C A R L I L E   H O U S E

Finding ways to preserve run-down heritage buildings through their adaptive reuse

An explanatory document submitted in partial fulfillment of the requirements of the degree of
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Authenticity

This explanatory document has been prepared solely by myself, Dmitry Rozov, ID 1418037.

I declare that all work within this document is my own work and has been carried out in accordance with the guidelines stated in the Unitec Student Handbook. All work and ideas presented in this explanatory document that is not my own, have been referenced in accordance with Chicago Referencing Style.

Dmitry Rozov

18.10.2013
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Abstract

This project positions itself within the general concept of the Auckland City Council Unitary Plan. According to the testimony, “we want Aucklanders to play their part, to help ensure the Unitary Plan protects what makes our city special, while delivering opportunities for growth.”\textsuperscript{1} It develops an approach to deal with one of the neglected heritage buildings in Auckland through thoughtful introduction of new functions and integration of the building back into community. This creates an opportunity for us to research and promote ways to protect the building, that is of great importance to the residents of Auckland by preservation through reuse.

\textsuperscript{1} Auckland Council. “Council Votes to Step Up Focus on Heritage Matters”. Auckland Council, 21 June 2012.
Acknowledgements

This work would be impossible without support and assistance of my supervisor, Branko Mitrovic who re-introduced me to classical architecture and its design principles. My co-supervisor Adam Wild for sharing his practical knowledge. David Chaplin played an important role devoting much of his time to supervising the development of the concept. Special thanks to Michael Milojevic, my supervisor from Bachelor program at University of Auckland, who showed interest in this project. And of course my wife, Elena, who patiently supported me all this time.

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1. Introduction

1.1 Research Question

Finding ways to preserve run-down heritage buildings through their adaptive reuse. (Case study of Carlile House).

1.2 Project outline.

This project deals with an existing building in a particular neighborhood. The task is conduct a comprehensive research about the current theoretical approach to such problems, characteristics of the neighborhood and the building itself; critically analyze acquired knowledge and come up with architectural response. Project will include a functional proposal and a design of a building within the real site boundaries.

Thesis is divided into two parts. Theoretical part, which is currently in reader’s hands and design part, which will be presented during the examination week.
1.4 Methodology

The main methodological principle of this work is research by design.

Theoretical basis for this project is explored through extensive literature research. This embeds the project within the frame of current theoretical discourse and allows a thorough understanding of the problem.

Architectural research is focused on the ways to adapt the old building to the present day needs through analysis on urban, architectural and building levels. This approach is described in detail.

Urban analysis includes general history of the area, current social situation and spatial characteristics of the area. This gives us an overview of the situation and reveals possible opportunities, as well as limitations for reuse in a given historical and cultural context.

Architectural analysis involves research into more local characteristics, that give area its unique character and flavor.

Building analysis includes a detailed survey of the building, exterior and interior. This allows to understand the technical condition of the building and provides extra depth to the architectural proposal.

Results of this analysis lead to a certain decision-making conclusion, which altogether lead to an architectural solution to the problem.

1.5 Project significance.

Carlile House is a prominent building in the neighbourhood of Grey Lynn and its derelict condition has long worried local residents. The main dilemma of this particular situation lays in the fact that we are dealing with a neglected listed monument under private

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2 Grey Lynn 2030 Transition Community “Grey Lynn 2030’s submission on the Auckland Council’s LTP” 29 April 2012
ownership, when the listing authority (namely Historic Places Trust) can not anyhow influence the condition of the building. So there are two forces in play. First is NZHPT, who would preserve the building and preferably restore it, but does not have neither the rights nor the funds to do so. The second one is the owner, who would prefer to pull the building down, but cannot do it because of the monument status of the latter.

This situation is dragging on for some years now and it has a potential outcome of the building being pulled down because of neglect. Recent tragic earthquake in Christchurch added some fuel into the fire. According to the new regulations, the owners re required to quake-proof their affected property within 10 years up to 67% of current code. These regulations make future of Carlile House even foggier. The purpose of this work is to try to come up with a solution that would satisfy the owner, the residents (who are quite anxious about the fate of the building) and NZHPT, as well as address the needs of community and bring new life into Carlile House.

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2. Theoretical Framework

2.1 Current knowledge

There is an on-going battle between the preservationists, who want to protect the historical built environment at any cost, developers, who are trying to make the biggest profit of any situation, and the public, who reaping the fruits of this struggle.

In fact, the debate revolves around the question, whether an old building should be preserved at any current state or restored to the original condition and how it should be done. But there is also another solution to the problem – adaptation. In contradiction to the first two, the latter addresses not only the physical condition of the building, but the cause of the problem as well. However, adaptation is conjugated with the possibility of extensive physical alteration of the structure, that can cause many debates potentially haltering the project.

The biggest and possibly the oldest proponent of restoration is Viollet-le-Duc. In his idealistic opinion “To restore a building is not to preserve it, to repair, or rebuild it; it is to reinstate it in a condition of completeness that could never have existed at any given time.”

He argues that we should follow the architect’s original intentions as guideline in order to complete or restore the building.

It is now commonly accepted, that an old building should show its age and patina, as part of its authenticity, since age is the greatest immaterial asset of the building. If we try to hold off or negate these effects of ageing, we will initially “rob it (the building) of its dignity and identity”.

But since there is a difference between patina and neglect, there is always a degree of subjectivity in any approach.

Le-Duc’s strongest opponent, John Ruskin, argued that there is no way one can restore architectural monument. He wrote: “Another spirit may be given by another time, and it is then a new building; but the spirit of a dead workman cannot be summoned up, and

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commanded to direct other hands, and other thoughts.”

So in his opinion restoration is “a lie from beginning to end”. He goes on: “take care of your monuments, and you will not need to restore them.” It just happens only with course of history that we start appreciating a building and declaring it as a monument. So the question arises – what to do with a building that has a certain historical significance, but is already deteriorated?

Alteration can provide a solution to the problem. Those who oppose restoration in favour of alternation often quote the ill fate of those, who try to prevent the new from replacing the old, referring to classical Greek mythology.

2.2 New Buildings in Historic Settings

“The paradox of architecture is that the adored city must in part be destroyed to allow for the new”.

It was not until after Second World War, when historicism was seriously taken into consideration. Apart from large scale reconstruction such as Dresden or Warsaw, or extensive renewals, such as London, there projects of a smaller scale. They included rebuilding of town squares, individual buildings as well as infill projects. “The general purpose was to retain the memory of place and to give continuity to the history of town”.

The very first projects that were executed revealed a problem of lack of consideration of the needs and values of the inhabitants. Since then various countries developed guidelines for development in historic settings.

ICOMOS recognised that preservation necessitated the adaptation of historic towns to the requirements of contemporary life, but it should be done without destroying its existing fabric, structure, or historical evidence. Also it declared:

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6 Ruskin, J. Seven lamps of architecture. Second edition. p. 204
7 Ibid. p 205
8 Scott, F. On altering architecture. p. 167
“When it is necessary to construct new buildings or adapt existing ones, the existing spatial layout should be respected, especially in terms of scale and lot size. The introduction of contemporary elements in harmony with the surroundings should not be discouraged since such features can contribute to the enrichment of an area.”

In European Charter of Architectural Heritage from 1957 article 7 states:

“It should be noted that integrated conservation does not rule out the introduction of modern architecture into areas containing old buildings provided that the existing context, proportions, forms, sizes and scale are fully respected and traditional materials are used.”

2.3 Adaptive Reuse Practice

It is now believed that “The best way of preserving buildings as opposed to objects is to keep them in use” with or without adaptive alteration. But it is also understood that often adaptive use of building is the only way that historic and aesthetic values could be saved economically and historic building brought up to contemporary standards. As Scott notices, “restoration is an important component of alteration, but alteration is the agent of re-occupation rather than emptying buildings”.

Gofrey Chaucer once said: “There’s never a new fashion but it’s old”. Indeed, we can find examples of adaptive reuse that go back to the antiquity. Even then, building on or within the existing structures was nothing outstanding and commonly practiced.

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10 Ibid p. 47
12 Scott, F. On altering architecture. p. 176
For example St. Peter’s in Rome completed by Michelangelo, who managed to produce a well-balanced design sensitive to the structure already built as well as surrounding building fabric (Fig.2.1). Not to mention other classic palaces and cathedrals built by consequent generations of architects when all of them contributed each in their own way to the finished project. Sometimes even construction materials and elements used to be shifted from one building to another.

2.4 Adaptive Reuse Strategy

When choosing a reuse strategy for an abandoned building, it could be beneficial to think of it as of healing process. Interestingly, the word “heal” comes from the old English “hælan” what means to save and to “make whole”.13 So the process of reuse should aim for saving a building by reinstalling both old and new fragment in a way that would create a meaningful whole.

One of the ways to achieve this goal is through incorporating new functions that will be in cohesion with the building. So the local context should be explored for the impetus of functions generated by the local community. This will raise chances of acceptance of the proposal and will make sure that the new development will be appreciated and taken care of by the public. A successful project will make a great contribution to the livable urban environment as a place where it is good to work, live and play.14

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2.5 Adaptive Reuse in New Zealand

In New Zealand approach to re-use is somehow bipolar. On one hand there is a tendency towards strict restoration and conservation of buildings, promoted by Historic Places Trust. That often results in some sort of “dead envelope” when a building is restored, but is not contributing to the built environment and contains rather artificial functions. This approach could be illustrated by restoration of Hurworth Cottage built in 1864. Part of it was proudly described in Heritage Quarterly: “The chimney still maintains its original brick, earthenware pots and has a painted white finish. The seismic strengthening incorporated a steel sleeve inserted into the internal cavity of the chimney and then filled with concrete. This method was designed and approved by leading New Zealand seismic engineers.\(^{15}\)

On the other hand, there is a clear dominance of façadism in favour of return on investment. Among the recent examples, is the Wong Doo building in Auckland (built in 1885) being rebuilt in 74 apartment tower and retail stores (Fig.2.4). It is being redeveloped with Auckland’s Council Built Heritage Acquisition Fund, which was established in 2011 to acquire at-risk heritage buildings with the intention of restoring and on-selling them.\(^{16}\) But the new development extending above historic facades has nothing to with them and in no way it is inspired by or coherent with the old structure. It is being proclaimed “This is one tool the council has to address Auckland’s all too common problem of heritage demolition by neglect, when owners don’t have the inclination – or far more commonly,

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\(^{15}\) New Zealand Historic Places Trust. Heritage Quarterly Central Region Winter 2012 p. 3

\(^{16}\) Auckland City Council. Our Auckland. October 2013. p. 19
the funds – to restore buildings which are important parts of Auckland’s history.”\footnote{17} As we will see, this is the exact case of Carlile House and there exists a great chance that this building will follow the fate of Wong Doo building if left solely for developers.

2.4 Cultural Context of Adaptive Reuse.

As we can see, process of architectural reuse is deeply embedded in a historical background. It is understood that prevailing cultural ideas define context, in which an architect needs to provide the design.

Process of reuse of old buildings can have a certain pedagogical context. From a certain perspective, it arises three fundamental problems – structure, lifecycle and learning.

If we look at the old building as a source of information, we would first need to examine it and define what is there in the building that we could benefit from in terms of history, culture, aesthetics, beauty etc. Different buildings have different secrets. As Cramer put it: “The historic building fabric contains not only a wealth of resources and undiscovered qualities but also no shortage of problems and defects with the architect will have to consider and work with.”\footnote{18} Quite often an old building will contain traces of alterations and additions, which could be perceived as fragments of a once useful whole. In order to understand and to be able to interpret it one should understand its structure. Structure is an instrument that we use in order to learn complex things. From practical point of view, for any adaptive reuse project to be successful it is important to have “a thorough knowledge of a building ... in order to be able to reliably plan safe and sustainable building works.”\footnote{19} In other words, we need to have a clear, fully structured knowledge of a building.

\footnote{17}{http://www.scoop.co.nz/stories/AK1309/S00110/aucklands-1800s-heritage-secured.htm}
\footnote{18}{Cramer, J. Architecture in existing fabric. 2007 p. 12}
\footnote{19}{Ibid. p. 67}
Reuse also addresses the issue of expanding the lifecycle of a building. The concept, which gains popularity in our days since people become more and more aware of the finite character of resources and attempt to tackle problem of unlimited consumption.

Parallels could be drawn with a lifecycle of a human being. There are a number of theories describing how architecture and built environment affects people. P. Zumthor describes architecture as a flow of imaginative pictures. He mentions, “Some of these images have to do with my childhood. There was a time when I experienced architecture without thinking about it. … Memories like these contain the deepest architectural experience that I know”\textsuperscript{20}. In his view, unconscious experience that we learn in our childhood goes with us throughout our life. This notion co exists with idea of a German philosopher and architect Rudolf Steiner.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Fig2.2.png}
\caption{Rudolf Steiner’s Goetheanum building. Dornach, Germany. Source: http://www.goetheanum.org/The-first-Goetheanum.690.0.html?&L=1}
\end{figure}

In his book “Architecture” he discusses the way architectural form influences human beings, initially as a visual experience imprinted unconsciously on the soul.\textsuperscript{21} He even goes as far as saying that architectural experience over time influences the form of the body (Fig.2.2). Learning experience in our childhood gains more importance hence it is time when we are able to learn on the level of unconsciousness.

There are several theories about how children learn and in fact several schools of theorists. One of them was founded by Russian theorist Vigotskiy. He was one of the first to draw a difference between the lower and higher psychological functions and consequently two types of behaviour: natural and cultural (or historic). Natural behaviour

\begin{thebibliography}{99}
\bibitem{20} Zumthor, P. Thinking architecture, p. 10
\bibitem{21} Steiner, R. Architecture : an introductory reader, 2003
\end{thebibliography}
cannot be altered, as it is predetermined by nature, while cultural can be consciously controlled. When acting together they allow for psychological development of a person.

At the same time, his theory draws a line of interaction between learning and development among children. Vigotskiy argues that there is a level of Actual development (things that a child knows already) and level of Potential Development (what children can do under supervision or with help of adults). The subtraction from one another will give the zone of proximal development (Fig. 2.3).

One of the consequences that follow out of it is that the only good learning – is the one in advance of development. So experiences and knowledge that we put into this zone of proximal development will affect the path of the future development of a child.

Thiebaut rightly noted: “Rather than a simple integration, what guarantees the success of the project and reduces the risk of errors is its insertion into a continuous cycle of regeneration that encompasses within itself experience of the past and the germs of the future.” From this point of view, successful projects dealing with architectural reuse could provide a valuable context for the kids to learn from as well as introduce them to the conscious and unconscious values associated with a certain community.

These types of processes were referred to by Carl Gustav Jung as individuation or a “process of transformation where the personal and collective unconscious is brought into consciousness (by means of dreams, active imagination or free association) to be assimilated into the whole personality.” Contrary to Vigotskiy, who was more focused

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22 Gauvian, M. Readings on the development of children. 1997

23 Thiebaut, P. Old buildings looking for new use. 2007 p. 9

on kid's psychology, Jung distances himself from any age restraints. He argued that besides achieving physical and mental health, people who have advanced towards individuation tend to be harmonious, mature and responsible. They then might comprehend humane values such as freedom and justice and have a good understanding about the workings of human nature and the universe.
3. Urban Analysis

3.1 History of the area

Originally the area was part on Newton Borough and was vacant rural land up until 1886 when it was subdivided for residential purposes. According to information available at Special Collection Library, the map of 1886, Special Collection Library, Auckland City Library) shows large undivided lots (Fig.3.1).

![Map of Newton Borough 1886](image)

Fig. 3.1 Map of Newton Borough 1886. Source: Sir George Grey Special Collections, Auckland Libraries, NZ Map 2676

The map of 1903 shows partially divided lots with current street pattern (Fig.3.2) while the map from 1900 – 1909 depicts present day lot allocation (Fig.3.3)

The inner city of Auckland became rundown starting from the 1950’s. Ponsonby and Grey Lynn were regarded as working class slums and low-rent suburbs until around the 1970s. In 1970 process of gentrification started to change the character of the place when more and more homes became renovated. Property prices started to go up.

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Fig. 3.2 Map of Newton Borough 1903. Source: Sir George Grey Special Collections, Auckland Libraries, NZ Map 198

Fig. 3.3 Map of Newton Borough 1900-1909. Source: Sir George Grey Special Collections, Auckland Libraries, NZ Map 6618
Current Social Situation. According to Census 2006, majority of the population in Grey Lynn East (part where Carlile House is located) is of European origin; 71% against 56,5% on average in Auckland city (Fig.3.4). For people born overseas who are now living in Grey Lynn East, the most common birthplace was the UK and Ireland. 

![Fig. 3.4 Ethnic groups in grey Lynn East. 2006. Source: http://www.stats.govt.nz](http://www.stats.govt.nz/Census/2006CensusHomePage/QuickStats/AboutAPlace/SnapShot.aspx?tab=Culturaldiversity&id=3515420)

Around 80% of the local population belongs to the age group between 15 and 65 with a strong tendency that older people who have lived in the area for most of their lives choose to stay here (Fig.3.5) (28) Couples with children or one parent with children account for 49,2%.

Almost 60% of Grey Lynn residents have some post-school qualification, while the most common occupation is “professionals” with relatively high wages, compared to the whole of Auckland city. In Grey Lynn East, 35.0 percent of people aged 15 years and over have an annual income of more than $50,000, compared with...

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21.6 percent of people in Auckland Region (Fig. 3.6).

There is a vibrant community life in Grey Lynn, especially closer to Ponsonby with a number of community focus groups including the Urban Environment Group, Community Gardens, Grey Lynn Farmers Market, etc. Alliance Francaise also established its presence in the area due to large number of French immigrants and is patronizing Richmond Road School.

### 3.2 Zoning

Though Carlile House is formally attributed to Grey Lynn it finds itself on the border of Grey Lynn and Ponsonby in the middle of an almost uniformly residential cluster (Fig. 3.7).
There are a number of small-scale retail spots along Richmond Road. In vicinity of the site there are several educational institutions (Richmond Road Primary School and St Paul’s College), while most of the business and retail store are located along Ponsonby Road. Despite a vibrant social life, Grey Lynn lacks spaces that could be used for community purposes or for rental by creative class people. A walk along Richmond road on a weekend revealed a pattern of distribution of activities and businesses. It is needed to say, that the whole road is busy in terms of cafes, grocery stores, etc., but if one goes from Surrey Crescent towards Ponsonby road, it will become noticeable, that businesses somehow disappear closer to Carlile House despite equal housing density. The explanation could be that Ponsonby Road, as a main business hub, “sucks in”
businesses from adjacent streets up to a certain distance. And this is something to be considered in the project.

3.3 Building Heights

If we look at the map of building heights distribution, we will clearly see the predominance of one to two storey buildings in the area (Fig.3.8).

Fig.3.9 Heights map.
Despite the fact that Carlile House itself is only two storey height, it is considerably higher than the rest of the buildings and used to be quite dominant. It used to be that way up until the development of a residential complex across the street on the corner of Richmond Road and Dickens Street (Fig. 3.10). It reaches up to five storeys and is the most tall and massive structure in the vicinity.

3.4 Transport

As can be seen from the map – Richmond road is a collector road (Fig. 3.11).

Unlike arterial roads (such as Ponsonby road) collector roads are designed to provide access to residential properties. Mainly along the street a green zone with trees separates driveway from walkways. Cars are parked on both sides of the street what contributes to safety and comfort of pedestrian flow (Fig. 3.12).
There is a bus route that goes along Richmond road with a bus stop almost in front of Carlile House. A ride from Britomart Transport Center is around 25min. Ponsonby road provides an easy access to the 1\textsuperscript{st} and 16\textsuperscript{th} Motorways in both directions.

So as we can see, Carlile House can easily and conveniently could be accessed by most types of public and individual transport and is situated in an area with comfortable walking opportunities.

Fig.3.11 Transport Map
4. Architectural Analysis

4.1 Main building types

Main buildings in the area are low-rise freestanding historic villas of one or two storeys (Fig.4.1).

Fig.4.1 Typical villas in proximity to Carlile House
Villas were commonly placed close to the street in order to maximize the rear yard space. All main entrances are from the street side. Traditionally, the front of the house almost always faced the street, irrespective of sun and view. This meant there was a consistent decorative edge to the street. Since the area is located on a sloping terrain, most of the villas are elevated from the street level on a platform, with the stairs leading towards the entrance porch. In many cases such change of levels was used to construct a garage in front of the house with a terrace on its roof (Fig. 4.2). Villas used hip roofs for the main building, with gables and valleys. The pitch or slope of the main roof for villas varied from 30–45°, and pitch was not always consistent.\textsuperscript{29} Another common feature of the villas is the canopy over veranda on the street side. Typically for the time, a floor plan for the villa and the desired accessories could be chosen from a catalogue by a prospective owner and be assembled from prefabricated elements by the local tradesman builder.\textsuperscript{30}

From about the 1980s, villas saw resurgence in popularity. Renovation of these houses is now a significant part of the building industry’s work. So in that sense we could assume that villa will remain valued and popular housing type in the area in the foreseeable future and their typology should be respected in any new development.

\subsection*{4.2 Vistas}

Carlile House is located on a prominent position in Grey Lynn. Sitting in the bend of Richmond road, it provides an attractive viewpoint from both side of the street. Keeping in mind that Grey Lynn is predominantly a villa occupied suburb, it is quite difficult to

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{fig4_2.png}
\caption{Diagrammatic characteristics of a typical villa.}
\end{figure}

\textsuperscript{29} Salmond, J. Old New Zealand Houses 1800–1940.

\textsuperscript{30} \url{http://www.renovate.org.nz/villa/floors/floors-original-details/}
navigate around, and Carlile House serves as a distinct focal point effectively terminating the vistas (Fig.4.3).

Second most important vista in proximity of the site is down Chamberlain Street. Looking down the road one can see the Grey Lynn Park below (Fig.4.4). Depending on proposed activities on the site, the park could be incorporated into functioning scheme due to its proximity.

Fig.4.3 Views on carlile House from Richmond Road
4.3 Landmarks

Identifying other landmarks in the area will provide a deeper insight in the character of the district as well as potentially give clues and references for the new design.

*Grey Lynn Council Chambers and fire station.* (1 Williamson Avenue, Grey Lynn, Auckland). Erected as a dual-purpose building, the structure was designed by John Mitchell - architect Northern Ireland (Fig.4.5). It was erected in 1889 and throughout its life underwent series of additions and alternations. Now it is used as a café and retail space.31

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Grey Lynn public Library (472-474 Great North Rd, Grey Lynn, Auckland). Not much known about this building except for it was build around 1924 (Fig4.6). \(^{32}\)

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\(^{32}\) http://www.historic.org.nz/TheRegister/RegisterSearch/RegisterResults.aspx?RID=584
St Columba Church (92 Surrey Crescent, Grey Lynn) was built around 1931 by English architect Daniel Patterson (1880-1962). Today it’s site can boast a notorious community garden (Fig.4.7).\(^{33}\)

Richmond Hall (1 Francis street, Grey Lynn) was built around 1900. Until 1910 it was used as a school for Grey Lynn residents, but later was acquired for the needs of Returned Services Club (RSA) The main structure still remains, though the street façade was completely rebuilt using modernist architectural language.\(^{34}\)


\(^{34}\) http://www.livingheritage.org.nz/Schools-Stories/100-years-of-Grey-Lynn-School
Fig.4.7 St Columba Church Source: Sir George Grey Special Collections, Auckland Libraries,

Fig.4.8 Richmond Hall. Original design. Street facade now remodeled. Source: Sir George Grey Special Collections, Auckland Libraries, 1-W1550
5. Building Analysis

5.1 Building Site

Carlile House is located on a very complex site. It has exposure to three streets – Richmond road, Chamberlain Street and Dickens Street. Along Chamberlain Street site incorporates 4 standard lots, along Dickens Street – three, and it would take another 2 lots along Richmond road. Morphologically the site is sloping in two directions. Northern part of the site slopes towards the South. Then it forms a plateau in the central part, while its Western part forms a steep slope along Chamberlain street. Overall change of levels is 4m in North-South direction and 5m in East-West direction (Fig.5.1).

![Contour map, showing the site and part of Grey Lynn park in the lower corner.](image-url)
5.2 Existing access points

The site has several existing access points from both Richmond road and Dickens Street. It is completely fenced off from Chamberlain Street (Fig.5.2).

There is a driveway to the West of the main building leading to the backyard (Fig.5.3)

and there is an entrance into the asphalted car park behind the church (Fig.5.4).
Main pedestrian entrances are located on the corner of Richmond Road and Dickens street leading to the church and a separate one leading to the front door in front of Carlile House (Fig.5.5).

5.3 History of the Building

Carlile House was among the first buildings to be erected in Grey Lynn. It was designed back in 1886 by English-born architect Robert Jones Roberts (1832-1911) in what is considered to be Classical-Italianate style (Fig.5.6)\textsuperscript{35}

\textsuperscript{35} McKenzie, Joan. Costley Training Institute (Former). New Zealand Historic Places Trust, 12 September 2011.
He also designed the New Zealand Shipping Company Offices on the corner of Quay and Customs Street in the late 1890's. This building was pulled down not long ago. He also is known for his designs of a grand home named Castelreagh, in Devonport and the grand Lake Hotel in Takapuna built in 1887. Both buildings are now destroyed. So essentially, among all buildings of this architect, Carlile House is the only building still standing.

It was a purpose built educational institution for boys and reflected the philanthropic approach to welfare of the late 19th century. Building was erected on the funds of late Sir Edward Costley (1796-1883) and reflects contemporary concerns with child welfare, education and self-improvement.

In early August 1886 the building was complete and New Zealand Herald reported published an article giving a very plausible description of the building:

“Every arrangement is made for the health and comfort of the inmates. There is a commodious dining room, and sitting room for use of the lads, on the ground floor, where are also situated Manager's quarters, kitchen, pantry, scullery, storerooms etc.
On the upper floor there are six bedrooms and a commodious room reserved for infirmary, if necessary, having beautiful views. All the baths have hot or cold water laid on, and the lavatories are of the most approved pattern. It is intended to commence the formation of a library, provision being made for it in a recess in the sitting-room. Gas is laid on throughout the building.”

Throughout its life it changed uses from educational institution (1886 – 1908), to children’s home (1909 – 1930), headquarters for New Zealand Church Army (1935-1976) and being a Tongan Community building (1976 till present).

The main building gradually became run down and vandalized as a lack of finance hampered plans for its full re-use. The property was cross-leased and transferred to the United Church of Tonga in New Zealand Trust Board in 1990. There is clear evidence (became apparent after recent inspection) that after draft conservation plan was prepared for the building, its deterioration increased significantly due to vandalism.

5.4 Alterations to the building

Originally in 1886 there was only the main building on the site. In 1892 a new workshop was erected at the rear for a blacksmiths forge and carpentry workshop. In 1898 a gymnasium was built.

The whole new wing was erected in 1910 and provided additional dormitories and bathrooms, and a large hall. In 1916 the verandah on the west side of the building was covered in order to be used as a play area (Fig.5.7).
The interior of the home was renovated in 1926/27. Repairs were carried out in 1942 and 1951, and improvements made to fire egress in 1954. In May 1975 part of the building was damaged by fire. During the 1980s and 90’s the condition of the building deteriorated significantly.\textsuperscript{36} The roof above the central part structure of the main house was completely replaced due to rot and covered with corrugated steel. Stone detail to the cornice on the west bay has been completely removed to make pavement of the car park. Stone brackets, and intermediate facing stones at the eaves have also been removed along all the side and rear facades on the original block. At present, staircase in the west part has burnt down. Windows at the ground level are boarded with plywood on the inside. All the glazing is broken. Building is suffering from vandalism on

a daily basis. Especially ground floor is heavily littered, what makes access to certain rooms impossible. Even in course of several days that the survey took place; new graffiti appeared on the building.

The Chapel adjacent to the main building was built in 1913 as a memorial to Sister Cecil who was running the Children’s Home. In 1978 the former chapel seating 100 people was destroyed and a new church for 300 people was built on its place. Nowadays church is the only building that is officially in use on the site.

5.5 Building Survey

Carlile House was listed as Category 1 building by NZ historic place Trust in 2011. Nevertheless information on the building itself is very scarce. The only set of plans (with no dimensions given and unknown scale) was found in a draft conservation plan prepared by Matthews and Matthews Architects Limited in 2003. So it became clear that for the purpose of the project as well as for any further investigations on preservation of the building a proper set of plans is necessary.

Cramer, in his book “Architecture in Existing Fabric” gives a chart, which defines the precision levels in measured surveys depending on planning purpose and plan contents (Appendix 1).

Upon close inspection of the building, it became clear that its main structure is still solid, with no apparent cracks or deformations, but the main damage is concentrated in decorative stonework. Since it suffered from severe weathering and lack of maintenance, it should undergo professional restoration in order to prevent irrevocable deterioration. These two factors together with technical and time limitations defined my choice of precision levels. Thus, for the main structure Level II was chosen, (tolerance of +/- 5 cm. Near-accurate survey of the entire building) and Level V (tolerance +/- 1cm. Detail survey for conservation purposes)37 was chosen for the stonework.

37 Cramer, J. Architecture in Existing Fabric. 2007. p. 59
It is needed to say that due to access limitations subfloor area as well as roof structure of the building were surveyed by indirect methods and can only be used for indication purposes.

Instruments used for the survey were: laser measurer, conventional tape measurer, and flexible ruler. Complex decorative elements were documented by tracing them over with graphite with subsequent scanning in CAD (Fig 5.8 - 5.9). Curvatures of the stonework were approximated as radiuses.

5.6 Building Structure

Symmetry and proportions. Carlile House has a generally symmetrical composition. Front (north) façade has two symmetrical bays with paired windows on both sides. Main entrance is located in a small portico on the line of symmetry. East and West facades are not symmetrical. In plan the building has “H” shape with its back South West part missing. It is not clear whether it was originally intended to stay like this, or it was supposed to be extended if needed. Concluded study showed that despite the building
is “well-designed” it does not have any regular system of proportions. Same applies for
the ornamental parts and décor. It resembles classic style, but does not follow any of the
classical five orders (Fig.5.10).

Many of the elements can be
found on different buildings in
Auckland from the same time
period, what allows us to
assume, that they were not
specifically designed for this
building, but rather left to the
discretion of the stonemason.
Nevertheless, Carlile House
produces an impression of a
solid and graceful building
depicting contemporary
tastes in design, detail and
finishing.

Walls of Carlile House form
the load bearing structure and
are made of solid bricks.
Each brick measures 220mm
X 105mm X 75mm. Average
thickness of mortar joints is
10mm and masonry is laid
with flush pointing. The
perimeter walls at ground floor level have thickness of 450mm and are laid in Flemish
bond (Fig.5.11) On the first floor, walls are 335mm thick and are laid in running bond.
The apparent change of thickness is clearly visible in the outer walls of the stairwells
(Fig.5.12). The inner partition walls are 270 mm. There is also several lightweight timber
framed partition walls which are 150mm thick (Fig.5.12). All walls are plastered on the inside (15-25 mm thickness) (Fig.5.14).
Fig.5.10.1 Section through the facade of the flanking wing of Carlile House.

Fig.5.12 Principle section along the centerline of the main corridor.
Exterior décor. Facades of Carlile House are richly decorated with stone elements. Horizontal bands and quoins, cornices, brackets, window surrounds, keystones, heads and sills are made with sandstone. Windows at the ends of the projecting wings are framed with pilasters supporting an entablature. The main entrance portico originally had a solid plaster or stone balustrade with end piers and urns over the entablature and pilasters, but was removed.

Floors could be inspected through openings and missing floor boards. They have typical structure for the period. Joists 300mm by 50mm spaced at 380mm are run across the length of the rooms. They are covered with tongue and groove floorboards 150mm by 25mm. Ceiling boards and moldings are fixed directly to the bottom side of the floor joist. There are no signs of insulation between the joists (Fig.5.15).

All rooms had wooden ceiling roses. It is understood that originally all rooms would have had gas lighting and ceiling roses provided ventilation into the roof space for the gas.
Some of them are still in place (Fig.5.16).

*Windows* are traditional sash windows. Despite limited access, their structure could be examined through the gaps that appeared due to rot and weathering (Fig.5.17). In the windows inspected, original balancing weights were still in place. There are two types of windows: interior and exterior. They mainly differ by the types of sills used (timber for indoor and stone for outdoors). The exterior windows also differ by shapes of top rail of the upper sash. Segmental arched windows were used at ground level with semi-circular arches at the upper floor. The back part has plain rectangular windows with trapezoidal lintels. (Fig.5.18).
Paneling. Dado paneling is used for decorative purposes on the interior throughout the house at the height of 1200mm. It consists of vertical tongue and groove boards 100mm wide and a horizontal rail replicating the shape of inner window sills (Fig.5.19).
Roof has timber framing covered with slate tiles. Original structure is completely modified above the central part (Fig.5.20).

Foundations could not be inspected. But we can assume that they were standard for such type of buildings.

Quake-proofing. As it was discovered during preparation of Preliminary Conservation plan in 2003 Carlile House is identified as an earthquake prone building, and will require structural strengthening works. This is likely to include securing or removing hazardous appendages, and installing new structural strengthening to tie existing walls to floor, ceiling and roof framing. As computer modeling showed (Resist NZ) the building would require 4m wide X-braces made out of 200mm Universal Steel Section running from ground floor to the top floor ceiling in order to prevent destruction from lateral loads during an earthquake. This creates a certain problem of retrofitting this structure into the building, with should be architecturally addressed during the design process.
5.7 Value Assessment

After inspection of the site and documentation of the building, it became apparent that Carlile House has great architectural, cultural and historical significance. Although it is important to point out that not all of the components of the structure have equal value. Carlile House is a good example of the design approach taken by Victorian architects of the time. Little attention was paid to the parts of buildings that were not included in the public domain. In our case we can see huge difference in detail and ornamentation between the street facades and the courtyard side (Fig.5.21).

Fig.5.21 Contrast between front and back side of Carlile House
Back side has plain rectangular windows with standard stone sills but there is no ornamentation and the lintels have plain trapezoidal shape. The brickwork is of the same bond, but colour of individual bricks varies greatly. The central part attached to the back has a much cheaper feel to it as it lacks any ornamentation at all. Because of the sloping site, it was built on the lower level and its connection with the main building is not well detailed. On the outside, it resulted in a passageway that incorporates the stairs and protrudes from the back of the main building (Fig.5.22).

![Passageway connecting the back wing with the main building](image1)
![Passageway interior](image2)

Decision was made to keep the roof ridge below the eaves of the main part what resulted in a very low pitch and contributed to a “barrack” feel overall. On the inside it resulted in a very “strange” corridor with trimmed door casing, very irregular dado panelling and a feel that it was not designed anyhow, but was built as luck would have it (Fig.5.23). Part of the building erected in 1910 is adjacent to the Eastern part of Carlile House is built in a very cheap manner, but with approach similar to one of the original. It has a clear distinction between symmetrical façade looking towards Dickens Street and its backside (Fig.5.24). Dickens street side is build of higher quality red brick and has a
decorative central part. It replicates décor elements of Carlile House, but instead of natural materials décor is made of cement mold, thus only mimicking original design. Eaves have no ornamentation apart from exposed rafters. The back side is made of lighter brick with the same window style and dimensions. There is no décor at all and window lintels and sills are just rectangular molds. Inside this part somehow resembles interiors of Carlile House, but in a cheaper manner (Fig.5.25).
Neither gymnasium nor workshop buildings could not be accessed during inspection. These building help us to understand how the house operated throughout its history. It is needed to say that both buildings have purely utilitarian roles and are placed randomly behind the main building. As we can see fro the construction sequence diagram, no attention was paid to the planning of the site and to spaces new additions create. Also, in general press gymnasium building is often referred to as stables.

![Fig.5.26 Original design of the Sister Cecil.](image1)
![Fig.5.27 New church built in 1980's](image2)

Source: Sir George Grey Special Collections, Auckland Libraries, 4-8136

The chapel was originally built in 1913 (Fig.5.26). It was a small chapel for the use of the members of the house and children. Later in 1979 it was demolished and a new church for the Tongan Community was built on its place. Though many sources mention of remodeling of the chapel, from the conversation with the church members it became clear that there are no traces of the old chapel left. So the church building is in fact a new construction form 1980’s (Fig.5.27).

Similar conclusions were drawn by Matthews and Matthews Architects in their conservation plan. The main building and interiors of Carlile House were given category
A, while the 1910 addition, its interiors and supporting buildings were graded as category B. The church was quoted as the least important and marked as category C. List of categories and their explanation are given in appendix 2.  

6. Ethical Issues

The current owner of the site is United Church of Tonga, which acquired the land together with the building in 1976. Since then they mainly used the church premises and left the Carlile House into the state of despair. Local residents wrote numerous letters to the Auckland Council and published articles in the newspapers underpinning the importance of Carlile House and its poor state, but to no effect. The problem spiralled around the fact that Church of Tonga did not want to give up the building and they had no money to preserve it. In 2003 right after completion of conservation draft some work was carried out to prevent water from getting in, but further deterioration including vandalism is still occurring. Finally in December 2011 building was listed as Category 1 Monument preventing it from being pulled down.

As of today, demographic situation changed significantly and Church congregation mostly moved out of Grey Lynn, so Church parish has to travel from other districts as far as South Auckland what causes numerous complaints by the local residents. At the same time they believe that Auckland Council should be proactive in this matter because it is the only institution having the authority to impose sanctions. Lately members of the public sent a letter to the Council arguing that United Church of Tonga must pay rates for the building, which is clearly not used for religious purposes (answer has not been received at the time of writing). With the perspective of shifting segregation, increased rhetoric’s about the state of Carlile House and having to pay rates, it becomes clear that United Church of Tonga is facing difficult situation, when outside factors suppose major changes in the coming future.

One of the goals of proposed scheme is to find a delicate way out of this situation, make a potentially economically viable solution, address the future needs of the changing community and breathe a new life into the historic building.
7. Functional proposal

Defining functions of the project was one of the most crucial moments preceding the design process. Since the project had to address the whole site, rather then the Carlile House alone, it became clear that it should be a multifunctional development. Project should have taken into account the site and building context as well as financial perspectives. Proposed functions for the site don’t come solely from urban analysis of the area. Conversations with members of the public and members of Alliance Francaise gave a better understanding of the community needs and helped to generate economically feasible proposal that would likely gain support of the local residents.

There are altogether three functions proposed for the site - the outpatient rehabilitation clinic for the elderly, community centre and kindergarten.

7.1 Rehabilitation centre

There is a long-time relationship between architecture and medical institutions. Already in the beginning of the 15th century Leon Battista Alberti provided expert advice for a healthy life in his “Della famiglia” where he describe the main criteria for a healthy environment. Today architecture helps doctors to establish a well-defined brand identity and harmonious memorable picture of the practice. Phillip Meuser in his book Medical Practices assumes that the aphorism “Tell me where you live and I will tell you who you are” could be well attributed to a modern medical practice. Impression given by the exterior influences the well being of a visitor. “It starts with the ring tone on the telephone, includes the typeface of the headed notepaper and extends right up to the architecture and design”39. In those terms, there could hardly be a better building suitable for conversion into an outpatient clinic than Carlile House. Already existing example of such functional conversion could be found in Wickham, Newcastle, NSW, Australia (Fig.6.1).40 Once a building housing infant school, it was converted into

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outpatient clinic serving local community. With a similar approach, the core part of the structure of Carlile House will act as a main building containing reception area, staff rooms, doctor’s cabinets, dentist, well-being studio and hairdresser. The new supporting structure would contain community laboratory, swimming pool, special treatment pool, sauna, changing rooms, gym and equipment room.

7.2 Community centre
It would consist of an exhibition hall, multifunctional performance hall with supporting structures, office, and a café/bar. Alliance Francaise is looking for a place in the area to lease long term using their own fund. So such centre would provide opportunity for them to establish a base in the area. Parts of the premises could be rented out for private exhibitions, or to private tutors who would like to use the stage or exhibition hall.

According to Alliance Francaise, Richmond Road School is overcrowded and there is a long waiting list. Potentially during the day community centre could take on some activities such as drawing or theatrical classes. In the afternoon stage could be used by children to stage performances for their parents.

7.4 Kindergarten
Kindergarten should be catering for around 20 children aged 2 to 5. Despite there is a such facility in Richmond Road, this one will directly benefit from the presence of Alliance Francaise on the site, as well as it will use the community facilities and will concentrate on bilingual learning (English and French). Emphasis should be made on the process of interaction between kids and other uses of the site.

7.5 Car park
Parking utilises natural change of levels. It is located below the ground level and is designed to accommodate passenger cars up to 2.1m height. It can be used by the staff only. Parking for the visitors is provided in front of Carlile House.
7.5 Benefits.

Such functions solve both current problems and address future ones, given present day social patterns. As we could see in urban analysis, the biggest age group is 15 to 65 with the tendency for people to stay. This alone will soon produce an increased load on the main hospitals, while providing certain medical care facilities on the local level will decrease this load, improve efficiency and make healthcare a more pleasant experience for the local residents. Surprisingly enough, recent study showed, that medical institution located in a historic building is more appealing to the patients and seems more trust worthy that the one located in a new building.

Swimming pool on the site can be shared by patients of the clinic, kindergarten and members of Richmond road school given their timetables do not intersect. There used to be a swimming pool used by the school, but it was closed due to lack of funds and maintenance.

Community centre will provide a new stage for exhibitions and small scale performances much needed in Grey Lynn. It will also support the multinational environment of the area and serve as a language learning hub and a platform for cultural exchange.

Kindergarten located in such premises would support and promote among children understanding of lifecycle, the notion of societal responsibility as well as develop their interpersonal relationship on a broader level.

These functions should help to keep Carlile House within lifecycle of Grey Lynn community and retrofit the purpose of serving the community as it was originally intended.
8. Precedent study

8.1 Museum of Roman Art

Located in Merida, Spain. It was designed by Rafael Moneo and built between 1980 and 1986. In this project Moneo should be applauded for depth of his insight into the structural and spatial opportunities provided by a vast archaeological site. His interpretation of the structure and hierarchy of ruins and of the immediate context of the site resulted in a building, that “turned past into a living reality through an architecture that gives continuity to the site’s use throughout the ages.” In construction of the museum Moneo decided to over impose the grid based on the surrounding building matrix to erect a structure physically coexisting and even touching the ruins (Fig. 7.1).

This seeming conflict allowed to reveal the lack of coincidence and to effectively express the complexity of ruins. In terms of construction methods architect followed his Roman predecessors. “Using the same building materials and identical techniques had always

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Fig. 7.1 Museum of Roman Art. Merida. Spain. Plan showing position of walls against the archeological ruins

Fig. 7.2 Building was constructed using traditional Roman technique

41 Rafael Moneo. Remarks on 21 Works. 2010 p. 117
struck me as the most respectful way of coexisting with what had been built before”. (Fig.7.2)

Despite a quite fundamental nature of the museum, Moneo sees it as “the latest component in the building continuum on the site, the most recent episode in its history.”

8.2 London National Gallery Sainsbury Wing

This project was studied for its contextual relations with the old building and its surroundings. In his interview, talking about the project, Venturi constantly underlines the importance of context (Robert Venturi on designing the Sainsbury Wing of the National Gallery, London). Namely, that the new wing had to address and help to form Trafalgar square at the same time it had to connect to the old gallery. The new building copies the rhythm and inflecting on the old one at the same time it is separate by a space from the original (Fig.7.3). The intention was to create a continuation of rather than an addition to the gallery. On other sides the new wing is a completely different building incorporating different contexts but still maintaining unity by the use of materials (fig.7.4).

Fig.7.3 London National Gallery. Plan. Fig.7.4 London National Gallery Sainsbury Wing. View from Trafalgar Square.

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42 Ibid p. 107

43 http://www.youtube.com/watch?v=5-_hmXaWTkw
In this project Venturi justifies the use of traditional materials despite they do not have a structural role anymore. First, contextual reason, “to make a building feel at home where it is” thus providing contextual analogy. Secondly, he argues that traditional technologies are easier to maintain, have bigger life span, and are usually cheaper.\(^\text{44}\)

### 8.3 Neues Museum

Located in Berlin, Germany, the original building was designed by Friedrich August Stuller between 1841 and 1859. Building was severely damaged during WWII and it was restored and partially rebuilt in 2009 by David Chipperfield Architects in collaboration with conservation architect Julian Harrap.

Fig. 7.5 Old and new parts of the Neues Museum. Berlin. Source: von Rauch, F. et al., Neues Museum. 2009

Fig. 7.6 Interior detail. Neues Museum. Berlin. Source: von Rauch, F. et al., Neues Museum. 2009

Intention of the project set out by Chipperfield’s team followed the approach of William Morris: “Its aim was not to restore the building as an idealised version of the original; instead it proposed a preservation programme that would show the vicissitudes of time

and so conserve the broader cultural heritage of the museum.\textsuperscript{45} In such approach, the vision of ruined structure was supposed to stay (Fig.7.5), while consolidation work undertaken during 1980’s with “no heed to aesthetic considerations” was removed to clear way for the new structure. This project aimed for “not in a design for contrast but for continuity”\textsuperscript{46}(Fig.7.6).

\begin{thebibliography}{9}

\bibitem{Hudson} Hudson, J. “Architecture from Commission to Construction.” 2012 p. 60

\bibitem{vonRauch} von Rauch, F. et al., Neues Museum. 2009

\end{thebibliography}
9. Design proposal

9.1 Degrees of intervention

"Change is a natural condition of life".\(^{47}\)

Design strategy is largely based on the functional proposal that suggests that the whole site goes through redevelopment program. That supposes the change of ownership, and that, in its own term, renders the church building on the site irrelevant to the program. Since it is a building of a very specific shape and built in an offensive manner towards Carlile House, its demolition seems to be justifiable.

Project also supposes removal of the 1910 addition and two supporting buildings as well as removing of the later addition to the central part of the main building. It seems to be quite a tuff decision, but it does have reasons behind it (Fig.8.1).

Fig.8.1 Structures to be removed are marked with red. Structures to be restored are marked with green.

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\(^{47}\) Cramer, J. Architecture in existing fabric p.15
First, these later buildings were never part of the original scheme. They lack any unique characteristics, and present a bare mimicry of the original building, but in a false manner. Besides they sit in the middle of the site, with large offset from the streets, thus creating unused and unpleasant “non-spaces” around them, which cannot be improved without interference in the buildings themselves. With these structures in place, it is not possible to use potential of the site to the full extent.

Secondly, historic approach to the design of these buildings was of subordinate character to Carlile House and did not suppose any importance or significance. They were built the cheapest way possible with the only intention to accommodate certain functions.

There are several other aspects, such as their structural soundness. Gymnasium building shows severe deformation of the brick cladding towards Chamberlain Street, possibly caused by foundation weakness (Fig.8.2), while workshop building has structural cracks. As of 1910 addition, it has such a large scale that dwarfs the villas around.

Even the structure of Carlile House itself, despite the fact that it is Category 1 building, will have to go through quake-proofing restructuring one way or another.

Summing up, the scope of interventions and demolition on the site is quite significant, nevertheless it should give way to the new structures, which will assist the recovery of overall significance of the project and reintroduce the whole site to the community of Grey Lynn.
9.2 Spatial composition

According to Zumthor, there are two primary types of spaces – excluded in included: "in architecture, there are two basic possibilities of spatial composition: the closed architectural body which isolates space within itself, and the open body which embraces an area of space that is connected to the endless continuum." \(^{48}\) "In the course of the project, these approaches are explored in relation to Carlile House. Positive and negative consequences of both scheme were evaluated and one of the concepts was developed in detail.

9.2.1 Excluded Spaces

This approach supposed use of the old building as a core structure that was extended to form a single new building. Basically two new structures were erected to the right and at the back of the old building and connected to it through glazed courtyards. (Fig. 8.3-8.4). Such scheme allowed for convenient arrangement of functions and easy planning, since its street exposures were minimal and there was a lot of space around the buildings. Quake-proofing of the old structure was made an easy task, thanks to the adjacent steel greenhouse structures used in the courtyards. It also paid certain respect for the demolished structures. One of the courtyards provided opportunity for the 1910 part to be rebuilt of decided so. This project helped to reveal opportunities given by the site and existing infrastructure, but it also identified various problems that were left overlooked.

Firstly, single building resulted in a structure that did not fit into surroundings; neither in terms of scale not in terms of building typology. The site could be penetrated from any

\(^{48}\) Zumthor, P. Thinking Architecture, p. 21
Fig. 8.3 Exploration of the possible alignment of the building and planning options for a single building structure.
Fig. 8.4 Study of various components of possible structure. Glazed courtyard linking old and new buildings shown on the bottom image.
side, but since the building did not have a unified structure, it would have been difficult to navigate around. It also failed to take note and respond to the neighbouring elevations along the street.

Secondly, big problem appeared out of the concept itself. This approach created a lot of various spaced around the building, many of which could not be used or clearly lacked character.

Finally, on a more phycological level, existence of various undefined and semi isolated spaces opposed the idea of interaction between site users.

Overall, though it was decided not to take this approach, it helped to understand and formulate the problems that had to be addressed in the new schemes.

9.2.2. Included Spaces

Such approach meant creation of a number of buildings forming various courtyards. Through this concept, buildings of an appropriate scale could be achieved. Also, the need for courtyards meant that buildings had to be pushed towards the street line, thus increasing level of interaction between the new structure and existing building matrix. Many beneficial features were transferred from the previous concept, including use of levels, position of driveway, subdivision by functions, etc.

Greater attention was paid to the alignment of buildings. Primary and secondary axis were identified and an attempt was made to arrange building blocks in relation to these axis (Fig.8.5).

Resulted scheme consisted of two courtyards: a little one to the right and a bigger one to the back of the old building. The small courtyard was flanked by a building containing physiotherapy department. It was left open on to sides to allow free passage from the street to the lower courtyard via a number of steps and ramps. Kindergarten and community centre were placed along the West side of the site. These buildings were
Fig. 8.6. Four images above. Proposed set of plans for a courtyard building arranged in relation to the main axis of the site.
connected with the swimming pool via a colonnade running along the South end. Such colonnade completed the courtyard and at the same time it did not block sunlight on the adjacent lot. Similar colonnade provided physical connection between the new structure and Carlile House and covered exit from the car park underneath (Fig.8.6). Altogether this scheme proved to be more appropriate, as it allowed spaces for interaction, as well as it supposed more human scale of the buildings and a relatively lean and easily read composition. Thus certain attempt was made to investigate it on a volumetric level.

Several important issues were identified and addressed. Namely, the necessity to respond to the style of residential development across Dickens Street, to create a lively elevation on Chamberlain street in cohesion with the surrounding villas and to address the back of Carlile House with all of its problems.

This was partially achieved through design of glass cube, housing stairs, on the corner of Richmond Road and Dickens Street (Fig.8.7). It was supported by a glass structure of the swimming pool placed on the main longitudinal axis of the site (Fig 8.8)
Fig.8.8 Above. Proposed perspective along the main axis, looking towards swimming pool pavilion.
Cohesion along Chamberlain Street is supposed to be achieved by elevating the main buildings on a platform and a play of solid and void in the facades. On material level, introduction of corrugated metal covering some the walls provided reference to the original roofs of the villas as well as facade variety (Fig.8.9).

Fig.8.9 Proposed perspective along Chamberlain Street.

Potential of such approach became clear, and a critical appraisal of this scheme was conducted. It identified several issues. The main concern was the lack of relation Carlile House to the new structure (Fig.8.10). Courtyards were too fragmented and did not respond well to the need of integration of the old building. Street elevations though showing some relation to the surroundings, could be improved.
To address these issues the whole building and site analyses and value assessment were reviewed and another study was made in an attempt to find a better solution for the courtyard.

9.3 Development of the selected concept

9.3.1 Improvements to the chosen scheme.

Ideally, a single defining shape of a courtyard would be the most appropriate, but it is physically impossible due to the shape of the site, which complexity is defined by its skew. Several important factors were additionally considered when attempting to redefine the new shape: axis, symmetry, composition of the old building, character of its backside and elevations of adjacent buildings (Fig.9.0).
Axis. The two main axises of the site were reinterpreted. The primary one was located longitudinally through the centre of Chamberlain Street elevation, while secondary one appeared through extension of Carlile’s House main line of symmetry. Thus their intersection defined the centre of the main courtyard. As it is known, “in general, there are two ways of properly incorporating the skew; by the interposition of a circle or circular segment, or by a triangular or trapezoidal form.”\textsuperscript{49} So the decision was made to

\textsuperscript{49} Cortlandt Curtis, N. “Secrets of architectural composition” p. 80
incorporate a circular courtyard at the back and locate all the buildings facing into it (Fig. 9.1).

Symmetry. Carlile House would be a completely symmetrical building, if not for the missing real left part. At the same time, it is evident, that it does not distract from the notion of symmetry. Similar approach was taken in regards to the arrangement of courtyard. It is not symmetrical, but it would be appropriate to call it balanced with the “wing” to the left of the old building missing because of the boundary. Nevertheless such layout allows for a circulation on both sides of the building and allows possibility to respond to both axis (Fig.9.2).
Composition of the old building provided some clues that allowed to develop architectural syntax of the new structure. As we can see, Carlile House is effectively consists of three blocks with a smaller block attached to the back. The courtyard side is heavily dominated by their plain abutting ends. This notion was interpreted in the project and similar vertical “blocks” were used to define critical points with the rest of the structure filled in between them. For example one of the blocks creates a focal point at the end of secondary axis. Two other are flanking the old building on its sides. Finally, one of them is used to establish presence of the new structure on the main elevation along Richmond Road (Fig.9.3-9.7). Though in different situations their dimensions vary, they always for the dominant part of the structure. Upon closer analysis it became apparent that the harsh border created by these blocks supposed a certain counterpart.

Fig. 9.2 Semi-symmetrical composition of the master plan. Left wing “missing” due to site boundary.
Fig. 9.3 Four images above. Plasticine model was made to investigate possible volumetric solutions using building blocks.
Fig. 9.4 Site layout in relation to the main axis.

Fig. 9.5 Study of elevations. Top - along the longitudinal axis, bottom - along Chamberlain Street.
Here we should refer to the functional use of the space and remind ourselves that it will be used by kids attending the kindergarten. It is known that edge conditions are always rich site for children. As Michael Tawa notices “what makes place engaging is that it

Fig.9.6 Axonometric study of possible volumetric solutions.

Fig.9.7 Schematic sections through the swimming pool area (right) and main corridor (left)
always promises more that it delivers\textsuperscript{50}, that it always holds something back, that it possesses something intriguing”. In that sense the idea of “limit” is never about a straight delineating or a sharp line, but it is always about a zone of interchange, an interval with blended and morphed borders. This notion found its implication in the design of the infill structure and in the use of pergolas. A large proportion of the new structure should be made visually permeable for the users of the courtyard (Fig.9.8). This will allow the landscape to blend the otherwise hard boundary between building and courtyard.

![Fig. 9.8 Principle section through the play zone of the kindergarten](image)

The pergolas, on the other hand, serve a dual function. They provide a physically permeable barrier helping to define the circular courtyard and at the same time they create a link between that new and the old building, thus bringing Carlile House into the courtyard (Fig.9.9)

\textsuperscript{50} Tawa, M. “Theorising the Project” 2011
Characteristics of the surroundings were examined in more detail what was reflected in a more elaborate elevations along Dickens and Chamberlain Streets. They are described in more thoroughly in Street Exposures part.

9.3.2 Site levels and access

This project attempted to make the most use out of unevenly sloping terrain of the site. For this purpose the site was split into three main levels (Fig.9.10). First level is the existing street level. It holds Carlile House itself and Part of the physiotherapy department building. Steps leading to the second level were placed deeper in-between the two buildings. This allowed visitors to go from one building to the other without

Fig.9.9 Study of pergolas and their layout. It included an option of a glass extension attached to the back of the old building
necessity to take the stairs (it is especially convenient for disabled or clients who need support for walking). Platform immediately behind Carlile House was raised to reach the first level. It serves three functions: allows uninterrupted passage through old building’s circulation and emergency exits, it creates a necessary platform for the underground car park ramp and it helps to define circular shape of the courtyard.

Second level is 1.4m lower and holds the main courtyard. From this level one can access cafeteria and kindergarten. It serves for primary circulation around the site.

Third level forms a small enclosed courtyard and secondary circulation route. It is 1.4 m lower and holds entrances to the community centre and concert hall.

There are three main access points to the site (Fig.9.11). The central entrance is located where the old gates used to be – that is on the central axis of Carlile House. It accompanied by the emergency route and car driveway to the left of the old building. Another access point is located on the primary longitudinal axis of the site and leads towards Grey Lynn Park. The new additions are served through secondary entrances along Dickens and Chamberlain streets.

There is a very important reason for such location of entrances because they control the way person experiences buildings. On the approach to the building on the street level
one can experience the scale and general aesthetics of the composition. The central entrance creates passages along the buildings, which allow for up-close encounter with the buildings so that a person could see and appreciate the decorative details and craftsmanship involved in construction (Fig.9.12).

Entrance from Chamberlain street helps to establish the central axis and focus of centre of the courtyard. It also allows visitor to look at Carlile House form the distance in order to grasp the whole building.

Fig.9.12 Circulation scheme around the site

9.3.3 Occupancies

The final scheme supposes the following allocation of functions. Rehabilitation center with all of its supporting structures is located in Carlile House itself and a new East part. Bar and boulandgery are located in a separate block behind the main building directly connected to exhibition hall and community centre. In this part functions and spaces are organized in such a way, that they can operate independently of each other. At the same time for certain events, they can be used as a singly facility; for example during a kids play, parents can enjoy the bar while waiting for the play to start, and grandparents could enjoy kids drawings in the exhibition hall.

Kindergarten is located in a separate building on the upper West corner of the site. It is designed with an small inner courtyard that can be used on windy days. Alternatively, windows in the curved play area could be opened in order to integrate both small and large courtyards.

Car park is located underground below the kindergarten.

For detailed allocation of functions refer to appendix 3.
“The key to the success of a new relationship between architectural neighbours is not necessarily the degree of similarity, but the design skills that have gone into creating it”\textsuperscript{51}

Stylistic approach to design is based on the general idea that Carlile House should play the dominant role on the site. That refers to its scale, style and proportions. New buildings should possess characteristics that allow them to form a symbolic backdrop to the original structure at the same time expressing its own character. Also, they should respond differently to different context of adjacent streets.

As we could see from building analysis, Carlile House has a significant difference between highly ornamented front and rough almost primitive back. Also it tends to have symmetrical composition and classic design, but does not truly succeed in both. So design of the new buildings is seen as something “in-between”.

In search for the answer to the problem my attention was turned to the classical orders. This provided possibilities to establish a single unifying structure to the whole project and help various functional elements to relate to each other.

The basic element was established as 450mm by 450mm in plan – a reference to the construction technique of the ground floor walls of Carlile House, which are laid in Flemish bond and are 450mm thick. Underlying dimensional grid at multiples to 2m derived from the proportions of the protruding flanking wings of the main building, which are 6m wide. Though it is necessary to underline that it was not taken literally and variations exist where it was beneficial for the overall composition.

A brief study was undertaken to explore results that the use of different orders produce in relation to proportions of Carlile House (Fig.9.13).\textsuperscript{52}

\textsuperscript{51} Insall, D. Living buildings” 2008 p. 173

\textsuperscript{52} Chitham, R. “The classical orders of Architecture” 2005
Chosen base unit was used as base column diameter and intercolumniation was set to 2m. Results showed that the most appropriate order seemed to be Tuscan. It produced acceptable ceiling heights and sections, allowed for roofs to cover the necessary spans and kept the tallest of the new structures subordinate to the old building. Also, the
tallest ridge was reaching the eaves of Carlile House, what provided a nice clean reference.

Though facades of the new structure are not meant to be classic, a certain degree of ornamentation allows to place an emphasis on important parts (such as entrances) in a manner similar to the old building, where an ornamental portico marks the main entrance. Preliminary study of the elevations based on this principle is given in Fig.9.14. For full set of perspective drawings and details refer to appendix 4.

![Fig.9.14 Elevations base on the use of Tuscan order along the main longitudinal axis (top) and in relation to the central wing of Carlile House (bottom)](image)

9.3.5 Old and new

“The issue is no longer about new versus old, but about the nature of the vital relationship between the two.”

Intrusions into the old building were kept to the minimum, nevertheless they could not be avoided completely. In places where they had to be made, they were integrated into

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53 Powell, K. Architecture reborn. 1999 p. 19
the overall scheme of the project, so the new structures were carefully and purposefully related to the old building. Thus, the necessity to quake-proof the old structure demanded a steel reinforcement cage to support the lateral loads on the walls. The proposed way of integration of such a structure into the building takes notion of the fact that the roof structure above the central room was completely replaced due to rot and the floor between the ground and first floor was partially affected. In this case decision was made to remove the floor between storeys, to expose the roof structure. The reinforcement steel cage would be installed on the inside of the room and would include an additional passage way along the perimeter of the first floor (Fig.9.15). This will provide an interesting pay of heights for someone entering Carlile House from the main entrance. Such space will not only successfully solve the problem, but also could be used to introduce visitors to the scale of the other buildings on site, where double height spaces are often used. A feeling that could arise when passing through spaces like this was once described by Le Corbusier when he speaks of Green Mosque: “In Baroussa, in Asia Minor, at the Green Mosque, you enter by a little doorway of normal human height; (it) produces in you a necessary change of scale so that you may appreciate … the dimensions with which it is intended to impress you.”

Several other changes are related to the overall composition of the building ensemble. They were designed in compliance with the main principles of Venice and ICOMOS Charter. A new wing was added to the left of the old building (Fig.9.15). This allowed to add extra space for the clinic and complete the symmetrical composition. It was also intended to balance for the “missing” left wing of the overall plan. The new wing is designed in a manner similar to the old, but without direct copying, so it could be clearly identified as a new structure.

Fig.9.15 Position of the quake proofing structure inside Carlile House

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54 Le Corbusier “Towards New Architecture” p. 181
A colonnade supporting wooden pergola was added to the back in order to help define the courtyard. Though it is a permanent structure, physically it has only two-point connection to the was of the building, thus it also can be removed almost without traces if needed. Other than that, no significant changes are supposed to the old structure apart from restoration procedures.

9.3.6 Street exposures

Richmond road.
The main elevation along Richmond Road boasts façade of Carlile House restored to its original condition with balustrade above entrance portico, regular garden and cast iron fencing. To the left of the House one can see the gable end of one of the main block of the new structure with a passageway in between them. Main block, designed in a traditional way is accompanied with an addition designed in a more modern style with a large glazed opening, referring to the style of the block on the opposite side of the street. Carlile House together with the brick addition are located behind the fence, while the addition is intentionally left outside to be included in the public domain, thus reinforcing its connection with the residential block. Large tree on the corner of the site is left in tacked, so it nicely dissolves sharp geometry of the modernist addition behind it.

Chamberlain Street.
Elevation along Chamberlain street projects the spatial arrangement of the main building blocks, at the same time is clustered and split into segments of different scale. Parts of the elevation are placed on a base, which relates to the structure of the villas, where garages are often set to the height of the ground floor and used as terraces. This allows the new structure to keep close to the scale of surrounding villas and to relate to their level diversity.
Dickens Street.

Design of the elevation along Dickens Street is dominated by the necessity to mediate contrast between Carlile house and the residential development on the opposite corner. This is achieved through both shape and materials used in the new building. Similar to Chamberlain elevation, main building blocks project into the street, while a large part is taken by rectangular additions finished in grey corrugated metal, thus referring to the shapes and palette of the residential block.

For detailed elevations refer to appendix 5.
10. Conclusion

This project investigated the problem of producing an architectural response to a complex set of social requirements as well as certain physical restraints. Throughout the project design proposal underwent several stages. Each stage included changes that were considered necessary in order to give more in-depth design and to produce more sensitive response to the problem.

The design approach endorsed the site’s existing complexity on the levels of topography, typology, scale, proportions and materials. It produced a building ensemble that respects the existing building matrix and produces elevations coherent with its surroundings. One of the most difficult but the most rewarding parts was to make planning work as a whole at different “zoom” levels.

Despite the fact that this project supposes demolition of the buildings that, as some may argue, have historical and cultural significance, it allows to engage with the core building on a much higher level and increase the overall significance of ensemble.

What was particularly important about this project, is that the functional proposal reflected the real situation in the community and presented circumstances appear to be coherent with the building, which is associated with the local proximity. Functional complexity of the project comes from the fact that the context is generating the impetus of functions which are needed in local community, rather than superimposing artificial function which would fit into the site.

An overall objective of this work was to raise awareness of the troubled state of Carlile House, and propose a way out of this situation. Hopefully this will help the residents of Grey Lynn in their struggle to save part of national heritage that would greatly contribute to the vibrant character of the neighborhood.
12. Definitions

*Preservation* – refers to maintenance of property without significant alteration to its current condition. This approach should be taken when it is appropriate to maintain a building or structure as is.\(^{55}\)

*Reconstruction* – indicates the rebuilding of a structure. This approach is taken when a historic structure needs to be physically in place for contextual reasons, even though it is no longer exists.\(^{56}\)

*Rehabilitation* (adaptive reuse). For historic buildings needing repair, alterations, or an addition, the most flexible intervention strategy is rehabilitation, which preserves those portions or features that convey the structure’s historical, cultural, or architectural values while making compatible use of the property possible. Because this approach involves freedom to assign new use to the historic property, it is also referred to as adaptive reuse. It is a suitable approach when existing historic fabric is damaged or deteriorated, or modifications are made to update portions of the structure.\(^{57}\)

*Conservation* – is the action taken to prevent decay and manage change dynamically. It embraces all acts to prolong the life of our cultural and natural heritage.\(^ {58}\)

*Prevention of deterioration* – entails protecting cultural property by controlling its environment, thus preventing agents of decay and damage from becoming active.\(^ {59}\)

*Consolidation* – is the physical addition or application of adhesive or supportive materials to the actual fabric of cultural property.\(^ {60}\)


\(^{56}\) Ibid p.195

\(^{57}\) Ibid p.197

\(^{58}\) Feilden M. B. Conservation of historic buildings. Third edition. 2003 p. 3

\(^{59}\) Ibid. p. 9

\(^{60}\) Feilden M. B. Conservation of historic buildings. Third edition. 2003 p. 9
Structure - is a fundamental, tangible or intangible notion referring to the recognition, observation, nature, and permanence of patterns and relationships of entities.\(^{61}\)

Bibliography


Grey Lynn 2030 Transition Community. Grey Lynn 2030’s submission on the Auckland Council’s LTP. 29 April 2012


McKenzie, Joan. *Costley Training Institute (Former)*. New Zealand Historic Places Trust, 12 September 2011.


Internet sources.


### Appendix 1

**Precision levels in measured surveys**

<table>
<thead>
<tr>
<th>Planning purpose</th>
<th>Plan contents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRECISION LEVEL I</strong></td>
<td></td>
</tr>
<tr>
<td>Scale 1:100; Tolerance +/- 10 cm</td>
<td>only serious deformations</td>
</tr>
<tr>
<td>Schematic survey of the entire building</td>
<td>only distinct irregularities in plan</td>
</tr>
<tr>
<td>• feasibility study</td>
<td>simplified representation of wall and ceiling thicknesses</td>
</tr>
<tr>
<td>• deriving floor areas and volume</td>
<td>no fittings (doors, windows)</td>
</tr>
<tr>
<td>• facility management</td>
<td>no finishes</td>
</tr>
<tr>
<td>• routine maintenance measures (only)</td>
<td></td>
</tr>
<tr>
<td>→ not suitable for design planning</td>
<td></td>
</tr>
<tr>
<td>→ not suitable for building measures</td>
<td></td>
</tr>
</tbody>
</table>

**PRECISION LEVEL II**

Scale 1:50; Tolerance +/- 5 cm

Near-accurate measuring survey of the entire building

- functional planning
- planning application
- planning of works that apply to one storey only
- planning of works for buildings without serious defects or deformations
- planning of works for building measures not affecting the building’s load-bearing structure

- deformations < 5 cm
- clear irregularities in plan
- near-accurate representation of wall and ceiling thicknesses
- presentation of the main construction elements
- schematic representation of fittings (doors, windows)
- main room fixtures (wall paneling, suspended ceilings etc.)

**PRECISION LEVEL III**

Scale 1:25 / 1:10; Tolerance +/- 2 cm

Measuring survey true to deformations of the entire building

- planning of works for buildings with more serious defects and distortions
- planning of works for measures that span several storeys (e.g. lift, stairs, chimney, ducts etc.)
- planning of works for buildings with valuable building substance
- building measures in listed historic buildings

- deformations < 5 cm
- exact plans with all irregularities in wall paths
- presentation of the construction in detail
- building materials annotated
- detailed drawings of fittings (doors, windows)
- main surfaces and finishes (wall, mural, floor finishes etc.)
- reflected ceiling plans (joint positions, plasterwork etc.)
- main historically relevant finds

**PRECISION LEVEL IV**

Scale 1:25 / 1:10; Tolerance +/- 2 cm

Comprehensive analytical measured survey of the entire building

- building measures for historically significant buildings

- deformations < 2 cm

All aspects of precision level III as well as:
- all surface finishes (walls, ceilings, floors)
- all fittings and fixtures
- all historically relevant finds

**PRECISION LEVEL V**

Scale 1:10 / 1:5 / 1:1; Tolerance +/- 1 cm

Detail survey for conservation purposes

- complex structural planning in buildings exhibiting serious distortion
- detailed repair measures
- detailed interior planning
- detailed planning of restoration works

- all individual aspects of the construction
- all individual aspects of surfaces
- stone tooling
- wall murals

Source: Cramer, J. Architecture in Existing Fabric. 2007, p. 59
Appendix 2

Conservation Categories.
The tabulation schedule uses five categories, which have consequential conservation policy implications summarized as follows (terms are those defined in the ICOMOS New Zealand Charter):

A - items of exceptional significance. Items or spaces which should be preserved and protected at all costs. Only processes of maintenance, stabilization, restoration, reconstruction or reinstatement are appropriate for such features.

B - items of considerable significance. Items or spaces which should be preserved and protected where they do not conflict with the conservation of a feature of higher heritage value. These items may be adapted - as long as the adaptation is reversible and in accordance with clause 20 of the ICOMOS NZ Charter (refer Appendix 7.02) - but should otherwise be subject only to the processes of maintenance, stabilization, restoration, reconstruction and reinstatement.

C - items of some significance. Retention is preferred, but modification may be justified where there is no conflict with items of higher heritage value. Some reduction of significance or removal of such items may be justified where this assists the recovery of overall significance.

D - items of little or no significance or not relevant. May be retained for functional reasons where there is no conflict with items of significance. Retention or removal of such items is optional.

intr - items which are intrusive on conservation values. Should be replaced or concealed if practicable, where this will assist the recovery of heritage significance.

Source: Carlile House Conservation Plan. Matthews and Matthews Architects Ltd. 2003
Appendix 3
Final Design Drawings. Plans (Original at 700mm X 1000mm Magnani Incisioni 310gsm Paper)
Appendix 4

Final Drawings. Perspectives. (Originals at 500mm X 700mm Magnani Incisioni 310gsm Paper)
Appendix 5
Final Drawings. Elevations. (Original at 700mm X 1000mm Magnani Incisioni 310gsm Paper)
End of explanatory document.