapidly being lost.
2.3.7 NAENAE POST OFFICE AS SITE

2.3.8 SETTING THE SCENE NAENAE

Naenae was built by the state as a satellite suburb of Wellington in the mid 1940's after Labour came to governance with a push for social reform (Sarnitz & Ottlinger, 2004, p. 140). Naenae's heritage began well before this however, prior to 1840 the area was covered by swap and forestry with the area then becoming the Te Mako Pa, "where the important Te Ati Awa leader Wi Tako lived for nearly 30 years" (Schrader, 2018, p. 1). While residing in the Te Mako Pa, Wi Tako built the Nuku Tewhatewha a significant pataka, Maori food store, this pataka was one of seven across New Zealand that was carved to show support to the Maori Kingdom ("Nuku Tewhatewha | The Dowse Art Museum," n.d.)(figure 2.37). The pataka has been on display at the Dowse Art Museum in Lower Hutt since 1982. The area of Naenae then became "a poultry and market garden settlement for partially disabled servicemen" (Schrader, 2018, p. 1). This was set up by the government following World War One, becoming Wellington’s largest market garden. This early history sets the scene of Naenae forever being a very community focused location.

The development of what is current day Naenae again had a community focus at its core. When constructed Naenae was primarily a state house suburb, with planning lead by Ministry of Works architect Ernst Plischke and based upon the garden city movement (Schrader, 2018, p. 2). The “new streets were curvilinear (to reduce monotony) and green corridors were constructed to allow children to walk to school away from main roads" (Schrader, 1996b, p. 19). The suburb was
to be based around a community and shopping centre (figure 2.38), however the original design by Plischke, based on St Mark’s Square in Venice, never eventuated (Sarnitz & Ottillinger, 2004, pp. 152-153; Schrader, 2018, p. 1). A subtler version arrived in the late 1950’s well after Plischke had left the Ministry of Works.

During the mid 50’s juvenile delinquency and promiscuity drew shadows of doubt over the once model suburb (Schrader, 1996a, p. 61). The lack of desire to see Plischke’s community centre plan completed by the government was detrimental to the Naenae people; the garden city model can also account for this too, but that discussion is beyond the scope of this research. Planning for the community and shopping centre finally began in 1951, under the direction of government architect Gordon Wilson (Sarnitz & Ottillinger, 2004, p. 153). The shopping centre was New Zealand’s first pedestrian mall and “owed much to Plischkes original plan comprising a series of pedestrian courts, with car parking assigned to the centres edges” (Schrader, 2018, p. 2).

The pedestrian mall was constructed in a modernist style with common parapet and veranda heights (Schrader, 2018, p. 1). This ensured unity across the entire precinct, conveying the order and newness the government intended for Naenae. The entire centre was built over the next few years culminating in the construction of the post office in 1959. Fittingly the post office became the centre piece of the precinct and community life, the precinct to which was “named Hillary Court after mountaineer Edmund Hillary” (Schrader, 2012, pp. 14-15) who had conquered Mt Everest in 1953.
Figure 2.38: Ernst Plischke’s scheme for the construction of Naenae’s new community centre.

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See print version
Figure 2.39: Hillary Court under construction in 1958. Naenae Pool and Community Hall in the foreground.
The community centre united Naenae in the years following. It became a hub for community activity, all the government had ever hoped for. The following archival video shows Hillary Court as a hub of activity, the video is dated 1955, but is likely sometime in the early 1960’s seeing the Post Office is shown in the video and wasn’t constructed until 1959.


However as the years have gone by Hillary Court has slowly declined. Many shops have closed along with the post office in 2015. Many of the closures over the years being speculated as a result of the opening of Queensgate Shopping Mall in Lower Hutt in 1986 which has subsequently grown over the 30 years following (Schrader, 2019). Hillary court and Naenae in general is now tired, sad and fading away in dire need of revitalization (figure 2.40). The community spirit of Naenae is still alive though, with a strong reliance on the library and pool as activators of community engagement.

### 2.3.9 DEMOGRAPHICS OF NAENAE.

Naenae is a relatively low socio-economic suburb of Lower Hutt highlighted by a high unemployment rate of between 12 to 16% compared to 8% for all Lower Hutt combined (StatsNZ). Roughly half of the population of Naenae is of Maori or Pasifika ethnicity showing a clearly diverse community (StatsNZ). Like the 1940’s when Naenae was constructed, it remains a very family orientated suburb with one family households constituting over half of Naenae’s population (StatsNZ).
Figure 2.40: Photomontage of the existing condition of Naenae.
2.3.10 HISTORY OF THE FORMER NAENAE POST OFFICE.

(Figure 2.42)

The first post office in Naenae was in a former army building on the corner of Seddon Street and Naenae Road (Schrader, 2018, p. 2; Moohan, 1959a, pp. 1-2). Opening in 1946 the original post office, which was intended to only be temporary, had become inadequate by the mid 1950’s (Schrader, 2018, p. 2). Therefore heightening the need for a new one.

In 1958 the government confirmed plans for a new post office in Naenae. Design of the post office was led by district architect J. P. Blake-Kelly, under the direction of government architect Gordon Wilson. Construction of the post office began in early 1959 with J.M Construction being the main contractor in the build (Moohan, 1959a, p. 2)(figure 2.41).

The post office was the best example of mid-century modern architecture in the entire Hillary court precinct (Schrader, 2018, p. 2). The plan follows a well-organized structural grid that deviates at the edges of site as expected (figure 2.43). The original plan located three programmes in the building; the public post office at the prominent corner, a mail room and retail space flanking it on either side. Reinforced concrete structure, white plaster finish and brick
Key Timeline of Naenae Post Office

Jan 1944
Temp P.O opens @ Naenae Public works camp

March 1946
First P.O opens cnr Naenae Rd & Seddon St

May 1959
Foundation Stone laid

June 1959
Construction of New P.O in Hillary Court begins

April 1961
Planter boxes infilled with concrete

1960
Clock face installed to tower

1961
Defects found in clock tower & addressed

Sept 1958
Construction of New P.O in Hillary Court begins

Dec 1959
P.O in Hillary Court Opens

1986
Post & Telegraph Dept. restructure into 3 departments

1984
Plans for proposed reno's includ. 2nd storey. - Did not happen

2015-16
Post Office building sold to private buyer

2015
Naenae P.O & Kiwibank close permanently

2016-18
New owners attempt to open bottle store in old P.O. building. Local council reject

2018
Naenae Residents Assn. use P.O for temp event

2019/2020
Council to lease P.O to use for temp gym and community space

Aug 2019
Hutt City Council add the P.O building to their heritage register

Figure 2.42: Naenae Post Office History Timeline
Figure 2.43: Existing plan of the former Naenae Post Office. Based on historical records and observations from outside the building.

Key
1. Clock tower
2. Vestibule
3. Courtyard
4. Entry
5. Corridor
6. Former Post Shop & Kiwibank
7. Former Mail Room
8. Storeroom
9. Former Mail Dock
10. Former Office Space
11. Toilets
12. Bike Shed
13. Boiler Room
14. Former Retail
15. Service Entry
16. Existing Naenae Cafe
17. Existing Naenae Pharmacy
infill were used in the construction of the post office. “Brick was also used as a decorative element; as latticework in the western parapet and the clock tower” (Schrader, 2018, p. 2). The façades reflect the programmatic use internally. The western façade has floor to ceiling glazing in a grid form to which the original postal office was located behind, halfway along this façade the treatment transitions to more private with smaller windows and planter boxes, which were infilled with concrete not long after construction (Donaldson, 1961). A larger window fills the second last structural bay of this façade, indicating the former display window of the retail space. The prominent corner locates the main entry which is set back into a small portico. The veranda awning tapers at this point signifying the corner. This connects along to the clock tower that sits separate from the building, but part of the composition none the less. Behind the tower is the small courtyard, with beams and columns supporting the awning and tapering back to the southern wall. The southern wall, to which the mail sorting room was once located behind, consists of floor to ceiling glazing. The last structural bay on this façade has a smaller window with brick infill above and below to which offices and storage were originally located behind. The parapet aligns with the heights of other buildings in Hillary Court. The rear of the building
once provided worker parking, bike storage and service entries.

Ben Schrader described the interior of the post office as just as elegant as the exterior; "[t]he customer service area featured a handsome wooden counter, pendant ceiling lights and a large abstract wall mural by the celebrated artist Guy Ngan" (Schrader, 2018, p. 2)(figure 2.44).
Figure 2.45: Existing exterior condition of the old post office.
2.3.11 THE CLOCK TOWER AS A KEY FEATURE

Perhaps the key feature of the post office is the 14.3 metre clock tower positioned at the corner of the building. The tower has two vertical reinforced concrete columns that meet by merging into a semi-circle form at the top, the tower has a white plaster finish and a lattice brick infill (Schrader, 2018, p. 2; Evening Post, 1959a)(figure 2.46). The clock face sits below the open semi-circle and a steel trellis closes the opening at the base of the tower (figure 2.47).

The clock tower is significant for two reasons. Firstly, the government architects who designed the post office saw the clock tower as an architectural element that could break the horizontality of the existing built environment in Naenae and the Hutt Valley (Moohan, 1959a, p. 4). The clock tower became the focal point for the identity of Naenae because of its vertical nature making it visible across the skyline throughout the suburb (figure 2.48).

Secondly, the construction of a clock tower in 1959 was a significant turning point for the Ministry of Works in their construction of public infrastructure. Clock towers had been prominent features of post offices for much of New Zealand's early history, however a number of disastrous earthquakes resulted in clock towers across the country being demolish as a safety precaution (Nash, 1959, p. 2). The seismic concerns with clock towers meant that for a long time they were absent from new post offices. The Ministry of Works architects convinced the post and telegraph department that significant advancements had been made in the construction industry, assuring
Figure 2.48: The clock tower is an identity and can be seen throughout the suburb.
them that a clock tower on the new Naenae post office could be constructed to greater seismic standards than before (Schrader, 2018, pp. 2-3; Evening Post, 1959b; The Dominion, 1959; Nash, 1959, p. 2). Separation of the clock tower from the main post office building alleviated the earthquake risk also (Moohan, 1959b, p. 3). These two reasons perhaps make the clock tower the most important architectural feature of the post office, it is crucial that respect is retained towards this element in any redesign.

2.3.6.5 CURRENT CONDITION OF THE POST OFFICE

There has been a handful of changes to the post office over the years. 1984 saw a proposal to add a second storey to the building and reconfiguration of the interior spaces (Naenae Post Office, Additions and Alterations, 1984, n.d). This work did not eventuate (Schrader, 2018, p. 3). Over the years the post boxes have been infilled, the brick infill on the western parapet plastered over and an exterior door added to the southern façade (figure 2.49). From observations looking through windows and multiple sourced photos it appears that changes have occurred inside, however cannot be clear on this due to the inability to access the inside of the building throughout the duration of the research portfolio (figure 2.50). As a result,
the post office currently sits in a decaying state, well distanced from the
elegancy of its early days. The clock tower, which became operational again
in September 2019, and the structural rhythm of the façade give glimpses
of its modern significance, however poor maintenance and neglect from the
current owners has left it screaming for help. A bid by the current owners
to convert the building to a bottle store failed, which was welcomed by the
community (Schrader, 2019). As of the beginning of this research in March
2019 there was no heritage listing on the former post office, it gained listing
from Hutt City Council in late 2019.

Figure 2.50: Decaying state of the existing interior of the former post office.
2.4 CHAPTER TWO CONCLUSION

Chapter two has engaged a contextual analysis of the research agenda exploring three facets of the project; heritage preservation and adaptive reuse, modern architecture and building typology and site. This chapter is important in framing the subsequent design decisions in the proceeding chapters. Through the analysis of the context the argument that adaptive reuse can aid the preservation of modern heritage was built theoretical. This identified that the next step was to engage design by applying the analysis to the process of finding a new use for the former Naenae Post Office in order to strategize the reuse scheme of the building.
This chapter intends to tie the history and theory explored through chapter two into the design realm and drives the research through iterative design exploration. Two approaches are used to explore how new use can be derived from an existing building. The first is focused on a formal development of design without programmatic considerations whereas the second uses programme as a driver of design opportunities. This process begins to strategize the design approach for the reuse of the former Naenae Post Office.
3.1 TWO APPROACHES TO FIND NEW USE
3.1 INITIAL DESIGN EXPLORATION

3.1.1 APPROACH ONE – FORM LEADING NEW USE

The research took to exploring how the new use of the former Naenae Post Office could be defined through form. In the 1990’s Kevin Rhowbotham helped develop this approach because his writing situated form at the forefront of design investigation (Rhowbotham, 1995). Rhowbotham argues that modernism quantified the notion of programme making it difficult for it to be experimented with (1995, p. 12). Consequently, conventional agendas were assigned to certain programmes making it difficult for them to be experimented with. Rhowbotham argues that “this proscriptive act closes down an opportunity to re-examine the nature of spatial usage, occupancy or inhabitation” (1995, p. 13).

Responding to his own critique Rhowbotham is advocating for experimentation in design to question the conventional norms associated with programme. Therefore, placing programme as secondary to form.

Rhowbotham suggests a speculation on programme is needed to invert the relationship with form. Rhowbotham’s thinking places the formal problem first, form is then a consequence of experimentation (1995, p.13). As a result, programme would eventually arrive after the composition of the architecture was somewhat resolved (Rhowbotham, 1995, p. 13). This as opposed to at the beginning which would limit the abstraction of the form that could otherwise occur (McMorrough, 2006, 103). As such a much more conceptual basis could be placed on form because it is being placed at the centre of the
architectural research allowing for experimentation and discovery.

By using a modernist piece of architecture as the site for this project, it shows the beauty of adaptive reuse as a design process in which the designer can re-work an existing form. This is supported by Rhowbotham, although referring to new form, “this process of retrospectively fitting programme to form is articulated by an activity of reinterpretation, or re-reading” (1995, 13). When it is a new form the designer is only questioning the role of programme in its conventional interpretation. Whereas, adaptive reuse is allowing for the designer to question or re-work the original design intentions towards form and then subsequently projecting a new programme to these spaces. In the context of this research portfolio the existing form is the ‘new form’ that Rhowbotham discusses in his text.

3.1.1.1 DESIGN RESPONSE

In response to these ideas proposed by Rhowbotham, sketch modelling was used as a method to explore how form could speculate upon programme (figure 3.1). These explorations discovered that the design outcomes being produced inserted a new form on or beside the existing infrastructure,
Figure 3.1: Models exploring how the existing could influence new programme.
this began a conversation with the existing building but required further development. The development was required because the explorations found that inserting a new volume came with several implications such as how to deal with the junctions between new and old. The foam board and cardboard were relatively rigid and failed to give a good representation of the existing building. The explorations were developed further through sketching (figure 3.2). It was clear from both design outcomes, that the approach required a strategy to inform how the dialogue with the new and old is developed.

Figure 3.2: Sketches building upon the physical modelling to explore how form can inform programme selection.
3.1.2 APPROACH TWO – PROGRAMME DEFINING NEW USE

The second approach to exploring how adaptive reuse can transform vacant architecture to living heritage looked to programme as a driver for design decisions. This placed a more pragmatic approach to the problem against Rhowbotham’s speculative approach (see section 3.1.1).

3.1.2.1 SITE CONSIDERATIONS TO INFORM PROGRAMME

The site for this investigation was unpacked in section 2.3 but a further exploration of site was undertaken to help inform the programme led design explorations. Site mapping was done to explore the existing programme types evident in Naenae (figure 3.3). Furthermore, an analysis of the vacant spaces in Hillary Court was undertaken to identify the importance that the reuse of the post office can play in the revitalisation of the pedestrian mall (figure 1.4). The existing discussion surrounding the revitalisation of Hillary Court by the Hutt City Council [HCC] was considered in the exploration.
Figure 3.3: Exploration of programme types existing in Naenae.
Figure 3.4: The former Naenae Post Office at night.
Five programme categories were chosen that would best meet the existing needs of the Naenae community from the undertaken site analysis (figure 3.5).

1. Cultural
2. Social
3. Community
4. Workspace
5. Living

The intention of these programmatic categories was to engage a range of potential programmes that would suit the existing urban area. The analysis of the existing site is important in this process because the choice of programme in a reuse project needs to be relevant to the context to ensure continual use (Pyburn, 2017, p. 16). It appeared key to provide a space that could connect with the high number of youth in Naenae as well as the diverse families that reside in the suburb. Importantly the former post office sits at the centre of two of Naenae’s most used amenities, the pool and the library (figure 3.5). As such it was important that the new programme activated the node that is the former post office.
Figure 3.6: Collage identifying the relationship of the programme types to Naenae.
3.1.2.2 DESIGN METHODOLOGY FOR APPROACH TWO EXPLORATION

In order to inform the selection of programme matrixes were used to unpack suitable programme options. As a methodological device the matrix allowed for various options of programme to be assessed against each other, which explored a number of design opportunities for the reuse of the existing building. Three variations of a matrix were used to thoroughly consider programme.

“However masterful or clever a piece of design is, if it is not suitable for the new users of the space, then it just doesn’t work” (Brooker & Stone, 2018, p. 44).

Matrix One: (figure 3.7)

This matrix populates a range of programmatic concepts against the programme categories. The use of simple pencil sketching as an exploration method visualised how different programmes could occupy the site. The sketches of potential programmes were assigned to one of the 5 categories. This discovered that it was difficult to strictly confine specific building uses to single programme categories because they overlap a number of categories. For example, Youth Centre was assigned to the social category but could easily relate to workspace and community.

Matrix Two: (figure 3.8)

A matrix to cross examine the range of programmes against the five categories occurred. This highlighted the programmes that would work well together in a mixed-use space. For example: marketplace, co-working office and community space could co-exist together as they all shared similarities that fitted workspace, social
<table>
<thead>
<tr>
<th>Cultural</th>
<th>Urban Art Exhibitions</th>
<th>Art Centre</th>
<th>Art Gallery</th>
<th>Museum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Youth Centre</td>
<td>Homeless Shelter</td>
<td>Restaurant/Cafe</td>
<td>Kindergarten</td>
</tr>
<tr>
<td>Workspace</td>
<td>Co-working</td>
<td>Private Office</td>
<td>Retail</td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>Market Place</td>
<td>Community Hall</td>
<td>Community Centre</td>
<td>Cinema</td>
</tr>
<tr>
<td>Living</td>
<td>Apartments</td>
<td>Hotel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Cultural
- Already known spaces
  - Art Gallery
  - Community Hall
- New spaces needed
  - Museum
  - Art Display
  - Temporary

### Social
- Community Hall
- Art Centre
- Kindergarten
- Cafe / Restaurant
- Marketplace
- Co-working Office
- Private Office

### Community
- Youth Centre
- Cinema
- Community Centre
- Community Hall
- Marketplace
- Co-working Office
- Event Spaces

### Living
- Apartments
- Hotel
- Homeless Shelter
- Event Spaces
- Nightclubs
- Meetings

### Workspace
- Flexible
- Writing Space
- Study
- Engagement

### Programmes most likely to activate the site
- Potentially
- Main programmes
- Additional support

---

**Viable Programmes:**
- Coworking Office
- Creche
- Cafe
- Market Place
- Youth Centre
- Event Spaces
- Community Centre
- Community Hall

---

**Suburbia:** Would this really be justified?
and community categories. The findings from this matrix along with contextual considerations enforced the need for a programme that engaged the community and social interactions.

Interestingly to the historical narrative of the site the matrix exploration identified programme types such as community centre, offices, retail and crèche/kindergarten which had links to Plischke’s initial intentions for the Naenae town centre. “The shopping centre with shops at ground floor level and offices on the first floor is laid out around a park with playing fields and a sheltered kindergarten where mothers shopping can leave their children” (Plischke, in Sarnitz and Ottillinger, 2004). Plischke’s intention in his plan was to develop an interactive environment for the residents of Naenae (Schrader, 1996a, p. 71).

Perhaps the modernist ideologies of workspace and community are beginning to re-emerge in the contemporary realm.

Matrix Three: (figure 3.9)

The final exploration of programme through matrixes looked at how the potential programmes could architecturally impact the existing building. This ensured the process was using programme to consider adaptive reuse design ideas. Based on the outcomes of matrix two the programmes were refined down to youth centre, community centre/hall, market place, co-working office, café/restaurant, art gallery and kindergarten/crèche. Design methods of simple pencil sketches along with collage was used to explore how the existing post office’s form could adapt to suit a new programme. This provided various options of how the existing architecture could engage the new programmatic elements. Significantly
Figure 3.9: Matrix explores the adaptive reuse impact of potential programme choices.

<table>
<thead>
<tr>
<th>Major Impact on extg</th>
<th>Community Centre/Hall</th>
<th>Market Place</th>
<th>Co-working</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playful reuse</td>
<td>High population of use</td>
<td>Definitely engage the community</td>
<td>Permanent market requiring slot of change to infrastructure</td>
</tr>
<tr>
<td>Engaging the youth</td>
<td>Co is the site able to be big enough</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minor Impact on extg</th>
<th>Community Event Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using the extg spaces</td>
<td>Community Event Spaces (new aspect version)</td>
</tr>
<tr>
<td>Structure to develop</td>
<td>Lo multiple uses</td>
</tr>
<tr>
<td>Co could be done in an office program too</td>
<td>Temporary Market could have low impact on extg</td>
</tr>
<tr>
<td>Works</td>
<td>Work to the easy to form spaces that could hold multiple uses</td>
</tr>
<tr>
<td>Works</td>
<td>Easiest for future reuse opportunities</td>
</tr>
</tbody>
</table>

- Difficulty for future reuse
- Major structural change
- Form addition
- Flexibility to be repurposed in the future
Programme could be implemented in numerous ways. Flexibility.

Could work in multiple ways! Low impact likely more successful.

Office

Cafe/Restaurant

Art Gallery

Kindergarten/Creche

Long form additions! Good! Embedding entry qualities.

Furniture, lighting, layout based on extra structure.

Zero's open plan.

Temporary灵活的

Temporary art exhibitions in event spaces.

Community space. Engage rent.

Contemporary education spaces are a lot more open plan - flexible.

Site by becoming a destination.

Works well with the entry design of the former post office.
the matrix engaged with adaptive reuse design considerations. For example, the community centre/hall programme was seen, through the drawings, as probably having a major impact on the existing architecture. However, when considering this implication the variation of the programme to a community event space was discovered to have much less architectural implications on the existing building. This matrix exploration was crucial because it was engaging with the contextual benefits of revitalisation whilst also assessing it against adaptive reuse considerations.

It was concluded through the matrix explorations that a co-working office would be selected as the primary programme along with ancillary functions of a kindergarten/crèche, event space and a temporary marketplace. Each of these programmes overlapped community, social and workspace categories whilst each align to contemporary adaptions of Plischke’s grand plan for the Naenae town centre back in the 1940’s.

**3.1.2.3 EVOLUTION OF THE PROGRAMME LATER IN THE PROCESS:**

Based on discussion and reflection that occurred during the August interim reviews the programme choice evolved to engage more with the community programme. It was felt that the design outcomes were too subtle and needed to relate better to what is already occurring in Naenae. It was proposed to have a community kitchen rather than a kindergarten as one of the programmes of the redesign because this could build upon existing community programs
in Naenae (figure 3.6). The hope of this decision would be to ensure longevity of the building because the redesign would also engage social and economic sustainability benefits key to living heritage architecture.

The proposed programmes (figure 3.10):

**Co-working Office:** Introduce suburban workspace to Naenae; flexibility, study space, career opportunities, cheap rental for businesses, business start-ups; youth study spaces

**Community Kitchen:** A place for locals to come and cook, share and trade locally grown produce and crafts etc. Potential to become a café if necessary.

**Community Event Space:** become an extension of the library to allow for community meetings, seminars etc. Hireable space for the community.

**Temporary Market Place:** build from the existing Saturday market that occurs in Naenae.

### 3.1.2.4 APPROACH TWO REFLECTION

This approach shows a process of how a designer or client could intellectually and informatively select a programme[s], that would be most suitable to the context, in order to derive design opportunities. This would aim to ensure that the building does not become neglected due to ill-considered programming. The approach supports the ideas developed earlier in the thesis surrounding living heritage as the current preservation method, ensuring a continuation of history, while evolving the existing building to be occupied by programmes that can have long term benefits to location and the building. The matrixes discovered a range of forms suited to numerous manifestations of programme considered against
Figure 3.10: Revised programme choices.
adaptive reuse thought. This provided many variations of how the reuse of modern architecture could occur. The resolution of a dialogue between new and old, key to living heritage, was missing in this exploration. Therefore, like approach one, section 3.1.1, further development was required through exploring tactics to the detailing of the reuse in order to achieve living heritage.

3.1.3 FINDINGS

The two approaches discovered that both programme and experimentation of form can lead to well considered design opportunities for the reuse of existing infrastructure. However, there was a shared view that defining how to develop a dialogue between old and new through detailing was important to strengthening the success of the reuse of a modern building and required in order to further develop the solutions from these explorations.
3.2 ADAPTIVE REUSE DESIGN FRAMEWORK
3.2 ADAPTIVE RE-USE DESIGN FRAMEWORK

The framework was developed as a method to reflect upon the adaptive reuse literature and case studies relevant to the course of research. Building upon the findings of chapter two and precedents the framework looks at how new elements can develop a dialogue with the old. The key difference of this framework, to that of what literature of the past has developed, is that its aims to be representative of adaptive reuse strategies evident in the reuse of Modern architecture. Although primarily developed from Graeme Brooker and Sally Stone’s (2004, 2018) reuse approach, the case studies chosen help to situate the framework within the realm of modernist architecture preservation.

Reflecting upon Graeme Brooker and Sally Stone (2004, 2018), Frank Peter Jager (2010), Matteo Robilgio (2017) and other key authors of the field, this framework develops four key strategies to how a dialogue can be developed between the new and the old:

- Strategic Separation
- Immersion
- Fragmentation
- Transition

Each strategy uses design tactics as devices to achieve them. This aims to aid the designer in their concept design when planning their adaptive reuse design (figure 3.11).

3.2.1 STRATEGY ONE: STRATEGIC SEPARATION

This strategy is evident in buildings that have
### STRATEGIES FOR THE ADAPTIVE REUSE OF VACANT ARCHITECTURE OF THE MODERN ERA

<table>
<thead>
<tr>
<th>Strategic Separation</th>
<th>Immersion</th>
<th>Fragmentation</th>
<th>Transition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td><strong>Immersion</strong></td>
<td><strong>Fragmentation</strong></td>
<td><strong>Transition</strong></td>
</tr>
<tr>
<td>- Separating existing structure</td>
<td>- Working from existing structure.</td>
<td>- Dissecting important elements &amp; enhancing through clever detailing.</td>
<td>- New buildings juxtaposed next to historic building - could be on top, in or alongside.</td>
</tr>
<tr>
<td>- Strategically inserting new architectural elements.</td>
<td>- Merging new &amp; old.</td>
<td>- Building like a historic jigsaw.</td>
<td>- The new architecture becomes about the transition between spaces and the careful detailing to the intersections of new &amp; old.</td>
</tr>
<tr>
<td>- Any new element is added specifically as a response to existing infrastructure, relate to new programme.</td>
<td>- Reliance on each other.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Tactics</strong></th>
<th><strong>Tactics</strong></th>
<th><strong>Tactics</strong></th>
<th><strong>Tactics</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plane</td>
<td>Plane</td>
<td>Plane</td>
<td>Plane</td>
</tr>
<tr>
<td>Voids</td>
<td>Voids</td>
<td>Voids</td>
<td>Voids</td>
</tr>
<tr>
<td>Installation</td>
<td>Installation</td>
<td>Installation</td>
<td>Installation</td>
</tr>
<tr>
<td>Heritage Slice</td>
<td>Structural Contrast</td>
<td>Surface</td>
<td>Junction</td>
</tr>
<tr>
<td>Structural Contrast</td>
<td>Structural Contrast</td>
<td>Elevations</td>
<td>Volume</td>
</tr>
<tr>
<td>Rhythm</td>
<td>Rhythm</td>
<td>Elevations</td>
<td>Volume</td>
</tr>
<tr>
<td>Opening</td>
<td>Opening</td>
<td>Installation</td>
<td>Insertion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Case Studies</strong></th>
<th><strong>Case Studies</strong></th>
<th><strong>Case Studies</strong></th>
<th><strong>Case Studies</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>La Luana School, Spain</td>
<td>La Luana School, Spain</td>
<td>La Luana School, Spain</td>
<td>La Luana School, Spain</td>
</tr>
<tr>
<td>Citizens Art Centre, Japan</td>
<td>Citizens Art Centre, Japan</td>
<td>Citizens Art Centre, Japan</td>
<td>Citizens Art Centre, Japan</td>
</tr>
<tr>
<td>Tate Modern, United Kingdom</td>
<td>Tate Modern, United Kingdom</td>
<td>Tate Modern, United Kingdom</td>
<td>Tate Modern, United Kingdom</td>
</tr>
<tr>
<td>The Stables, Australia</td>
<td>The Stables, Australia</td>
<td>The Stables, Australia</td>
<td>The Stables, Australia</td>
</tr>
<tr>
<td>Park Hill, United Kingdom</td>
<td>Park Hill, United Kingdom</td>
<td>Park Hill, United Kingdom</td>
<td>Park Hill, United Kingdom</td>
</tr>
<tr>
<td>Gucci Hub, Italy</td>
<td>Gucci Hub, Italy</td>
<td>Gucci Hub, Italy</td>
<td>Gucci Hub, Italy</td>
</tr>
<tr>
<td>Castelvecchio Museum, Italy</td>
<td>Castelvecchio Museum, Italy</td>
<td>Castelvecchio Museum, Italy</td>
<td>Castelvecchio Museum, Italy</td>
</tr>
<tr>
<td>German Design Centre, Germany</td>
<td>German Design Centre, Germany</td>
<td>German Design Centre, Germany</td>
<td>German Design Centre, Germany</td>
</tr>
<tr>
<td>Fondazione Prada, Italy</td>
<td>Fondazione Prada, Italy</td>
<td>Fondazione Prada, Italy</td>
<td>Fondazione Prada, Italy</td>
</tr>
<tr>
<td>Gucci Hub, Italy</td>
<td>Gucci Hub, Italy</td>
<td>Gucci Hub, Italy</td>
<td>Gucci Hub, Italy</td>
</tr>
<tr>
<td>German Design Centre, Germany</td>
<td>German Design Centre, Germany</td>
<td>German Design Centre, Germany</td>
<td>German Design Centre, Germany</td>
</tr>
</tbody>
</table>

*Figure 3.11: Adaptive reuse design framework*
been re-used where the original structure remains a prominent feature, with new architectural elements helping enhance the existing. The reuse of the existing may be relatively subtle or involve minor additions, alterations or demolition but are inspired by the existing (Brooker & Stone, 2004, 81).

**Tactics**

**Plane:** New wall, roof or floor elements strategically located within the existing infrastructure to enhance spatial relationships. The use of planes may allow the new programme to function within the existing structural grid. Planes may be located in positions significant to the history of the building to strengthen the narrative.

**Voids:** Form or use existing spatial openings within the existing buildings to situate new elements required by the reprogramming, such as stairs, lifts and skylights. This enhances the separation because new elements are being strategically positioned to relate to the existing architecture.

**Installation:** The existing is emphasised through the insertions of objects such as fixed furniture or joinery. The additions become important to enhance the new use of the space while directing the new user towards key views or elements of building (Brooker, 2006, p. 3).

**3.2.2 STRATEGY TWO: IMMERSION**

Occurs in building reuse projects where the new and old become completely dependent on one another. The need to critique the existing infrastructure to determine the elements to retain and capitalise on through the integration of the
new is crucial to an immersion strategy.

**Heritage Slice**: Allows for a dependence of both new and old but ensures a direct link to the past is retained. The heritage slice has been used in precedents to draw insight back to the original uses of spaces. These areas are strategically chosen in order to fit with the new requirements of the reuse programme. This tactic can aid heritage listing purposes.

**Structural Contrast**: Explores how the disguising or magnifying of new structural elements against the existing structure can occur. Using contrast as a design tactic heightens architectural expression emphasising the qualities of the old while equally enhancing the spatial qualities of the new (Brito, 2004, p. 74).

**Rhythm**: Conceptually the use of the original planning grids and layouts can be used to help develop a rhythm in the new planning. The spatial or structural planning may relate to the existing rhythm or have their own rhythm that opposes the existing.

**Opening**: Critical refinement of spatial conditions in order to open up space, act as spatial organisation devices and/or signal physical or visual movement (Brooker & Stone, 2004, p. 208). As a result the tactic of opening can become important strategic devices to allowing the new programme to successfully immerse itself with the existing. An opening can be used as a device to develop strong relationships of sequence and movement to let the new programme inhabit the original architecture.
3.2.3 STRATEGY THREE: FRAGMENTATION

This strategy is occurring in building reuse projects where important details or parts of the building are enhanced through the dialogue with new elements. The buildings become like a historical jigsaw.

Tactics

Surface: old or new materials or textures applied to planes or objects in the architecture. Surfaces are used to develop tension between elements. This tactic is not confined to new surfaces but could incorporate existing surfaces of the building, which in doing so creates a complex representation of the past (Brooker & Stone, 2018, p. 167).

Installation: Like the tactic of the same name, used in the strategic separation strategy, objects are installed throughout the architecture to help orient and direct views and movement through space. The architect’s role in curating the arrangement of the interior and exterior composition of the architecture is important in developing the dialogue of old and new.

Elevations: This tactic is used to highlight contrast between the new and old aspects of the architecture. New additions can be positioned to enhance aspects of the existing elevation or used to break a pattern evident in the original design.

3.2.4 STRATEGY FOUR: TRANSITION

This strategy is exploring projects whose intention is to attach new elements/structures next too, with in or on top of the existing building. This approach creates a juxtaposition in the
architecture allowing the old to be readable against the new through visual separations (Hunt & Boyd 2017, 100).

**Tactics**

**Junction:** The intersections between the new and old parts of the building become important to this strategy. A clear definition of visual separation is important. Case studies show that the junction can occur in many ways, seamless, contrasting, tension, setback etc.

**Volume:** The addition of a new volume is explicitly critiquing the original design of the architecture because it conveys that the new use requires an entire new form in order to successfully occupy the existing (Brooker, 2006, 8). Therefore, an analysis of programme, site and existing architecture is important in being confident with the new volumes positioning and form.

**Insertion:** Helps play a role in the visual separation with the original architectural fabric. The insertion tactic critically assess how circulation may work between the two or more architectures. Furthermore its asks how a new volume may insert itself within or alongside the existing.
3.2.5 REFLECTION UPON FRAMEWORK

There was a significant process taken to reach these final design strategies and tactics (figure 3.12). Early on sustainability was chosen as one of the strategies to the reuse of modern architecture. The intention of this was to engage a contemporary design approach to adaptive reuse, though through reflection it was decided that sustainability was always important to every project therefore it would have an overarching impact on all strategies.

The conceptual capabilities that this adaptive reuse design framework develop could be endless. As a result, programme and sustainability were seen to be filters to the framework. Both elements would act as limits to design opportunities. This allows the design process to remain pragmatic.

Figure 3.12: Various versions of the framework as it was developed.
3.2.6 CASE STUDIES

Precedents were used as a method to both develop and illustrate the findings from the framework exploration. These findings being that individually the strategies can act as conceptual elements of the reuse project, with the tactics the ways to implement them. Though when the entire building is considered each of the strategies and respective tactics co-exist, coming together to form a diverse dialogue between the old and the new.

Fitting with the intention of the framework the case studies chosen (figure 3.13) are all buildings which were originally built during the modernist period, Castelvecchio the exception.

3.2.6.1 KEY PRECEDENTS

La Llauna School, Barcelona, Spain

The La Llauna School is in a former printing factory on a narrow and densely occupied street in Barcelona (Brooker & Stone, 2004, p. 85). This building provided the architects of the re-design with several contextual challenges. The design solution is pragmatic but poetic (Powell, 1999, 151). There are subtle changes to the building as required by the reprogramming (Brooker & Stone, 2004, p. 85).

Strategy: Strategic Separation

Tactics:

Planes: Capitalising on the existing building conditions the architects used planes as a way of
<table>
<thead>
<tr>
<th>Location</th>
<th>Former Function</th>
<th>Built</th>
<th>New Function</th>
<th>Remodelled</th>
<th>Reuse Architect</th>
<th>Framework Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>La Lluana School</td>
<td>Barcelona, Spain, Printing Factory</td>
<td>Late 19th century</td>
<td>School</td>
<td>1984</td>
<td>Enric Miralles &amp; Carme Pinos</td>
<td>Strategic Separation</td>
</tr>
<tr>
<td>Castelvecchio Museum</td>
<td>Verona, Italy, Castle, Barracks, Museum</td>
<td>1st – 18th centuries</td>
<td>Museum</td>
<td>1957-64</td>
<td>Carlo Scarpa</td>
<td>Fragmentation</td>
</tr>
<tr>
<td>The Stables</td>
<td>Melbourne, Australia, Mounted Stables &amp; Police Riding School</td>
<td>1912</td>
<td>University of Melbourne Faculty of Fine Arts &amp; Music</td>
<td>2018</td>
<td>Kerstin Thompson Architects</td>
<td>Immersion</td>
</tr>
<tr>
<td>Gucci Hub</td>
<td>Milan, Italy, Caproni factory</td>
<td>1915</td>
<td>Offices for Gucci</td>
<td>2016</td>
<td>Piuarch</td>
<td>Immersion Transition</td>
</tr>
<tr>
<td>Park Hill Estate</td>
<td>Sheffield, UK, Council Housing</td>
<td>1957-61</td>
<td>Housing &amp; Commercial</td>
<td>2011</td>
<td>Hawkins Brown with Studio Egret West</td>
<td>Immersion</td>
</tr>
<tr>
<td>Fondazione Prada</td>
<td>Milan, Italy, Gin Distillery</td>
<td>1910</td>
<td>Museum Gallery</td>
<td>2008-18</td>
<td>OMA</td>
<td>Fragmentation Transition</td>
</tr>
<tr>
<td>German Design Centre</td>
<td>Essen, Germany, Power Plant</td>
<td>1927-32</td>
<td>Museum Gallery Offices</td>
<td>1997</td>
<td>Foster Associates</td>
<td>Fragmentation Transition</td>
</tr>
<tr>
<td>Citizens Art Centre</td>
<td>Kanazawa, Japan, Factory</td>
<td>1920’s-30’s</td>
<td>Cultural Arts Centre</td>
<td>1995-96</td>
<td>Ichiro Mizuno</td>
<td>Strategic Separation</td>
</tr>
</tbody>
</table>

Figure 3.13: The precedents used to inform the development of the reuse framework.
defining the space into classrooms. The existing structural rhythm of the building was retained which dictated the positioning of the planes (Brooker and Stone, 2004, p. 86).

**Voids:** The architects strategically formed vertical openings into certain areas of the building to open up the spaces and let light fall vertically and radiate horizontally through the floors (Powell, 1999, p. 151; Brooker and Stone, 2004, p. 85). This approach critically assesses the failings of the existing building in relationship to the new programme.

*Tactics from other strategies*

**Openings [from immersion]:** The architects used openings as a tactic for immersing the new programme to the context. Part of the front wall was opened to signify the new entry to the building (Brooker & Stone, 2004, p. 87). Combined with the use of planes this new opening directs movement into the building. The combination of tactics highlights the rich dialogue between old and new required in a reuse project (figure 3.14).

The La Lluana School is a key precedent that aligns with the strategic separation strategy. The architect’s design defines that the new elements are required in order for the building to live on. “[A] dialogue between the old building and the remodelling is developed; the two do not exist independently but become intertwined” (Brooker and Stone, 2004, 87).

**Castelvecchio Museum, Italy**

Carlo Scarpa’s approach to the reuse of the former castle aligns towards the important notion of a dialogue between old and new. In his design Scarpa analysed the existing, striping it back to essential elements and then added a new layer
to relate to the new use while also unveiling the many layers of the building’s history (Brooker & Stone, 2004 p. 245; Murphy, 2017, p. 10)(figure 3.15).

**Strategy: Fragmentation**

**Installation:** Scarpa uses installation as a tactic to direct views movement and light through the space. Each object is carefully curated and displayed to emphasise important junctions and parts of the building’s narrative (Brooker & Stone, 2004, p. 249).

**Elevation:** Elevations are used to disrupt the original rhythm of the facade by inserting windows in locations, to the facades of the old barracks, that are in stark contrast to the original design. This unveils layers of the past while introducing to the facade, the reprogramming of the building. **Surface:** The use of surface enriches the dialogue of old and new. Scarpa’s detailing convey varying degrees of surface treatment such as smoothness to roughness and colour (Brooker & Stone, p. 249). There is a constant interplay of tension in the treatment of surfaces.

Through his design process Scarpa embraces the richness of the detail and uses layering to convey the connection of the old and the new. “He dealt in fragments, layering’s, abstract juxtapositions and asymmetries, and in the arrangement of events unfolding in space” (Murphy, 2017, p. 31).

### 3.2.6.2 VISUAL TRACE ANALYSIS

As a response to the case studies visual trace analyses were undertaken to unpack the various adaptive reuse tactics used by the architects. This process identified that all the buildings require a
synthesis of multiple tactics in order to develop the intended idea of a dialogue of old and new. This co-existence of multiple design tactics transforms the infrastructure from decrepit buildings to living heritage architecture. Architecture that is telling storeys of the past while sustainably facilitating new needs (figures 3.17-3.20).

Figure 3.16: Visualisations of the case studies through various mediums of sketch.
Figure 3.17: Analysis of precedents that display elements of the strategic separation strategy.
Figure 3.18: Analysis of precedents that display elements of the immersion strategy.
Fondazione Prada, Italy

German Design Centre, Germany

Castelvecchio Museum, Italy

Figure 3.19: Analysis of precedents that display elements of the fragmentation strategy.
Figure 3.20: Analysis of precedents that display elements of the transition strategy.
3.2.6.3 VISUALISATION OF THE CASE STUDIES

Free hand pencil, pastel and charcoal sketching was undertaken to explore the details of the precedents. This allowed for an understanding of the design intentions behind the reuse approach in each case study (figure 3.16).

3.2.7 DESIGN RESPONSE TO THE FRAMEWORK + CASE STUDIES

Spatial vignette collages were used as a design method to begin to visualise the framework in the context of the former Naenae Post Office. Combining both hand sketching overlaid over digitally modelled views this design series aimed to explore how the existing building could be adapted to suit the new functions. This series did not reach the level of detail exhibited in the...
case studies. The vignettes were simply placing foreign shapes into the existing building without considering contextual relationships (figure 3.21).

Overall the scale of these drawings was too small, therefore, it was decided to start designing at a larger scale in order to explore the dialogue of old and new at a greater level of detail.

3.2.8 LARGE SCALE DRAWINGS

The set of drawings explored three different approaches to the concept (figure 3.22):

1. post war modernism
2. framework led
3. sustainability

They were explored through both plan and section. These drawings were not successful in terms of design because they failed to engage with the design framework as intended, the outcomes were still in the mind set of section 3.1. In these explorations the framework was being used as a point of reference rather than instigating dialogue in the architecture.

However, as a methodological process this series of A1 drawings allowed for a much more intimate understanding of the old post office. The scale of the drawings showed elements of the existing architecture that may not have otherwise been discovered working at smaller scales. The physical action of drawing at the A1 scale meant that each detail had to be carefully composed and understood. Therefore critical reflection of the existing detailing of the building was able to occur.
Figure 3.22: Design explorations at A1 scale applying the framework to the Naenae post office.
3.3 CHAPTER CONCLUSION

Chapter three has taken two approaches towards deriving new use from existing infrastructure in order to achieving living heritage. One through ignoring programme and the other embracing programme both concluding that guidelines to achieving a dialogue in the old and new was needed to further develop the design outcomes from both explorations. The adaptive reuse framework develops a conceptual guideline when looking to reuse modern architecture. Precedents illustrated and confirmed that the design strategies proposed were evident in current practice. The following chapters take the Naenae Post Office as a subject to test the framework against.

Figure 3.23: Based on the findings from chapter three this diagrams the role of the framework in the reuse of modern architecture.
4.1 INTRODUCTION

This section explores the preliminary design for the reuse of the former Naenae Post Office. The iterative design process undertaken in this chapter builds upon the adaptive reuse design framework developed in chapter three. Each of the series of iterations were evaluated to inform design decisions following. This phase took a pragmatic approach to design, using the conceptual ideas of the adaptive reuse framework whilst using programme as a practical limit.

4.2 ARCHITECTURAL COMPOSITION AS AN EVALUATION THEORY

Composition was an important element of modernist architecture (Frampton, 1992). In this investigation composition was used as a theory for evaluating design outcomes. This along with the learnings from the early literature reviews gave a holistic view towards the design explorations of this section.

Labatut argues that physical, intellectual and emotional needs and desires are equally important to architectural composition as conventional principles (Labatut, 1956, 33). Labatut describes that tangible and intangible elements such as furniture, materials, movement and light, are crucial to architectural composition because they each come with limitations requiring careful consideration and exploration to ensure the composition is successful (Labatut, 1956, p. 34). Here he is acknowledging the need for limitations in order for designs to remain pragmatic to architectural practice. As such in this research portfolio the design tactics and programmes come with limitations that require consideration to ensure strong architectural composition.
To be able to evaluate the design outcomes of this preliminary phase the compositional framework, which parallels the thinkings of Labatut, developed by Don Hanlon in his text Composition in Architecture, has been used. Hanlon in his methodology acknowledges the importance of analysis as a process to stimulate design thinking towards architectural composition (2009, p. 1). Hanlon’s approach is synergising the formal qualities of a composition with the character identity of an architecture. Similarly, in pursuing the character identity in architecture Howard Robertson argues that analysing and experimenting with the existing masses, proportions and repetitions in the buildings can be crucial in developing a strong composition (1945, p. 67). This acknowledges the role of analysis, which in this research portfolio has been clearly demonstrated, to relate all elements of an architectural composition.

Hanlon’s five formal properties of composition act as a framework to assess the physical composition of the design outcomes for the reuse of the post office.

- **Number** – numerical patterns evident in architectural compositions such as rhythm in the structural grid.

- **Geometry** – ordering device which develops a language of form for a phenomenon. In architecture this could relate to spaces that have different sizes and uses, but geometrically are similar, such as rectangular to square spaces.

- **Proportion** – ratios of aspects of a compositions in relationship to the context.

- **Hierarchy** – relative importance of
elements in a composition. This is dependent on number, geometry and proportion because they all contribute to relative sizes of parts of a building.

- **Orientation** – in architecture orientation could occur both externally and internally. This could be relating externally to aspects such as the patterns of the sun or a direction of movement whereas internally the orientation could be determined by functional and organizational requirements

*Descriptions paraphrased from Hanlon, 2009 pages 3 and 4.*

In this research portfolio the two perspectives to architectural composition is required to ensure a dialogue of old and new is being developed in the design outcomes that compositionally are strong both formally and holistically.
4.3 CONCEPT DESIGN

The preliminary design phase developed a consistent design exploration method of collage to explore the design intent. This range of 3d collaging explored form, organization, composition and programme to transform the existing Naenae Post Office to living heritage. The constant layering of elements heightened this expression for two dualities, old and new, coming together in a reuse project of this nature which section 2.1.4 argues is important in achieving living heritage.
4.3.1 BUILDING A CONCEPT DESIGN

The initial series of iterative explorations (figure 4.1) look at how tactics of the framework (section 3.2) could be implemented in order to introduce new programme to the existing architecture. This situates the design framework as a conceptual device in the reuse of existing infrastructure. The diagrams and 3d collages show conceptual ideas of planning and spatial relationship between the new and existing.
Figure 4.1: Iterative series of explorations using the design framework as a device to generate conceptual ideas for the reuse of the former post office building.
Parti Diagram Plan

Iteration 4 - Planes

Iteration 5 - Planes & surface

Iteration 6 - Planes & insertion

3D Visualisation

layers of old and new
4.3.2 DEVELOPMENT OF A CONCEPT

Continuing to use 3d collage as a design method this series of iterative development engaged with the reuse framework and how it could be applied to the existing architecture (figures 4.2 – 4.4). The iterative process allowed variations in the tactics to be explored in order to assess the best options and manifestations of the framework on the existing infrastructure.

Furthermore this series of explorations highlighted that the existing clock tower should be retained as the dominant hierarchy in the architectural composition. The role of the clock tower in Naenae’s built environment is important to retain. When introducing new elements to an existing modernist building the explorations highlighted that subtle changes can be effective to tie the new programme to the history of site.

These findings developed a design concept that respects the existing building, retains the clock tower as the dominate object in the composition whilst pushing the limits to achieving a new and old dialogue in the architecture.
Iteration 2 development
Figure 4.3: This series expands iteration four. They show respect to the existing while engaging the tactic heritage slice by restoring original planter boxes. Uses small interventions, such as openings to support the re-programming.
Iteration 6 development

Figure 4.4: These explorations build upon the outcomes of iteration 2 and 4 development and propose a 2nd level to facilitate new use the iterations specifically unpack the transition strategy looking at volume, junction and insertion design tactics.
Iteration 6 development continued
4.4 RESOLUTION OF THE CONCEPT

To strengthen the concept, focus was placed on development of form. Introducing a new volume to the building to suit the new programme was the considerable observation from the initial concept therefore this development of form was important to ensure that the new integrated in dialogue with the existing. The use of collage allowed many layers of the research investigation to be explored at the same time with each subsequent series of iterations building upon the previous.

4.4.1 STRUCTURE

Through exploring five variations of structure (figure 4.6) this series concluded that new structure to support the new 2nd level should ensure that it does not significantly interfere with the ground plane as not to disrupt the existing pedestrian movement (figure 4.5). Highlighting that in the reuse of modern architecture when introducing a significant new volume the implications on the existing urban design should be considered.

4.4.2 PROPORTION

This series looked at how the proportion of the new volume could relate better to the existing hierarchy and composition of the former post office (figure 4.7). Particular attention was paid to ensuring the dominance of the clock tower was not lost. This iterative investigation identified that using the qualities of an existing building can identify opportunities to integrate the new architectural elements. Along with the considerations in section 4.4.1 the findings of this investigation help reduce the dominance of the new volume on the western façade of the former post office.
Light Weight Structure

Match existing structure

Innovative Materials

Structural Walls
Freeing the ground plane

Figure 4.6: Iterative explorations of potential new structure for the second storey.
Figure 4.7: Iterative explorations of the proportion of the new volume in relationship to the existing architectural composition.
New volume
initiates potential
new design at th
entire built

Flat form across. Clock
remains.

Ward continuous
Sliding have a
better dialogue to entity.
Structure beyond.

New volume proportions in better
relationship to extg. Dialogue.

Sit in line with extg
veranda.

Proportions work well with th clock tow.
4.4.3 COMPOSITION OF NEW VOLUME

The vertical extension of the clock tower against the elongated horizontality of the former post office building lead the development of the new volumes form. The series looked to explore how two forms could coexist together (figure 4.8). This process identified the design tactic of contrast (section 3.2.2) as important in ensuring that the new volume respected the existing composition of the building. Learning from the use of volumes and contrast in case studies, section 3.2.6, such as Gucci Hub, The Stables and Tate Modern helped justify the composition of the volume.

Figure 4.8: facing page - Exploration of the composition of the new 2nd storey.
layers of old and new

1. Large Volume.

2. 

3. 

4. 

5. 

6. 

7. 

8. 

9. 

10. 

Similarity:

Tate Modern:

Mass Above:

Gucci Hub:

Contrast Volume:

Christchurch Civic Building:

New to facade:

Alternative: Option C:

Smaller 2nd volume to show relationship to the old form [s].
Figure 4.9: Iterative exploration of potential roof forms of the proposed new volume to the existing building.
4.4.4 FORM DEVELOPMENT

Design tactics contrast, elevation, volume and planes were used to develop the roof form to identify the separation of old and new (figure 4.9 – 4.10). The iterations document a thorough exploration of options considered against the context. This identified that the reuse of modern architecture requires the synergy of multiple design tactics to achieve a design intent.

Figure 4.10: Existing roof forms in Naenae helped influence design exploration of the roof.
4.4.5 PLANNING THROUGH SKETCHING

The final stage of the resolution of the concept related the development of form to the proposed new programme for the building (figures 4.11 – 4.14). 3D axonometric sketching was used as a method to resolve the spatial arrangement, circulation and movement within the building. These explorations indicated where new openings could be located to suit the requirements of the new use and the movement within the building. Compositionally these explorations use the existing internal orientation of the building to situate the new functions. Therefore the existing architecture is informing how the programme occupies the building, a key notion argued in the literature in chapter two.
Figure 4.11: Iterative development of the planning scheme for the reuse.
Figure 4.12: Further development of iteration one
Figure 4.13: Further development of iteration two and three.
Figure 4.14: Further development of iteration four and five.
4.5 CHAPTER CONCLUSION

The preliminary design has used the adaptive reuse design framework as a device to resolve the form and planning of the building (figures 4.15 - 4.19). Design tactics have been taken from each strategy in order to achieve design intents. The essence of the concept was retaining the existing clock tower against a new volume to situate the new programme requirements, there was a definite development of form and composition in the process of defining the concept. A planning strategy that relates to the existing design of the building locates the programme in the building however there was a lack of articulation of the interior aesthetic.

The focus on form and planning has neglected the resolution of the reuse scheme at a detailed level. A resolution at a higher level of detail will develop the integration of the old and new which is crucial to transform the building to being dynamic. Therefore the developed design stage aims to engage the detailing in a lot more depth to ensure a synthesised design outcome for the reuse of the former Naenae post office.
Figure 4.15: Visualisation of the preliminary design solution.
Figure 4.16: Preliminary design ground floor plan.

**Key**
1. Hillary Court Pedestrian Mall
2. Clock Tower
3. Courtyard
4. Entry
5. Community Kitchen Dining Area
6. Community Kitchen Workspace
7. Community Event Space
8. Storeroom
9. Co-working Office
10. Reception
11. Unisex Toilets
12. Stairs
13. Elevator
14. Corridor
15. Service Entry
16. Area for Temporary Market
17. Existing Naenae Cafe
18. Existing Naenae Pharmacy
Key
1. Hillary Court pedestrian mall
2. Clock Tower
3. Courtyard
4. Meeting Room
5. Lockers
6. Co-working office quiet zone
7. Co-working office social zone
8. Storeroom
9. Kitchenette
10. Foothpath awning
11. Unisex Toilets
12. Stairs
13. Elevator

Figure 4.17: Preliminary design first floor plan.
Figure 4.18: Preliminary north/south section identifying critical consideration of new elements in the concept design.

Key
1. Courtyard
2. Community Event Space
3. Corridor
4. Co-working Office
5. Elevator

new volume over former retail space to add a second level to the building for the co-working programme, making use of the 2 existing roof heights.

forming void in the existing building to insert new vertical circulation.

demolishing existing glazing and making use of opening to direct movement based on the re-programming.

new opening to facilitate connection between event space and community kitchen.
Figure 4.19: Preliminary east/west section identifying critical consideration of new elements in the concept design.

**Key**
1. Community Kitchen
2. Community Event Space

- **Key**
  - New volume to suit requirements of the reprogramming.
  - Heritage slice restoring the original vertical and horizontal timber panelling in the former post shop public area.
  - Installation of new bench tables between existing concrete structure.
  - Forming new opening in existing wall to install new kitchen joinery, dining space in old post office area.

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5.1 RESOLUTION OF THE PRELIMINARY DESIGN

The developed design stage looked to explore the articulation of an interior aesthetic and a more detailed approach to the coming together of the new and old elements of the building.

5.1.1 THE STAIR AS THE ACTIVATOR OF REUSE

The development of the stair case to connect the ground floor of the existing building to the new second floor was used as an architectural element to begin the conversation between old and new as it directly involves both old and new connection the new space with the existing (figure 5.2). Sketching and collage was used as a design method to unpack the opportunities of the stair case. In the preliminary design the stair was not in a prominent location because the opportunities of the stair had not been fully unpacked. Through reflection the developed design positioned the new stair case in a central location in the building allowing it to be an activator of movement throughout the building (figure 5.3).

The transparency of Ernst Plischke’s approach to stairs was embraced as a precedent and lead to spatial opportunities of inhabiting the space below the stairs (figure 5.1 & 5.4).

The development of the stair uses the design tactic void to create a new opening in the existing building that is carefully considered and suits the re-programming. The development of the stair identified that to fully resolve an aspect of the design numerous design tactics from the framework are required. Installation to carefully consider how the stair related to other parts.
Figure 5.2: Initial sketching looking at the connection of new and old in the design of the stairs.
Figure 5.3: Iterative explorations of how the stair could manifest spatially. Downside of this series is the balustrading being asthetically too heavy.
of the building, such as through the design of balustrading and treads. Opening to form a new entry to suit the positioning of the stair case. Void in order to connect the ground floor to the new volume. Each design move comes with its own set of implications requiring careful consideration to ensure that the essence of the design is not lost (figure 5.5 – 5.6).

The New Zealand building code was referenced in the design of the stairs to ensure the design remained pragmatic adding another layer of complexity to the research.

Figure 5.4: Developing the balustrade to be more transparent. These explorations added a more contemporary colourful aesthetic against the functional modernist design.
Figure 5.5: Sectional visualisations development identifying spatial implications that require consideration of other design tactics such as planes (roof) and openings.
Figure 5.6: Development of the stairs
5.1.2 DEVELOPMENT OF MATERIALS

Analysis of the existing materials was undertaken. The existing drawings and photographs showed evidence of asbestos therefore it was proposed that all of this would be safely removed accordingly. The exploration of materials highlighted ones that should be retained in the reuse scheme (figure 5.7).

Working with the existing materials would ensure a rich dialogue between old and new, while engaging notions of sustainability. The new materials were chosen to work with the existing materials to help develop the tension between old and new (figure 5.8).
Figure 5.7: Analysis of existing materials in the former post office building.
Material Palette

Figure 5.8: Proposed material palette of both existing and new materials
5.1.3 THE EXISTING ENTRY – HERITAGE SLICE

The original vestibule entry (figure 5.10) to the former post office was embraced as an opportunity to explore the design tactic heritage slice (section 3.2.2). This tactic allowed for layers of the buildings history to be unveiled.

A small peel in the paint finish on the columns at the entry showed that the original glazed tiles where still remaining under this layer of renovation (figure 5.9). The bright colours that can be seen had a relationship to the funky aesthetic that developed in the resolution of the stairs. Restoration of these tiles would directly link to the original use.

The existing entry door was also seen as worthy of being retained and restored. Spatial in the redesign it has been used as a division between the new enclosed entry and community kitchen beyond (figure 5.11 -5.12).

The resolution of this entrance identified that to achieve living heritage a consideration of the failing of the existing materials is important to understand how the new elements can aid in ensuring the longevity of those that can be sustainably retained.
Figure 5.11: Variations of how the entry could be adapted to achieve a heritage slice.

- exterior vestibule retained
- enclosed entry with original door as a division plane.
Figure 5.12: Development of the entry to facilitate new use. Enclosing the original portico allows for more usable space in the community kitchen.
5.1.4 THE COMMUNITY KITCHEN

The new community kitchen retained the position of the original post office counter, therefore primarily inhabiting the original public part of the building. The notion that this space was once the space that served the community drove the decision to position it here, a new programme that would again serve Naenae. This holistic orientation of the space strengthens the composition of the new interior environment because it is adding meaning to the design decisions.

Features:

- New kitchen joinery was positioned in the space similar to the location of the original post office counter. Reusing timber from the demolished walls, new appliances to suit modern needs and a lighting design that follows the original.
- The timber vertical and horizontal panelled wall surface is restored to show respect to the existing.
- Nooks for sitting, trading, eating are created between the existing concrete columns and space by the existing entry door.
- The opening between the former public post office space and the offices remain and as a result a new door would be installed to provide connection to the co-working office but retain the ability to separate the spaces.

The ground floor plan (figure 5.14) shows the planning of this space. Visualisations of the intended aesthetic of the community kitchen will be presented at the onsite examination and as part of the addendum.
5.1.5 COMMUNITY EVENT SPACE

Plischke used movable walls in a number of his modernist architecture (Sarnitz and Ottillinger, 2004, p. 188). This similar approach was taken in the design of the community event space, using planes as a design tactic for separation of space. Providing flexibility, multiple uses of a single space. This helps articulate the flexible nature of this programme type as well as retain the original open plan aesthetic of the mail room. Furthermore the ability for this space to become an extension of the community kitchen further enhances its flexibility (figure 5.14).

5.1.6 REFINEMENT OF THE FAÇADE

The existing rhythm of the southern façade is retained, modernising the floor to ceiling glazing while adding a new door to provide access between the courtyard and the event space (figure 5.13 – 5.14). This identifies that subtle changes or upgrades to the existing building can be effective in refreshing the architecture.

The introduction of a second floor impacted the western façade, however attention has been given to retaining the existing rhythm of the façade. Forming a new opening, to relate to the stairs, disrupts the rhythm but identifies a change in programme, similar to that done by the original architect. Upgrading the ceiling to floor glazing in the community kitchen refreshes the façade but retains its original character. Demolishing the section of awning at the new entry but retaining the steel structure shows a link to the past (figure 5.14 - 5.15).
5.3 DEVELOPED DESIGN REFLECTION

The developed design stage has resolved key elements of the building to suit the new use. It has aimed to articulate the interior aesthetic. The adaptive reuse of modern architecture framework developed in chapter three has been used as a device to resolve the design solution.

Further development could have gone into the resolving of the programmes, particularly co-working office however the premise of this research has about the dialogue developed when new architectural elements are integrated with existing building conditions.

Continuing this process of development, between the submission of this document and the onsite examination work will be done to achieve a more detailed resolution and articulation of the conversation of old and new in the final design scheme.
Figure 5.13: Visualisation of the development of the Southern facade.

layers of old and new
Figure 5.14: In progress developed plan of ground floor. Resolved plan will be presented at on site examination and added in addendum.
Figure 5.15: In progress developed plan of first floor. Resolved plan will be presented at on site examination and added in addendum.
This research portfolio advocates for the preservation of heritage architecture, particularly modern heritage. Engaging adaptive reuse as a design process to achieve this, the research has argued that a coming together of old elements with new, through a critical consideration of context, will develop a useful dialogue in the architecture. This investigation has engaged a pragmatic approach to research critically assessing the existing fabric and exploring how the reuse scheme can have minimum impact on the existing. The inherent nature of reusing an existing building along with considerations of material reuse, implications of significant alterations, and new programming based on building and contextual conditions align this investigation to a general discourse of sustainability.

The core proposition is the notion that less truly is more. By using this notion, the research process concluded that subtle changes can help retain the essence of the original design, while also facilitating new building uses. Thus highlighting that the complexities of this research lie in the investigation of the dialogue between old and new in the aesthetical detailing of the reuse design, such as facades, stairs, junctions and material choices. Although subtle at times, these moments of design outcomes observe the need to carefully consider the existing fabric when working with modern architecture. Continuing this process, additional elements of more detailed resolution will be presented for the on-site examination and later in the addendum.

Overall this research portfolio has engaged a methodology that has explored numerous avenues. It has been grounded by an approach
that firstly analysed the existing context to build a historical and theoretical basis for the research. Secondly, new use for the existing building was sought through two differing approaches to design that concluded that an adaptive reuse design framework was necessary to strategize the reuse of modern heritage. Finally, the creation of this framework lead to it being applied to the selected site to test through iterative design explorations these ideas towards the reuse of modern architecture. The iterative design explorations through collage and sketching have embraced the notions of the coming together of multiple elements. This notion has been applied during the project to both design thinking and reflection upon the literature to strengthen the notion of a dialogue between old and new.

One real obstacle for the development of the research portfolio was the inability to gain access to the interior of the post office building during the research. Requiring historical photographs and records to be used to make assumptions of the existing condition of the interior, which might have limited the ability to observe unrecorded changes to the building. While the project investigated one approach to adaptive reuse, one limitation is that a number of other approaches could be seen as almost equally important but not fully investigates them. Focus on urban role, more detailed development of co-working programme, investigations of the heritage listing requirements, performance simulation or speculative design approaches could have added to the complexity of the project. Additional explorations of any of those present opportunities for further research.

This project contributes to the wider research
field because it is encouraging adaptive reuse as a design process for the preservation of modern architecture. The design outcomes of the investigation have demonstrated that the learnings from the past through contextual analysis adds a contemporary layer to the building that makes the building better than before, sustainably facilitating more new uses. Adaptive reuse of an existing building places a clear set of limitations at the beginning of the process requiring innovative design thinking. The development of an adaptive reuse framework has achieved a strategy towards the reuse of modern architecture. The application of the framework has found that a synergy of multiple design tactics from the framework is required to achieve living heritage in modern architecture. The design research has clashed notions of historicism and contemporary design thinking to challenge traditional approaches to heritage preservation while also facilitating new uses of modern heritage.


7.0 FIGURES LIST

All figures not attributed in this list are authors own

Chapter One

Figure 1.1: Naenae Post Office 1959


Chapter Two

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Figure 2.4 Reuse strategies definitions


Figure 2.7 Whare in the Bush & Modern example

Top: A.P.Godber
Bottom: Lewis Martin

Figure 2.9  **Ernst Plischke as a young man**


Figure 2.10  **Book cover of Design and Living**


Figure 2.11  **Massey House: Ada Wendt**

Sutch House: Greig Royle Studio

Kahn House: Irene Kappel

Khandallah Community Centre: Plischke Estate


Figure 2.14  **Photograph of the Abel Tasman Memorial**

Plischke Estate

layers of old and new

Figure 2.19  Mondrian Composition II in Red, Blue, and Yellow

Figure 2.24  DOCOMOMO International logo

Figure 2.28  Exterior of Naenae Post Office 1959

Figure 2.31  NZ Post closures headlines


Figure 2.32  Kaitaia Post Office 1910 & Taita Post Office 1967


Figure 2.35  Selection of photographs from Evelyn McLaughlin collection


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Figure 2.36  **1.3 Waitomo Caves & 1.4 Waterloo**

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Figure 2.37  **Nuku Tewhatewha Pataka**


Figure 2.38  **Plischke’s scheme for Naenae Community Centre**

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Figure 2.39  **Hillary Court under construction 1958**


Figure 2.41  **Naenae Post Office being built**

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Figure 2.44  **Interior of the post office with Guy Ngan mural, 1959**

Courtesy of the Ngan Family
Figure 2.50 Existing interior of former Naenae Post Office

Courtesy of Emily Innes

Chapter Three

Figure 3.14 La Llauna School

Ferran Freixa


Figure 3.15 Castelvecchio Museum

Federico Puggioni ©


Chapter Five

Figure 5.1 Plischke stair precedent

Bonny Stewart-MacDonald

https://urbismagazine.com/articles/art-and-architecture-mingle-happily-in-this-home/

Figure 5.10 Original post office entry


layers of old and new

York: Thames & Hudson Inc.


States: Random House.


The Dominion. (1959, December 5). New Naenae Post Office Reflects Changes in Design. *The
Dominion.


The addendum consists of design work undertaken and produced between 18th November 2019 and 9th December 2019 prior to the on site examination.

9.1 FINAL DESIGN

This work further developed with more detail the reuse scheme for the former Naenae Post Office. The final three dimensional visualizations along with resolved floor plans articulated the exterior and interior aesthetic in order to convey how a dialogue between old and new can be developed in the reuse of mid-20th century architecture. The new elements of the building are identified through using black as a colour scheme to contrast against the existing forms and materials of the former Naenae Post Office. This allows the new to sit in clear dialogue with the existing architecture.

The final design conveys the conclusions from this research that adaptive reuse as a contemporary design approach to preservation allows the architecture to live on into the future by facilitating new uses along with tying elements of the former use of the building in the architectural solution.

Pages 203 – 217 – plans and visualizations presented at the examination.

Pages 218 – 219 – examination wall display.

Page 220 – end of year VUW Celebrate exhibition display.
Figure 9.1: Exterior view of the reuse design of the former post office. The clock tower remains a prominent feature, while the new volume sits subtly alongside.
Figure 9.2: West Elevation.
The new elements work with the existing qualities of the building to form an architecture that is respecting the past as well as serving new needs.
Figure 9.3: The southern facade retains much of its original character. Updating the door on this facade allows a second entry to the community event space as well as making the courtyard more usable.
Figure 9.4: 3D visualisation of the dialogue developed between old and new. Heritage slice tactic - new glazing inserted in existing structure, original glazed tiles restored.
Figure 9.5: Original elevation of the vestibule entry to the former post office. Traces of this design are unveiled in the reuse design of this research.

Figure 9.6: The community kitchen as the heart of Naenae. A new centre of community engagement.
Figure 9.7: Community Kitchen - The original entry door is restored in the reuse scheme, while a contemporary interpretation of the original counter design is undertaken to show respect to the original use of the former Naenae Post Office building.
Figure 9.8: New entry to the co-working office introduces a new programme to the street front. The new disrupts the original rhythm of the architecture to highlight the change in use.
layers of old and new

Figure 9.9: Co-working office reception.
Figure 9.10: New entry to community kitchen and community event space. Spatially the interior is more open and flexible for community functions. An interpretation of the original Guy Ngan mural (figure 2.44) was designed to make use of the dividing wall between the co-work office and community kitchen as well as referencing an important mural that was lost throughout the years of change to the post office building.
Figure 9.11: New staircase and lobby of the co-working office. The design of the stair aligns to modernist architecture. While the mural follows the interpretation of the Guy Ngan mural in the community kitchen, as if the triangular forms are coming through the wall. Doors and glazing between the spaces are retained to allow for spatial connections.
Figure 9.12: First floor flexible work spaces. The top ends of the original ground floor columns are evident and used to form new tables for work space.
Figure 9.13: Ground floor work spaces.
ON SITE EXAMINATION 9 DECEMBER 2019 - WALL DISPLAY
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