RUINS FOR REMEMBRANCE

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ABSTRACT

There is no other building that signifies what it means to be from Christchurch more than the Christchurch Cathedral. It is the symbol of the city, a unique part of the ambitions and aspirations of the founding fathers and early European settlers. The Cathedral tells the story of Christchurch, it is the heart, soul and centre of the city that is a part of our history in every sense of the word. Six years on from the devastating earthquakes of 2010 and 2011, the Cathedral has lain dormant, precisely placed awaiting a decision dividing the city.

The fate of Cathedral has shifted between two extremes:

- Option A: A complete reinstatement and restoration of the original Cathedral.
- Option B: Demolish the remains and build a contemporary replacement Cathedral.

When reviewing the two extremes, the reinstatement of this building is a denial of the earthquakes and what the building and city have endured; the replacement and demolition of this building is a denial of its heritage and historical value. The Anglican Synod, the official assembly of the church clergy, voted to reinstate and restore the Cathedral, just weeks before this document was completed.

Although this decision has been made, this research project introduces a third alternative, that sees the Christchurch Cathedral as a preserved ruin and transformed into a new civic centre. This scheme is neither restoration nor replacement but instead re-imagines and transforms the remains of the Cathedral through sensitive intervention as a space for the people. Seeking to 'press pause' on local social and architectural attitudes towards restoration and replacement, by exploring different design alternatives and future trajectories. Through this alternative, the building’s heritage and historical value are remembered, and the earthquake’s impact on the city is acknowledged.
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INTRODUCTION

1.1 RESEARCH QUESTION

“How can the architectural design of a sensitive intervention effectively transform the remains of the Christchurch Cathedral as an alternative to restoration or replacement?”

1.2 PROJECT BACKGROUND

A violent and destructive earthquake violently rocked greater Christchurch on 22 February 2011. The lives of 185 people were lost, and many were seriously injured. This was one of the thousands of earthquakes experienced in the region. Starting on 4 September 2010, our communities were forever changed. Anyone who lived through the earthquakes has their own memories, from tragic loss to miraculous survival and everything between.¹

This research explores the opposing relationships characterised by the struggle between the opportunities of architectural transformation and limits of the surviving heritage of the city. To stimulate new ways of imagining, interpreting and intervening with historic urban environments, to prevent the permanent loss of its physical heritage.

The preservation and intervention of the Christchurch Cathedral is crucial to the recovery, spirit and identity of the city, a historic legacy to pass on to future generations to appreciate and enjoy. Acting a force beyond its intentional representation with a power to symbolise and embody the loss of both the Cathedral and the Church of England at the heart of Christchurch contemporary culture.

1.3. PROJECT OUTLINE

Firstly, Christchurch Cathedral will be preserved, as a significant amount of Christchurch heritage has gone; preserving the ruins of a distinctive Gothic Revival centre is pivotal. As a civic space, the Cathedral would remain deconsecrated, and the building would be transformed and repurposed as a public centre of Christchurch.

The architectural intervention becomes a place of congregation, information, contemplation and remembrance. An information/visitor centre, as well as a café/restaurant, aim to generate an enhancement in tourism and reception of visitors that will continue to enrich the city. Functions such as Christmas and Easter services are incorporated, as well as areas used for markets, civic and festival events while respecting the integrity and original character of the historic building.

This research project starts with a review of the theoretical discourse on issues of preservation and intervention, investigating through iterative design process exploring the divide between the interaction of old and new built fabric. Heritage factors play a crucial role in the city’s emerging future, to re-establish Christchurch’s identity and connection back to its surviving buildings.

1.4. AIMS/OBJECTIVES

The project aims to make the building’s ruins useful and to perhaps evaluate the Christchurch Cathedral’s value in the community in the present and future life of Christchurch. The central focus of this project is to enhance the messages and values of surviving heritage, and look to steer an existing condition away from its predetermined or seemingly inevitable future between the current binary paradigm of restore or remove.

The purpose of this project is to ultimately devise an architectural intervention that responds sensitively to the limitations or potentials of the current building fabric, with the highest respect possible. Integrating the people, the Cathedral and the square, to ensure the visitors and wider public remember and engage with their past as a living part of the city.

1.5. SCOPE & LIMITATIONS

The ongoing debate surrounding the fate of Christchurch Cathedral has caused spirited discussion in Christchurch and wider New Zealand. The scope of this project acknowledges this, although, has not been constrained by the way these issues seem to be playing out.

Regarding engineering and strengthening issues concerning the Cathedral, this was understood from Miriam Dean Report. This report facilitated discussions with engineers for ‘Church Property Trustees’ and the ‘Great Christchurch Buildings Trust’ on engineering options for repair, restoration or replacement of the Christchurch Cathedral.

Concerning the extent to which Cathedral Square is considered, this research project acknowledges the significance and importance the relationship of the Square and Cathedral hold. However, the scope of this project focuses on the preservation and intervention of the Cathedral and adopts Regenerate Christchurch concept draft plan of the Square and surrounding area.

1.6. METHODS

This research project proposes a process for the preservation and intervention of damaged heritage of the Christchurch Cathedral. The tangible fragments of the Cathedral are essential architectural elements, intended to be remembered and seismically stabilised to reach an archival approach to preservation. Careful analysis of the Cathedral was necessary to produce a meticulous account of the remaining building in determining factors for the design. A three-dimensional digital model was generated to obtain and ensure a superior understanding of the current state of original building before thinking about how the project intended to work the new language with the old.

Architectural precedents were analysed to test alternative approaches to the existing building to devise the nature of engagement with the past. An iterative process of workbook drawings and sketch-up exploration were developed to explore the type of interventions and ‘intervention tactic’ employed by the precedent architect.
2.1. CONSERVATION IN ARCHITECTURE

Throughout history, historic and heritage buildings have been threatened by development at various times in their lifecycle. Heritage is something that has special significance to individual communities, and this is no different in the case of Christchurch. Heritage is recognised as part of our past exclusive to a particular generation gone, reminding us about the achievements and identity of that community.²

When heritage buildings suffer damage, they are typically met by either one of two extremes; bowl the building over or build it back up. If the decision to conserve a building were to be pursued, current best practice sees original methods and materials given preference in conservation work with the value sensitivity and respect of buildings concerning its history and context seen as successful schemes. This is demonstrated through the use of materials, form, colour, or a combination thereof. As a result, demonstrating an appreciation of progress of architecture techniques and technologies, without detracting from the form of the original.³

Any project that is involved in the adaptation and repurposing of an existing building, or re-instating the purpose of it, involves an existing language of architecture. In the case of the Christchurch Cathedral happens to be Gothic Revival, and a new language of the new. The usual strategy, that is generally approved is that the language of the intervention is distinct and clearly different from the language of the original. That is not to say that the two languages are antagonistic towards each other, there is simply no mistake about what is new and what is existing.⁴

4 Ibid.

STATE OF KNOWLEDGE

2.2. DEFINITIONS

- Preservation means to maintain a place with as little change as possible, to ensure its long-term survival and the continuation of its cultural heritage value.
- Intervention means any activity that causes disturbance of or alteration to a place or its fabric. Intervention includes archaeological excavation, invasive investigation of built structures, and any intervention for conservation purposes.
- Reinstatement means to put material components of a place, including the products of reassembly, back in position.
- Restoration means to return a place to a known earlier form, by reassembly and reinstatement, and/or by removal of elements that detract from its cultural heritage value.
- Stabilisation means the arrest or slowing of the processes of decay by providing treatment or support.
- Tangible Value means the physically observable cultural heritage value of a place, including archaeological, architectural, landscape, monumental, scientific, or technological values.⁶

6 Ibid. 10.
2.3. CHRISTCHURCH EARTHQUAKE CULTURAL HERITAGE AND NATURAL DISASTER

A reminder to us all the Christchurch earthquakes of 2010 and 2011 has caused vast amounts of damage to heritage and historic architecture, leaving an immeasurable impact on the built environment. Recorded throughout the history of the city, this loss of heritage is practically unmanageable to duplicate, these buildings that are now lost, significantly attributed to Christchurch’s architectural identity. With around 40 highly significant buildings listed under the Christchurch City Plan demolished, the surviving historic buildings in this instance become central in giving shape to the city’s cultural memory.

“By naming destruction an inescapable beginning of all construction, a necessary yet effectively repressed platform of the ideology of progress, one has to realise that what is of interest are not the objects destroyed, but the inability or impossibility to see the world differently without destroying them.”

We are living in a time of extreme flux. History is happening in the present as we question the past and hope for a better future. With the observations of climate changes threatening the earth, it becomes difficult to imagine a place free of devastation and destruction. The number of natural disasters is projected to increase, and in this instance, the cultural memory of cities are at risk of being lost. To the pivotal point at which both the fragility and the stubborn persistence of the human condition seem to be framed. The built environment has always been susceptible to disasters in many destructive ways, and throughout history, these disasters have always threatened the fabric of cities.

The effects of disasters on built fabric are typically demolished without leaving a trace, although, visible traces of disasters can attain a particular monumental value. These traces of disasters need not be cleared away they can be recorded as a meaningful layer of history, representing age value. Buildings like the Christchurch Cathedral can remain as historical evidence, as reminders in the sense of what was experienced. This approach has been applied in my proposal, as it offers the observer an opportunity to take a step back and reflect on what happened in Christchurch.

Figure 2.1. Christchurch Cathedral in Ruins.
3.0. EXISTING KNOWLEDGE - PRESERVATION

3.1. NATURE OF PRESERVATION

“The task involved in bringing together the petrified remnants of yesterday and the life of today provides a vivid illustration of what tradition always means: not just the careful preservation of monuments, but the constant interaction between our aims in the present and the past to which we still belong.”

The nature of historic preservation has long existed to be merely a question of preserving the city image. Engaging with the already existing built environment is becoming the order of the day, preserving it for continued use. The task of preservation is not merely aimed to ensure the survival of fragments of buildings in isolation, but to recontextualised the remnants of the past and guarantee their future as living parts of our world.

Preservation is any activity proposed to maintain surviving cultural resources, historic sites, or protected buildings and districts, employing a range of treatments from simple maintenance to rehabilitation for new uses. In general policies regarding preservation and new construction in historic settings have been consistent and confusing for practitioners and architects alike. Consequently, a debate has occurred about what should be the relationship between the architecture of the present and the architecture of the past, especially when they occur together in the same protected setting.

Because our attitudes toward the architecture of the present are shaped primarily by our attitudes toward the architecture of the past, and vice versa. The preservation of existing buildings is about the creative possibilities of preservation and can be achieved in many ways: Meticulously restore it, trying to keep alive the smells and the textures and construction that gave it birth and constitute its history. Alternatively, gently bringing it into the present with minimal interventions integrating new development, albeit reserved or invasive. The preservation of old buildings enriches the cultural and physical energy of a city, allowing the occupants to use, enjoy and learn from them in the present.
### 3.2. AGE & MEMORY

“Already the image of the nineteenth-century castle ruin teaches us that these objects are cultural products of memory that serve specific aesthetic purposes of melancholy and nostalgia. Urban ruins in re-use, act as aesthetic object in the modern city. They are involved in an ongoing atmospheric translation of their cultural memory.”

Whole regions and cities are defined by the variety and texture of buildings they contain, which although often of very differing architectonic or artistic worth, have become the bearers of many personal memories over the course of time, and therefore are part of the general collective memory as well. Although, irrespective of the buildings historical significance, the very idea of protecting a gas station or a shopping centre sends some preservationists into mild convulsions because such types are assumed to be detrimental to the landscape.

“That is again no question of expediency or feeling whether we shall preserve the buildings or past times or not. We have no right whatever to touch them. They are not ours. They belong partly to those who built them, and partly to all the generations of mankind who are to follow us. The dead have still their right in them: that which they laboured for, the praise of achievement or the expression of religious feeling, or whatsoever else it might be which in those buildings they intended to be permanent, we have no right to obliterate.”

History, memory and continuing management of heritage are some of the reasons to preserve historic buildings, which form the distinctive character of many urban centres, creating continuity with the past, and providing a visual cultural reference. Age poses a further set of problems, the older a remnant of the past is, the more preservationists tend to want to preserve and protect it. The basis for such an outlook is rarely expressed, but is rooted in the belief that ‘old’ is inherently better than ‘new.’

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19 Richard W Longstreth author, Looking beyond the Icons. 22.
3.3. PICTURESQUE RUIN

“The scar is a deeper level of reconstruction that fuses the new and the old reconciling, coalescing them, without compromising either one in the name of some contextual form of unity. The scar is a mark of pride and honour, both for what has been lost and what has been gained. It cannot be erased, except by the most cosmetic means.”

Throughout the 1940s, remembering the war in ruins increasingly became a scheme to investigate as an alternative to demolition or rebuild. In picturesque terms, a letter of The Times in 1944 was published characterising the visual ‘charm of ruins’ as damaged cities, and significant buildings can be preserved become permanent war memorials. This approach to memorialising a disaster sends a powerful message of remembrance of the devastation of what war can generate. In 1945, architect Hugh Casson published ‘Bombed Churches as War Memorials’ in his writings; he suggested these damaged buildings can be preserved as ‘garden ruins.’ Conceptual sketches of War Memorials were illustrated representing what these garden ruins would be like.

“History moves forward while looking over its shoulder; how much to commemorate and remember, how much needs to be forgiven then forgotten in the interests of peace within and without?”

The ruins of the Christchurch Cathedral must be remembered; the ruin, depicts layers and dimensions of the city, reminding us in the present the cities recent violent past, as a physical and demonstrative reminder of the result devastation or disasters can occur. Just as a human skeleton is a more acceptable presentation than a decaying corpse, a building in ruin is a more sanitary state for when it is pronounced dead. If the building has undeniably come to the end of its useful life and its cultural values, then a ruin should be created. Historic buildings typically offer a wide range of differently sized rooms that have survived successfully because of their adaptability to many different types of use.
3.4. VALUE OF PRESERVATION

“If indeed there be any profit in our knowledge of the past, or any joy in the thought of being remembered hereafter, to render the architecture of the day, historical; and, the second, to preserve, as the most precious inheritances, that of past ages.” 27

For many people, the value of the old buildings and neighborhoods lies in what they ‘say’ about life in the past. Historical buildings and sites are preserved, according to this view, primarily for their documentary value and because much of the interest is in the life of earlier times. There are, of course, many historic places whose preservation is prompted primarily by their importance of their windows into the past. 28

The value of the existing built environment is therefore very much dependent upon one’s attitude towards the old building, equating to the general measures of values at different times. The more important motive for preservation is that people value old buildings and cities mean to us in the present. The urge to preserve is often because many historic settings are places in which we want to live and work today. 29 When Winston Churchill was debating after the Second World War whether the building should be rebuilt or not, he used an interesting phrase “we shape our buildings, and afterwards, our buildings shape us”, and that is true for heritage buildings it is also true for new buildings that we build. 30

We want to enjoy our heritage, we have an overriding duty to preserve it and hand it on to others. 30 Historic buildings are becoming more important in people’s lives, as irreplaceable and valuable commodities in their own right that deserve the duty of care. A growing recognition that protection of our heritage and historic buildings is an important part of the quality of life. People respond to a historic environment, not because it offers a nostalgic retreat into the past, but because it contributes to the quality of life now. 31

Governing bodies such as New Zealand Historic Places Trust (NZHPT) work to bring awareness to the importance of national identity. The argument that preservation is important, essentially to frame it as more as the art of not forgetting, which may or may not rely on maintaining a material thing to transmit knowledge. Preservation then becomes what an object says, rather than what it is. It becomes about how we design vessels of communication, transmitters of history, and traces of time, all in an effort not to forget the things we do not want to forget. How many historic buildings are perfectly maintained, yet fail in any way to broadcast a nuanced message about their past? 32

The preservation of historic buildings and specifically the Christchurch Cathedral, is an anchor to us to what happened in the past and in a sense, to keep buildings well maintained as something that we can remember. Preservation is not really about keeping things the same. It is the earnest of people who simply are trying to hold on to some semblance of history in a fast-moving world. As architects and citizens, we want to know what we can learn from them and what will happen to them next. We want to integrate them into the new world we are always in the process of making, in this way preservation gives the past a future.

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27 Ruskin, Seven Lamps of Architecture, 148.
31 Schitich, Building in Existing Fabric, 14.
4.0. EXISTING KNOWLEDGE – INTERVENTION

4.1. NATURE OF INTERVENTION

“It is important that we remember the tragedies and traumas of the past, and that we stand ready to draw lessons from history, even as we look forward eagerly to the future.”

By their very nature, architectural interventions in historic urban environments pose extraordinary challenges. Successful schemes are those that respect the original use of the site, and the new architecture helps to reveal the historical and cultural identity is retained. The current preservationist’s approach is traditionally beneficial to the growth of the tourist, instead of the residents. Architects’ attitudes toward buildings of the past are informed by their attitudes toward the buildings they wish to make in the present, and vice versa. The attitude towards the past was that it was finished and that built work of the present should be distinguishable as ‘different’.

Understanding the trace of history is more important than ever, historic areas are progressively coming under pressure form new development. This pressure has raised the need for new buildings and is compounded by how our culture is constantly progressing and architecture is always slow. History plays a new role in the making of contemporary architecture looking at history in a variety of different ways, freeing of its ties of traditional methods of previous generations. Celebrating the history of the city, people are more selective than we give them credit for and will prefer to visit projects that have a sense of place. History is taking place in the present as we question the past and hope for a better future.

The strategy of the language of the intervention involves an existing language of architecture and a new language of the new. Whereby, investigating the treatment and facilitating the divide between the new and the old. This relationship is distinct and different from the language of the old so that there is no mistake about what is new and is existing. Should buildings that are deemed historic be deprived of the right to change and grow in response to present need? Historical and aesthetic value of the old work must be weighed in the balance with the aesthetic value of the new.

The consideration of an existing building only concerning its external appearance and urban presence ignores its cultural and artistic values and shows disregard for both cost-effectiveness and sustainability and a lack of willingness to engage creatively with the building as found. If every intervention in a pre-existing context is like entering a conversation already in progress, we must recognise that even the attentive listener may still misunderstand what others have to say. The appropriate and successful repurpose of an old building when it evades unnecessary problems and was first articulated in the 1964 Venice Charter. This is not simply a matter of quantifiable material advantages but also of the nature of the building: the ‘aura’ of a historic building informs its later use.

Designing new architecture in existing fabrics has no clean slates, these projects are often stimulating and sensitive, requiring an enormous amount energy and enthusiasm. The ‘as found’ principle allows the tactical advantages of bottom-up approaches in comprehending and experiencing the city. As a dynamic place of change and transformation; a stage for the informal interplay between the past, the present and the yet-to-come.

34 Bernard M Feilden, Conservation of Historic Buildings. 3-5.
36 Schittich, Building in Existing Fabric. 17-18.
37 Cramer, Architecture in Existing Fabric. 102.
4.2. REVERSIBILITY

“A monument that is to survive the coming centuries in spite of its increasing ‘age value’ is never repaired and restored ‘once and for all’, as one must sometimes fear given the wild perfectionism of our time.”

The notion of reversibility offers the opportunity for the building to be re-established to its previous condition before the intervention. This principle is seen as a safety net for historic sites in the event our view of them, and advances in research may bring to light new understandings not accessible to us at present. The term reversibility is concerned with buildings later changes or additions which is a great alternative to ‘more harmless’ solutions avoiding irreversible interventions. For example, it is not a surprise that the notion of reversibility was primarily comprehended in the literature on the restoration of paintings, seemingly painting restorers are understandably displeased by the irreversible interventions of their colleagues.

The minimum effective action is always best, as Feilden said; “any proposed interventions should (a) be reversible, if technically possible, or (b) at least not prejudice a future intervention whenever this may become necessary; (c) not hinder the possibility of later access to all evidence incorporated in the object; (d) allow the maximum amount of existing material to be retained.”

We can hope that next generations of designers will show the same consideration to our work that we have tried to show to that of our predecessors. The significance of reversibility of the space between the new architecture and the existing fabric is the issue concerning separation. This sense of separation can also be used to advantage in the design of smaller architectural interventions, often also simply more intelligent. Fairley definitive demonstrations of just how the proposed new language fits within the old, therefore establishing no misunderstanding of what is new and what is historic.

Above all, the concept of reversibility is a reminder that modesty, not audacity, is the great virtue of the preservation architect so that the integrity of the object as a historic entity is maintained. Reversibility is not simply a matter of making our interventions temporary; it is more properly a way of thinking about our work, understanding that we will probably not have the last word on any building in our care. The new work was respectful of the historic structure through its proportional similarities and alignment of openings existing fabric. As designers we are always only stewards of our cultural heritage, interventions must be clear, obvious and reversible.

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31 Bernard M Feilden, Conservation of Historic Buildings. 3-5.
32 Strike, Architecture in Conservation. 82.
4.3. ATTENTION TO DETAIL

The link between the new architecture and the historical site does not have to be a physical connection, nor is it necessary for it to be a direct replication of the existing fabric; One of the easiest forms to recognise is a design reference made to the basic shapes found in the historic fabric. The new architecture is referential to, rather than an exact copy of, the original fabric.44

The way in which the new and the old are brought together determines whether the existing building plays a leading or a supporting role. At the point where they join one can read the value ascribed by the architect to the existing building. Although the junction is undoubtedly a critical point, one should be aware that the overall design will be more convincing when the underlying principle behind the junction of new and old is also apparent in the treatment of both parts of the project. In its function as separator and bridge, the design of the joint must be carefully considered and expressed accordingly. The same basic design treatments used for the coexistence of additions and extensions to old buildings. Contrast and composition are similarly valid concepts beyond the expression of material traces of history.45

In the design of a new building, an appealing concept may distract attention from weaknesses in the detailed execution. However, for projects involving historic or existing buildings, it is primarily the quality of the design of details and individual solutions that will determine the character of the result. Finishing the right balance between necessary and sensible adaptations on the one hand, and individual design expression on the other is one of the most challenging aspects of preparing designs for existing buildings. Attention to detail is the measure of the success of failure, and it is unfortunate that, all too often, insufficient care is taken during this somewhat unloved planning phase, causing an ambitious design to slip back into mediocrity.46

These enclosures present a problem for the designer; what should the new building look like? The new structure has to be larger and positioned over the top of the fragile fabric. The new architecture could well be intrusive, detract from interest in the historical remains, get in the way. The observer could find the new architecture more interesting than the history. It is necessary to generate the design of the new building from the historic remains, but to do so in a restrained way – using for example, repetition of the plane shapes of the building rather than playful metaphor. The new architecture needs to be seen to belong to the site. It should be simple, carefully edited in its details, and well crafted.47

44 Strike, Architecture in Conservation. 95.
45 Cramer, Architecture in Existing Fabric. 151.
46 Ibid.159.
47 Strike, Architecture in Conservation. 76.
4.4. DIFFERENTIATION

The strategy of intentional opposition for relating new and old architecture is one of conscious departure from the character of the pre-existing setting and the determination to alter that character through contrast, an approach that privileges differentiation at the expense of compatibility. Sometimes stark contrast is the appropriate response to a context that is found to be in some way unsatisfactory. Architecture is not always obligated to blend into a preexisting condition – sometimes a critique is called for. While these interventions were oppositional concerning the preexisting conditions of their individual sites, they were highly in agreement with that part of their context.48

The new component is an obvious addition, clearly legible in the image and fundamentally different from the existing substance. Old and new, and for the time being, the final layer is added. Old and new are generally treated in an egalitarian manner, both undergo the same intensive treatment. The existing building is thus dissected into different historic layers in the course of the design process.49

Achieving links between the old and new, especially where the existing fabric comes to be revived and transformed through such delicate interventions as the ‘reverse archaeology’ of building inside a building. Now, the architectural problem can be defined as the problem of the relationship of the old to the new and the way to manage this relationship is being worked out, not based on imitation, composition or modularity, but by working out ideas of separation, integration and the idea of designing with history.50

4.5. INTERVENTION TACTIC

BUILDING INSIDE THE RUIN

This method tends to express the ruin most fully but provides the greatest difficulty in making a weather-tight seal between old and new.

BUILDING ON THE RUIN

“Building on the ruins can be seen from both sides, but the interface between old and new often means that the ‘ragged edge’ of the ruin may be lost.”

BUILDING OVER THE RUIN

“Building over the ruin provides the simplest and least destructive solution. The ruin is enclosed inside a museum-like building. However, the ruin is now separated from its context.”51

48 Semes, The Future of the Past. 223.
49 Schittich, Building in Existing Fabric. 18.
4.6. TYPE OF INTERVENTION

STRATEGY INSERTION

“The insertion of a new functioning element not only provides a use for an often redundant or neglected space but also serves to enhance and intensify the building itself.”

For a successful dialogue to be established, the new piece of architecture, be it space or a building, is inserted into the original volume, using the existing structure as protection and nestling in it. Various images can illustrate this action: think of a peg being inserted in a hole or a wedge being pushed between two edges. Alternatively, a new liner fitted to an old jacket. In all these cases, the resulting object depends on both parts: the peg gives the hole structural stability; the wedge keeps both edges apart; the liner hides the coat’s construction seams and enhances its insulation function.

In general, the inserted piece has its own identity; it creates its own world, and the pleasure of this new world is heightened by the experience of its relationship to the old. The architect and owner reclaim the hidden value of the old building and re-present it as a living contemporary object, using it in the present and ensuring its long-term preservation. What makes this an “insertion: rather than just another building in the streetscape is the utter interdependency of the new piece and the existing fabric.

STRATEGY JUXTAPOSITION

“Here juxtaposition is revealed as the basic formal operation of synchronicity, as two apparently unrelated events or elements suddenly form a secret link that strikes, in the mind of the perceiver, an evanescent lighting bolt of meaning.”

A juxtaposed intervention is when a new addition is placed beside the existing building. Typically, these schemes do not involve a physical connection of old and new, but rather the new piece of architecture is integrated while the original remains fully legible. The formal separation of the two forms adds to the value of each, commonly with a combination of distinct and different materials palettes, contrasting colours and textures, or volumetric abstraction.

STRATEGY WRAP

The new ‘wraps’, take fragments of our environment, which are then ‘curated’ by the architects. The intention of the wrap is fundamentally clear, to protect the heritage or historic building and to present new. The purpose is frequently also to proclaim a renewal, a new drive geared to the future. The new skin represents modernity wrapped around the familiar, and the new wrap is always distinct.

The designer has to decide if the new protective cover is located in a plane over the top of the remains or in the place of the original roof. Each needs a different approach to the way it is detailed. The umbrella should avoid any reference to the lost roof, and the gap between the top of the remains and the umbrella should be clearly expressed order to accentuate the idea of a new cover floating over the top of the ruin.

STRATEGY WEAVING

Threaded or woven interventions are usually complicated works where the architect interweaves the new intervention in and out of the existing building fabric. Commonly, the limits, or the seams, between the old and the new interventions are not instantaneously apparent, or they do not form a known pattern. Although, this strategy tends to focus on the ‘romance of the ruin,’ the older elements cannot be fetishised because they are reused actively and interconnected with the new necessary building components; the result is akin to a knitted fabric.

Weaving the old into the new is an ancient strategy. The need to survive demands that we use our resources wisely. A building exists; why not reuse it? Why not adapt it? The strategy of weaving stands on the shoulders of the eighteenth and nineteenth-century appreciation of ruins, by way of artists’ appropriation of industrial spaces in the 1960’s. The ruin is reused and enjoyed, not as a distant object but as a component of the present. In these interventions, architects have to put everything they have learned aside and invent new approaches.
5.0. PRECEDENT STUDY

5.1. COVENTRY CATHEDRAL - SIR BASIL SPENCE

The Coventry Cathedral is an example of 15th Century Gothic Church architecture that became a monument to the damage after WWII bombing, which destroyed the centre of the medieval city. Much of the city centre in ruins but Coventry survived rebuilt itself, and today Coventry Cathedral is one few obvious signs of what remains of what happened back then.61 The debate over the rebuilding of Coventry Cathedral resulted in an architectural competition being held and a winner not being announced until 1951. Basil Spence was declared the winner, from the 219 entries, his design was thought to exhibit ‘spirit and imagination of the highest order’ along with the ‘ability to solve the problem of designing a Cathedral regarding contemporary architecture’.62

Complex debates ensued concerning the value of restoring the Cathedral versus preserving it in a ruined state with the site, the style, the size, and the cost of the new cathedral also being discussed. Elsewhere, other bomb-damaged buildings were similarly being preserved as war memorials. In other cities devastated during the war, the idea of preserving the ruins of religious buildings as memorials became a recurring theme of discussions of how the destruction should be commemorated.63

“Through the ordeal of the bombing, Coventry was given a beautiful ruin… It is felt that the ruin should be preserved as a garden of rest, embracing the open-air pulpit and stage.”64

Basil Spence winning scheme proposed the idea of memorialising the remains of the damaged cathedral to act as a forecourt to the new cathedral, propelling him into an arena of architectural theory. By retaining the footprint of the building as a kind of imprint of the memory of what took place reflecting a sense of civic pride among the citizens as a living building while being meeting the needs of the diocese. In the case of the Christchurch Cathedral, the ruins of the building can act as a kind of political reminder of the devastation of natural disaster. Similarly, to Coventry Cathedral where ruins cannot be allowed to crumble because of what they represent, as something quite powerful as a reminder of war, of its cost, of the human tragedy that occurred.65

61 Campbell, Coventry Cathedral. 1.
63 Campbell, Coventry Cathedral. 21.
64 Spence, Phoenix at Coventry, p 117.
65 Campbell, Coventry Cathedral. 81.
5.2. REBUILDING THE REICHSTAG – NORMAN FOSTER

“The scarred and graffiti-marked fabric of the Reichstag bears the imprint of time and events in a palpable way. It is more evocative than any exhibition. Preserving these scars allows it to stand as a living museum of German History for future generations.”

The original Reichstag building was severely damaged by fire in 1933 just weeks after Hitler became Chancellor. The Reconstructed Reichstag is a perfect monument to normalisation. Sir Norman Foster created a state of the art parliament building nestled in the shell of the retouched historical building (erected by architect Paul Wallot in 1894). Foster’s scheme covered with a glass dome that recreates the contours of the original one, that was taken down after the war and doomed beyond repair. A new project by Foster continues the historic ‘alleviation’ of the building, only it does not propose to wrap the Reichstag but to make it more transparent.

“Collective memories are embedded in the building’s fabric. Within its walls is a record of both the most tragic and the most uplifting aspects of Germany’s history and culture. The integrity of that record is important for present and future generations. It relies on preserving surviving layers from the past and articulating their relationship with the present.”

The glass, in this case, is not merely the preferred material of modern architecture but also, supposedly, a symbol of the democratic openness and transparency of German public institutions. Transparency, after all, is only a metaphor. The experience of wandering through the glass dome is a fun distraction, a compliment to the architect and the tourists, not a revelation. In the dome of the Reichstag, glass turns into a flattering mirror that provides little insights into the building’s shattered history.

Accessible to visitors, there is a gallery in the new Reichstag from where people can keep an eye on their politicians—at least, that was the architect’s plan. In the centre of the dome is a graceful cone-shaped structure covered with mirrors where the visitor can see multiple reflections of the building. Offering the opportunity to enjoy the panoramic view of the city and takes pictures with the new Berlin in the background.

66 Foster, Jenkins, and Baker, Rebuilding the Reichstag. 60.
67 Ibid. 14.
68 Ibid. 20.
69 Ibid. 208.
70 Ibid. 132.
71 Ibid. 142.
5.3. CASTELVECCHIO MUSEUM – CARLO SCARPA

The Castelvecchio in Verona renovated between 1958 and 1964 as a museum is a meticulously detailed in design, strongly informed by the tradition of arts and crafts. His approach is a beautiful exposition intervention to presented historical fragments and of characterising individual formal values.\(^{72}\) Ever since Carlo Scarpa (1906-1978), masterly mise-en-scene of history in his remodelling of the Castelvecchio Museum in Verona from 1964 elevated the potential of historical elements. The use of historical analysis as a generator for the architectonic design can invest a design concept with meaning.\(^{73}\)

As attractive as many of Scarpa’s ingenious details are, they consistently reinforce our perception of the Castelvecchio as a fragment, poetic and suggestive, no doubt, but a ruin nonetheless. The details are partly to do with construction, but they are also a lot to do with the aesthetics, the aesthetic of the detail, the tectonics of the detail. The invention of elements from assemblies of abstract shapes, the collage-like juxtaposition of new and old elements, and the use of joints and connections between materials as a form of ornament. However, why should we accept a decontextualised fragment as being more truthful or authentic than a recomposed whole?\(^{74}\)

He juxtaposed the precise, square cuts of the new materials, stone floor slabs. For example, with the uneven edges of the old materials and increased the drama of this encounter by the visible separation between the ragged, uneven old and the precise, square new. These encounters were critically important and instead of turning them into smooth transitions, he exploited their dramatic potential to the fullest. Scarpa removed surfaces, overlaid new details, invaded the domain of the old with his new interventions and allowed, in turn, the old to invade the new. Ultimately, Scarpa was designing with history, while the obvious goal was to provide a new museum in the old fortress, the building became its museum, a creation in its own right to be studied and cherished.\(^{75}\)

Another touch of attention to detail is seen in an opening in a wall of the existing medieval fabric, where Scarpa has introduced a new floor level as part of the museum. This juncture needed a new safety rail across it and of course in Scarpa fashion obsessed over the detail where the rod connects with the existing at least in part affecting or effecting the language of the old. It is obvious what is going on, and there is no kind of misunderstanding of what is new and existing, this is a new intervention and was needed to adapt what exists. This relationship is that lovely interaction between the one and the other, usually the existing masters the new, where the new has to defer to the existing. Although, now and then there will be this little detail which indicates the new intervention has intervened the existing has had to defer slightly butting into it.\(^{76}\)
“Our vision was not to make a memorial to destruction, nor to create historical reproduction, but to protect and make sense of the extraordinary ruin and remains that survived not only the destruction of the war but also the physical erosion of the last sixty years.”

Extensive bombing during World War II left the building in ruins with some sections severely damaged and others completely destroyed. Few attempts at repair were made after the war, and the wreck was left exposed. Chipperfield’s scheme tackled the problem frontally, with the key aims of the project to retain all the marks and scars of the building. The process can be described as a multidisciplinary interaction between repairing, conserving, restoring and recreating all of its components. To re-complete the original volume and parts of the building that remained after the destruction of World War II for all to witness the past and what has survived.

There was an instinctive desire after the destruction of World War II, for the building to ‘rise from the ashes.’ Although, the challenges during the development of the design were to steer away from the stringent conservation standards and instead focus the need to provide for cultural tourism.

Which would become a collective work across time, with the original sequence of rooms being resorted with newly built sections that create continuity with the existing structure. The ideas embedded in the original architecture are not suppressed the destruction of war and the ruin of time are visible. It is the reclamation of what could be saved, and out of that the making of a new building, patched, mended, added to, redesigned, by architect and museum people, and built by craftspeople.
6.0. SITE

6.1. HISTORY OF CATHEDRAL SQUARE

Prior to the earthquakes, Cathedral Square was surrounded by buildings of various styles and ages. These included offices, hotels and banks, as well as entertainment venues such as an aquarium, cafes, bars and cinemas. Many of the Square’s well-established heritage buildings were demolished including Warners Hotel, The Press Building, the Regent Building and the former Lyttelton Times Building.\footnote{81}

Evolving with the times, from when it was first laid out in 1850, Cathedral Square – the heart of the central city has undergone many changes. The square’s shape, feel and function has evolved from a muddy thoroughfare in the early days to a more formal, pedestrian-orientated place for housing civic and social gatherings. Early layouts of the Square focused on defining the extent of the Cathedral Site while allowing traffic along Colombo Street to pass in front of the projecting Cathedral frontage.\footnote{82}

The early 1970s design introduced pedestrian areas in front of the Cathedral by closing off the direct Colombo Street connection and South-Western parts of the square to traffic. Bus stops and taxi stands were confined to the outer edges. In the late 1990s, the redesign focused on increasing the size of the pedestrian areas and reducing the presence of vehicular traffic. Before the series of earthquakes, Cathedral Square was a special place for celebration and fun; farewell and homecoming; worship and commemoration.\footnote{83}

\footnote{82} Colin Brown, Vision & Reality: Christchurch’s Cathedral in the Square (Christchurch, N.Z.: Christ Church Cathedral Chapter, 2000).
\footnote{83} New Zealand Federation of University Women and Canterbury Branch, Round the Square.
6.2. **REGENERATE CHRISTCHURCH**

Regenerate Christchurch a group established in 2016 in attempt to lead the regeneration of Christchurch. In July 2017, Regenerate Christchurch produced a concept draft plan of Cathedral Square with five key moves proposed in response to the cities public feedback.\(^4\)

Key moves below:

Key move 1: Reshaping Cathedral Square.

Key move 2: Framing the Square with structures and buildings that can stimulate activity.

Key move 3: Improving connectivity to, through and around the area.

Key move 4: Upgrading the streets and lanes between hubs of activity.

Key move 5: Integrating water and the indigenous ecosystems into the streets and public spaces.\(^5\)

This project accepts the draft concept and key moves for the Square and surrounding area proposed by Regenerate Christchurch.

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\(^5\) Ibid.
6.3. HISTORY OF CHRISTCHURCH CATHEDRAL

Construction of the Cathedral started fourteen years after the city was founded in the 1850s and was only made possible by land, money and hard work by the early settlers. Their dream was to build a city round a central cathedral and college, after the model of Christ Church Oxford. Christchurch was in an emerging city that was still partly swamp, there was not even agreement on a site for the bold new centrepiece. It was not until 1858 that an area of more than three acres was set aside as the location for the Cathedral. Bishop Henry John Chitty Harper (1804-1893) had obtained the public go-ahead for a cathedral in the middle of Christchurch, a remarkable undertaking when the population of the town numbered barely three thousand.86

“No architectural project in colonial Canterbury was more intimately linked with the settlement’s founding vision than the plan to build a cathedral. A cathedral was essential for a colony in which the Church of England played a central role and where it was envisaged.”87

By June 1859 James Edward FitzGerald approached George Gilbert Scott (1811-1878), an eminent English architect, to draw up plans. Once plans were sent to Bishop Harper on 24 February 1862, all that was required was to appoint a resident architect to supervise construction. The Cathedral Commission was determined to find the finest architect for the task, although this process ultimately delayed development for over a year. Scott decided to appoint Benjamin Woolfield Mountfort (1825-98) subject to the Cathedral Commission’s approval. The delay in making this appointment caused concern for the people in Canterbury, and in February 1864 the negotiations of the Cathedral Commission became the subject of a vigorous debate in the Christchurch newspapers.88

Scott’s original drawings showed a simple, Thirteenth-century inspired Gothic-style cathedral with a cruciform form with aisles, transepts and a choir with apsidal at the east end. The nave was divided into six bays by massive wooden columns forming an arcade that supported the triforium and clerestory, all constructed of wood. Scott was aware that timber was the most readily available building material in New Zealand, and he also understood the limited financial resources of colonial dioceses.89

As supervising architect, Mountfort was immediately confronted with several problems. In bringing Scott’s drawing to life. Although Scott’s plans were followed faithfully in all important respects, the cumulative effect of the supervising architect’s changes is significant. The most obvious divergence from Scott is seen in the tower. Mountfort’s alteration to other parts of the Cathedral was less immediately visible, but they were nonetheless significant.90

One noticeable aspect of Mountfort’s designs within the Cathedral is the font, commissioned in 1880 for Dean Stanely of Westminster Abbey. Carved from white Castle Hill Limestone, it stands of a central column of the same stone with four corner columns of polished Hoon Hay stone. The font cover is of New Zealand wood, executed by Andre Swanston of Christchurch under Mountfort’s supervision.91 The foundation stone of the Cathedral was laid with an appropriate ceremony of 16 December 1864, on the fourteenth anniversary of the arrival of the first Canterbury colonists. Towards the end of 1865, the foundations were complete, but construction was suspended through lack of funds.92

As built, Christchurch Cathedral was, by British standards, little more than a large parish church of conventional construction, and no-one in Christchurch was more aware of this than Mountfort. Although, it is widely acknowledged that the Christchurch Cathedral has very high heritage value not just locally but nationally, Heritage New Zealand Trust rates the building as a Category One historic place, and Christchurch City Council also gives it its highest rating. It has architectural and aesthetics significance due to its powerful Gothic design, it’s once was dramatic spire, towering columns, arches and the delicate stained-glass windows.93

The Cathedral has historical and social significance and it is estimated that more than 660,000 passed through the Cathedral every year. Making it at the time one of New Zealand’s most popular tourist attractions, and places of worship. It has obvious cultural and spiritual significance as it has throughout its life, served as the mother church of the Anglican Diocese of Christchurch and an icon of Canterbury.94

88 Ibid. 130.
90 Ian J Lochhead, A Dream of Spires. 144.
91 Thomas, Christchurch Cathedral New Zealand. 36.
92 Ian J Lochhead, A Dream of Spires. 144.
93 Lovell-Smith, ‘Heritage New Zealand; Cathedral Church of Christ (Anglican)’.
94 Thomas, Christchurch Cathedral New Zealand. 40.
Engineering strengthening and stabilising issues on the Cathedral have been mitigated and considered through the understanding of the Miriam Dean report. This report was conducted in November 2015 by Miriam Dean, who facilitated discussions with engineers for ‘Church Property Trustees’ and the ‘Great Christchurch Buildings Trust’ on engineering options for repair, restoration or replacement of the Christchurch Cathedral.

The report addressed three main issues:

- The level of damage and risk with the present structure.
- What is required to mitigate any risk and ensure safe access to investigate repair, restoration or replacement options.
- Whether the Cathedral can be repaired or restored, in whole or in part, to 100 per cent of new building code standards.

The Cathedral has suffered a lot of damage due to the earthquakes and this has reduced its capacity to resist future earthquakes. Although, the engineers agree that it is feasible, from an engineering perspective, to ‘reinstate’ the Cathedral (through a combination of repair, restoration, reconstruction and seismic strengthening) or to replace it entirely. The engineers and quantity surveyors reached a large measure of agreement on engineering options and indicative costs. Although, such differences exist between the engineers are mainly methods of implementation of stabilising methods which causes the less amount damage to the built fabric.

Reinstatement could enable the building to achieve 100 percent of the code’s seismic capacity requirements and is best achieved using a combination of both modern and reused original materials. Repair in-situ is ideally preferred from a heritage perspective but some elements of the Cathedral have cracked and moved such that deconstruction is necessary before replacement can start. The Cathedral would then have the same capacity to resist collapse as that required for a new building.


96 Ibid.
6.5. **CATHEDRAL PHOTOS**

Figure 6.13. *Interior Columns North Nave.*

Figure 6.14. *Christchurch Cathedral Internal Nave West in Ruins.*
Figure 6.15. Christchurch Cathedral Interior Aps. 

Figure 6.16. Christchurch Cathedral Interior Aisle South Wall.
Figure 6.17. West Porch in Ruins.

Figure 6.18. The Christchurch Cathedral North Aisle Roof in Ruins.
Figure 6.19. The Christchurch Cathedral West Porch in Ruins.

Figure 6.20. The Christchurch Cathedral North view in Ruins.
The principles and character of Gothic architecture originated in France 12th Century and were similar throughout Western Europe. It evolved from Romanesque art and is recognised through the application of the pointed arch in arcades, doors and window openings. The pointed arch was to suggest height coinciding with the aspiring tendency of the style. Important buildings such as Church’s and Cathedrals were created to impress the almighty. The style is also characterised by inserted large windows to allow ample light flow into the building.96

By the 1800s, the industrial revolution was steaming ahead, although not everybody appreciated the revolution that was happening. Admirers of the older tradition of Gothic style sought to revive it, believing that society needed more meaningful buildings. The Gothic Revival style championed high-pitched roofs, tall spires and holy crosses. The style grew in popularity, eventually influencing every level of society, from what people wore, to the newspapers they read and the garden benches they sat on.97

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97 OpenLearn from The Open University, Gothic Revival: Design in a Nutshell (1/6), accessed 12 May 2017, https://www.youtube.com/watch?v=NsL8KpM7Qs.
7.0. THE PROJECT

7.1. DETAILED DIGITAL MODEL – CHRISTCHURCH CATHEDRAL

The generation of a three-dimensional model enabled the study of detailed issues that the project was facing. There is the volume of the Cathedral that is missing and the question of elements that remain. The approach to preserving what is there, what has remained, what has survived, ensuring the building has been made safe and stays as a permanent reminder of what the people and city have endured.

The buildings ruins have been retained to provide a visible reflection of the impact of the Christchurch earthquakes. Maintaining the Cathedral footprint is a powerful approach, as traces of the past become more significant and act as touchstones to our memory of events. The study of the building comprehensively analysed before starting to work in an intervention tactic employed by the precedent architects.

Determining a stable/ safe level of the ruin was achieved by analysing the Miriam Dean report. The Cathedral and its original building fabric remain relatively intact, the approach taken in this project was to ensure the least possible loss of that remaining fabric, a huge positive from a heritage point of view. The report shows elevations and sections that depicting the extent of crack lines due to earthquake damage. (Refer to section 6.4.)
7.2. **CATHEDRAL OUTLINE**

The Cathedral needs to cater for large and small community gatherings, of up to a thousand people. Most importantly to restore and maintain the sense and presence of God. Consequently, as a place where people from the city and the province of Canterbury can gather for weekday worship.

The Cathedral is also a place of hospitality, education and information considerations needs given to smaller meeting places and areas where visitors and citizens can come and feel welcome, spend time in stillness, silence and reflection, and leave with a sense of renewal themselves and be prepared for going into the busy world again.

7.3. **CATHEDRAL PROGRAMME**

New Cathedral: Inserted into the frame of the crucifix form, maintaining the symbolism of the Anglican Cross. The new intervention follows the original footprint, that is aligning new columns with old columns, respecting the repetition and continuity of the original building.

<table>
<thead>
<tr>
<th>Children Chapel</th>
<th>Altar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choir Rehearsal</td>
<td>Seating</td>
</tr>
<tr>
<td>Private Chapel</td>
<td>Font</td>
</tr>
<tr>
<td>Offices</td>
<td></td>
</tr>
<tr>
<td>Sacristy/Vestry</td>
<td></td>
</tr>
</tbody>
</table>

Memorial Museum: This building takes the damaged and broken fabric into this new auxiliary space, an areas where craftsmen specialist in conservation work and repair damaged fabric. Residents and visitors are welcome to pass through this building to learn and be involved in the process repair and reconstruction.

<table>
<thead>
<tr>
<th>Visitor Centre</th>
<th>Public Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflection/ Remembrance Spaces</td>
<td>Display Space</td>
</tr>
<tr>
<td>Seating</td>
<td>Gift Shop</td>
</tr>
<tr>
<td>Restrooms</td>
<td>Storage</td>
</tr>
<tr>
<td>Cafe</td>
<td></td>
</tr>
</tbody>
</table>
7.4. CATHEDRAL ITERATIONS

First iterations are concerned with developing concepts that pay homage to the symbolism of the crucifix form, unique to the Anglican faith. Initial development proposes re-occupation of the existing building reinstating damaged areas, completing the necessary envelope with new construction. Primarily this work envelop new upper levels of wall and roof sections as another way of dealing with what’s left and adding on. Because the great cathedrals of this world, are never finished, they are always shifting, changing, because they are places of people.
Strategy Wrap
(Refer to section 4.6.)

Building over the ruin
(Refer to section 4.5.)

West porch, pre earthquake.

Strategy Wrap
(Refer to section 4.6.)

Building on the ruin
(Refer to section 4.5.)
This scheme intended not to feel obliged by the outline of the existing roof line of the original building. The new roof is to be supported of its own independent structure and act as a big umbrella over the remains of the building. This approach doubled as a means of protecting the original fabric of the remaining walls, but do not receive the loading of the new roof.
SEATING ARRANGEMENT/ SIGHT LINE STUDY

Strategy Insertion
(Refer to section 4.6.)

Building inside the ruin
(Refer to section 4.5.)

Sunday Service - Choir  50-400 Seats
Synod Service    700 Seats
Small Prayer Service- Choir 25-50 Seats

KEY

- Yellow: Sunday Service - Choir  50-400 Seats
- Orange: Synod Service    700 Seats
- Green: Small Prayer Service- Choir 25-50 Seats
**PUBLIC/ PRIVATE STUDY**

**KEY**
- Light - Public
- Dark - Private
7.5. **CIVIC CENTRE OUTLINE**

The Cathedral would remain deconsecrated, and the building would be transformed and repurposed as a public centre. The architectural intervention becomes a place of congregation, information, contemplation and remembrance. Another way of dealing with what’s left and adding on, the great Cathedrals of this world, are never finished, they are always shifting and changing because they are places of people.

7.6. **CIVIC CENTRE PROGRAMME**

Civic Space: Functions such as markets and festival events while respecting the integrity and original character of the historic building.

Information/Visitor centre: To generate an enhance tourism and reception of visitors that will continue to enrich the city.

Cafe/Restaurant: To generate an enhance tourism and reception of visitors that will continue to enrich the city.

Christmas and Easter services: Paying homage to the original use of the building, was part of the negotiations with the government when gifting the building to the people of Christchurch & New Zealand.

7.7. **CIVIC CENTRE ITERATIONS**

This project must respond to the existing building, in such a way that requires a great deal of respect and sensitivity of the essence of what it is. One medium to represent the existing and this project use another media to represent the nature of the intervention, demonstrating a differentiation of one and the other, or penetration of one and the other. (Refer to Section 4.4.)

The architectural design needs to be plausible from a structural point of view, but its also about the aesthetic of the two languages. Because there is the technique of the intervention and there is the sense of the problem of how to resolve the detail in a technical sense.
The building's formal structure and rhythmic design, there is a real beauty in axis and rhythm in a building such as this Cathedral. One response when adding new interventions, is to respect the existing axis and rhythm by enhancing it with new work, albeit in new materials or in a different way. The strong axial alignment is intended to draw the visitor towards the café/restaurant inserted in the apse on the eastern end of the building.

Although, the planter as shown currently, perhaps almost limits itself at the same time, because of the form of the building, a rhythmic set of planters would be more respectful. It is not a powerful enough response; maybe there is a way of breaking out from the strong axial form. This project needs to take a stronger position, challenging the axis going against the old Cathedral rhythm, suggesting to break it down, pull the walls apart. Allowing the landscape to come through it, not just up and down the aisle but across it, with a different feature to let the people walk through it.

**AXIS AND RHYTHM**

The building's formal structure and rhythmic design, there is a real beauty in axis and rhythm in a building such as this Cathedral. One response when adding new interventions, is to respect the existing axis and rhythm by enhancing it with new work, albeit in new materials or in a different way. The strong axial alignment is intended to draw the visitor towards the café/restaurant inserted in the apse on the eastern end of the building.

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Strategy Juxtaposition
(Refer to section 4.6.)

Building over the ruin
(Refer to section 4.5.)

Figure 7.17. Workbook Iteration 11

Strategy Juxtaposition
(Refer to section 4.6.)

Building over the ruin
(Refer to section 4.5.)

Figure 7.18. Workbook Iteration 12
Strategy Juxtaposition
(Refer to section 4.6.)

Building inside the ruin
(Refer to section 4.5.)

Strategy Inversion
(Refer to section 4.6.)

Building inside the ruin
(Refer to section 4.5.)
Formally the intervention is a match of the old in contemporary materials in steel and glass. The form of the new intervention conforms precisely to line and footprint and profile of the old roof. The envelope in nature is an obvious distinction between what was there before the destruction happened and what is added. The extent of the new work is in a sense to fill up the volume of a sufficiently different material to see the wound and see the damage, and it is not just a small wound in the case of the Christchurch Cathedral.

There is this other layer of working in of old and new junction’s construction details, which adds credibility to the investigation of the project. To be able to demonstrate that this work has not been working just at arm’s length, to determine the details of the problem at hand. It comes to the measure how the work of the detail, in a sense is a measure of the success of the proposition, whereas in most projects that may not be so. A project such as this, it becomes the ultimate demonstration of what this project is trying to achieve.
In fact, another way of honouring the existing is by not copying the existing, which is often a well-meaning but less satisfactory way of approaching the problem. Because now the existing is seen for what it is and there is no mistake that. Most new builds are based on a new proposition and can typically get away without focusing on the attention to detail. Although, projects that are concerned with new and old languages merging, are about the nature of the intervention not in just a conceptual sense but a detailed sense. While using a contemporary language of the intervention, become particularly interesting and informative.

This project investigated the idea of a piece of a Cor-Ten steel sheet which has been folded to the same profile as the steps on the western porch. The intervention aimed at overlaying new treads and rises that floats above the existing steps with space of about 50mm. This new intervention follows the same line but not touching, and it acts and comes in from the margin of the step, almost like a carpet going down the steps which instead of the old steps gets walked on.

This approach intended to be a beautiful routine in following the line of the old steps without actually walking on them, where the edges old steps remain evident but are not walked on. This means there is a sense that they are continuing underneath this overlay, beautiful techniques like this which honour the existing of protecting them, so they stay as a reminder. Any project that involves the intervention into something that exists requires some thoughtful attention to detail, in the drawings.
Figure 7.23. Workbook Iteration 17

Strategy Insertion
(Refer to section 4.6.)

Building inside the ruin
(Refer to section 4.5.)

Figure 7.24. Workbook Iteration 18

Strategy Insertion
(Refer to section 4.6.)

Building inside the ruin
(Refer to section 4.5.)
VISITOR EXPERIENCE

The ultimate goal of this project is to not only to transform the ruins of the Cathedral sensitively; but to influence the visitor to remember, contemplate and obtain information about Christchurch, while reconnecting the people, the building, and the Square as a living part of the city.

The sensitive architectural intervention is a glass and steel structure that fits nestled inside the stonework. The notion of reversibility has played a pivotal role in the outcome of the project (Refer to Section 4.2). This approach was never about making something temporary but instead paying respect to the original building and built fabric as a means of intervening in an existing fabric that can be removed at a later date, subject to the techniques and technology that is available in the future.
8.0. CONCLUSION

The significance of this building to Christchurch and New Zealand cannot be overstated. Its heritage and historic fabric contribute to the character and history of the city, giving information about the changes of places and the spirit of the time. As a living part of the city, the new architecture must express the existing building as a social statement, that recognises the beneficiaries of heritage are in fact the citizens and visitors of Christchurch.

This project is a way of challenging the two extremes of restoration or replacement, the sensitive intervention creates a place of congregation, information, contemplation and remembrance. It is essential that the intervention, both in terms of its aesthetic and spatial qualities be extended to the surrounding square and buildings.

The preserved ruins of the Cathedral ensure the heritage, and its historical value, acting as a reminder of the earthquake’s impact on the city. The ruin as a picturesque object remains the lasting legacy of the Cathedral and compelling statement of civic and social interaction and is an essential investment for the memory of cultural values to pass on to future generations.

As designers, we are always only stewards of our cultural heritage and will probably not have the last word on any building in our care. Acknowledging this, the project is about sensitively inserting new architecture in a way that reinforces the notion, not just in the technique of the intervention but embedded in respect and care of the language that it carries.

The strategies of intervention tactics employed in this project can be applied to other damaged buildings in Christchurch. A wealth of knowledge would be created that would facilitate the repurposing of the city’s surviving and existing stock of buildings with appropriate interventions. It is a matter of national importance to revive a buildings use, that tends to the needs of its community now and in the future.
9.0. BIBLIOGRAPHY


## 10.0. FIGURE LIST

All figure listed are of the authors creation, unless otherwise sources has been stated.

### Section One

**Figure 1.1.** Option A - Reinstatement  

**Figure 1.2.** Option B - Replacement Cathedral - Warren and Mahoney Architects  
http://cathedralconversations.co.nz/portfolio_page/chosen-concept/  

**Figure 1.3.** Christchurch before earthquakes  
https://data.linz.govt.nz  

**Figure 1.4.** Christchurch after earthquakes  
Ibid

### Section Two

**Figure 2.1.** Christchurch Cathedral in Ruins  
Authors Photograph

### Section Three

**Figure 3.1.** Hugh Casson, Bombed Churches as War Memorials  

**Figure 3.2.** Hugh Casson, Bombed Churches as War Memorials  
Ibid

### Section Four

**Figure 4.1.** Pombal Castle's Visitor Centre, COMOCO Architects.  
http://www.archdaily.com/563933/pombal-castle-s-visitor-centre-comoco-arquitectos/  

**Figure 4.2.** Intervention Tactic  

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MEMORABLE DIFFERENTIATING

Vaga R.
Lce Kew Moss

1. TOWER (T)
2. NORTH WALL (N)
3. NORTH NAVE AISLE (NJN)
4. NAVE
5. SOUTH NAVE AISLE (SNL)
6. SOUTH WALL (S)
7. NORTH TRANSEPT (NT)
8. TRANSEPTS
9. SOUTH TRANSEPT (ST)
10. VESTRY (NV)
11. SACRISTY
12. VESTRY (SV)
Declaration

Name of candidate: JORDAN SCOTT

This Thesis/Dissertation/Research Project entitled RUINS FOR REMEMBRANCE

is submitted in partial fulfillment for the requirements for the Unitec degree of MARCH (PROF)

Principal Supervisor: CAMERON MOORE

Associate Supervisor/s: HUGH BYRD

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