Preliminary Original Research Article

A Layered Conservation Response to the Layers of Built History

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Abstract

The Conservation and Heritage Research stream in Unitec's School of Architecture explores the theory and practice of heritage conservation and adapting historical places, as well as incorporating new design into heritage environments, both internationally and in Aotearoa New Zealand. Research addresses conservation, and the future use and development of historical and modern buildings, from preservation through to adaptive reuse.

Dedicated to design-led research, engaging design and its methodology as research, this paper proposes an approach to building conservation that recognises the value of utilising various conservation methods in accordance with the ICOMOS New Zealand Charter, based on a detailed investigative analysis of the varied layers of embodied history. The meticulous and meaningful analysis of applied conservation principles in the selected precedent – the Neues Museum in Berlin – critically inspired and influenced the design response for the 2010- and 2011-earthquake-damaged Canterbury Provincial Council Buildings in Christchurch, where the various conservation approaches were tested.

Introduction

Historical buildings are significant to our collective memory – the understanding of our pasts, our achievements, challenges, philosophies and agendas. They are the most tangible evidence of our pasts, therefore there is the expectation that these buildings should be retained in a preserved state, seemingly 'untouched' and without change since construction. This focus on protection often leads to such an 'original' historical building being considered too precious to touch, change, or adapt; that any change will somehow threaten the historical value of the building itself.

This position is, however, challenged when a historical building is subject to change and damage from causes beyond our control, as in the case of natural disaster. What is our response – to restore or not? The path of restoration and repair brings forth challenging questions with no simple answers. Restoration takes a building back to a particular point in its existence, often to its supposedly original state; although the restoration process could focus on any stage in the building's life, from initial conception through to its most recent state, depending on which stage of its life is considered historically most important. Each has added to the layers of history and evoked new memories. If not restoration, then there is the threat of demolition. When the cost of restoration is assumed to outweigh the historical and potential use values of a building, it will face a probable future of abandonment, dereliction and, eventually, demolition.

Yet we should understand how significant the histories evidenced in our built environment may be. Establishing legibility of all the layers of history a building has been witness to is what conservation practice aims to protect, to ensure that the building continues to have relevance within society and to retain evidence of those layers of history for

future generations.

The paper has as its focus this research question: How can differing conservation responses and approaches maintain and enhance those layers of history within a historical building? The challenge of maintaining the authenticity of a building and its layers of change and history cannot usually be achieved through a singular method of conservation. The ICOMOS New Zealand Charter (2010) lists four degrees of intervention for the purpose of conservation: preservation, restoration, reconstruction and adaptation.[1] Each intervention involves different outcomes, with each having varying levels of permanence and legibility within the building. As such, to assume that one method of conservation will be an appropriate response to the entire building and its layers of history is ill-conceived. This is especially so when presented with varying levels of damage in a building. Such an example is the Canterbury Provincial Council Buildings in Ōtautahi Christchurch, New Zealand. The Provincial Council Buildings suffered considerable damage overall, from both the 2010 and 2011 Canterbury earthquakes, and have remained in limbo ever since, awaiting their fate as discussions continue around a conservation plan. Through precedent case study, this paper investigates how the use of various strategic conservation approaches as compared to one singular approach can maintain and enhance the authenticity in the layers of history of a historical building. Detailed and critical analysis of a suitable precedent can become the basis for formulating a multi-faceted conservation approach, applicable to historical buildings both nationally and internationally. One such precedent is the Neues Museum in Berlin, Germany.

The Neues Museum, Berlin, Germany

Designed by Friedrich August Stüler, the Neues Museum was one of the first buildings in King Friedrich Wilhelm IV's vision to create a 'sanctuary for the arts and sciences' on what is known as Museumsinsel (Museum Island).[2] The three-storeyed building, opened in 1859, had richly decorated internal spaces, which were arranged around two central courtyards, referred to as the Egyptian and Greek courtyards. The museum fell victim to bombing during the Second World War, which caused the complete destruction of the west wing, the central stair hall, and the southeast corner of the building.[3]

It remained in a ruinous state for nearly fifty years, before serious conversations were held around reconstructing and repairing the Neues Museum in order to help restore Museum Island to what it once had been. Two international design competitions were held in the 1990s; one for the redesign and masterplan of Museum Island, including reconstruction of the Neues Museum, and the second exclusively for the reconstruction of the Neues Museum. Submissions for the reconstruction of the Neues Museum included designs from Giorgio Grassi and Frank Gehry, though ultimately it was the English architect David Chipperfield who was selected to embark on what would be a twelve-year process to reconstruct and restore the Neues Museum.[4] The complex design approach of Chipperfield revealed a building that embodies all layers of its past; the intricate details of Stüler's design, traces of the Second World War, years of languishing and deteriorating, and its sensitive embrace of a modern twenty-first-century reconstruction.

Figure 1. Neues Museum southwest façade, drawing of Friedrich Stüler's 1859 design. Source: Wikimedia Commons (author unknown)

Figure 2. Neues Museum, completed staircase hall echoing the form of the original. Photograph: Jean-Pierre Dalbéra. Source: Wikimedia Commons. Licenced under Creative Commons Attribution 2.0 Generic Licence.

The destructive past of the Neues Museum created a unique challenge for Chipperfield. The damage from war and time had left the museum inconsistently ruined. Large sections of the building were completely lost, some parts partially destroyed, with others only showing superficial damage.

These varying degrees of damage meant it was important not only to curate a sensitive response to the damage but also to realise that one conservation method would struggle to respond appropriately to the entire building. There was an important focus on achieving historical legibility and authenticity. Chipperfield's conservation approach "gives

1 ICOMOS New Zealand, *ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value: Revised 2010* (Auckland: ICOMOS New Zealand, 2010), 6.

2 David Chipperfield et al., *David Chipperfield Architects,* ed. Rik Nys (London: Thames and Hudson, 2013), 198.

3 Jonathan Taylor, "The Neues Museum: A Fresh Approach to Conservation," BuildingConservation.com, accessed January 23, 2021, https://www.buildingconservation.com/articles/neuesmuseum/neuesmuseum.htm

4 Chipperfield et al., *David Chipperfield Architects,* 12.

Figure 3. Ethnological Room, showing minimal intervention, retaining traces of the original wall colour and previous restoration work. Source: Google Maps

Figure 4. Ethnological Room, Ionic capital with deliberately retained damage. Source: Google Maps

back only enough context so that the significance of the whole structure and sequence of spaces contained within [the Neues Museum] are legible."[5] His response was unique in that each space, surface, wall, detail or decoration was assessed as a separate entity. It was never assumed or suggested that a conservation approach selected for one space or surface would work or be appropriate for any other space or surface in a similar condition. Referred to as 'soft restoration' by architect and historian Kenneth Frampton, this approach by Chipperfield is explained as "[keeping] everything that is original and [making] sure nothing synthetic creeps in. Don't take off the render on the face and redo the whole thing. Keep it, paint it, use the same colour – but make sure it is now seen to be new. Not glaringly evident but then not faking it either."[6]

Evidence of how this method of conservation can successfully honour each layer of history is seen when there is a closer look at the internal spaces of the Neues Museum. There is a distinction between the old and new; what has been restored, repaired or replaced. Three main strategies of conservation can be seen in the internal spaces of the Neues Museum: preservation, restoration and reconstruction. The ICOMOS Charter describes preservation as a way to ensure a building's long-term survival, which involves as little intervention as possible through the means of stabilisation, maintenance and repair.[7] The Ethnological Room in the southwest corner of the Neues Museum demonstrates the way in which preservation can reveal a sense of rawness in the space, seemingly only touched by the hands of time. There is no attempt made to repair the broken capitals or the cracked plaster, or to retouch the faded paintings on the wall. The space is unapologetically honest about its age, history and the trauma it experienced that has come and gone. The only moments of intervention that are visible are in the essential stabilisation and support for the weakened plaster. Applied in areas with superficial damage, Chipperfield's 'soft restoration' method aims to memorialise rather than suppress and hide the damage caused by post-WW2 decay and weathering. Decayed areas were painted in a colour a shade or two lighter than the original, which created a variegated effect. It was never the intention to restore the surface to a completed state, but rather to a state that could be perceived as complete. Close inspection of the surfaces would reveal the colour difference, and also the texture of the surface continues to display the decay, ensuring historical legibility. Reconstruction is defined by the ICOMOS Charter as a form of restoration involving the introduction of new materials to replace what has been lost. This is considered an appropriate conservation method if reconstruction "is essential to the function, integrity, intangible value, or understanding of a place."[8] Reconstruction was used by Chipperfield in spaces where the architecture was integral to the exhibit, as it was in the Roman Room. In an advanced state of decay, the Roman Room had only fragments of the plaster remaining on the walls and ceilings. When reconstructing the missing elements such as the decorative mouldings and capitals, it was important for the reconstructed material to provide a neutral backdrop to the surviving original material. Working with a muted colour palette provided context for the surviving fragments, allowing visitors to experience the space as it once had been, yet with subtle evidence of what had been reconstructed.

Addressing the lost west wing of the museum had a simple solution: to re-establish the form. Chipperfield supported this by saying, "it doesn't make sense not to re-establish the form – it would be like a Greek sculpture with the missing arm. It's one thing not to put the arm back, but it would be funny to add something that wasn't there in the first place."[9] It was about re-establishing and honouring what had been. Chipperfield did this by working with the footprint, scale and masonry materiality of the lost element to recreate the overall formal symmetry of the building; but with simplified detailing at the roof cornice and around

5 David Chipperfield in an interview with Alejandro Zaera, "A Conversation with David Chipperfield," in *El Croquis 120: David Chipperfield 1998–2004: Minimalismo Denso = Dense Minimalism*, ed. Fernando Marquez Cecilia and Richard C. Levene (Madrid: El Croquis, 2004), 22.

6 David Chipperfield, *David Chipperfield: Architectural Works 1990–2002*, ed. Francisco Rei and Thomas Weaver (New York: Princeton Architectural Press, 2003), 39.

7 *ICOMOS New Zealand Charter*, 6.

8 Ibid., 7.

9 David Chipperfield in an interview with Adam Caruso and Peter St John, "A Conversation with David Chipperfield," in *El Croquis 87: David Chipperfield 1991–1997*, ed. Fernando Marquez Cecilia and Richard C. Levene (Madrid: El Croquis, 1998), 20.

Figure 5: Room of Niobids, with previously weathered areas of wall retained. Source: Google Maps

Figure 6: Roman Room, with reconstructed detail. Source: Google Maps

Figure 7. Southwest façade of the Neues Museum. Photograph: Janericloebe. Source: Wikimedia Commons

window openings, offering light but recognisable distinctions between the new and the existing. As mentioned earlier, the different conservation intervention strategies may have varying levels of permanence and legibility within a building. This is something that is clearly evident in Chipperfield's response to the Neues Museum – convincing evidence of his detailed analysis of different spaces and surfaces, deciding which elements are important in providing a context of understanding for historical legibility, and then developing a conservation method in response. Choosing a singular method of reconstruction may have provided for the building to be experienced in a similar way to how it once had been before being subjected to damage, but it would not have acknowledged the many years that the Neues Museum had spent in its ruined 'limbo' state. Through strategic application of an array of conservation methods, there are moments within the building that now reveal details that were never intended to be seen, such as the brick wall construction behind the plaster, the confronting remnants of the Second World War in the form of bullet fragments and charred columns, which would have been filled in and painted over; and the cracks and chips within the plaster caused by the years of being a ruin, which would have been filled and repaired. It is such moments in the building that reveal and contribute to an enriched story of the various periods of the building's life. A walk through the Neues Museum reveals that narrative.

The Canterbury Provincial Council Buildings

The Canterbury Provincial Council Buildings were constructed in three stages between 1859 and 1865, following the formation of the Canterbury Provincial Council in 1852.[10] The building was a reflection of the growth and success of the new province. Designed by Christchurch architect Benjamin Mountfort in the Gothic Revival style, the three building stages reflected just that. The first and second stages were of timber construction, the second displaying a higher level of decorative detailing and including a stone tower, which is considered the "first example of Victorian constructional polychromy in New Zealand."[11] The third stage showed substantive evidence of the province's growing wealth base and its ever-growing confidence. Constructed from stone, it included a new Bellamy's dining facility and Provincial Council Chamber with intricately detailed interior. As Aotearoa New Zealand's only surviving purpose-built provincial council buildings, they have held significant heritage value; home for a varied array of occupations since the disestablishment of provincial government in 1876 until the 2010 and 2011 Canterbury earthquakes. The earthquakes caused a significant loss of building fabric, including the complete collapse of the Provincial Council Chamber (the 'Stone' Chamber), the interior of which had been admired by architectural historian Nikolaus Pevsner as one of the finest High Victorian Gothic spaces outside Europe.[12] The varying degrees of damage throughout the buildings related to different construction materials and methods used over the years, and also from previous conservation and strengthening interventions on some parts of the buildings. In the early stages of this research project the assumption was that a singular conservation response could be applied to all aspects of the damaged Provincial Council Buildings. However, following detailed investigation of the multi-faceted conservation approach used by David Chipperfield in the Neues Museum and assessing the varying degrees of

10 Ian Lochhead, *A Dream of Spires: Benjamin Mountfort and the Gothic Revival* (Christchurch: Canterbury University Press, 1999), 93.

11 Ibid., 100.

12 John Stacpoole and Peter Beaven, *New Zealand Art: Architecture 1820–1970* (Wellington; Sydney; London: A.H & A.W. Reed, 1972), 25.

Figure 8. Completed Provincial Council Buildings, ca.1870 (Armagh Street Tower, far left, and Council Chamber to the right). Source: *Christchurch Star* archive and Christchurch City Libraries

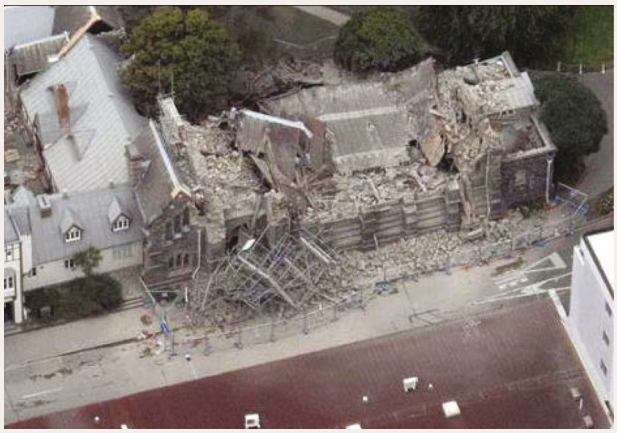

Figure 9. The February 2011 earthquake in Christchurch caused the complete destruction of the Provincial Council Chamber. Photograph: Tony Ussher. Source: Christchurch City Council

damage that the Provincial Council Buildings sustained during the earthquakes, from cosmetic to structural collapse, it became clear that this would not be an appropriate response. As a result, this project became an amalgamation of interventions, taking account of the damaged state of each area, its historical or architectural significance, and its potential use-value within the proposed repurposing programme.

There were two levels of intervention: minor and major. Minor interventions focused on sections of the buildings that suffered the least amount of damage or had been dismantled after the earthquakes. The exterior walls of Bellamy's suffered a partial collapse, and the initial conservation response could have been to restore walls to their previous state, hopefully by recycling fallen stones. However, it was proposed, in acknowledgement of this moment of history, to reconstruct the fallen areas of the exterior walls out of a similar, but not identical stone, coursed in a more regular construction pattern. This would allow the reconstruction to sit sympathetically within the surviving stonework, while maintaining honesty about being a new material and revealing the scars from the earthquake. Major interventions responded to sections of lost fabric and new moments of growth, within and in addition to the existing building fabric. As mentioned previously, the Stone Chamber had one of the finest High Victorian Gothic interiors. The greatest loss of the Provincial Council Buildings during the earthquakes was this interior space; in particular, the highly decorated ridge-and-furrow ceiling. With so much of the material lost following the earthquakes, it was essential to find an appropriate conservation response that would not only honour the layers of the building's history, including the earthquakes, but also the aesthetic and historical significance that was associated with the interior of the Stone Chamber. Two approaches were considered. The first could be likened to Chipperfield's approach of 'soft' restoration. Only a small number of the panels of the ridge-and-furrow ceiling had survived the collapse of the Chamber. The gaps left after reinstating the surviving panels would be filled by new panels

Figure 10. Perspective of Bellamy's illustrating selective reconstruction with new masonry. Drawing: Tanya Bezuidenhout

painted to match the existing colours; however, the pattern of the existing would not be replicated on the new. Only enough detail and colouring would be given to the viewer to help understand the form and grandeur of the Stone Chamber, while still indicating where new material had been used.

The second approach looked at the way damaged buildings, or buildings left in a state of limbo, can reveal elements and aspects of themselves that were never intended to be seen. A particular feature of the Stone Chamber was the timber scissor-trusses above the painted ceiling. Found throughout the Provincial Council Buildings, these scissor trusses are a unique feature of the buildings. This second approach would reinstate the surviving decorative panels in their original positions, though it would not replace missing panels; instead, there would be glimpses of the scissor trusses afforded through gaps between the surviving panels. Either of these solutions would be acceptable in revealing the layers

Figure 11. The substantially reinstated Durham Street Tower (above the line indicated). Drawing: Tanya Bezuidenhout

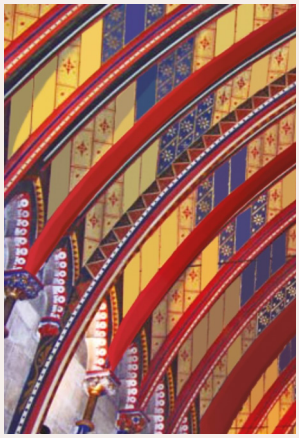

Figure 12. The highly decorative ridge-and-furrow ceiling of the Stone Chamber pre-earthquake. Photograph: Melanie Lovell-Smith, for *Te Ara Encyclopedia of New Zealand*. Licenced under Creative Commons Attribution-NonCommercial 3.0 New Zealand.

Figure 13. Soft restoration of the ridge-and-furrow ceiling. Surviving panels retain decorative detailing. New panels only show base colour. Photograph: As for Fig.12 (with adjustments by Tanya Bezuidenhout)

of the Stone Chamber's history, as well as the architectural features that contribute to its significance. It became clear that, as with the Neues Museum, conservation responses to the damage of the Provincial Council Buildings are varied, with multiple solutions being appropriate. There is a driving focus on honouring the collective legibility of the multitudinous layers of the building's past; including the ten-year period since the earthquakes, through the deliberate retention of some of the post-earthquake 'temporary' support provided to surviving stonework.

This paper acknowledges that no one method of conservation can be considered the 'right' way, but that the process of utilising various conservation methods can maintain the authenticity of a building, respecting and retaining the often multiple layers of change. The meticulous and meaningful analysis of applied conservation principles in the selected precedent – the Neues Museum in Berlin – critically inspired and influenced the design response for the Canterbury Provincial Council Buildings in Aotearoa New Zealand, where similarly various conservation approaches were tested. The result is a design response that honours both the significant aesthetic and historical values of the Canterbury Provincial Council Buildings, and the many layers of the building's history.

Figure 14. The reinstatement of material between the buttresses 'weaves' new and old elements together, respecting the overall history of the Stone Chamber. Drawing: Tanya Bezuidenhout

Figure 15. Selected retention of post-quake strengthening will provide tangible evidence of earthquake response. Photographs: Tanya Bezuidenhout

Authors

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Fig. 9. Stone Council Chambers, destruction from earthquakes. Tony Ussher, "Photographic Record of the Clearance: C 07 Stone Chambers." Christchurch City Council, New Zealand, 2015.

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