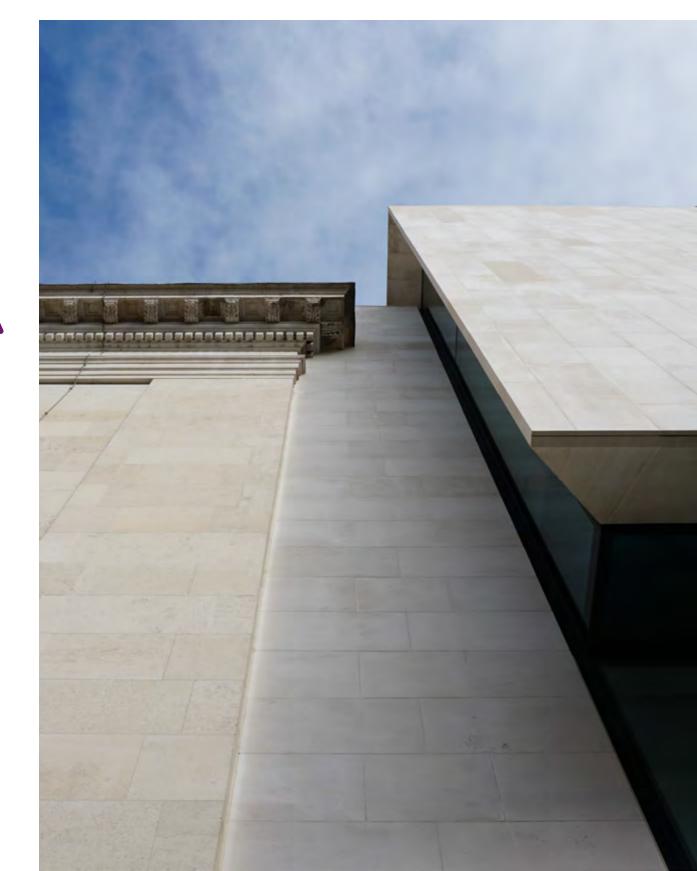
Alternative Realities

Approaches to Adaptive Reuse in Architecture

Hugo Chan

Byera Hadley Travelling Scholarships Journal Series 2018







NSW Architects Registration Beard





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Cover Image: The Sammy Ofer Centre, London Business School

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> **Hugo Chan** January 2019

PRFFACE

"We shall not cease from exploration.

And the end of all our exploring will be to arrive
where we started and know the place for the first time."

- Thomas Stearns Eliot

To begin with a quotation is for me, an important and humbling reminder that everything we do and think in our lives is often interwoven with the ideas and visions of those who have come before us. When we seek new ideas, we often look to the past for inspiration, forming a continuity which stretches back through time. Such is the nature of our collective human culture and history.

Architecture is no exception to this. Our cities and our buildings define our public spaces physically but are also poignant reminders of our shared collective past. The question of how we treat our architectural past, to my mind at least, is an entirely different and hugely contested matter.

Unlike a book, we cannot simply reprint a new edition.
Unlike a painting, we cannot protect it in a carefully curated gallery.
Unlike an artefact, we cannot encase it in glass and control its humidity.

Architecture is inhabited. It is a living breathing organism. It is used in, worked in, loved or hated. Without the lives which occupy buildings, architecture would be little more than monuments to particular moments in history, with some romantic association to times gone by. But what becomes of our buildings when their original, functional specifications become irrelevant? What should we do when they no longer provide the density, the 'usefulness' or indeed the 'aesthetics' of our current age?

Increasingly, today's architects and designers must deal with urban environments which are already saturated within existing building stock. The simplistic demolition of buildings, manifest iconically by the implosion of Pruitt-Igoe Housing Estate some ten years after its completion, is neither practical nor sustainable.

Within this context, adaptive reuse maybe seen as one of the manners architects are negotiating this issue. The desire to convert our old buildings to suit new functions and spatial experiences has become an integral part of the ongoing development of many major cities. As we change within an increasingly complex and urbanised world, our buildings and our cities must change with us. Through this body of work, I believe I have only begun to scratch the surface of what is a hugely complex and rapidly growing field of architectural research and practice. Forty case studies from four cities spread across the world have been selected to provide a snapshot of the diverse range of current approaches and practices to adaptive reuse.

From these case studies, it is my fond hope that this research project will serve as a reminder that our collective architectural history is not merely confined to the textbook as a relic of the past. It is, very much, a living, breathing part of our daily lives, which continues to shape our experience of space and our engagement with the built environment.

Hugo Chan

January 2019



Alternative Realities

Approaches to Adaptive Reuse in Architecture

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The aim of this research is to identify the challenges and outline the opportunities associated with the adaptive reuse of architecture, to better understand the profession's unique ability to transform our existing collection of buildings and structures into new spatial experiences as part of the temporal evolution of our urban fabric.





01 INTRODUCTION

"Because we designers lack a sturdy grasp on our historical heritage, we lack the confidence to tolerate architectural change. An understanding of the role of invention in historical architecture and of the way the past affects present preferences would help designers and design controllers to conquer their own aesthetic prejudices and therefore to deal more effectively than they do now..."

- Denise Scott Brown

// CONTEXT

In an age of ever rapidly increasing urbanization and change, the question of what we, as contemporary global citizens, ought to do with our legacy of architectural buildings remains the subject of passionate and often heated, public discourse. In New York, the proposed renovations to Philip Johnson's iconic AT&T Building on Madison Avenue announced in late-2017 were swiftly decried by architectural critic Rowan Moore of The Observer as "another step in the glassification of the street levels of great cities."² Only a few months earlier, in London, the confirmed demolition of Robin Hood Gardens, a 1960s Brutalist public housing project originally recommended for heritage listing was described by architect Simon Smithson as "an act of vandalism."3

Meanwhile, in Australia, Sydney based opinion columnist, Prof. Elizabeth Farrelly, lambasted the secretive sale of the Classical Italianate Sydney General Post Office Building as "a disgrace and a catastrophe...[with its] assurances of heritage protection...barely worth the screen time of reading them."4 Even in the development motivated and density driven city of Hong Kong, the demolition of the historic Star Ferry Pier was recollected as "the scar left by the destruction...[which] is still deep and painful."5 Although this may seem to be a depressing and pessimistic backdrop, it is a very real acknowledgment of the fact that no major globalised metropolis is immune from the delicate and hotly debated topic of architecture and heritage.

At the other end of the spectrum however, is the question of whether every building retained in the name of heritage can truly be considered meritorious and valuable. The Hong Kong Antiquities Advisory Board lists 1,444 historic buildings in the city⁶ and in the state of New South Wales, Australia contains over 27,000 individual sites and buildings are recognized for its heritage value by the NSW Office of Environment and Heritage.⁷ The New York City Landmarks Preservation Commission identifies 36,000 architecturally significant sites across the five boroughs which form New York City⁸ and Historic England registers almost 400,000 places of historical significance.9 This staggering catalogue of historic sites and buildings underscores a clear and overwhelming desire to protect and maintain the socio-cultural history embodied by architecture. Simultaneously though, it highlights the potential nostalgia driven danger of preserving all parts of our existing urban fabric under the pretence of preservation in order to prevent change, progress and development.

Ultimately, the acts of cultural vandalism and an a priori assumption that whatever is old is necessarily valuable are two sides of heritage extremes which underscores a clear necessity to discuss the role and significance which contemporary architects have played and will continue to play in adapting and conserving our built fabric.

■ 01.01 // The Great Court of the British Museum, London, United Kingdom, Foster + Partners.

// OBJECTIVES

Through a series of case study projects spread across the four cities, this body of work will interrogate the different policies and approaches for how buildings of different heritage significance classifications are retained, restored and adaptively reused. By unraveling the challenges and opportunities associated with the adaptive reuse of architecture, this research project will endeavour to illustrate how the architectural and design professions' can transform existing buildings into new spatial experiences as part of the inevitable, temporal evolution of our urban fabrics.

This primary research objective will be devolved into four interrelated areas which will form the basis for inquiry and structure for interrogating each case study site:

- To compare the differences in heritage policies which govern the flexibility of adaptation and the practices of conservation for historic buildings in each of the four cities:
- 2. To study how the various differences in values, politics, histories, cultural attitudes and perceptions have helped to shape both policy and by extension, the role which architects have in the conservation and adaptation of historic buildings:
- 3. To explore the approaches, methodologies and design solutions adopted by different architects when engaging with the fabric of these historic buildings:
- 4. To identify potential future areas for further development associated with both practice and policy in continuing to generate new modes and approaches to adaptation and conservation of historic urban fabric.

// METHODOLOGY & STRUCTURE

The research methodology adopted for this project was qualitative data collection and secondary sources. Primary data collection involved field research of the proposed case studies and semistructured face-to-face interviews based on formulated questions arising out of the research objectives. Initial questions served as the base, with the interviews extended through instantaneous question and answer-responses to the interviewees' answers. The use of in-depth interviews as the primary mode of data collection was selected because it enabled exploration of attitudes, values, beliefs and motives. These Interviews have been documented by Audio-visual means with a transcript of each interview in English also retained as appendices to this body of work. The field research will also involve the photographing and/or filming of the buildings and freehand notation and drawings to record significant design components and architectural details.

Additional information collection was also focused on qualitative data, with broad terms of reference to obtain heritage impact assessments, historical records, legislative guidelines and academic critiques of case study projects. A range of historical archives were also used in the collection of historical site information.

Given the diverse ages and types of projects, the presentation of case studies in each city has been identified and ordered geographically, from north to south, east to west. A location map in each section provides a clear identification of each project's location within the wider urban context of the city.



01.02 // Finding a relevant backdrop. Interview setup with Mr. Lawrence Mak and the Preservation and Revitalisation display in the background at the Urban Renewal Discovery Centre, Hong Kong.



01.03 // Behind the scenes. Camera and lighting setup for interview with Mr. Spencer De Grey at Foster + Partners, London, United Kingdom.

// LIMITATIONS OF RESEARCH

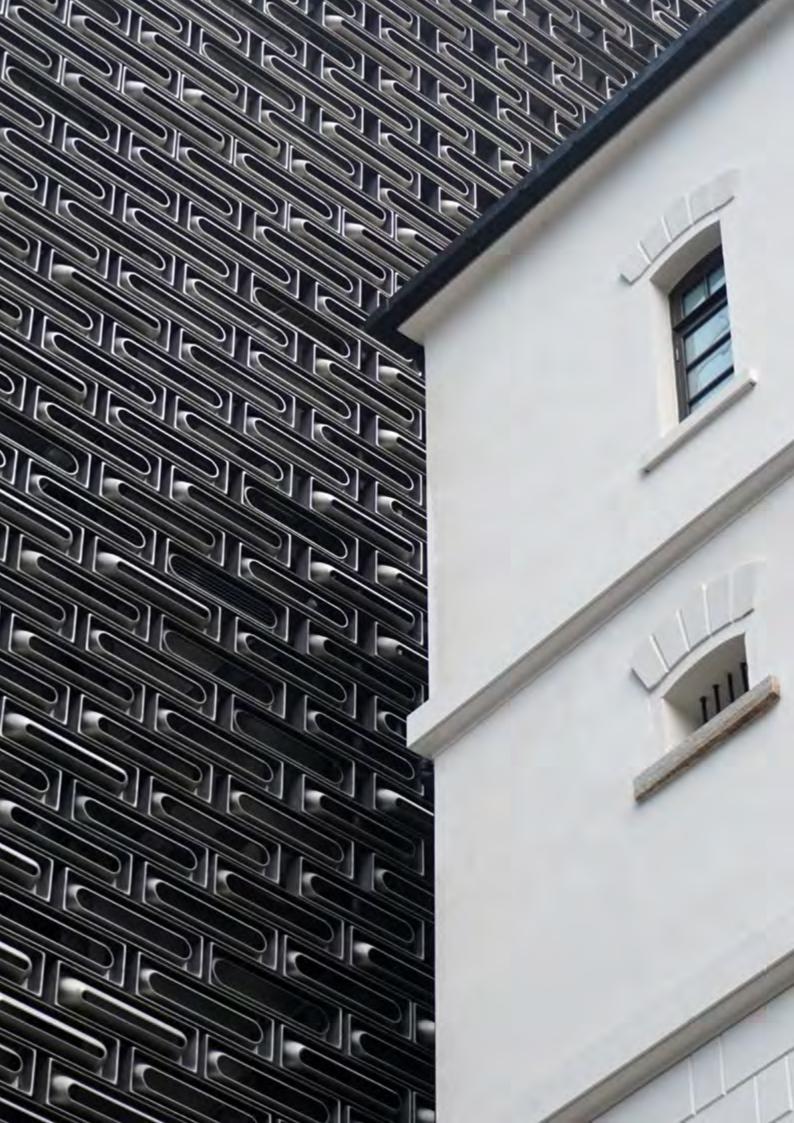
It is acknowledged that this body of work is not an all-encompassing study of all adaptive reuse public buildings in the four cities analysed. Rather it has sought to take a critical cross section of different public buildings and spaces, of different scales and from different periods of completion over the last two decades, to provide a comprehensive overview and comment on current approaches to adaptive reuse.

The research has been based upon the time schedule adhered to in the five-month primary data collection period of February 2018 - June 2018. The time schedule has also been limited by the seven-month July 2018 - January 2019 period of collation, review and editing processes. The selection of specific case studies in each city has been curated to reflect notable and recent projects but has also been subject to other factors including but not limited to: site access, site photography permissions, interview consent and publication permission as well as, the availability of research participants. Reasonable efforts have been taken by the researcher to ensure that photography undertaken on private properties at various locations comply with applicable guidelines and can be reproduced freely on digital mediums for notfor-profit educational and non-commercial purposes.

Information presented in this journal has also been restricted by copyright legislation across all four cities, with images and referenced graphics and text used restricted almost entirely to public domain or copyright expired (freely available) information. Reasonable efforts have been taken to trace the providence of material not created by the author and are included as part of the image credits of this document. The decision to impose this restriction is to enable the research presented here to be freely presented on the public domain without potential infringement of copyright laws across the four iurisdictions.

From the basis established by this research project, it is fully believed that an analytical, case-study based approach to further developing an understanding of adaptive reuse can be extended to other projects and other cities. The establishment of a digital archive of information is also to enable students, academics and the general public with more freely available information into the significance of our collective civic history and encourage engagement with the role architecture plays in shaping our identity and our urban spaces. Further information on the future projects currently being undertaken as legacy projects arising out of this Byera Hadley Travelling Scholarship are detailed in the conclusion of this report.





02 UNRAVELING THE JARGON

"And on the pedestal these words appear: 'My name is Oymandias, king of kings; Look on my works, ye Mighty, and despair!' Nothing beside remains. Round the decay Of that colossal wreck, boundless and bare The lone and level sands stretch far away."

- Percy Bysshe Shelley Ozymandias, 1818

// TOWARDS ADAPTIVE ARCHITECTURE

It is Percy Shelly's poem of 1818 which encapsulates the pre-modern pretensions to greatness but also, the recognition that since time immemorial, statesmen, leaders and nations have sought to erect monuments which they hoped, would withstand the test of time. In this sense, for much of history, architects were the agents for enshrining their patrons' political, social, cultural and economic ambitions and to this day, architecture remains symbolic of this relationship. In striving toward the closest form of immortality, it is perhaps true to say that each epoch of designers and inhabitants weave into the urban fabric of the city, an imprint of society and culture of that particular moment. With the arrival and departure of each generation, decisions are made on what physical aspect of the city is to be retained, and which aspect must change, leading, perhaps rightly so, to architectural theorist and writer Deyan Sudjic's warning that "We are afraid of how cities change in ways that take away our memories of who we are, and those who came before us, once were."11 It is here, between monuments, memories and the inevitability of change that an architectural idea of adaptive reuse can begin to find its more tangible definition.

Between the contested duality of pursuing progress and preserving the past, adaptive reuse can be seen through its most encompassing definition as "any building work and intervention to change its capacity, function or performance to adjust, reuse or upgrade a building to suit new conditions or requirements." Indeed, it is recognized that very few buildings within our collective architectural oeuvre have ever remained wholly unchanged from its point of original completion. From the remodelling of palatial interiors by the kings of old to follow changing aesthetic tastes to the extensions of museums to house ever expanding collections of artefacts during the age of exploration, buildings have seldom been immune from change. Indeed, it could even be argued that it is through this collective layering of histories and styles that our overall appreciation and engagement with these monuments are enriched.

 ^{02.02 //} Convergence of old and new materiality,
 Tai Kwun, Central, Hong Kong



At the same time of course, the specificities of how these changes take place and the success of its functional, aesthetic and spatial results, remains a matter of architectural potential and discussion. On one hand, we recognise that historic buildings are "...an inexhaustible universal source of inspiration for modern innovative architecture, in terms of materials, construction methods, layout and design, contributing to a high quality of life."13 But at the same time, we remain aware that the artefacts of the past are not representative of all moments in history, and that "preservation offers a critical historical view of an object in space and time, but, paradoxically, only by full recognition of the absences in both physical and temporal records."14 Adaptive reuse is therefore, by its nature, selective. It is selective of what physical, tangible aspects it can retain and what temporal, experiential qualities it captures and represents to a new generation of people.

Running parallel to the intangible, cultural qualities which shape adaptive reuse, the day to day practice of architectural adaptation is the site of more concrete problems and issues. Fundamentally, adaptive reuse is the recognition that our buildings are not immortal and indeed suffers from obsolescence in multiple ways:

Physical Obsolescence

The material fabric and structure of a building or site is no longer able to stand independently.

Economic Obsolescence

It is no longer economically viable for a site to be operated in the manner for which a building may have been originally designed.

Functional Obsolescence

Changes in cities means that the function of a building is for which it was originally designed is no longer required.

Technological Obsolescence

Technologies have changed to render a site no longer necessary, or a building is incapable of adapting to technological change due to the rigidity of its original spatial planning and structure.

Socio-Cultural Obsolescence

A place of socio-cultural significance is no longer necessary (such as a place of worship), because cultural practices have changed, rendering the building obsolete.

Countering these issues, attitudes of replacement, re-making, re-using and re-conceiving, enables historic buildings to be adapted for contemporary needs and requirements.¹⁵ From this perspective, adaptive architecture may appear to be directly at odds with Louis Sullivan's Modernist creed that 'form must ever follow function'. 16 Indeed, to transform any building whose use has become obsolete into a new use, seems if anything, sacrilegious. Upon closer consideration however, adaptive reuse is an exercise in function, almost entirely free of form.



- 02.02 // Carlo Scarpa's interventions at the Castelvecchio Museum are considered one of the earliest modern approaches to adaptive architecture.
- 02.03 // 837 Samsung, New York. Morris Adjmi Architects. An example of functional obsolescence, an old warehouse transformed into commercial premises.

The challenging programmatic re-arrangement of spaces in an exercise constrained and contained within existing forms suggests a process and an act which is purely functional. Through this, two categories of adaptation become apparent across the majority of projects:

- Form Extends Function: where contemporary additions are added to supplement pre-existing use. and
- Form ≠ Function: where the contemporary additions have been implemented to provide a new compatible use which differs from the buildings original design intent.

The form and its surfaces, though a necessary and important consideration, becomes capable of existing independently of its functions, its symbolic and associative qualities to memory and history remain present though not necessarily reflected by its contemporary functional use, sustainable performance or technical requirements.

Ultimately, adaptation recognizes that buildings are not in fact, dead lifeless, timeless objects but that "Buildings are philosophy, written in space, written in territory and written in materials because they are actually touching on, in many ways, who we are as individuals."17 Through this, the conservation and reinterpretation of historic buildings adds to the continuum of our cities, reinforcing a sense of place and thus, "can also cultivate civic pride and emotions of attachment and belonging, fostering unity and averting discord."18 Sydney architect, Peter Lonergan eloquently summarises this approach to architecture as being "a dialogue which speaks of its history which is then able to participate in the future of the city."19 Adaptive reuse is therefore an opportunity to emphasise the significant role architecture plays in maintaining a continuous and collective sense of cultural identity.



// ADAPTATION CODIFIED: A POLICY OVERVIEW

Whilst each nation, state and city have their own legislation and policies toward the conservation of historic buildings which gradually arose from increased urbanisation beginning in the late-19th Century, the global framework which provided a standardised approach was first established with The Athens Charter for the Restoration of Historic Monuments 1931 which consisted of a manifesto to encourage protection of historical sites, enable their restoration and, also promoted "modern techniques and materials [which] may be used in restoration work."20 This moment was, in many ways, the establishment of two schools of thought for adaptive architecture and conservation: Firstly, whether new additions ought to be read visually as extensions of original fabric, or whether such modern materials should be seen as clearly of its own period, different and separate from the original historic fabric.

Under the shadow of World War II which destroyed many of the oldest cities in Europe, the United Nations also introduced The Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict, 1954 which provided a "system of general and enhanced protection...in the event of international or non-international armed conflict."21 This was followed by The Venice Charter for the Conservation and Restoration of Monuments and Sites of 1964 which, though considered out of date today and remains under some criticism, established what might be considered the contemporary definition of 'adaptive reuse'. The Venice Charter enshrined the principle that "Replacements of missing parts must integrate harmoniously with the whole, but at the same time must be distinguishable from the original so that restoration does not falsify the artistic or historic evidence,"22 ensuring that most adaptive architecture which continues to this day would adopt a fundamental principle of contrasting materiality, form and scale to provide visual separation between contemporary additions and historical fabric.

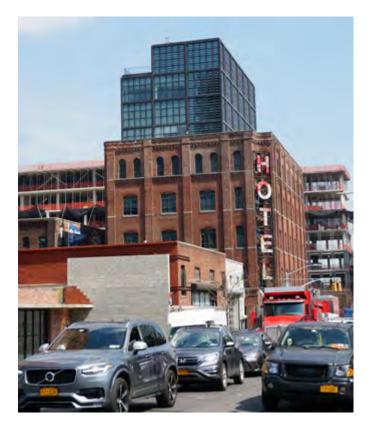
02.05 // Wythe Hotel, Brooklyn, Morris Adjmi Architects. The existing brickwork from an old cooperage is retained but new contemporary steel and glass additions are added to provide additional hotel rooms.

02.06 // The Design Museum, London, Allies & Morrision. The entire facade, though respectful of the original proportions, have been replaced with new low energy, high performance glass.

Since the introduction of the Venice Charter of 1964, various additions and new policies have been added, including more recently the Hoi-An Protocols for Best Conservation Practice in Asia (2005), the Charter for the Interpretation and Preservation of Cultural Heritage Sites (2008) and, The Paris Declaration on Heritage as a Driver for Development (2011). These international policies and charters continue to inform decision making processes at the national and regional levels of governance. At the heart of the most recent Paris Declaration in particular, was the specific mention that it was necessary and vital "To adapt new uses and functions to existing heritage, rather than the reverse, and to help users of historic buildings to adjust their expectations of modern living standards."23 It is under this broad directive that a global view of adaptive architecture has been established to provide new functional uses to existing heritage buildings.

In the interpretation of these broad international frameworks, the four cities in this research have legislative policies which categorises places of historical and socio-cultural significance through some form of hierarchical framework. There are evident similarities and differences to be found, with two categorisations identified: a Grading of Significance method and a Typologies method.

London and Hong Kong both adopt a three-tier grading system with broad terms of reference encompassing all building typologies and spaces. In Hong Kong, Grade I listed monuments are the most



significant with Grade II and Grade III buildings of a lesser significance.²⁴ Similarly, in London, a Grade I building is defined as 'buildings of exceptional interest,' with Grade II* and Grade II buildings identified as being of a lesser significance.²⁵

Contrastingly, Sydney, under the guidelines of the NSW Office of Heritage and Environment follows a type based hierarchical structure alongside the Commonwealth Heritage List, and a NSW State Heritage Register. These lists exist in tandem with listings within each Local Government Authority, separated as Locally Listed Items, Public Domain Items, Heritage Conservation Areas, Archaeological Items and Aboriginal Place of Heritage Significance.²⁶ In a similar manner, New York City also abides with parallel Federal Monuments and State Monument Listings,²⁷ and has its own designations for heritage sites, divided as Individual Landmarks, Interior Landmarks, Scenic Landmarks and Historic Districts.²⁸

Across all four classification systems, it is worthwhile noting that all of them identified in some form or another, the fact that "Heritage serves many purposes and is a form of social, economic and political capital, which can be expended in various ways by assorted parties. It has a role in defining and symbolizing a people's identity..." Most importantly was the acknowledgement that beyond the tangible material context of a building, a site or a neighbourhood, intangible factors such as memory, past events or social gatherings also had a place in the consideration of the conservation and adaptive

re-use of buildings. This plays an important clue for designers and architects, as it recognizes that conservation of architecture is inherently an experiential project, demanding an altogether different modus operandi of conservation when compared to the conservation of art and sculpture.

In recognizing that not all aspects of heritage architecture are concerned with preservation alone, all four policy structures appear to provide leeway in the removal of original fabric to enable new additions and alterations. At the Wythe Hotel in New York, additional steel and glass structures could be added to the back with timber frames and structures used in other parts of the hotel, whilst at the London Business School, an entire portion of 1960s fabric was deemed to have little significant contribution to the original late-19th Century building and was also demolished and replaced with contemporary structures. These incisions however are not without their controversies. At the Design museum for example, the 20th Century Society maintains that the structural alterations made to the interior were too severe and deviated too far from the original integrity of the structure. Nevertheless, these examples appear to suggest that irrespective of the specific policy type, a particular grading methodology exists for specific assessment of fabric of sites and buildings outside of the larger system of heritage classification and is used by practitioners to determine where opportunities exist for contemporary additions to be inserted into heritage fabric.



CONSERVATION POLICIES: AN OVERVIEW

INTERNATIONAL POLICIES & CHARTERS

The Athens Charter for the Restoration of Historic Monuments 1931

The Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict 1954

The International Congress of Architects and Specialists of Historic Buildings 1957

The Venice Charter for the Conservation and Restoration of Monuments and Sites 1965

The Convention Concerning the Protection of the World Cultural and Natural Heritage 1972

Principles for the Analysis, Conservation and Structural Restoration of Architectural Heritage 2003

The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites 2008

The ICOMOS Paris Declaration on Heritage as a Driver of Development 2011

ASIA

The UNESCO Hoi An Protocols for Best Conservation Practice in Asia 2005

EUROPE

The European Cultural Convention (The Paris Convention)

1954

The Convention for the Protection of the Architectural Heritage of Europe (The Granada Convention) 1985

The European Landscape Convention (The Florence Convention) 2000

NATIONAL LEGISLATIVE FRAMEWORK

United States of America

The Antiquities Act 1906

The National Trust for Historic Preservation Charter 1949

The National Historic Preservation Act 1966

Australia

The Australian ICOMOS Chater for Places of Cultural Significance (The Burra Charter)

The Aboriginal and Torres Strait Islander Heritage Protection Act 1984

> The Heritage Council Act 2003

Conservation of Australia's Historic Heritage Places (Productivity Council) 2006

United Kingdom

The Ancient Monuments Protection Act 1882

The National Trust for Places of Historic Interest or Natural Beauty 1895

> The National Trust Act 1907

The National Heritage Act 1980



REGIONAL GOVERNANCE

New York State

The New York State Environmental Quality Review Act

1975

The New York State Historic Preservation
Act
1980

New South Wales Key Authorities

NSW Office of Heritage & Environment

Key Policies

The Heritage Act 1977

The Local Environmental Plan **2012 Onwards**

England + Wales Key Authorities

Historic England

Key Policies

The Planning Listed Buildings and Conservation Areas Act
1990

National Planning Policy Framework **2018**

LOCAL AUTHORITY

The New York City Commission Key Authorities

The NYC Landmarks Preservation Commission

Key Policies

The New York City Landmarks Preservation Commission Charter 1965

The New York City Administrative Code **2018**

Sydney Key Authorities

Local Authority (Council)

Key Policies

Development Control Plan 2012 Onwards

The Hong Kong SAR Government Key Authorities

The Antiquities & Monuments Authority

The Urban Renewal Authority

The Commissioner for Heritage Office (Development Bureau)

The Advisory Committee on Revitalisation of Historic Buildings

Key Policies

The Antiquities and Monuments Ordinance 1976

The Revitalising Historic Buildings through Partnerships Scheme 2008

The Heritage Impact Assessment Mechanism for Capital Works Projects 2008

London Key Authorities

The London Assembly

Local Authority (Council)

Key Policies

Local Development Plan



"To us, adaptive reuse means the creative reuse of existing and historic structures for a particular function. This can be the definition of it, but its greater meaning is to give life to old buildings and new chapters to old structures."

> - Elizabeth Leber, Partner Bever Blinder Belle

"The ultimately sustainable building is a building that you can recycle. Instead of demolishing the building, you can adapt it to change. The challenge is to do buildings which encourage change, which respond to change, and to have technologies and techniques which enable buildings to improve their performance."

> - Lord Norman Foster, Executive Chairman Foster + Partners

"I think I would question whether significant work is important because it is rather interpretive. I mean I suppose one should try to question that term if we really want to be brave about it. I am not sure that components of our adaptive projects are truly significant, they simply existed, and we are asking whether they should remain...We could so easily continue to play and discuss this idea - I mean, one of the sites in Hong Kong which we worked on was about reusing a natural landscape and I would also question why often, landscape is separated from this subject. Why is it just about buildings?"

> - Tod Williams, Partner **Tod Williams Billie Tsien Architects**

"Well the term adaptive reuse for us really means looking at existing buildings and understanding if you can reuse them. I think it also has a lot to do with designing new buildings, designing them in a way that they are not entirely tailored for the brief of today, because we know that the brief of today will have morphed during the evolution of the project let alone when it is finished."

- John McElgunn, Partner Rogers Stirk Harbour + Partners

"The best-known meaning is related to heritage buildings but then, more generally, the adaptive reuse of existing structures does not always have to involve heritage, it could simply be a reuse of a building which is capable of being reused or adapted. There are multiple good reasons for this, starting with statutory requirements and environmental reasons for reusing buildings and parts of buildings. Re-purposing or re-making buildings are all a part of adaptive reuse... Adaptive reuse is really the key to ensure that heritage structures have an ongoing role in the city and can be recycled many times so that they can continue to participate and add new voices to the city.

- Peter Lonergan, Creative Director Cracknell & Lonergan Architects

"Adaptive reuse is a very widely used term, in a way it is code for the fact that buildings have long lives, much longer than our own lives in fact, and the physical nature of the building generally does not change significantly but, the program, the function, the use of the building becomes outmoded very quickly and adaptive reuse is the ability to revitalise the structure and give it new life."

> - Richard Southwick, Partner, Director of Historic Preservation Beyer Blinder Belle





"The whole concept of adaptive reuse is to re-use buildings for a purpose which is required either for social or for economic reasons. To that extent, I think adaptive reuse has become the accepted practice around the world as a way of retaining valuable heritage assets."

> - Michael Moir, CPS Project Director The Hong Kong Jockey Club

"Adaptive reuse is totally central to the way that we live today... I think with the increasing pressure of sustainability, of survival on this planet, we need, at all times, to be making the best use of what is already built. So the challenge for today is to find ways of bringing new life to those buildings. This is particularly difficult when it comes to adapting existing buildings to meet higher and higher energy and sustainable standards."

> - Spencer De Grey, Partner Foster + Partners

"The nature of how we approach historical buildings in Hong Kong is quite different to other parts of the world fundamentally because of our extremely high urban density, the rapid movement of people within the city and, the quick pace of change in terms of building use and function. So, when we push forward a project which involves adaptive reuse, our first consideration is always: 'How can more members of the public enjoy or make use of this particular building or space?'"

> - Lawrence Mak, General Manager, Planning & Design The Urban Renewal Authority, Hong Kong

"For me, it means the re-purposing of a building for a function which it was not originally designed for. But I have to make that a little bit more complicated by saying that in a way all buildings get repurposed during their life, even when the principal use is the same for which they were designed for."

> - Paul Appleton, Partner **Allies and Morrison**

"...It is about starting with a remnant structure, which may not be a building, it may be something that industry had left behind and building upon what has been left from before...It is part of a continuum of the city or the cultural evolution of us collectively as a species because nothing we do is ever in isolation, it is always built upon what came before."

- Tim Greer, Director Tonkin Zulaikha Greer

"...For us, adaptive reuse is really about conceiving of a new life and a new use for a significant and thoughtful work from the past...Adaptive reuse really has a lot with how we live today and how we expect to live in the future and how we inhabit those buildings which exist already."

- Billie Tsien, Partner Tod Williams Billie Tsien Architects

"...[Adaptive Reuse] is [about] what place or value a building has within its community, what society's association is with that building and its importance to it. Of course we have a National Heritage List to address this, however, the building does not necessarily have to be listed to hold favour within a community. That is probably one of the first things that you as an architect want to delve into - the history of a building to understand the communal value to the people who live around it and use it."

- Gavin Robinson, Associate Partner Sheppard Robson





03 HONG KONG | CHINA

"It being obviously necessary and desirable that British subjects should have some port whereat they may careen and refit their ships when required, and keep stores for that purpose, His Majesty the Emperor of China cedes to Her Majesty the Queen of Great Britain, &c., the Island of Hong-Kong, to be possessed in perpetuity by Her Britannic Majesty, her heirs and successors, and to be governed by such laws and regulations as Her Majesty the Queen of Great Britain, &c., shall see fit to direct." 50

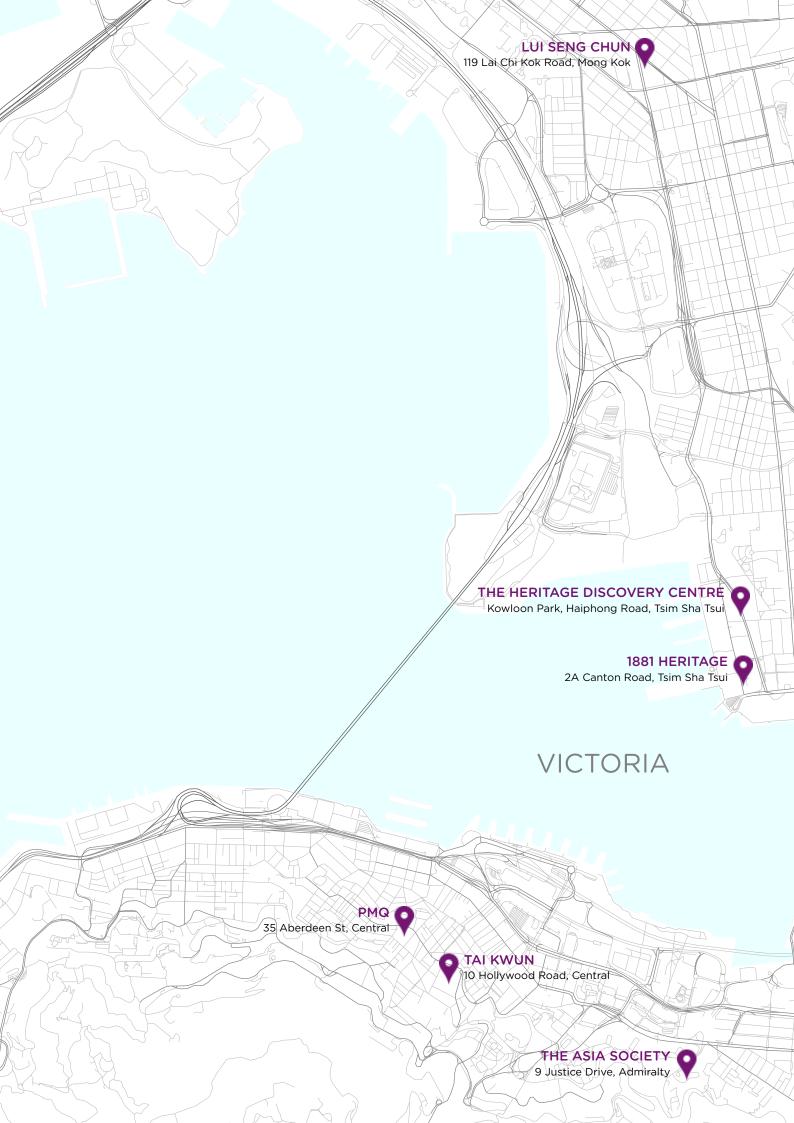
- Article III, The Treaty of Nanking, 1842

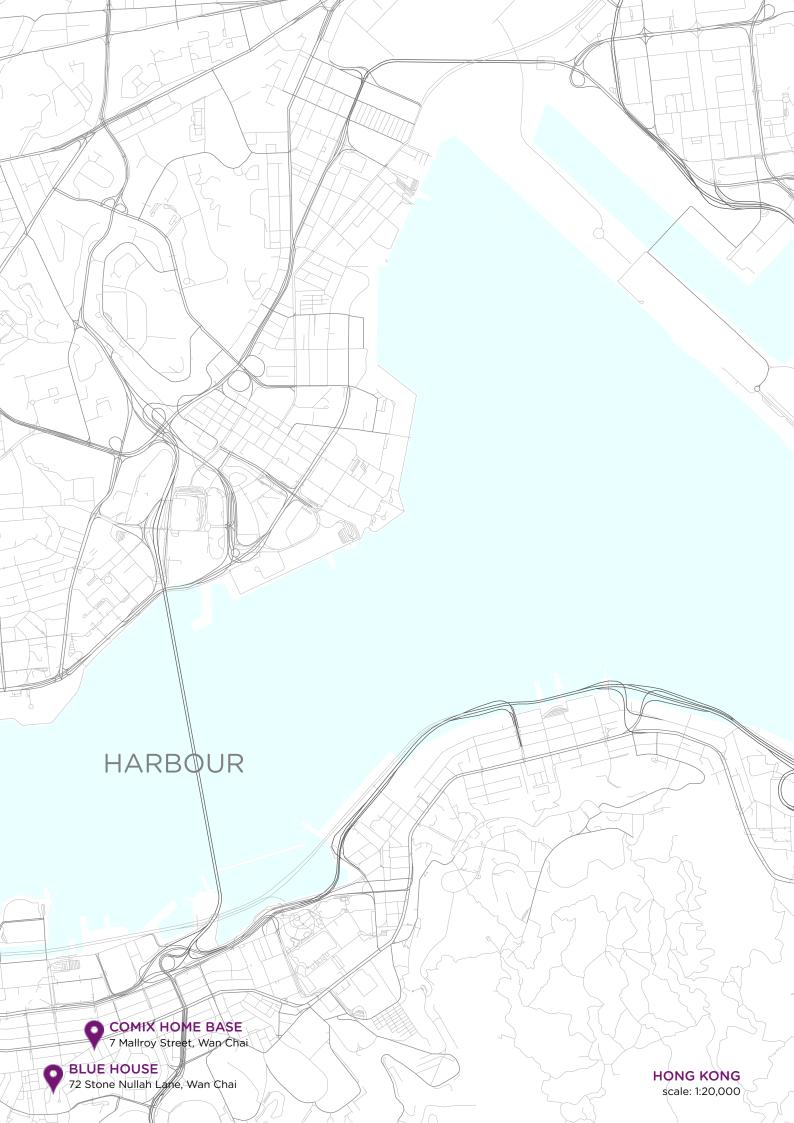
Once known as Victoria City, set against the literal translation 'The Fragrant Harbour', Hong Kong has been a site of dualities and contrasts since the signing of the Treaty of Nanking in 1842, which ceded this city to the British Empire. For the last two decades, it has consistently ranked as one of the world's most liberalised economic markets, despite being part of a socialist-communist nation since 1997.³¹ Within its 1,106 square kilometres are a population of 7.39 million inhabiting the highest concentration of high rise buildings in the world, even as it continues to maintain up to 40% of its land as natural reserves and country parks.³²

Today, set against the face of constant demolition and construction which reaches ever closer toward the skies, questions around the remaining 1,444 historic sites and 167 Grade I listed buildings have become the site for the "Politicization of heritage [which] is evident in internal struggles between governments and interested groups and citizens and exchanges within and outside formal institutions." As the city has continued to develop and its citizens become more attune to the increasing loss of a civic past, heritage has come to be seen as "... a socio-cultural resource which the Hong Kong citizenry is drawing on to help define an identity, both connected to and distinct from mainland China." ³⁴

What is unique about the case studies presented here, as opposed to the adaptive architecture of the other cities examined in this study, is the heavy involvement of government agencies. Virtually all of the revitalized buildings have been dedicated to civic uses, ranging from creative workspaces of PMQ to the a centre for Chinese medicine at Liu Seng Chun. Only the shopping and dining precinct of 1881 Heritage within this study is derived with a dominant commercial aim, and, perhaps not-surprisingly has come to be criticized for placing profits over preservation, capitalisation over conservation. The question therefore is, as a late entrant into the field of adaptive reuse, how does this contemporary city strike a balance between conserving the very few buildings which remain, against a backdrop of social and financial pressure to expand, modernize and capitalize on land.

 ^{03.01 //} View of Victoria Harbour and Hong Kong as seen from The Peak.







// LUI SENG CHUN

Lui Seng Chun Medicine Shop & Residence

119 Lai Chi Kok Road, Mong Kok

Original Architect

W.H. Bourne

Adaptive Reuse Architect

AGC Design

Original Construction

1931

Adaptation

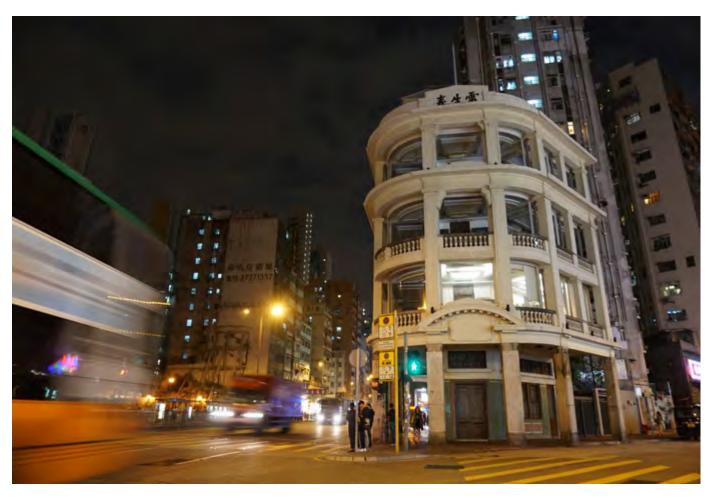
2008-2012

Finding its roots as a traditional Chinese 'tong lau' (Literally: Cantonese House), the Lui Seng Chun was originally a typical form of shop-top housing common throughout Hong Kong. Its ground floor served as a retail premises whilst the upper floors were for the shop's owner and extended family.

As part of the first group of the Antiquities and Monuments Office's revitalisation through partnerships scheme in the late 2000s, the residence was transformed into a Traditional Chinese Medical Centre for the general public, operated by the Baptist University of Hong Kong. Enclosure of the deep verandahs enabled a new external circulation around the facades of the building, whilst medical consultation rooms, doctors' offices and a medicine dispensary took over the third, second and first floors respectively.

Through minimal visual intervention, the building retains all of its historic characteristics, with the only externally visible contemporary addition being a three-storey staircase which connects across the four-storey building. New glass frames for example are carefully hidden behind the existing columns so as to create an illusion of lightness and transparency. Overall, the building provides a restrained yet functional adaptation, with the added benefit that once private spaces have now become accessible to the wider public.

^{• 03.02 //} Corner facade of Lui Seng Chun, as viewed from the corner of Lai Chee Kok Road and Tong Mi Road.



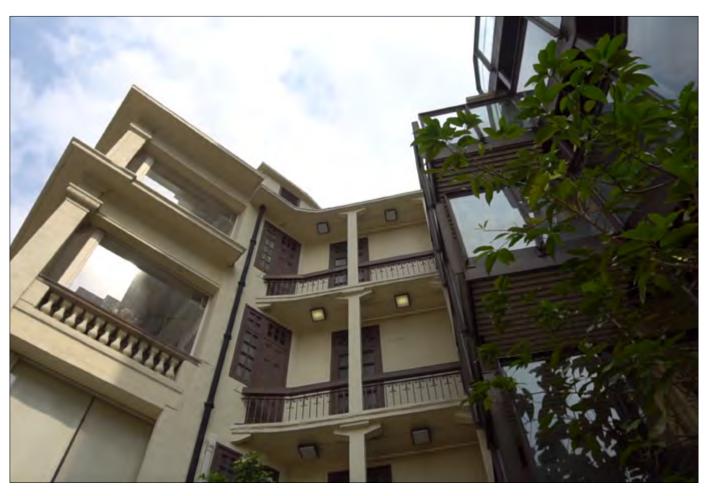




Above 03.03 // Night view of the Lui Seng Chun.

Below Left

03.04 // The only new visible additions made to the buildingare a new fire egress and circulation stair core, expressed in a painted steel to match the existing timber windows and doors.







Above 03.05 $/\!\!/$ Rear courtyard view demonstrating the connection between the contemporary staircase and the existing verandas.

Below Left to Right 03.06 // Restored heritage street front with timber and rendered surfaces.

03.07 // Free-standing column hiding the window frame internally

THE HERITAGE DISCOVERY CENTRE

Whitfield Military Barracks

Haiphong Road, Tsim Sha Tsui

Original Architect

Colonial Government

Adaptive Reuse Architect

Architectural Services Department

Original Construction

1910

Adaptation

2005

Site of the former Whitfield Barracks, the Heritage Discovery Centre has been home to Hong Kong's permanent exhibition on the architectural history of the city since 2005. Serving as an exhibition space and a teaching and learning venue, the original barracks have been adapted through the insertion of a single glass and steel box at the centre of the site, connecting the two-separate barracks together as a single building. The new glass wing connecting across the two barracks buildings simultaneously creates a publicly accessible courtyard outside, as well as serving as the permanent exhibition space for the Heritage Discovery Centre.

Glass and steel elements are deliberately used to separate between old and new fabric, forming a clearly defined sense of scale and proportion. A double height atrium volume for example adds to an architectural moment of pausing as the space transitions from the original barracks into the new permanent exhibition gallery. The repetitive standardised components of steel and glass, though a typical Modernist motif of efficiency are effective and referential in this scenario as reinforcing the same simplicity and repetitive structure which defines the original barracks buildings.







Above Left to Right 03.09 // Steel and glass skylight junction connecting between old and new fabric.

03.10 // Exterior contemporary additions housing the permanent exhibition gallery.

03.11 $/\!\!/$ The 'in-between space' a skylight provides separation between the historic rendered arcade and the new concrete structural grid.

Below Left to Right 03.12 // Exterior internal courtyard with the new glass entry into the permanent exhibition gallery.

03.13 // Conserved historic facade and open arcade veranda.









// 1881 HERITAGE

The Former Police Marine Headquarters

2A Canton Road, Tsim Sha Tsui

Original Architect

Director of Public Works. Colonial Government

Adaptive Reuse Architect

A+T Design

Original Construction

1881-1920s

Adaptation

2003 - 2009

The transformation of the former Marine Police Headquarters into an international travel destination for shopping, dining and hotel accommodation arguably tested the boundaries of how far adaption should go in transforming a site from its original condition. With a mandate to increase usable floor area by 250%, substantial excavation, creation of three entirely new terraced stories of shops and the insertion of architectural detailing made to 'look and feel' Classical were all design decisions which has remained controversial at 1881 Heritage since its completion. Detractors argue that the fundamental integrity of the site was irrevocably damaged by the parade ground's removal and curtilage trees isolated, all in the name of conservation. Proponents argue that its intensity of change was the only suitable manner of upgrading the site and providing a necessary economic return to fund the conservation works.

In branding, the project transforms history into a tool of commercial marketing, the shopping complex's very name '1881 Heritage' harks back to an idea of Classical Colonial Hong Kong as some form of significant heritage and the buildings today are described as 'moments of memory'. The use of Classical motifs, from arches to engaged columns attempts to blur the line between what was past and what is new. Ultimately, this project raises the pertinent potentially valid question - Where do we draw the line of 'too much' adaptation?











Left Top to Bottom: 03.15 // View of the mixed Chinese/ British styles for the former local fire station.

03.16 // The conserved building adapted into a dining and hotel venue, with new classical motifs added to its surroundings.

03.17 // Heritage facade detail of the conserved Marine Police Headquarters.





Right Top to Bottom: 03.18 // Mimicry of historic details to provide a sense of continuity to the new retail shops and terraces.

03.19 // Conservation of a historic tree, protected on an island to enable deep excavation works on all four sides of the three.





// COMIX HOME BASE

Green House

7 Mallory Street, Wan Chai

Former Owner / Major Tenant

Lawrence Mallory

Adaptive Reuse Architect

Urban Renewal Authority Aedas (Design & Documentation)

Original Construction 1910s

Adaptation

2005-2011

The site of the COMIX Home Base, an initiative of the Hong Kong Arts Centre was born out of a cluster of ten pre-war residential apartments which had fallen into disuse. Built without electricity and without plumbing, substantial additions were made to the building to transform it into a creative arts workspace and exhibition space. With several of the buildings deemed to have been beyond repair, only their facades were conserved, with a new 300 sqm pocket public courtyard created, the site of exhibitions, book launches and other events for the local community.

By peeling back the building, its original structure has been exposed, revealing an interesting convergence of European and Chinese building techniques. A traditional Chinese timber framed and tiled roof rests atop classically proportioned verandas and columns which run up the building's three floors. Internally, paint has been peeled back to reveal the original brickwork, providing a dark red backdrop from which exhibitions and public events can be held. Whilst its original tenant, the COMIX Home Base is due to vacate in late-2018, its spaces remain available for exhibitions, ensuring that this small piece of Hong Kong's mixed Sino-European past can be made accessible to the wider public.

 03.20 // View of the COMIX Home Base entry and conserved street facade along Mallory Street.



Above Left to Right:

 $03.21\,/\!/$ New structural bridge which supports the conserved facade as well as providing a pedestrian connection to the conserved facade.

03.22 // Peeled back interiors of the conserved building and exhibition spaces revealing the original brickwork and timber framed structure.

Below Left to Right:

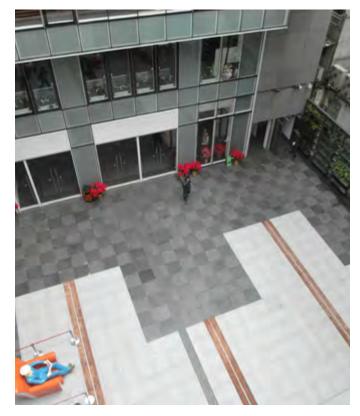
03.23 // Interpreted perforated facade screen for the new extension adjacent to the existing building.

03.24 // View to the paved courtyard, used for outdoor exhibitions and performances.

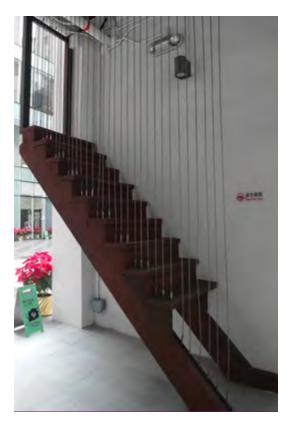
03.25 // Restored heritage detail - a staircase which would have formed part of the original house.

03.26 $/\!\!/$ View across the suspended bridge into the cut portions of the building, revealing the new structural grid which supports the original facade.













// VIVA BLUE HOUSE

Blue House

72A Stone Nullah Lane, Wan Chai

Original Architect

Unknown

Adaptive Reuse Architect

St. James' Settlement Urban Renewal Authority

Original Construction

1920s

Adaptation

2005-2017

The urban renewal of our cities often results in the displacement of existing residents and neighbours. Communities may be wholly broken and dissipated to other parts of the city in the name of progress and development. At the site of Blue House, an old apartment complex scheduled for refurbishment, this challenge of preserving a community in the face of gentrification was taken up by St. James' Settlement. In collaboration with the Hong Kong Housing Society and through a staged process of re-development spanning over a decade, gradual changes – upgrades to current fire egress standards, new elevators and much needed plumbing and electrical works could take place.

Only in 2017 did the final stage of refurbishment complete, with all twelve units of the site restored and upgraded and residents returned. New community functions, including a small communal courtyard and spaces for the arts and a small museum known as the House of Stories was dedicated to showcase local and traditional crafts. By advocating bottom-up community-led conservation practices, the site presents an example of adaptation to meet the needs of the local community and existing residents, rather than have conservation imposed upon a site through merely a heritage listing.













Opposite Page, Top to Bottom, Left to Right: 03.28 // The original un-refurbished state of the Blue House, c. 2014.

03.29 // A new outdoor pocket park has been created for residents to enjoy, providing space for a new compliant access route to the apartments.

03.30 // Remnants of the old building demolished for the pocket park are rendered in different colours to show its outline.

Left Top to Bottom 03.31 // Conserved heritage door entry in a Chinese Style.

03.32 // Conserved Heritage Detailing

03.33 // Rear portions of the blue house, with new circulation structures wrapping around the conserved building's less significant facades.

// ASIA SOCIETY HONG KONG

Former Royal Navy Explosives Magazine

9 Justice Drive, Admiralty

Original Architect

Director of Public Works. Colonial Government

Adaptive Reuse Architect

Tod Williams & Billie Tsien Architects

Original Construction

1860, 1905, 1940s

Adaptation

2001-2011

Part of the original garrison which was stationed in the newly formed Colony of Hong Kong, the Victoria Barracks Explosives Magazine housed, as the name suggests was the site of munitions storage and manufacturing. The brief for this adaptation involved linking up several independent structures across a vast hillside, creating a cultural centre from which the Asia Society could host its many and diverse activities.

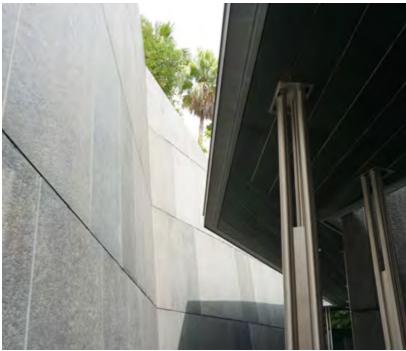
Framed within a vegetated pocket against many vertical towers, Tod Williams & Billie Tsien Architects looked to emphasise the horizontality of the site through their new additions. As some of the oldest remaining buildings in the city, the majority of new additions which sit adjacent to the original structures are delicate, minor incisions.

angular covered walkway, designed simultaneously to frame a visitor's journey as well as avoid significant trees and respect the natural topography stops at all the appropriate junctions between old and new and highlights the cross pollination of Chinese and British architectural forms. The meandering path, taking visitors from the entry through to the new galleries and theatre, provides a moment of peace and refuge from the noise and hectic chaos which defines much of Hong Kong. The result is the ability for visitors to reflect within a sanctuary of peace situated within buildings once designed to house the machines of conflict.

03.34 // Entry to the Asia Society Hong Kong, note the large multi-purpose hall which extends behind the shadow of trees.











Opposite Page, Top to Bottom, Left to Right: 03.35 // Meandering bridge connecting visitors from the entrance to the various performance venues dotted across the site.

03.36 // Deliberate offset between the retaining wall and covered walkway to enable filtered light and a sense of openness along the pathway.

03.37 // Restored heritage detail of pre-existing veranda and covered walkway structures.

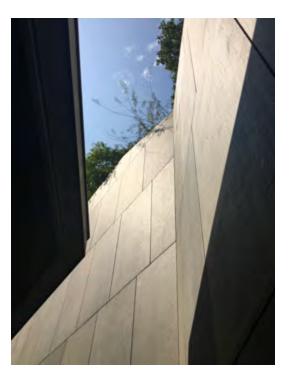
Left:

03.38 # Conserved munitions transport tracks, now integrated as part of the paving.

Below Left to Right:

03.39 // Another moment of filtered light and vegetation visible through the off set between the retaining wall and covered walkway.

03.40 // Juxtaposition of old and new materiality, never touching but nevertheless entered into a clear dialogue.





// TAI KWUN CENTRE FOR THE ARTS

Former Central Police Station, Magistracy and Victoria Gaol Hollywood Road, Central

Original Architect

Charles St George Cleverly, Surveyor General A F Churchill, Director of Public Works

Adaptive Reuse Architect

Herzog De Meuron

Original Construction

1860s, 1915, 1919

Adaptation

2007-2018

At 14,500 sqm, Tai Kwun Centre for the Arts is the site of three of Hong Kong's mere 100 or so Grade I listed heritage items, distinctively in the Oriental or Regionally adapted Classical Edwardian style from the turn of the early 20th Century. The project begins with the conservation of the Central Police Station, the Victoria Gaol and Police Accommodation Complex and the Central Magistracy Buildings. The public colloquial, 'Tai Kwun', meaning Big Station, implying perhaps that this centralisation of legal authority meant that an individual could be arrested, tried and gaoled, all conveniently under the same roof.

Herzog De Meuron presents us with two distinctive and simple volumes, inserted adjacent to these heritage items and integrated carefully to the site. A decidedly contemporary aluminium façade unit system helps to reinforce and reflect the delicacy of existing Chinese style tiled roofing atop these Edwardian buildings, whilst also repeated to extend the austerity of masonry blocks which form the gaol's walls.

The simplicity of these volumes, expressed through the units helps to maintain a strong sense of the horizontal, even as the volume rises. Variables within this structured tiling system enables variable porosities, with fully solid elements protecting galleries and mechanical spaces from direct sun, semi-perforated facades to highlight views over the cityscape, providing dappled natural light and portions of 50% porous units for green spaces and covered open spaces. The system also restricting light pollution to neighbouring buildings by night. The contemporary incisions made into the site are boldly and appropriately situated, providing new means of connection across the site, from the prison yard to the galleries and across the site to new learning centres in what were once gaol cells.



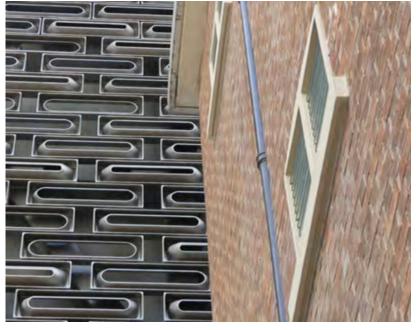












Far Left Top to Bottom:

03.42 // Conserved gaol block with the new unique facade pattern of the contemporary additions to the left.

 $03.43\,/\!/$ Interweaving of staircases connecting the different buildings across the different floors and areas of conserved buildings.

Left Top to Bottom:

03.44 // Existing conserved terracotta tiled roof in a Chinese style - situated upon an English brick building.

 $\ensuremath{\text{03.45}}\xspace$ // Conservation of the awning which forms the entry to the Central Magistracy.

 $03.46\ /\!/\ Juxtaposed$ materialities between the old brickwork and the new perforated screen tiles.

Below Left to Right:

03.47 // View of the new contemporary performance spaces situated against the existing gaol building.

03.48 // Restored details of the Magistracy building.

Bottom Row Left to Right:

 $03.49\,/\!/$ Juxtaposed materiality - complementary patterns established by the new metal screens and existing terracotta tiled roof.

 $\,$ 03.50 // Detail of the new metal screens which are used to clad all of the major new additional galleries and performance spaces.













// **PMQ**

Former Police Married Headquarters

9 Justice Drive, Admiralty

Original Architect

Director of Public Works. Colonial Government

Adaptive Reuse Architect

Architectural Services Department

Original Construction

1950-1951

Adaptation

2008-2014

Often offices are transformed into residential buildings as are so many industrial lofts but rare are the situations where the opposite occurs. As the demand for shared working areas and spaces for the creative industries has continued to grow with a new generation of designers, a new, centralised hub was needed in Hong Kong. The former Police Married Headquarters, two Bauhaus Modernist apartment towers, now hosts this hub of creative industries known simply by its abbreviation, PMQ.

The building's strictly regular repeated pattern of modular units was simply opened up into wholly flexible working spaces with multiple sizes and configurations. Today, PMQ is home to over fifty local and international shops, workspaces and offices for a range of design industries from jewellery to architecture, from fashion to furniture. Two primary new incisions are made, first a new, extensive cantilever, spanning between the two buildings encloses an outdoor atrium, performance and exhibition space. Secondly, A larger enclosed hall, known simply as 'The Cube' was also placed as a connector between the two blocks of creative spaces and serves as the primary lecture theatre for the site.







03.52 // Above top to bottom: New balustrade details.

03.53 // View of converted apartments now housing a mix of creative workspaces.









03.54 $\!\!/\!\!/$ Opposite page, left: Junction between the existing building and the new cantilevered roof structure.

03.55 # Above: The 'cube' addition which connects the two wings together and houses the lecture theatre.

03.56 $/\!\!/$ Left: Junction detail of the new cantilevered atrium roof.

03.57 $\slash\hspace{-0.6em}/\hspace{-0.6em}/$ Right: Conserved facade of the original married quarters apartment block.



04 LONDON | UNITED KINGDOM

"This royal throne of kings, this scepter'd isle,
This earth of majesty, this seat of Mars,
This other Eden, demi-paradise,
This fortress built by Nature for herself...
This blessed plot, this earth, this realm, this England..."

- Richard II, Act 2, Scene 1. William Shakespeare, 1595

London, above all else is a labyrinth of buildings and spaces. Paul Appleton, Partner at Allies and Morrison comments that "cities and buildings are an accumulation of centuries, sometimes millennia of social history and physical history..." and nowhere is this manifest more clearly than in London. So saturated is this city which dates back to the Roman Empire that it's eclecticism and mix of styles, typologies and motifs become an almost continuous, unbroken narrative of European architectural history. 37

It is perhaps this backdrop pre-existing condition of diversity which enables many of the adaptive use projects across the city to take on a decidedly bold and deliberately contrasting architectural expression. At the same time, London is no stranger to reuse of its building stock. Many of the buildings examined here have already moved into their second or third lives, reflecting a rapid change of pace in the functional needs and demands of this ever-growing city.

Large enclosed structural grids which grace the atriums of The British Museum and Kings Cross Station stand in deliberate expressive contrast to its neighbouring historical materials of Portland limestone and brown brick. Continuing the tradition of the 1851 Crystal Palace with their large continuous spans, these new spaces help to reconfigure circulation for an ever-growing number of visitors and commuters.

Meanwhile, a former space of the industrial revolution, the Granary Stores is converted into Central Saint Martins, the University of the Arts London (UAL) architecture and design school. On the other side of London, UAL's Art School similarly finds its home in the converted Royal Army Medical Barracks of Chelsea. The willingness to push boundaries and create referential yet decidedly contemporary additions to pre-existing structures encapsulates an attitude towards adaptation which ensures that London can flexibly meet the demands of the future of its growth and change, without the risk of losing sight of its past and its heritage.









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TATE MODERN

Bankside Power Station

Bankside, London

Original Architect

Sir Giles Gilbert Scott

Adaptive Reuse Architect

Herzog De Meuron

Original Construction

1948-1962

Adaptation

1994

Originally the site of the Bankside Powerstation, a plant which, due to the rising price of oil, had been decommissioned a mere twenty or so years after its final stage was completed. After lying derelict for many years, the Tate galleries transformed it into its new centre for contemporary and modern art, and today, this project remains in the mind-set of many as the first recent example of highly successful adaptive architecture. Measured in pure numerical value, this success may be defined by its opening year entertaining 5.2 million visitors alone.³⁸ Architecturally however, its success is perhaps more to do with the simplicity of its expression, whilst simultaneously meeting all the demands of a major gallery of contemporary art.

Visible from the outside as a single glass pavilion addition, the significance of the adaptation of internal spaces is not made immediately apparent. The main atrium, known as the turbine hall and the former site of the station's generators is conserved as a large empty void, transformed time and again into large scale interactive public art spaces. Soaring above are the many pop outs, openings into galleries which rise above into the building. Whilst the equipment for electricity generation are no longer visible or present, the building's sheer scale is immediately suggestive of the heavy industrial process which once occupied its spaces. Weaving in and out of the original structure, a repertoire of variable volumes, sizes and heights alongside both naturally filtered and artificial lighting enables the gallery to operate with the greatest level of flexibility.

Previous Page

04.02 // View of the TATE Modern with its glass extension visible above.

Above Left to Right:

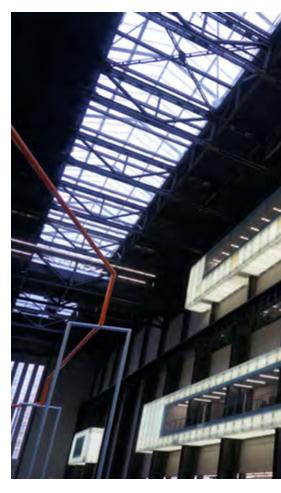
04.03 // Interior suspended intermediate floors - lightboxes highlighting the location of openings of the gallery spaces above.

04.04 // Gallery spaces are illuminated by the translucent glass openings which filters in dappled light into the various spaces.

Below Left to Right:

04.05 // Exterior view of the TATE Modern.

04.06 // Conserved steel structure exposed and now supporting the intermediate floors of galleries.















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THE IMPERIAL WAR MUSEUM

Bethlam Royal Hospital

Lambeth Road, London

Original Architect

John Gandy Sydney Smirke

Adaptive Reuse Architect

Foster + Partners

Original Construction

1814 / 1835

Adaptation

2013-2014

The connotations of war are often difficult to present and even harder when they are exhibited in wings of a historic hospital administration building. Presented with the brief for the Imperial War Museum, London, Foster + Partners were asked to broaden the narrative of the museum to take "...on conflict, which is slightly different to war, and considers aspects that also relate to peace as well as war, as well as conflict" From this, the museum has been reconfigured with a new, intuitive chronological arrangement.

A generous new atrium space, suspended over the two wings of the original hospital extension, provides a centralised circulation pattern across the realigned galleries as well as a four-storey exhibition space for the museum's largest objects - the Spitfire Aeroplane and V2 Rocket. Referencing the existing repeated pattern of openings, the angled rising concrete columns reinforces the spatial order of the atrium and provides the necessary arched support for suspending these large artefacts of war.

Even this extension of function is however, not the conclusion of the project. The museum's new half-basement level was created in anticipation of another future extension on grade with the existing surrounding park, ensuring that the museum will provide staircase-free entry, become more accessible and responds more appropriately to its topographical context. In providing this opportunity for further growth, this exercise ensures that the cycle of renewal and rejuvenation can be repeated in the future.







Above Left to Right:

04.08 // Staircase entry cut into the existing building providing access into the new atrium.

04.09 $/\!\!/$ An expressive steel structure terminates the angled concrete blade columns to form a multi-purpose function and exhibition space on the top floor.

04.10 // The new atrium space designed to improve circulation and enable the display of the Spitfire aeroplane and V2 Rocket within the museum.

Below Left to Right:

04.11 $/\!/$ The museum's additions are hidden behind the existing administration wing of the former hospital, with only the arched glass roof visible.

04.12 $/\!\!/$ The suspended spitfire framed between the angled concrete blade walls of the atrium.











CENTRAL SAINT MARTINS

The Goods Yard Complex, Granary Building & Sheds

1 Granary Square, King's Cross

Original Architect

Lewis Cubitt

Adaptive Reuse Architect

Stanton Williams

Original Construction

1852

Adaptation

2011



Wedged in three directions by the Victorian structures is a massive four storey complex of studios, study spaces and teaching theatres for the new college. Internal bridges link between the different schools of design and architecture across the campus. The Granary, now converted into the school's library is made separate by a full height internal street. Existing historic details, such as the peeled back structure and steel columns remain expressed, juxtaposed against the contemporary grey and black of concrete and steel frames. New window openings and atriums, carefully cut into the existing fabric opens up visual connections along the vertical axis of the many buildings, as well as improving natural solar access into the deep floor plates of the former granary and sheds.



Previous Page

04.13 // The conserved Ganary Building facade, fronted by the new Granary Square.

Top Left to Right:

04.14 // Careful incisions of new openings are deliberately placed to create contrast between old and new materiality.

04.15 // The new entry into the school campus from the enclosed public street.

04.16 // Removed fabric which has been peeled back remain visible and are exposed as part of the wall finish.

Bottom Left to Right:

04.17 // New glass and steel structures extend the height of the building and also enable light to penetrate deep into the floor plate of the building.

04.18 // The conserved ground floor of the granary transformed into the administration offices, with a light well visible in the top extended through the library to improve natural solar access.









GASHOLDER APARTMENTS

Pancras Gasworks

1 Lewis Cubitt Square, King's Cross

Original Architect

Imperial Gaslight and Coke Company

Adaptive Reuse Architect

Wilkinson Eyre

Original Construction

1860-1867

Adaptation

2018

//

The Gasholder Apartments in King's Cross, London begins to blur the line between historic structures as ornamental artefact or adaptation and reuse. Moving the gasholder structures from one side of Regent's Canal to the north and building a wholly independent structure sitting within the gasholders has generated an interesting juxtaposition within this project. The multiple layering of screens, balconies and the existing structures creates a dynamic, visually complex stratum of different forms.

An interesting banding is created where the new apartments do not necessarily align with the gasholder structures, creating an illusion of half-floors and bisected openings. This meeting of old and new nevertheless enables a reference to the site's industrial past, providing the visual bulk and scale of the once massive gasholder structures which would rise and fall with each shipment of gas into the city.

















Top Row from Left to Right

04.20 // The Gasholder Apartments with the adjacent Gasholder Park, another adjoining conversion of the towers into a public open space.

04.21 // Detail of the window openings and perforated screens which sit behind the Gasholder structures.

04.22 // Detail of the intersecting visual junction between Gasholder, perforated screen, windows and new floors expressed as horizontal dark steel components.

Bottom Row from Left to Right

04.23 // Junction of the two apartments where the gasholder structure meets, enclosing the atrium and entry to the apartments.

04.24 // Alternate perspective of the junction of structures at the two separate towers of the Gasholder Apartments





// KING'S CROSS STATION

King's Cross Station

Euston Road, King's Cross

Original Architect

Lewis Cubitt

Adaptive Reuse Architect

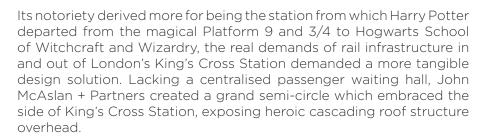
John McAslan + Partners

Original Construction

1931

Adaptation

2012



This upgrade to the Nineteenth Century station re-configured passenger circulation, providing much needed integration of underground, intercity and international rail services. New facilities, including dining and retail define the outer edge of the roof, encircling the passenger waiting hall. Whilst clearly contrasting in materiality and formal expression, the steel dome and grand atrium are all reminiscent of the existing roof over the platform concourse.



04.25 // View up the diagrid structure as column weaves into the roof structure.

Top Left to Right:

04.26 // View of the roof structure exposing the glass screens which allow natural light into the atrium of King's Cross Station.

04.27 // Exterior of the original station, now reconfigured as the arrivals exit area, with the original large span steel structures visible behind the brick facade.

04.28 //Upstairs view of the station departures area, showcasing how the roof form wraps around the station to enclose the public space.













// GREAT COURT, BRITISH MUSEUM

The British Museum

Great Russell Street, Bloomsbury

Original Architect (Reading Room)

Sydney Smirke

Adaptive Reuse Architect

Foster + Partners

Original Construction

1857

Adaptation

2000

Heightened contrast imbues the Great Court of the British Museum with its inherent spatial power. A circular reading room within the square court, a contemporary diagrid against Grecian porticos, a dark vestibule opening into a light filled atrium. These are the attributes of the Great Court which, through its simple functional brief to re-organise the circulation of the museum's galleries, generated a powerful, delightful public space.

Of course, prior to its construction, the space was virtually unknown and non-existent. Filled with storage rooms for books, the decluttering of space around the 1857 Reading Room presented an opportunity to provide a major public space within the very heart of the museum. With its long history and layered additions over decades, the British Museum was a labyrinth of galleries and spaces without a coherent centre or focal point. Today, there sits a powerful structural gesture, expressive of its time and enclosing the public space, gracefully and seamlessly merging between the four straight edges of the surrounding galleries with the rotunda dome of the Reading Room. New openings both downstairs and upstairs all return into this central atrium and thus, The Great Court acts as a central pivot which orientates visitors across its many floors and multiple galleries.









Left:

04.30 // Upstairs view of the great court, showcasing how the structure curves around the reading room to meet the square edges of the court.

Below Left:

04.31 // Detail of the diagrid roof structure and the qualities of light generated, referencing how light strikes the flutes of a column.

Below:

04.32 // Light striking the portico and columns of the British Museum

Right Top to Bottom:

04.33 // New passageways into different galleries of the museum are extended into the Great Court.

04.34 // Detail of the qualities of light from the diagrid hitting the Portland limestone which composes the four sides of the Great Court.





WCEC, BRITISH MUSEUM

World Conservation & Exhibition Centre

Great Russell Street, Bloomsbury

Original Architect (King Edward VII Building)

Sir John Burnet

Adaptive Reuse Architect

Rogers Stirk Harbour + Partners

Original Construction

1914

Adaptation

2014

The last remaining site for a significant addition at the British Museum required the satisfaction of multiple programmatic needs so often taken for granted in new museums. Carefully controlled spaces for preservation and conservation works, a large temporary exhibition gallery and an adequate transportation hub formed the basic brief of the World Conservation and Exhibition Centre of the British Museum, to be slotted in between an already cluttered mix of historic buildings.

Along its short street frontage abutting the King Edward VII building, Rogers Stirk Harbour + Partners chose a subtle variation of the existing materiality to simultaneously tie the building to its context but also give it a contemporary twist. The architects lined the façade with "...a Portland roach, which is encrusted with a lot of turreted gastropod"40 resulting in a complementary yet dynamic façade articulation. Panels to control light into the new conservation centre followed the same modular pattern, utilising "...a kiln formed glass screen, which would effectively be a privacy screen between outside"41 but which would still allow adequate solar access. A black steel frame encircles the corners of limestone and glass facades, defining the edges of the building and heightening the sense of formal order which directly references the adjoining Edward VII Building. The end result is a building which meets the programmatic needs of a 21st Century museum, references its place within the historic precinct of the British Museum and Bloomsbury, yet presents an expression which is contemporary and decidedly of its time.





Top from Left to Right

04.36 // A deliberate separation between the old building and new extension to create a 'breathing' space between structures.

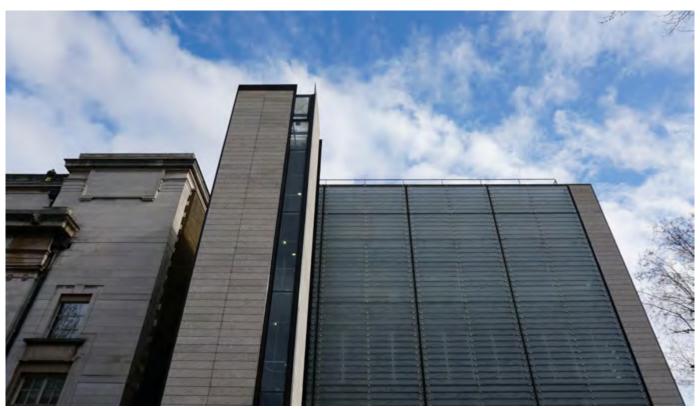
04.37 $\!\!\!/\!\!/$ Detail of the Portland stone, ceramic translucent glass and steel frame of the WCEC

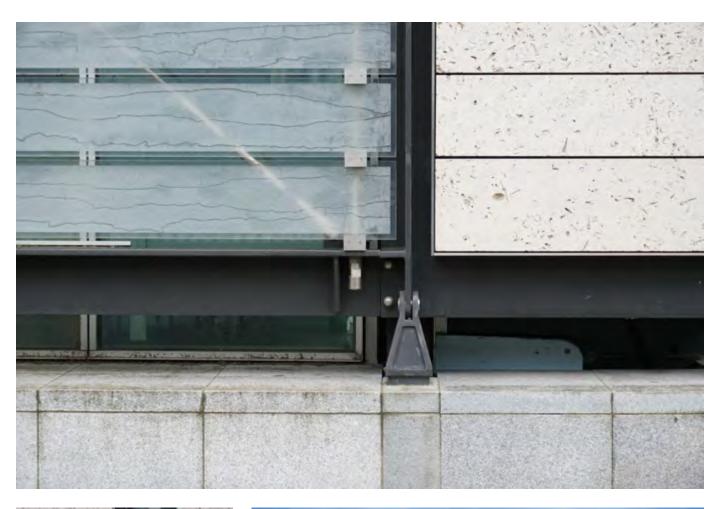
Bottom from Left to Right

 $04.38 \, /\!/ \, \text{Glass facade of the WCEC, a translucent surface which}$ allows for light to filter into the centre, whilst maintaining a high level of privacy.

04.39 // Detail of the facade system of the WCEC

04.40 // Detail junction of the turret which extends out revealed to be the circulation core of the building.

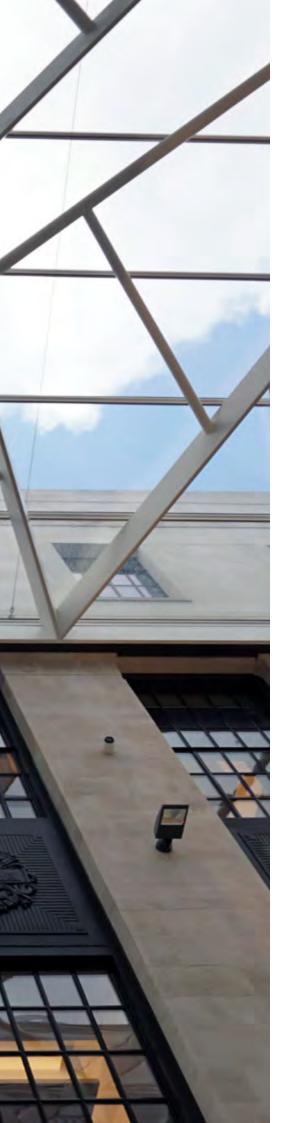












// THE SAMMY OFER CENTRE

Old Marylebone Town Hall 117 Marylebone Road, Marylebone

Original ArchitectSir Edwin Cooper

Adaptive Reuse Architect Sheppard Robson

Original Construction 1920

Adaptation 2017

The recently completed transformation of the Old Westminster Council House in Marleyborne, into the Sammy Ofer Centre of the London Business School utilises small incisions, coupled with consideration of what fabric is to be retained and what fabric is to be removed, to come together to form a respectful addition to connect the two limestone buildings together.

The steelwork lattice of the new central atrium responds to the structural misalignment of the existing construction on either side. A simple diagrid, connecting each of the structural nodes at the centre of each pier forms the base, from which the layout of primary and secondary beams could be derived. Consideration of what can be adapted on site improve ecological performance is also of great importance and in this instance, included the reuse of original shoring and piling structures from the 1960s additions, which were found to be in an adequate condition.

Replacing this 60s infill, which itself was a replacement of fabric which had been destroyed during the Blitz of World War II, the new spaces open up previously sealed off courtyards and provides additional connection between the east and west wing of the two historic buildings. Thought is given to elements which make up a building across all scales, from new lighting fixtures which arise from knowing what was once on site, to new window fixtures which have been ergonomically upgraded alongside glazing to meet current thermal and acoustic performance requirements. New flexibility is given to the lecture theatres, which now serve as a single hall for monthly Council meetings or be acoustic isolated and divided into two lecture theatres for the London Business School.

By rigorously attending to all of these components, and balancing between what must be altered and what ought to be retained, the Sammy Ofer Centre now sits as a peaceful, successful addition which responds to the existing materiality, proportion and scale in a meaningful and abstract manner.

■ 04.41 // Internal atrium of the Sammy Ofer Centre.

Below left to right:

04.42 // Staircase which separates between the contemporary addition and the original fabric of the Marylebone Town Hall.

04.43 // Night view of the new atrium and entry for the Sammy Ofer Centre.

04.44 # Atrium view, demonstrating the complexity of the structural grid which spans across the two buildings.

Bottom row, left to right: 04.45 // View of the interior courtyard

04.46 // Detail junction between new and old fabric.

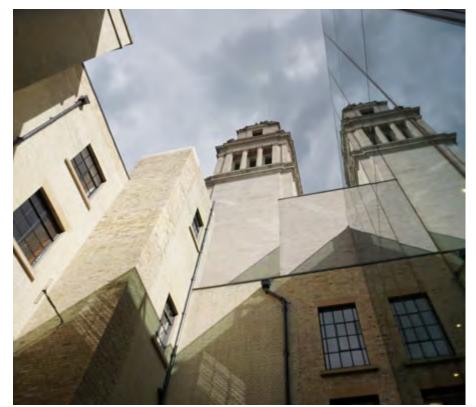
04.47 // Detail junction between new and old fabric.

04.48 // New handles, designed with improved ergonomics whilst referencing the traditional proportions and style of the building's windows.

04.49 // New lighting fixtures designed in reference to the historic interiors of the old building.

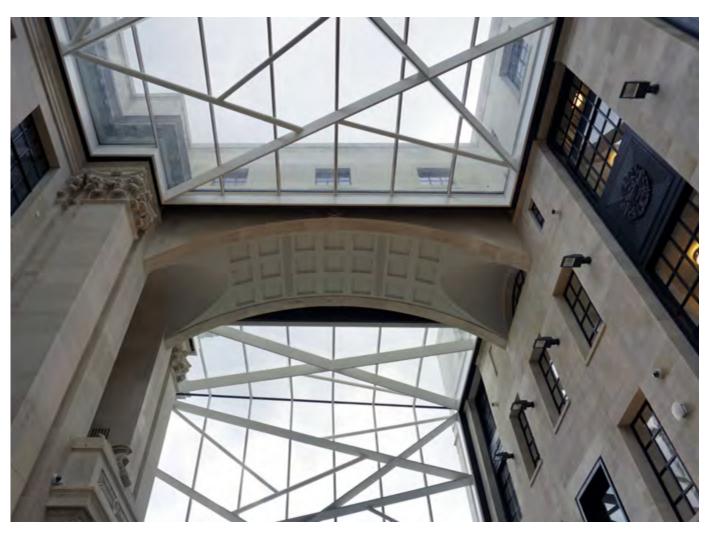


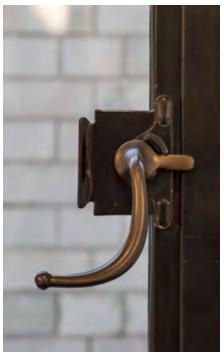














// VICTORIA & ALBERT MUSEUM

Exhibition Road Entrance

Cromwell Road, Knightsbridge

Original Architect

Ashton Webb

Adaptive Reuse Architect

Amanda Levete Architects

Original Construction

1873

Adaptation

2012-2017

Becoming the first porcelain-tiled public courtyard in the United Kingdom, the eleven thousand hand crafted tiles provides a directly responsive material to the extensive ceramics collections housed within the V&A, whilst also providing a striking material juxtaposition to the bright red brickwork of the existing 19th Century buildings. Reinstating the gateways, which run parallel to the street, the new courtyard re-orientates the museum's secondary entry to London's primary cultural artery in Knightsbridge, Exhibition Road.

The decidedly contemporary forms of the new café and light well stand simultaneously as independent objects within the courtyard, but are angled to imply a directional flow toward the museum's entrance. Detailing the design has also taken this opportunity reinterpret particularly poignant moments in the V&A Museum's history. New gates to the entry for example have deliberate metal perforations, which trace the location of shrapnel damage incurred, by the site during the bombings of London in World War II, and reference still visible damage to the stonework facades. Internally, the juxtaposition of old and new is expressed by the challenging underpinning excavation works and are made visible by vividly coloured steel columns, figuratively and literally "holding the weight of history and the Museum's priceless collection above."42

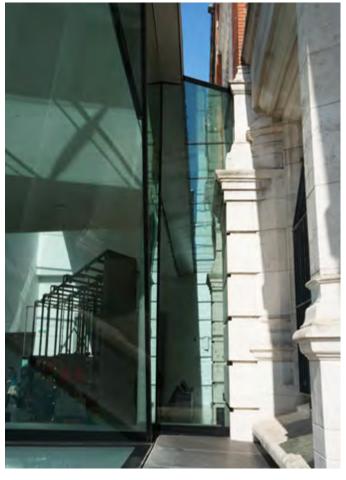




Above:

04.51 // Elevation view of the new extension, showing the juxtaposition of forms and materiality between the old and new.

04.52 // Structural independence. The new structure stands free of the existing forms, with the only connection and enclosure accomplished through detailing of glass fixtures and panels.









Left Top to Bottom: 04.53 // View of the courtyard from inside the new extension.

04.54 // Detail of the porcelain tiled roof, a contrasted materiality to the stone and brickwork of the V&A Museum.

04.55 $/\!\!/$ Interior view of the junction between the glass and the existing facade.

// CHELSEA COLLEGE **OF ARTS**

Royal Army Medical College

16 John Islip Street, Westminster

Original Architect

John Henry Townsend Wood Wilfred Ainslie

Adaptive Reuse Architect

Allies & Morrison

Original Construction

1904-1907

Adaptation

2007

An important aspect of adaptive architecture can be found in the subtleness of the changes made and it is the small incisions and careful decisions made for the Royal Army Medical College transformation into the Chelsea College of Arts which shows how robust historic buildings maybe appropriately adapted for new functions. At the heart of this exercise lay the reorganisation of circulation routes, both within each building and between the buildings such that they would act as a unified campus. Simple changes such as altering the placement of stairs and corridors enabled a huge degree of flexibility for a mix of studios to take place within the buildings, whilst adding new common meeting spaces to the married in lieu of old lavatory and ancillary spaces provided the building with a new, articulate address to the street.

The materiality and texture of the additions are a similarly subtle exercise, with Appleton highlighting that "We are not there in order simply to posit new buildings elegantly against old, we are there to extend the fabric, and where appropriate, and only where appropriate, to make things which look especially new."43 Through a complementary material palette, the additions to the rear and secondary facades of the conserved buildings, the project enables the original parade ground to become the significant, legible forecourt for the school of design, creating the sense of an articulate campus environment.





Top Row from Left to Right 04.57 // New extensions added as an underground roof plane and a circulation core, hidden behind the existing heritage building.

04.58 // New street front expression for the former married quarters building. Common room areas and offices open out in brick extensions, addressing the street and its public context.

Bottom Row from Left to Right $04.59 \ /\!\!/ \ Rearrangement of campus spaces$ enabling the former parade ground to become the heart of the college.

04.60 // Timber clad side entrance into the college buildings

04.61 // Small additions made to the side of the existing building, providing connections across the campus.



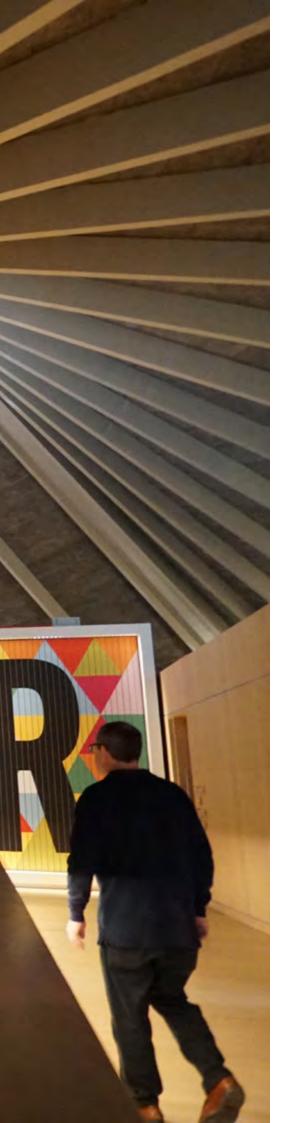












// THE DESIGN MUSEUM

The Commonwealth Institute

224-238 Kensington High Street, Kensington

Original Architect

Robert Matthew Johnson-Marshall & Partners

Adaptive Reuse Architect

Allies & Morrison, Office for Metropolitan Architecture John Pawson

Original Construction

1962

Adaptation

2016

An expression of the hope and vitality of post-World War II Britain as well as the changed politics of a post-Empire world, the hyperbolic paraboloid concrete roof presented a utopian view of modernity in the 1960s to house the Commonwealth Institute. Vacated by the Institute in 1995, the building is now home to the Design Museum. As an organisation with the vision to demonstrate that design touches everyone and a means to comprehend the world around us, the adaptation of a pre-existing structure to suit new purpose seems a highly appropriate and complementary exercise in creative design thinking.

In a city where much of its heritage legislation is geared towards the conservation of buildings from Pre-History to Gothic, from Georgian to Victorian, this project became the testing ground for how to adapt a work of Modernist architecture in a heritage sympathetic manner. Externally, the master planning of new surrounding apartments became an exercise in breaking the established city grid of Kensington High Street, angling the new apartment blocks to frame views toward the Design Museum and Holland Park beyond. New glazing, meeting current energy performance standards replaced the entire external façade, but consideration of the original formal articulation meant that smaller panes of glass, matching the original fenestration pattern were adopted.

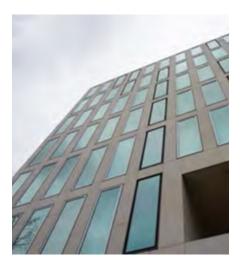
Careful articulation of the interiors ensured that the internal perspectives of the stunning paraboloid structure would remain visible, whilst new additions underground would help make this building capable of hosting exhibitions in the 21st Century. Overall, the Design Museum brings back the sense of civic openness and pride to the original structure, maintaining its original social intention as a place to share and discuss ideas.

 04.62 // Interior of the Design Museum, with the conserved paraboloid roof clearly visible overhead.









Above Left to Right, Top to Bottom

 $04.63 \ /\!/$ Detail of the restored exterior facade, with the glazing articulated to mimic the original pattern and modules of the curtain wall glazing.

04.64 // Elevation view of the Design Museum facade as viewed from Holland Park.

04.65 // The offset blocks of new apartments which provide a meandering path, framing the Design Museum from Kensington High Street.

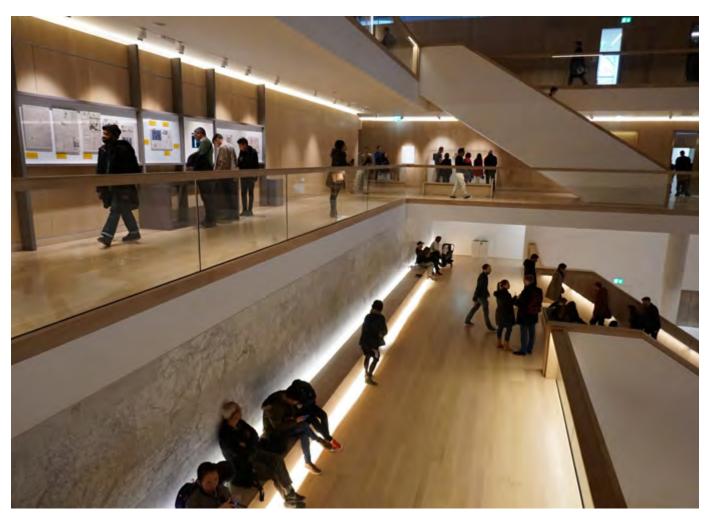
04.66 // Details of new windows to the apartment blocks, matching the proportion and size of the Design Museum's windows.

Opposite Page, Left to Right, Top to Bottom:

04.67 // Interior view of the new gallery circulation spaces. Note that the wall is comprised of marble which is taking on its third life - first as the stones of the Imperial Institute, then as paving for the Commonwealth Institute, now reused as a feature wall within the Museum.

04.68 // Detail of the restored paraboloid roof form.

04.69 //Detail of the restored paraboloid roof form.









05 NEW YORK | UNITED STATES

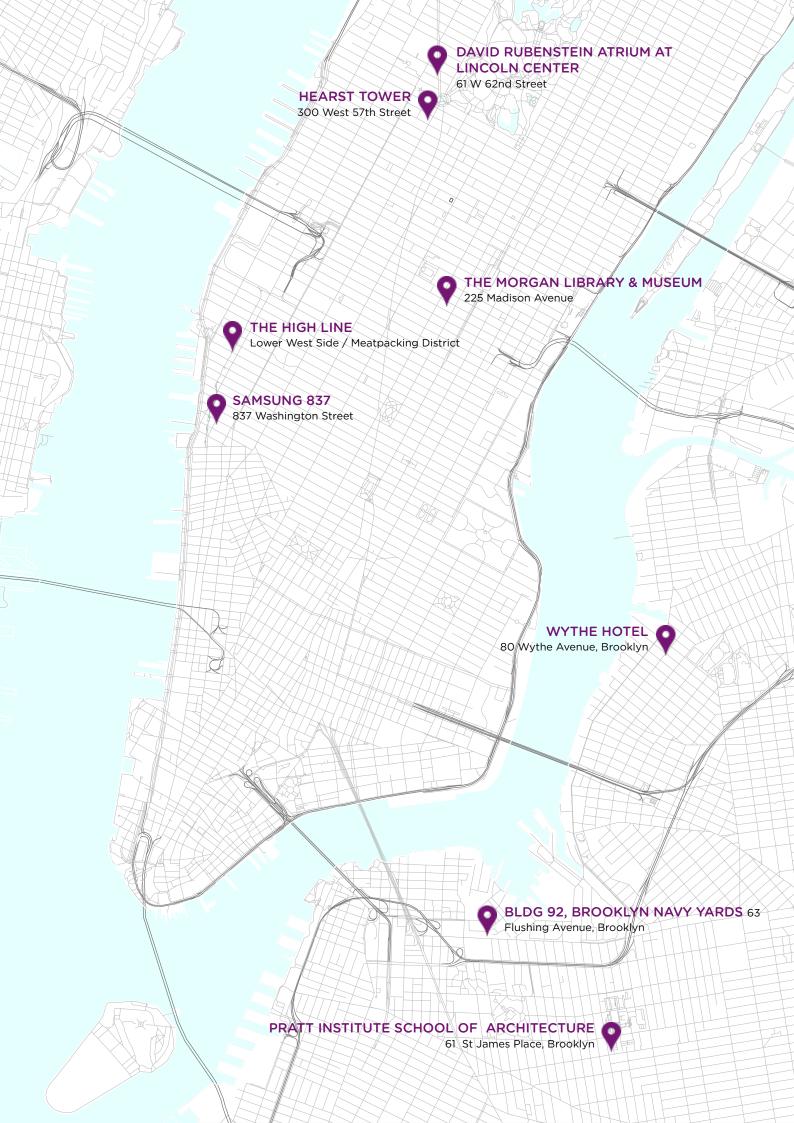
"Over the great bridge, with sunlight through the girders making a constant flicker upon the moving cars, with the city rising up across the river in white heaps and sugar lumps all built with a wish out of non-olfactory money.

The city seen for the first time, in its first wild promise of all the mystery and the beauty in the world."44

- The Great Gatsby, F. Scott Fitzgerald, 1925

In the city of blinding lights, singers Jay-Z and Alicia Keys accurately describes New York as being a "Concrete jungle where dreams are made of / There's nothing you can't do, now you're in New York!" Much of its current stock of architecture have been immortalised as imaginary visions conjured up when terms such as 'cosmopolitan' or 'metropolis' are used. Pushing toward the sky as the only limit, New York's old warehouses, and factories have to move with the times, being reconfigured from its industrial past to meet current financial and cultural demands. Across the city, its heritage conservation works are very much dependent upon the financial viability of restoring and retaining existing buildings, their fates invariably tied to economics.

Across the spectrum of the city, the David Rubenstein Atrium at Lincoln Center, designed by Tod Williams and Billie Tsien, is a successful attempt at repairing the spatial consequences of residual public spaces by private enterprise. The Pratt School of Architecture unites two education buildings to create a singular comprehensive venue for teaching the next generation of architects. Bold new steel and glass additions rising above existing stone and brick bases, such as the Hearst Tower, 837 Washington and the Wythe Hotel are all illustrations of the changing demands of land use the city has experienced in a contemporary age. At the same time, projects such as BLDG92 at Brooklyn Navy Yards, the public spaces of The Lincoln Center for Performing Arts, the Morgan Library and Museum, the TWA Hotel and The High Line are all expressions of the city's unique cultural and social heritage, conserved and reconfigured to maintain the city's past, whilst looking ahead toward the future.







//

DAVID RUBENSTEIN ATRIUM AT LINCOLN CENTER

Harkness Atrium / Harmony Atrium

61 West 62nd Street, Manhattan

Original Architect

M. Paul Friedberg & Partners (Original Tower) John Gillis Architecture (Harmony Atrium)

Adaptive Reuse Architect

Tod Williams & Billie Tsien Architects

Original Construction

1979 / 1995

Adaptation

2011

Under the original development of residential towers, the false pretence of giving back to the public resulted in the creation of an irregular, alleyway wide public access way, known as Harkness Atrium. Partially improved in the 1990s into consisting of a café and a rock climbing wall, it remained disused and unloved, eventually passing into the purview of the Lincoln Center for the Arts, who transformed the residual space into a visitor's gateway and ticketing hub.

To cantilevered protrusions, help to interrupt the rigid grid of New York's streets, announcing the David Rubenstein Atrium to the public and drawing visitors in. Deep set lighting fixtures, known as 'occuli', provides the illusion of natural light which, coupled with public artwork, a green wall and informal seating transforms this once dilapidated alleyway into a well-lit public meeting place. Integrating new technologies into the space has also enabled it to become an extension to the Lincoln Center's performance spaces, with the atrium now host to dancing events, musical performances and writer's circles. Led by Tod Williams and Billie Tsien Architects, the site is demonstration that within compact urban contexts, even residual spaces can be adapted to become exciting opportunities for public engagement.



Top to Bottom:

05.03 // Cantilevered Awning over the street, redefining the entry into the atrium. The external awning also contains one of the occuli which dots the interior of the atrium space.

05.04 // Detail of the interior occuli, providing the sense of natural sunlight into the atrium.

 $05.05\,\text{//}$ Perspective view of the atrium, a digital wall provides information on current performances at the Lincoln Center.











Top to Bottom:

05.06 // Detail of Green Wall running perpendicular to the street outside.

05.07 $\!\!\!/\!\!\!/$ Night view of the atrium, with the lighting of the occuli adjusted to reflect a cooler tone.

05.08 // Detail of the occuli

// **HEARST TOWER**

Hearst Corporation Headquarters

300 West 57th Street, Manhattan

Original Architect

Joseph Urban

Adaptive Reuse Architect

Foster + Partners

Original Construction

1928

Adaptation

2001-2006

The Hearst Tower's original five storey building had always been envisaged as a base for a future tower by its owner. William Randolph Hearst. Stopped only as the result of the Great Depression, the tower was added by Foster + Partners, seventy years later. The addition, made using a large steel exoskeleton diagrid, presents an interpreted, resonant structural expression which aligns with the established pattern of openings and vertical engaged columns of its stone base. The jagged corners of the tower, arising out of the tessellation of the diamond steel structure, places further emphasis on the building's two street frontage corners, reinforcing the existing sculptures and columns which grace its original facades.

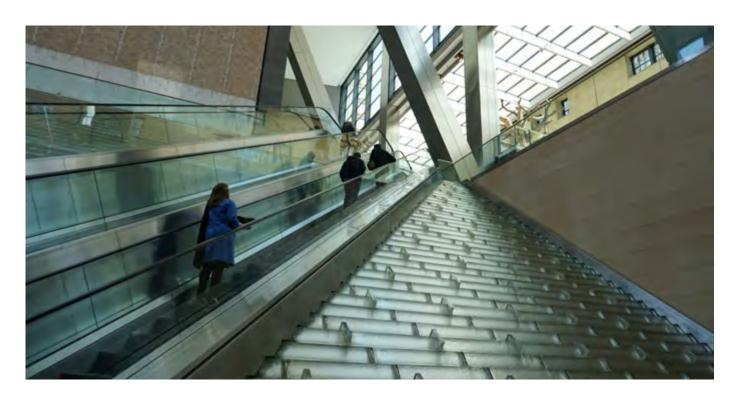
Programmatically, the new office tower would house the employees of the Hearst Corporation, meaning that "the approach [was for] keeping the podium at the base, using that for the communal facilities for the Hearst Corporation exhibitions, talks and so on - that fulfilled a need within the historical framework."46 The interior of the original structure was reconfigured as a multi-layered atrium, expressing the structural logic and transition from the stone base to the steel tower above and providing much needed break out and communal spaces for the workers above.







Above Top to Bottom: 05.10 // View of the exoskeleton diagrid structure of the Hearst Tower.





Above Top to Bottom:

05.12 $\slash\hspace{-0.6em}/\hspace{-0.6em}/$ Entrance Foyer into the main podium level of the Hearst Tower.

 $05.13\ /\!/$ Interior Atrium, with the diagrid structure cantilevering out, transitioning from the stone to the steel structure. The rough-face stone wall conceals the main elevator and services core of the tower.

MORGAN LIBRARY & MUSEUM

Pierpont Morgan Library

225 Madison Avenue, New York

Original Architect

//

McKim. Meade and White Benjamin Wistar Morris

Adaptive Reuse Architect

Renzo Piano Building Workshop Beyer Blinder Belle

Original Construction

1902-1908

Adaptation

2000-2006

Born out of the private collection of Pierpoint Morgan, the extensive manuscript and library of books at the Morgan Library & Museum represent a priceless repository of knowledge and culture. Protecting this important collection, whilst also exhibiting it to the public formed the basic brief for the extension and adaptation of three existing historic buildings. Faceted steel and glass panels add three new pavilions nestled in between the three existing historic structures and integrating the once separate buildings into a singular continuous flow of spatial sequences.

Utilising a modular, repeatable component, the new pavilions reinforce the existing proportions of the adjoining heritage buildings but expressed in a decidedly contemporary manner. Running parallel to these additions, hidden away, Richard Southwick, notes that "...we went down almost 50 ft (16.5m) into New York bedrock and the heart of the collections, the vaults, are underground and protected."47 Through these additions, which significantly expand the gallery's exhibition and storage spaces, the legacy of Pierpoint Morgan's collection remains not only safeguarded and protected, but also accessible to a wide, public audience.









This Page Top to Bottom: 05.15 // Exterior view of the smallest of three pavilion additions to the Morgan Library.

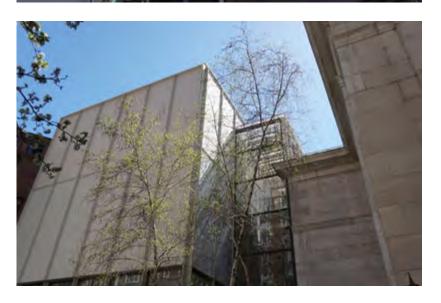
05.16 // Detail view of the juxtaposed materiality between old and new fabric.

05.17 // Exterior view of the largest pavilion addition, providing the new Madison Ave entrance for the Morgan Library & Museum.

Opposite Page Top to Bottom:

05.18 $\!\!\!/\!\!\!/$ Original ceiling motifs and artwork of the Morgan Library.

05.19 $/\!\!/$ The new cental courtyard of the Morgan Library & Museum, providing a connection between the three separate historic buildings.









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THE HIGH LINE

New York Central Railroad

Lower West Side / Meatpacking District

Original Architect (West Side Improvement Project)

Robert Moses

Adaptive Reuse Architect

James Corner Field Operations
Diller Scofidio + Renfro

Original Construction

1933

Adaptation

2009

The High Line has been lauded by many as one of the most successful examples of urban re-generation of abandoned industrial infrastructure and has spawned many copy-cat reviews across the globe. Through careful incisions and an in depth understanding of place, this project provides a diverse range of experiences and challenges the notion of what a public park can be. Its elevated position gives rise for opportunities to look back upon the city, and the architects Diller Scofidio + Renfro have done precisely this. Viewing platforms rise both up and down along the High Line, providing visitors with framed views of New York, matching up to its iconic grid of streets and avenues.

Modular concrete components, deliberately designed with larger stones to imply the rocks which used to lay beside the tracks provide the abstract functional paving stones along the route. Timber seating, with steel detailing rise in and out using the same modular pattern. This reconstituted ruin is now the site of ambitious public arts events and most recently, will involve the 'Mile Long Opera' a singing event featuring a chorus of hundreds which will take place along the entire length of the High Line. Turning ruin into park and turning eyesore into beauty, the High Line is the demonstration that every residual space of our city, if thought of critically, can in fact have a highly meaningful and resonant contribution to the life of our public spaces.

Left to Right: 05.21 // View along the high line as the pathway transitions into a planting area.

05.22 $/\!/$ View along the tracks of the High Line with new plantings growing in early spring.

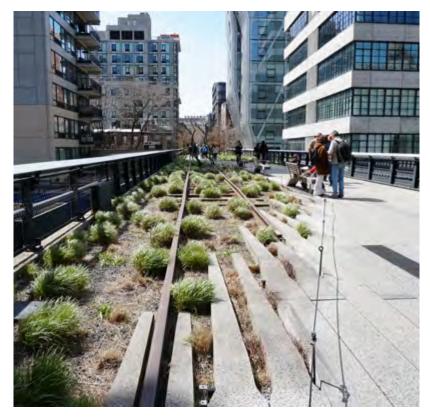
 $\ensuremath{\mathsf{05.23}}\xspace$ // Aerial view of a section of The High Line, indicating the articulation of concrete pathway modules transitioning from solid grey into the greenery.

Below Left to Right:

05.24 // Framed view of New York's grid streets from the High Line.

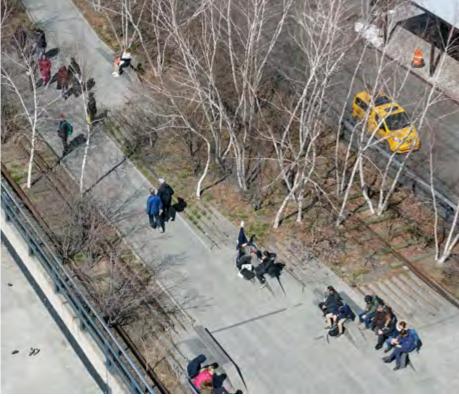
05.25 // Detail of sunbathing chairs along the High Line, with the chair designed using components of the railroad.

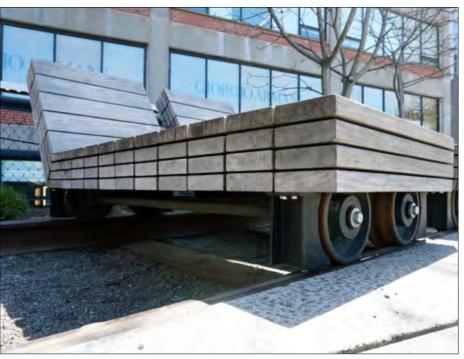
05.26 // Detail of the concrete panels which make up the transition between pathway and greenery.

















837 WASHINGTON

Super City Wholesale Meat Inc.

837 Washington Street, Meatpacking District

Original Architect

Unknown

Adaptive Reuse Architect

Morris Adjmi Architects

Original Construction

1938

Adaptation

2011-2017

837 Washington Street by local New York practice Morris Adjmi Architects is a simple, responsive building which brings together the industrial and post-industrial materiality of the area. Situated adjacent to the post-industrial elevated park, The High Line, another example of adaptation, this simple twisting steel and glass structure is added atop a rehabilitated Moderne brick building which dates from 1938, housing a former meatpacking warehouse. The act of twisting, is itself a direct reference to the building's place and to a moment in New York's history.

The building is sited at the junction where the original Gransvoort Market district ends and the Comissioner's Grid of 1811 begins, from which we get the iconic numbering system and formal rectilinear city blocks. It is at this corner of the city then, that, through an understanding and subsequent abstraction of ideas about place, the overlapping and collision of two different street grids are made apparent and emphasised.

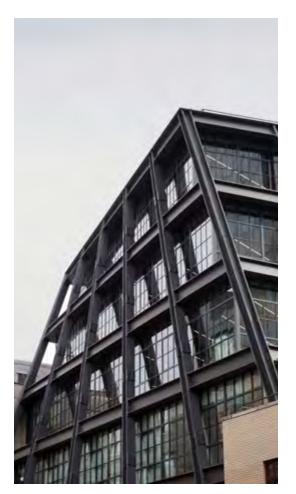
> Above Left to Right: 05.28 // Detail of the twisting steel frame of the new additions to the existing building.

05.29 // Detail of the steel connections and facade detailing of the new addition.

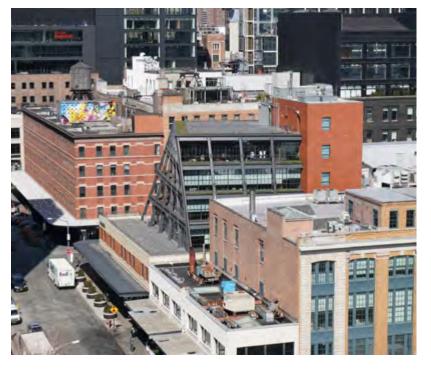
Left to Right: 05.30 // Aerial view the building.

05.31 // Detail of restored awning structure and old text for the site.

■ 05.27 // Street view of 837 Washington.









// WYTHE HOTEL

Weildmann Cooperage

80 Wythe Avenue, Brooklyn

Original Architect

Theobald Englehardt

Adaptive Reuse Architect

Morris Adimi Architect

Original Construction

1901

Adaptation

2012

Conversion of the former Weildmann Cooperage into a boutique hotel within the up and coming area of Brooklyn, Morris Adjmi Architects looked to reinterpreting the site's industrial materiality as their starting point. Conserving the deep floor plates and existing openings and structure of the brick and timber cooperage, an abstract glass and steel cube was inserted above the existing structure to provide new hotel rooms.

Setting back the hotel rooms in accordance with current building codes reveals a curtain glass wall opening out toward the Manhattan skyline, its fenestration details corresponding with the original factory windows, becoming a singular knitted grid rising six storeys above ground. The strong contrast between the glass curtain wall and the pre-existing brickwork becomes suggestive of two skins which wrap around their respective facades, with the brickwork taking on a thinness and lightness which almost implies that it could be peeled away to reveal the continued structural steel logic behind. The architectural language of the site's industrial past becomes decidedly contemporary and the project ultimately succeeds in revitalising an abandoned industrial site into a fashionable, trendy hotel.



Left to Right:

05.33 // View of the contemporary steel and glass addition above the existing masonry, with a fire stair emerging from the building's side.

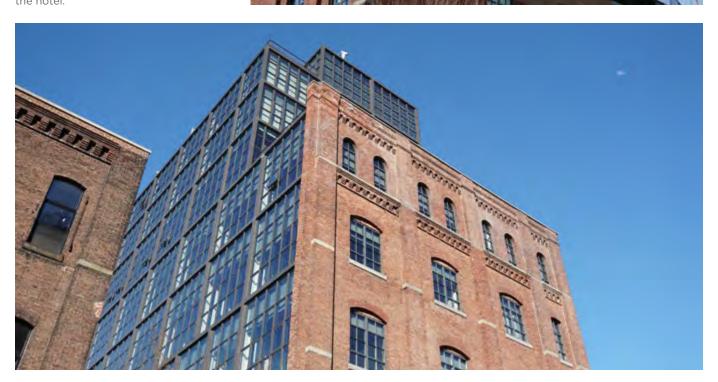
05.34 $/\!\!/$ Detail of the contemporary steel and glass additions.

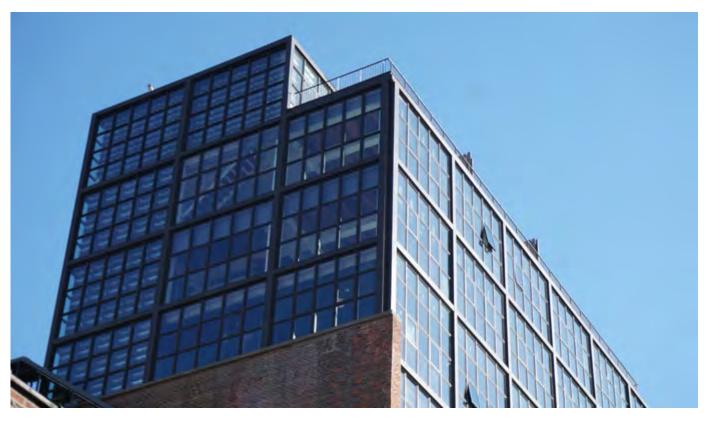
Below Left to Right:

05.35 // Expression of the two skins glass and masonry converging at the corner setback of the site.

05.36 // Exposed heritage detailing, including the original steel frame lintels and columns, supporting the brickwork.

05.37 // View of the brickwork facade of













// **BLDG 92, BROOKLYN** NAVY YARD CENTER

Marine Commandant's Residence

Flushing Avenue, Brooklyn

Original Architect

Thomas Ustick Walter

Adaptive Reuse Architect

Beyer Blinder Belle Workshop/APD

Original Construction

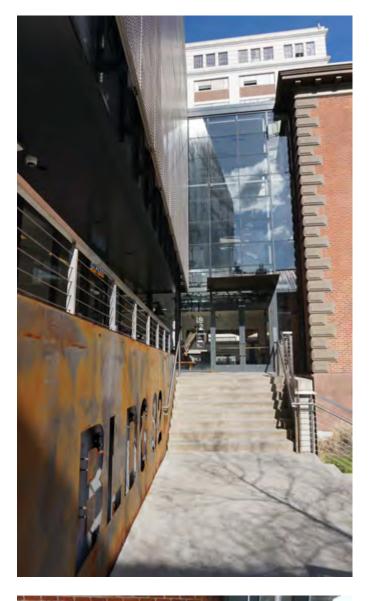
1857

Adaptation

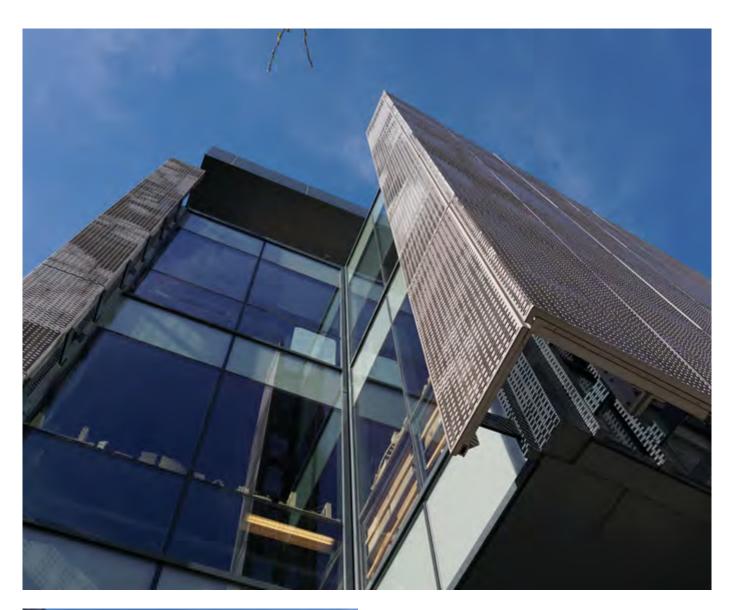
2011

Opening up what was once an enclosed military site to the neighbourhood of Brooklyn, BLDG92 presents the public face of the manufacturing and creative industries precinct known as Brooklyn Navy Yards. Providing a new public pocket square, a permanent exhibition gallery, as well as an education and employment centre, the extension is a secondary structure situated behind the existing Marine Commandant's House ensuring the protection of this historic building's curtilage.

Through a material juxtaposition between the brickwork of the Commandant's House against the perforated steel panels of the extension, the buildings clearly differentiate between old and new fabric. Simultaneously, the additions have a form and scale which retains a clear, complementary reference to the heritage building which now houses the Brooklyn Navy Yard's permanent historical exhibition. Whilst significant conservation works were required to stabilise the structurally unsound historic building, its adaptation, paired with its new extension, speaks of the past and the present site memories and stories of the Brooklyn Navy Yards, becoming an important public space which serves not just as an employment centre but also as the repository of local memory and history.









Above Left to Right:

05.39 // The entry foyer to BLDG92, defined by a glass atrium, separating the Marine Commandant's House from the new additions.

 $05.40 \ /\!/$ Facade detail of the new additions, showing the perforated screens controlling solar access into the glass curtain wall behind.

Left to Right: 05.41 // Interior atrium detail demonstrating the connection between the glass and steel structure against the brickwork of the heritage building.

05.42 $/\!\!/$ Exterior atrium detail of the connection between the contemporary glass building and older heritage building.



PRATT SCHOOL OF ARCHITECTURE

Higgins Hall, Adelphi Academy

61 St. James Place, Brooklyn

Original Architect

Mundell and Tercritz

Adaptive Reuse Architect

Rogers Architects Steven Holl Architects

Original Construction

1868

Adaptation

2005

Bridging two separate brick buildings to create a centralised school for architecture was the intent behind converting the Adelphi Academy buildings into the Pratt School. The challenge of this project lay in matching up the two separate buildings' misaligned floor plates. The dissonance in levels is resolved through the addition of a central glass and steel box. Horizontal steel elements extend and express the misaligned levels, whilst a central pillar of irregular window openings sets up a playful dialogue between the misaligned horizontal lines. The façade expression is formalised through the strict order of vertical opaque channel glass columns, which establish a new harmonic pattern and materiality between the two brick buildings.

Internally, studio spaces become one and a half level volumes, with the transition in level achieved through a mix of ramps and elevated studio workshops. By staggering the levels and physically expressing and resolving this discord in the façade, the new bridging pavilion provides a new harmony between the two buildings, creating the illusion of a singular continuous series of floors, whilst internally, using the separation of levels to define boundaries between different studio spaces and areas, whilst still enabling studios to have a visual connection along the entire workshop.

^{05.43 //} View of the Pratt School, with the extension in the background - note the steel beams extending out as a reference to the floor levels of the heritage building.

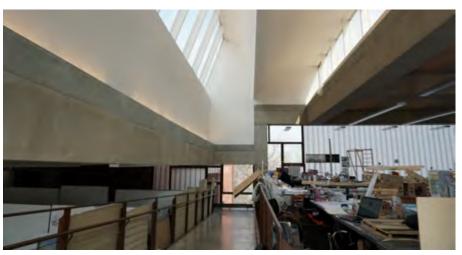












Opposite Page Top to Bottom: 05.44 // View of the new addition slotted between two existing brick buildings.

05.45 // Detail expression of the irregular window openings, juxtaposed against the strict vertical modular of the channel glass.

This Page Top to Bottom:

05.46 $/\!\!/$ View of the new addition juxtaposed against the south-east building.

05. 47 // Heritage detail of the deep set windows which make up the historic building on site.

05.48 // Interior view showcasing the transition from a lower level to a higher level. The skylights also help to improve natural light penetration into the studio spaces.





TWA HOTEL

Trans World Flight Center

Terminal City, John F. Kennedy Airport

Original Architect

Fero Saarinen

Adaptive Reuse Architect

Beyer Blinder Belle

Original Construction

1962

Adaptation

Late-2019

Eero Saarinen's sculptural masterpiece, the Trans World Flight Center was and remains one of the most celebrated airline terminals for its architectural expression and form. Its functional success however was short lived, with the rapid rise of Boeing 747 jet aircraft rendering the Flight Center functionally obsolete.

It is against this backdrop that a new ancillary airport function for the iconic Modernist building was found and is now almost complete and due to open as the TWA Hotel. The proposal retains the central hall of the TWA Terminal, becoming a new foyer and lobby of the hotel. Two wings of hotel rooms, flanking either side of the TWA Terminal follow the arching curvature of the site and quietly forms the backdrop for the original terminal's, preserving its historic view. The detailed glazing fenestration of the new flanking hotel wings correspond in proportion and scale to the original glazing of the TWA Flight Center, allowing the two new buildings to be read as part of a complimentary whole. Conservation of the two flight tubes provides an important connection back into the jetBlue Terminal, ensuring that the Saarinen building is not an isolated object within the campus of John F. Kennedy Airport, but a linked part of the suite of terminals which make up the airport.

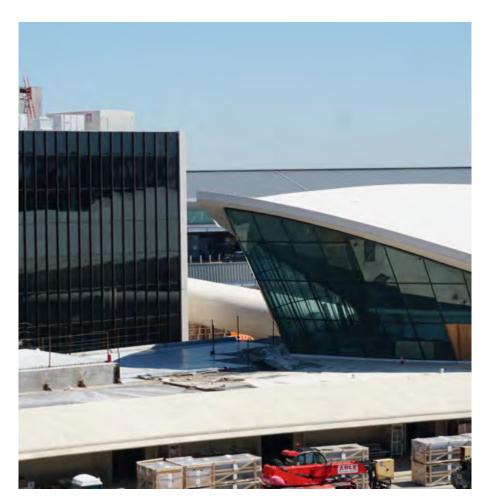
Opposite Page Top Left to Right:

05.50 // Detail comparison of the hotel facade and the original TWA Flight Center curtain glass wall.

05.51 // Aerial view of the original Eero Saarinen building, now conserved.

05.52 // View across Kennedy Airport's tram network toward the future primary view of Saarinen's sweeping roof forms. The second suite of hotel rooms are still under construction.

■ 05.49 // View of the TWA Hotel, under construction









06 SYDNEY | AUSTRALIA

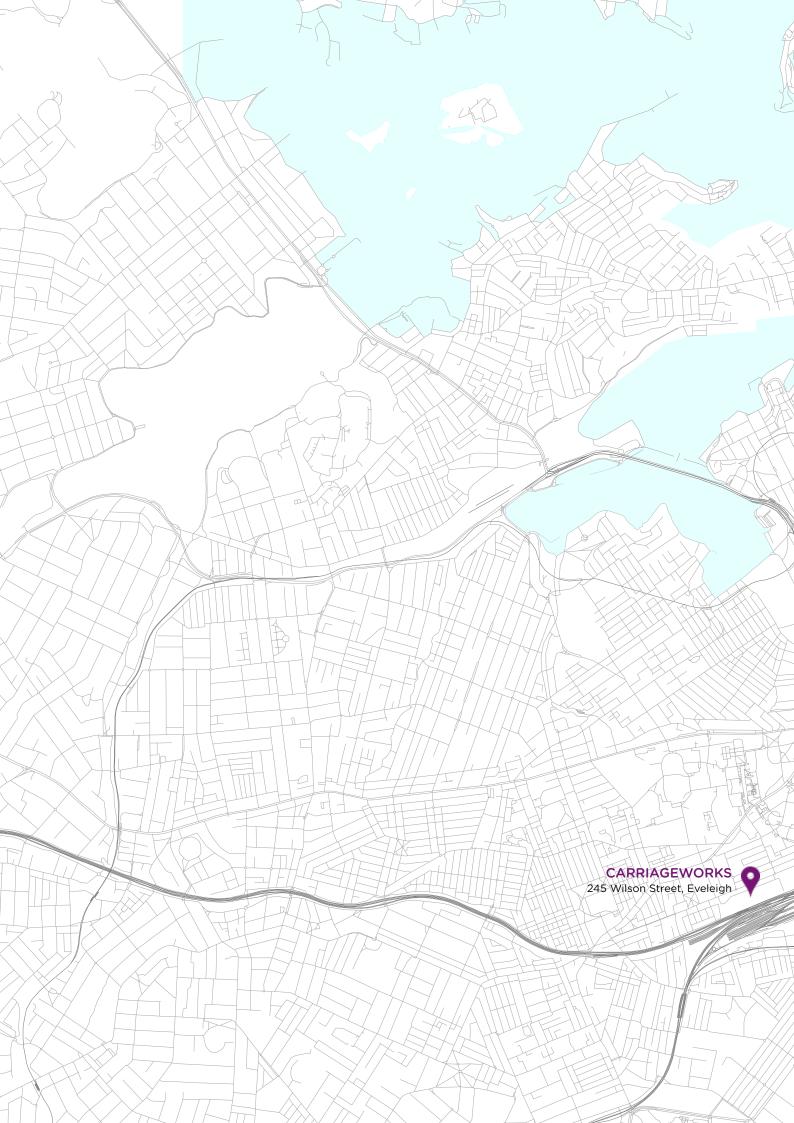
"If I were asked to describe the Old Colonial of Australia, I would call it an architecture of sunlight and shadows, of buildings and trees...to the golden splendor of the Australian sunlight, and to the combination of building and tree, it owes its particular beauty...The sun, the wind, and the rain are the tools with which Time has worked his pleasant textures on the Old Colonial of Australia..."48

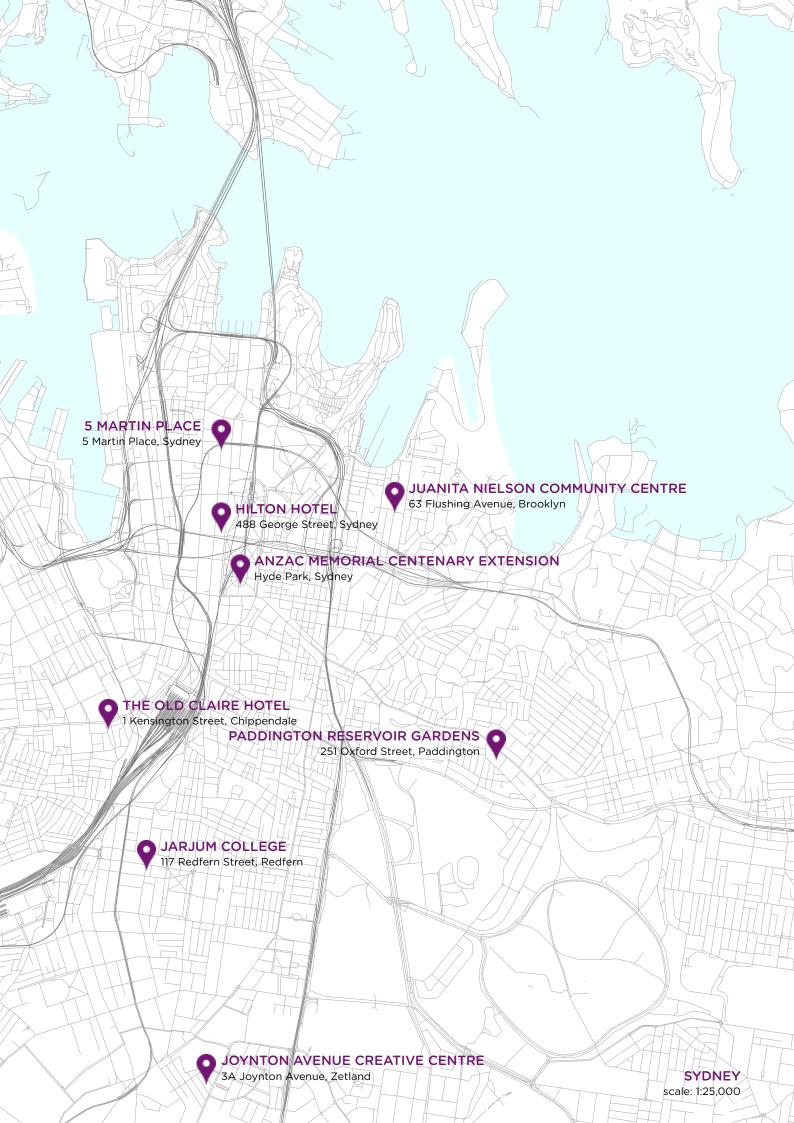
Old Colonial Architecture in New South Wales
 & Tasmania, Hardy Wilson, 1924.

At the heart of Sydney is a continual search for identity. Situated within a young nation, with a complex and uneasy convict establishment, to its fledging independence as a Commonwealth in 1901 and the continued suppression of Aboriginal people which permeates much of its historical socio-cultural development, the stories of the city which are chosen for remembrance, recollection and celebration is always contested and fraught.

The ANZAC Memorial is the clearest symbol of remembrance, its recent oculus and southern fountain extension on the centenary of World War I, reinforces a reminder of the many lives who were lost, and those who continue to fight in the cause of peace. The Paddington Reservoir Gardens, a subterranean park built around the ruins of the collapsed reservoir, a reminder of the temporal changes which our cities inevitably go through. The Hilton Hotel restored an old 19th Century connection between two major thoroughfares in the heart of the city whilst 5 Martin Place has been extended respectfully to defend one of the city's oldest defined public square. Jiajum College, both in expression and in function help to restore the social vitality and spirit of its local community in Redfern. All of these projects contend with the difficult question of how a place's contested history and disputed past can be carefully re-presented through architecture.







JUANITA NIELSEN COMMUNITY CENTRE

Nicholson Street Warehouse

31 Nicholson Street, Woolloomooloo

Original Architect

Unknown

Adaptive Reuse Architect

Neeson Murcutt Architects

Original Construction

1888

Adaptation

2017

The Juanita Nielsen Community Centre, whose namesake's murder remains an unresolved mystery, left behind a legacy of advocacy and community activism that is made real by the distinctive black and white pattern of her dresses now interpreted as canopies over the building. In converting this warehouse structure to meet the contemporary needs of the local community, Neeson Murcutt sought to reorganise its interior circulation, creating more flexible spaces for community events both inside the building and on the adjoining pocket park. Very careful incisions reconfigure the roof structure and windows, allowing better natural light into the former warehouse building.

Not wishing to hide its past, the true age of the building is made evident by the peeling back of layers on its façade, revealing a rugged brick and render surface which, whilst decidedly rough, avoids making the building look dilapidated. Internally, the building's original structure and materiality is exposed, a rough assortment of timber beams and steel columns, merged carefully with an equally industrial steel staircase, painted yellow to suggest a path of travel up the building. The building creates a dynamic and flexible series of spaces, producing a bold and playful façade which announces its public presence to its neighbours and thus, transforming the site into a hub of local community activities.















Opposite Page Left to Right Top to Bottom:

06.03 // Street frontage with the distinctive black and white pattern awnings over the windows.

06.04 // Rear facing facade, operable timber screens once again using the distinctive black and white facade.

06.05 // Side facade illustrating the multiple types of openings and the peeled back history of the surfaces of the building.

Above Top to Bottom:

06.06 // Detail of new additions made to the roof structure to increase internal height of the building.

06.07 // Facade detail with distinctive awning structure.

06.08 // New public art intervention featuring Aboriginal words and phrases traced into the building's walls.



PADDINGTON RESERVOIR GARDENS

Paddington Reservoir

251-255 Oxford Street, Paddington

Original Architect

Edward Bell and Will Wadsworth

Adaptive Reuse Architect

Tonkin Zulaikha Greer

Original Construction

1857

Adaptation

2009

Like chancing upon a forgotten ruin, the half open arches and exposed steel of the Paddington Reservoir Gardens is a powerful and poignant spatial reminder of the local neighbourhood's past.

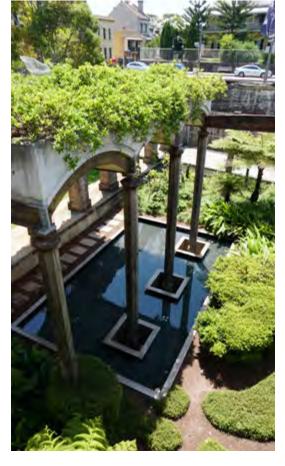
The disjecta membra of the site are not necessarily restored, but rather, carefully interpreted and new additions added above, adjacent or through existing fabric, creating an inferred spatial experience which are suggestive of the original structures and forms of the reservoir. Perforated steel panels arch overhead, whilst a new pond, suspended in-between three columns forms a central pivot at the heart of the gardens.

Counter-intuitive to the dogma of contemporary public space design, a park set below the street level by virtue of reusing the ruins means that the park becomes "...very quiet, it is a very contemplative space in the middle of a busy city. You can just be. There are very few places in Sydney where you can just go and just be." 49











Opposite Page First Column Top to Bottom:

 $06.10\ /\!\!/$ Contemporary steel structures expressed to imply the original arches of the reservoir.

06.11 // The central pivot of the garden, an enclosed pond reflecting sunlight to create a tranquil, dappled effect across the entire garden.

Opposite Page Second Column Top to Bottom:

06.12 // Detail of the new perforated screens, imprinted with a pattern which is reminiscent of the brick vaults which once ran over the entire reservoir.

06.13 // View of the transition between existing fabric and the interpreted new fabric which lies immediately adjacent.

06.14 // Remnants of an arcade support structure for the reservoir.

Below

06.15 // The subterranian nature of the garden ensures that the noise and traffic of Oxford Street are dampened, creating a small, inner city santuary.

06.16 $/\!\!/$ Perspective view through the gardens and remnant structures.

Below Right

06.17 // New planter boxes are cast in concrete, reinforcing the pattern of brickwork and creating a dialogue between old and new.











// **5 MARTIN PLACE**

5 Martin Place

Martin Place, Sydney

Original Architect

J. Kirkpatrick

Adaptive Reuse Architect

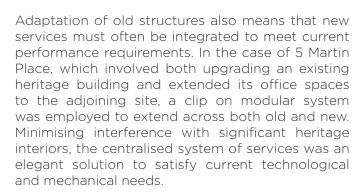
Johnson Pilton Walker Tanner Kibble Denton Architects

Original Construction

1916 / 1929

Adaptation

2016



Externally, the building takes on an equally considered approach and makes clear respectful reference to its pre-existing historical neighbour. Extension of established horizontal and vertical grids are simply abstracted and extended across the façade of No. 5 Martin Place. Referencing the scale as well as materiality of its neighbour, the extension provides "...a spatial pattern that previously supported public experience of this part of the city, the new tower entrance evokes an internal laneway connecting a reinvigorated Rowe Street to Martin Place."50 The result of these carefully considered architectural moves is the generation of a quiet, subdued architecture which is refined and undeniably belongs to its specific context and surrounding circumstance.











Opposite Page Top to Bottom: 06.19 // The contemporary side facade which faces the Modernist MLC Centre. It continues to reference the horizontal emphasis and other motifs but is evidently of a more dynamic expression.

06.20 // View of the transition between old and new clearly demarcated.

Left Top to Bottom: 06.21 // Details of the new facade fronting Martin Place.

06.22 // Details of the new facade fronting Martin Place.

06.23 // Detail of the junction between the old cornice and the new glass tower which rises behind.

// THE HILTON HOTEL

The Hilton Hotel

488 George Street, Sydney

Original Architect

Kolos & Bryant

Adaptive Reuse Architect

Johnson Pilton Walker

Original Construction

1960s

Adaptation

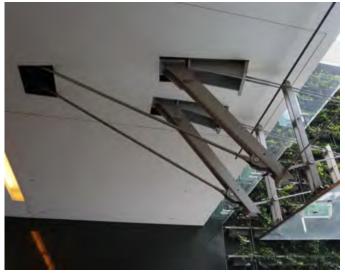
2005

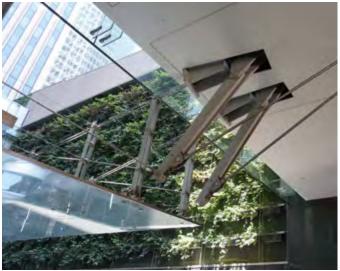
The Hilton Hotel's renovation represents how adaptation is not merely confined to heritage buildings. When we approach a project critically we may find that an existing structure is in fact sufficient and that minor surgical changes can have profound impacts on improving what is already available on site. This is an approach which not only serves economic and commercial interest, but more importantly, offers a more sustainable model of thinking about the cycles of construction and destruction in architecture.

Johnson Pilton Walker's approach to the 1960s building was to retain the primary modular tower of bedrooms and demolish the existing unsuccessful and dilapidated shopping arcade. This design decision also meant that The Royal Arcade, a 19th Century enclosed public street which connected Pitt Street and George Street bisecting the site was recaptured and restored and a new suspended glass canopy provides solar access into the very heart of the site. Along George Street, a new, sympathetic façade with references to the Romanesque columns of the Queen Victoria Building was introduced whilst finally, the rediscovered underground Marble Bar, the only remnant of the original 19th Century structures was restored and reopened. Through a careful consideration of context and meaningful consideration of existing building fabric, JPW's approach to the Hilton Hotel provides insight into how adaptive reuse can be applied outside the conventional bounds of heritage architecture.









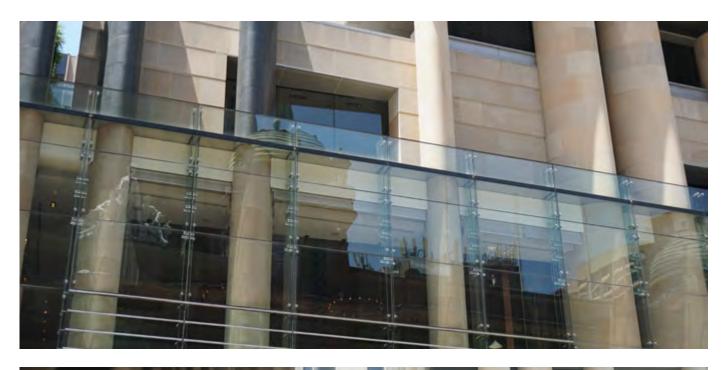
Тор:

06.25 // The new facade of the hotel's podium, with a glass curtain wall which reflects the forms of the Queen Victoria Building opposite whilst also suspended by its own line of concrete columns.

Above Left to Right:

06.26 // Mechanism for suspended the new open glass entry canopy in the promenade between Pitt Street and George Street.

06.27 // Mechanism for suspended the new open glass entry canopy in the promenade between Pitt Street and George





Above Top to Bottom: 06.28 # Detail of the glass facade facing George Street, with the reflection of the Queen Victoria Building visible.

06.29 $\ensuremath{/\!/}$ View of the new podium as seen from the Queen Victoria Building.



ANZAC MEMORIAL CENTENARY PROJECT

ANZAC Memorial

Hyde Park South

Original Architect

Charles Bruce Dellit Rayner Hoff (Sculptor)

Adaptive Reuse Architect

Johnson Pilton Walker

Original Construction

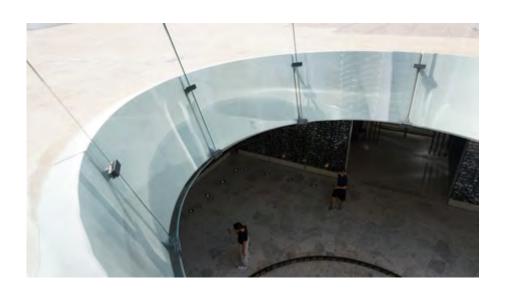
1934

Adaptation

2018

Stopped by the advent of the great depression, Dellit's original intent for a southern fountain cascade was never realised until Johnson Pilton Walker were appointed to create new education and exhibition spaces as part of the ANZAC Memorial Centenary Project. Referencing not only the historic existing structures but also the original unfinished intention of the architect, JPW reinterprets this vision into a new reinforcement of the Hyde Park Axis and extends the memorial with a new interpretive work which commemorates the sacrifice of NSW military service personnel.

Two southern fountains now frame a new sloping entry into the Hall of Service, lit in its heart by an occulus which references the existing Hall of Silence within the memorial. An interpretive art installation, designed by Fiona Hall, contains a handful of earth collected from each town and location across New South Wales, symbolic of how the call to service reaches every corner of this State. Outside of this new work, a new space to house the ANZAC Memorial collections as part of a museum as well as new education spaces enables the Memorial to not only be a space of contemplation, but a place of learning and understanding the history of conflict. Through this project, the ANZAC Memorial is both reinvigorated and transformed, its function extending beyond commemoration into education, its history recounted and its legacy preserved for generations to come.





Right Top to Bottom: 06.31 // View of the occulus from above on the steps of the original Memorial.

06.32 $/\!/$ View of the occulus from within the Hall of Service.

06.33 // Map of the World with NSW highlighted carved into the granite adjacent to the entry of the memorial.

Opposite Page Top to Bottom: 06.34 // The view from the occulus looking up toward the ANZAC Memorial.

06.35 $/\!\!/$ A view of the installation within the Hall of Remembrance, with the sun slowly moving away from its mid-day alignment.







// THE OLD CLARE HOTEL

Country Clare Inn / Tooth & Co. Brewery

1 Kensington Street, Chippendale

Original Architect

Sidney Warden

Adaptive Reuse Architect

Tonkin Zulaikha Greer

Original Construction

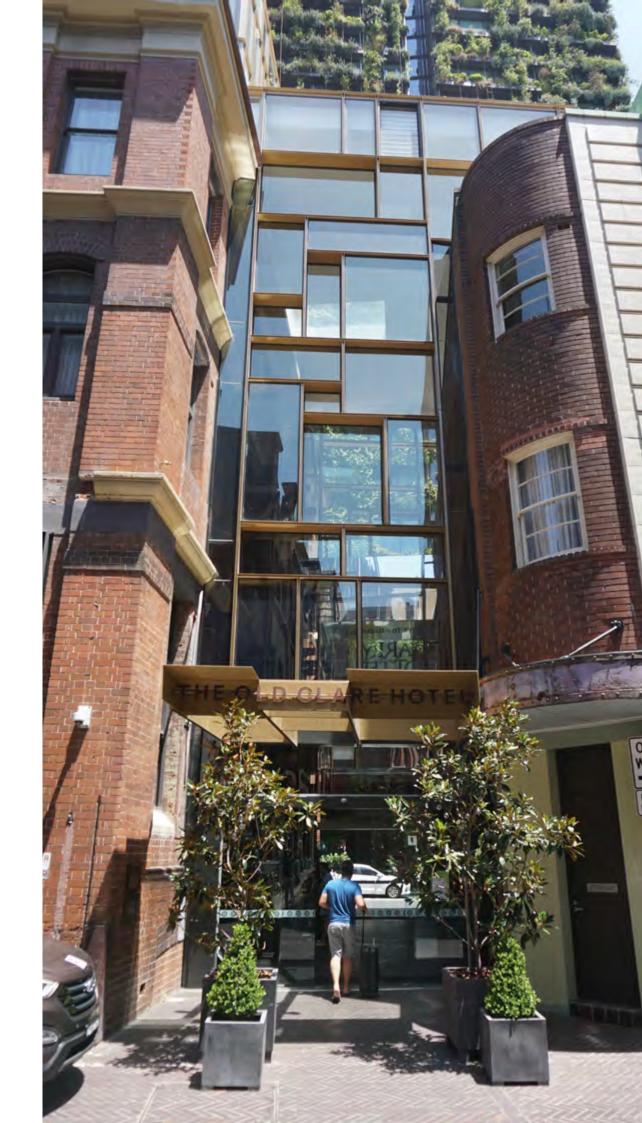
1885

Adaptation

2015

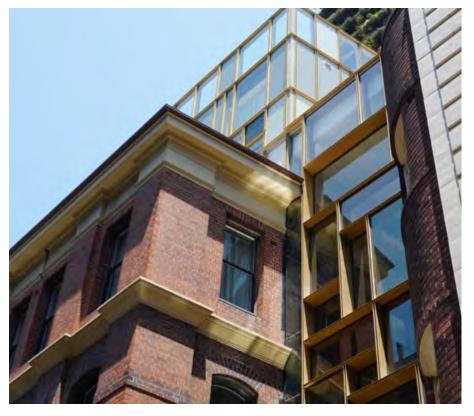
When a site contains buildings which are substantial in their own right, the adaptation of these structures does not immediately call for more additions or new insertions, rather. it may be necessary to take fabric away and create volumes which are the absence of specific programmed functions. At the development of the Clare Hotel, architects did precisely this and "...employed an architectural technique very deliberately called un-building the buildings we had inherited...we just sliced the brickwork from the top of the building straight through and we employed this technique which was quite powerful and architecturally emotional and confronting."51 Accomplishing this, new corridors could be run through the centre of the existing building, with new rooms on either side opening back into the streets.

Externally, the Old Clare involves a series of glass and steel forms, connecting across as a singular structure between three originally separated buildings - two pubs and an administration building. Through the act of enclosing a shared laneway in glass, the three buildings are immediately combined into one, with the now internal atrium laneway acting as a pivot point from which visitors and guests may access the different dining venues and hotel rooms. The project is thus a demonstration of finesse - analysing a site to find fabric which can be removed and making additions only as necessary.











Top, Left to Right:

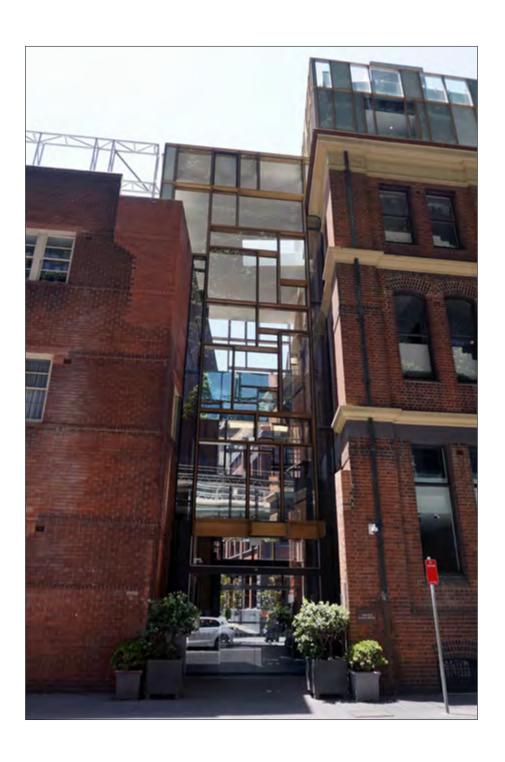
06.37 // View of the restored Old Clare Hotel pub, now a bar in the hotel's street facing frontage.

06.38 $/\!\!/$ New steel detailing articulating new full height openings into the ground floor restaurants and bars of the hotel.

Above, Left to Right:

06.39 // Detail showcasing the transition in materiality and the wrapping of the steel and glass structure over the existing building.

06.40 $/\!/$ Detail view of the proportional relationship between the new glass additions and the original facade.







// **CARRIAGEWORKS**

Everleigh Rail Yards

119 Lai Chi Kok Road, Mong Kok

Original Architect

New South Wales Government Railways

Adaptive Reuse Architect

Tonkin Zulaikha Greer

Original Construction

1880-1889

Adaptation

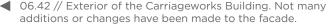
2007

The expansive train sheds which once formed the Everleigh Rail Yards are now the site of a multi-functional performing arts and exhibition venue. As the repair site for New South Wales' train network, the factory was already designed to be bathed in sunlight and its significant spans and regular structure meant that very little was done to alter the original structure. New volumes, fulfilling the new functional requirements of the Carriageworks venue were simply inserted between each of the bays. The only alterations made were to accommodate the major performance theatre but even then, the venue sits snuggly within the defined grid of columns and beams. Today, Carriageworks is a thriving arts hub, as well as host to regular farmers markets and Sydney Fashion Week, the minimal interventions of TZG demonstrating that an already highly accommodating and flexible space should not be heavily adapted and that alterations should only be made when absolutely necessary.











Opposite Page Top to Bottom: 06.43 // Steel awning structures now used for advertising,

06.44 # New insertions into the buildings in concrete, are carefully placed to reduce impact on the existing steel structures of the building.

06.45 //View upwards to one of the new skylights which services the major performance space building.

06.46 // View of the Carriageworks farmers market, contained in the adjacent sheds.

Below Left to Right: 06.47 // Detail of the existing steel column structures

06.48 // Upper levels converted into shared working spaces, closer to the original skylights to provide ample solar access.





// JIAJUM COLLEGE

St. Vincent's Church & Presbytery

117 Redfern Street, Redfern

Original Architect

Sheerin & Hennessy

Adaptive Reuse Architect

Cracknell & Lonergan Architects

Original Construction

1886

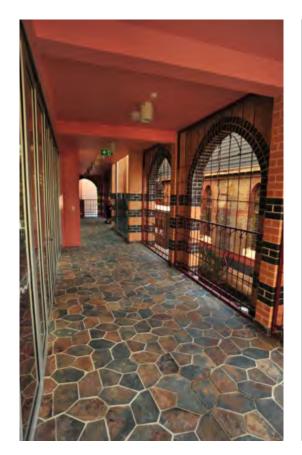
Adaptation

2012

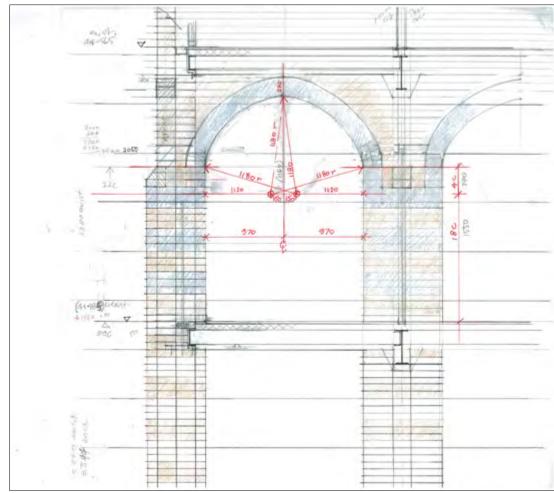
Born out of the good Samaritan work of Father Ted Kennedy, who first opened the doors of a Redfern presbytery to house local Aboriginal people, the site of Jarjum College is intrinsically linked to its local community. Now a school for Aboriginal children, the dynamic, colourful brickwork of the college are a direct reference to the equally dynamic brick facades of the adjoining church.

Fraught with a severely dilapidated heritage site, Cracknell & Lonergan Architects reconfigured the presbytery entirely, adding a new double storey arcade to support both a deep-set veranda and to provide shade and outdoor learning spaces for students. Wide glass screens opening into the verandas transforms the classroom into an outdoor learning space, encouraging different modes of teaching and learning configurations. Tucked away behind the conserved heritage buildings facing Redfern street, the once overgrown residual space between church and presbytery have been redesigned as a small courtyard, providing a muchneeded outdoor space for the students of Jarjum College.











Opposite Page Top to Bottom Left to Right:

06.50 $/\!\!/$ New veranda spaces for classrooms to flood into, so that practical examinations can be carried out.

06.51 $\slash\hspace{-0.6em}/\!\!/$ New staircase access connecting the two constructed pavilions.

06.52 $\!\!\!/\!\!/$ Construction drawing of how the arch was to be structured and determined.

l eft.

06.53 //Original state of the presbytery.

Below:

06.54 // Second view of the arcade and external facade of the completed project.







// JOYNTON AVE CREATIVE CENTRE

Esme Cahill Building, Nurses' Accommodation 3A Joynton Avenue, Zetland

Original Architect Unknown

Adaptive Reuse Architect
Peter Stutchbury Architecture

Original Construction 1938 / 1957

Adaptation 2018

Once a nurses' accommodation block for the Royal South Sydney Hospital, the site has been transformed into the Green Square Town Centre precinct, as part of the wider residential development and urbanisation of Green Square, Zetland and Waterloo. Taking a singular motif of an otherwise ordinary Federation building, the arched windows, Peter Stutchbury elongates, and expresses the form in a dynamically layered and powerful manner to create the new outdoor pavilion and indoor work spaces of the Joynton Avenue Creative Centre.

Steel timber and glass are all clearly expressed as arched tubes which run from the public square into the very heart of the original structure. The result of this is a powerful perspective framing, creating a repeated pattern of spaces within to begin defining future workspaces and shared spaces for its users. Where fabric has been deliberately removed, the architect has chosen to highlight rather than to hide, with carefully articulated details to cut corners exposing the brickwork and the implied plan of the original accommodation block. Here, heritage is not preserved in stasis, but powerfully altered with selective details expressed to ensure a decidedly respectful yet functionally contemporary building.

O6.55 // Detail of the new extended roof forming the covered public open space of the creative centre









Opposite Page Top to Bottom Left to Right: 06.56 // The gutter of the new roof exposed and revealed as an architectural roof feature.

06.57 //Overhead view of the roof structure, demonstrating how the layers peel back to become increasingly transparent.

 $06.58 \, /\!/ \, \text{External view of the timber screens which extend from inside out into the covered public space.}$

06.59 // Wide view of the proposal in context.

Below:

 $06.60 \ /\!/ \$ The timber slats start from inside, defining particular views and spaces before extending out over the covered public space.

Below Right Top to Bottom:

 $06.61\,/\!/\text{Detail}$ view of the sectional composition of the roof extension.

 $06.62 \ /\!/ \ Detail$ highlighting of cuts into the original fabric, these cuts are left exposed and highlighted across the building.









07 DIALOGUES: ADAPTIVE REUSE IN CONVERSATION

Over the course of this research project, a series of interviews were conducted with practitioners and designers to discuss their thoughts and experiences working within the field of adaptive architecture. This extracted section presents ten out of the twenty interviews undertaken in this project, examining the broad spectrum of works across the four cities and capturing a small snapshot of the current trends in architecture toward adaptation.

Each interview has been structured around broader questions which first asks for a definition of adaptive reuse and subsequently, its significance and why we adapt buildings. The interviews then focus into examining the circumstance, challenges, opportunities and final outcomes of a range of case-study projects which were identified in the previous sections of this journal. The interviews conclude with one simple question – what building in the built environment today might be worth conserving and adapting in the future?



Mr. Lawrence Mak General Manager, Planning & Design **Urban Renewal Authority**

DATE

FRIDAY, 2 MARCH 2018

LOCATION

Urban Renewal Exploration Centre Hong Kong Special Administrative Region

ABBREVIATIONS

LM - Lawrence Mak HC - Hugo Chan

Note: The following interview has been translated from Cantonese to English by the Author.

HC: Thank you Mr. Lawrence Mak for joining me for this interview today, my first question to you is what does the term 'adaptive reuse' mean?

LM: I think that there are some specific conditions which inform how the Urban Renewal Authority (URA) defines the term 'adaptive reuse'. One of the primary missions of the URA is to improve the urban conditions of old areas in Hong Kong. The nature of how we approach historical buildings in Hong Kong is quite different to other parts of the world fundamentally because of our extremely high urban density, the rapid movement of people within the city and, the quick pace of change in terms of building use and function. So, when we push forward a project which involves adaptive reuse, our first consideration is always: 'How can more members of the public enjoy or make use of this particular building or space?'

This approach is very much in line with international standards [of heritage conservation] but we also need to take on additional considerations, namely, to strike a clear balance between historical significance, architectural significance and future anticipated use. This is because if we purely use international standards such as The Burra Charter, we may be restricted to not providing new uses for these historic buildings and retaining its pre-existing use, as it might be deemed best conservation practice. But very often in Hong Kong, newer and stricter building codes restrict our ability to retain the original use after upgrade works and conservation works are completed, thus requiring us to consider new opportunities and functions for

these buildings. For example, the conservation of an old residential building does not necessarily restrict its future use to still being for residential purposes. We often consider more functions for reuse of these historic buildings for more members of the public can access and better enjoyment. I would say this is the main difference in our approach to adaptive reuse, with other considerations generally aligned to international conservation standards.

HC: On that note, I'd like to ask if you could elaborate on the aims and mission of the Hong Kong Urban Renewal Authority.

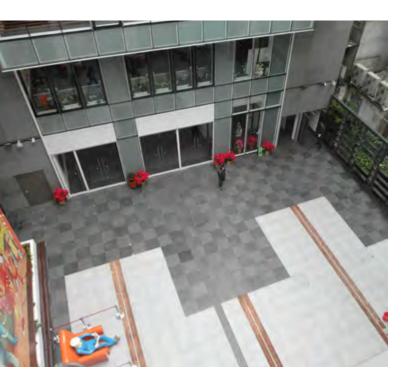
LM: The URA was established under the Urban Renewal Authority Ordinance (L.N 92 of 2001, Cap. 563), and within this, our primary mandate is to transform Hong Kong's old urban areas to improve the overall quality of the built environment. From this, we endeavour to improve the quality of housing whilst also simultaneously taking into broad consideration, neighbourhood infrastructural needs and improving the quality of public spaces for the community. Within the URA's strategy, our work is defined by 'The 4R's', with the first two being Redevelopment and Rehabilitation, which are our core business, while the other two namely Revitalisation and pReservation.

When we are confronted with a project, which may involve a building of historic merit or architectural significance, we take on a holistic view of how we can revitalise and reuse the building as well as integrating its function within a wider urban planning precinct.

HC: You mentioned Revitalisation as one of the 4R's, is there a case study example which you were involved in which illustrates the process and approach of the URA.

LM: One of the interesting projects which I was involved, was the Mallroy Street/Burrows Street revitalisation project which is located in Wan Chai. This project was first announced in 2005 and it involved ten small, individual Tong Lau lots. These ten buildings were completed in the 1910s and was one of the last remaining clusters of residential dwellings built in the pre-war Tong Lau style.

When we first started the project in 2005, we began with a public consultation, which took in a diverse range of opinions from academic experts, local residents, and other stakeholders. A series of design forums and design charrettes were organised to discuss how we should revitalise and re-purpose this cluster of historic buildings. During this period when we were receiving feedback from the community, the early 2000s was also the beginning of a broader public discussion and increased awareness of heritage conservation and revitalisation in Hong Kong. In the end, the outcome of our public consultation reflected that the community asked for the site to be used as an arts and/or cultural venue.





We took on board this public view and proactively began planning, studying and designing a solution which would enable a cultural use for the site. In short, the proposal sought to amalgamate the ten lots, adaptively reusing this site to generate a place, which could be accessed and enjoyed by the general public. With this aspiration, we presented our initial proposal to the Town Planning Board for approval.

To give you an overview of this design process, in Hong Kong, town planning is broadly defined by Outline Zoning Plans. One of the primary aims of "urban renewal" as a legacy if the 1980's for Hong Kong is 'slum clearance,' where building stock in severely dilapidated and poor conditions needed to be demolished and replaced with new housing. This zoning plan arose out of increased demand for housing and the generally poor condition of prewar housing throughout the city, many of which did not have basic sanitation facilities, including the Tong Laus of Mallroy Street/Burrows Street. At the time the site was used as sub-divided flats but they had no sanitation facilities.

In light of this, there was a real need to demolish and rebuild part of the site. The original zoning plan for the site was to create a new open space, which involved the entire demolition of the existing structures on site. The aim was to provide a new pocket park as Hong Kong is generally lacking in public open space. At the same time however, the housing cluster was designated Grade II Listed buildings. We therefore had to strike a balance



in the final design solution, negotiating with the Government and specifically the Town Planning Board on how we can provide adequate public open space, but also retaining the characteristics of the housing cluster.

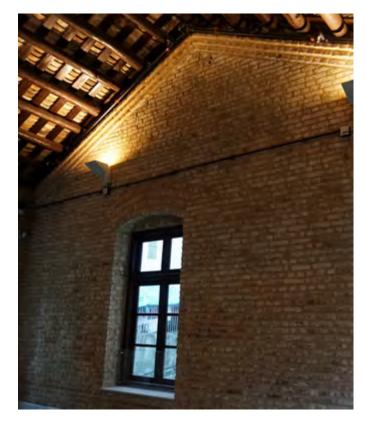
We commissioned a heritage conservation study to establish the elements, which were of particular historical significance. This cluster did have some very unique characteristics and features. It is a fourstorey building, with masonry brick wall construction and timber roof and floor frames. It used Chinese curved roof tiles, reminiscent of traditional Chinese vernacular village housing. These were all identified as key elements, which were marked for retention in developing our final design.

Having identified these elements, we still faced with the dilemma of providing a new public open space. Within the two building clusters, which faced the two streets and were divided by a narrow alley in between, we identified the Burrows Street cluster, which was in a comparatively worse condition, as the opportunity for redesigning it as the required public space. With the cluster of four houses along Burrows Street, we opted to only retain the façade and front building portion because the buildings facing both streets had a similar architectural character. We made this decision because unique balconies and

iron balustrades, which were also considered to be of architectural significance and merit, defined the street facing façades. The demolished component of the Burrows Street cluster thus became the new public open space, enclosed between the clusters. which could be used freely by the public.

HC: It has now been over a decade since the project first commenced, can you discuss which Arts organisation has been using this site since the revitalisation works were completed?

LM: As I previously mentioned, in 2005, when we held the public consultation, the outcome was that the site should be an arts or cultural venue. As a result of this, we initiated a new study to run in parallel with the conservation works, which looked at how we should operate the site in future. We commissioned a study with the involvement of Professor Desmond Hui from the Chinese University of Hong Kong, to consider how we should operate and run the venue in future. The key recommendations of this study was that the site should be managed independently, and this organisation should be deeply involved with and have a thorough understanding of local Hong Kong culture. At the same time, this arts organisation needed to be reasonably well-established, having operated in the city for some time, and have some experience in building management. These



requirements were very much due to the condition of the historic building, where special care needed to be taken in installation of works, as well as specific requirements for building loads. In our study for future operations, our premise was to have a single main operator. This operator would have past experience in local arts and culture, enabling them to serve as a central organiser who could then bring together a group of artists and participants to engage with the local community through public events and exhibitions. From the requirements of this 2009 study, we went for a public tendering process, which the Hong Kong Arts Centre was eventually awarded, with a proposal to use the site as a focus for animation and comics. Following a panel review involving URA internal members and community experts, the site became the home of Comix Home Base.

HC: I would now like to turn to another project, which is just commencing works, the Central Market located in Central. Can you elaborate on the initial process for this project and what you envisage for the future of the Central Market?

LM: The Central Market project has actually gone through quite a few iterations. In 2009, we were first approached by the government to commence a study on the future of the Central Market, which had already ceased operations for some years.

Because of certain conservation requirements, the government requested the URA to step in to look at how we could revitalise and reuse the market building. This building dates from the 1930s and is part of the modernist architectural tradition, known as the 'streamline moderne' architectural style.

When we were first engaged to look at the site, we endeavoured to seek public opinion andhence; we proceeded to establish a community consultation process to engage the community, hosting a series of forums and charrettes. Mainstream public opinion arising from this process was that the site should not be revitalised as a shopping centre and, should not be occupied with chain stores and boutiques. Public opinion was that the site should be for those who live and work in the Central district, for them to have a breakout area or breathing space, with minor general retail spaces. The proposed spaces should focus on community needs with opportunities for local events and activities to take place. The URA took on board these views and directed the design of the building toward such aspirations.

In terms of the architectural design of the project, we worked with several architectural practices; to develop a series of options which was eventually narrowed into a more resolved detailed design adopted for construction. We are also currently seeking further views on the ideal use and operation



for the site and how the future tendering process for the operation of the site should take place. Some of the options under consideration include whether the URA should maintain a role in the ongoing operation of the site, or whether it should be split between the URA and other organisation(s). We are therefore in the stage of reviewing these proposals.

HC: In terms of the Central Market, you will of course be making some changes to the spaces, whilst also carrying out conservation works. What are some of these changes, which are taking place?

LM: At the conclusion of our conservation study, we actually found the Central Market to be a very functionalist design. This is because it comes from marketplace design from the 1930s and was indeed considered to be at the forefront of architectural design in its day. In contrast, the dominant typology in the 1930s was still based on the Tong Lau, a basic masonry brick construction, with timber framed floors and the use of traditional tiles for roofing.

At the time, the Central Market was considered It used reinforced revolutionary. concrete construction, which was a very new construction method at the time. Its architectural style was streamlined and contemporary, what we may consider to be part of the international style. Its

internal organisation was based on the column grid structure, which gave it a high degree of flexibility, with the opportunity for partition walls to be changed as they were non-structural. This simple and flexible architectural design approach was highly suited to its function as a marketplace, which is why it is considered to be unique and significant.

Our conservation approach seeks to maintain and honour this flexibility of spatial function. We will also be restoring and conserving many of the external features, such as the horizontal fins and the horizontal band windows. In addition to this. the interior of the market has a significant internal atrium and grand staircase which will be preserved and in future, be reopened to the general public.

Another recognisable feature of the Central Market is that it is a major thoroughfare which forms part of the Central Mid-Levels escalator walkway system, which we will be retaining and conserving. We will also be aiming to reinforce the relationship between the interior spaces of the Central Market and this walkway system. Overall, I think the approach is very sensitive and respectful of the original 1930s building fabric.





HC: In our conversation today, we've talked about one project, which has finished and is in operation as well as a project which has just commenced construction and revitalisation works. In your personal opinion, what would you say is the future of adaptive reuse and is there a work in Hong Kong that you feel should be conserved and would be worthwhile revitalising?

LM: This is actually a very good question because in Hong Kong, which is such a small city so full of spectacular things, has maintained government proposals such as public-private partnership schemes for conservation over the years, which has proven to some degree a success. As we retain more and more of our past, many of our oldest buildings have already been identified as graded buildings or, declared monuments which are protected under strict heritage laws. So, looking ahead towards the future, I would say that our major challenge is to recognise that our architectural works of today, will eventually become the heritage of tomorrow.

We are now moving towards conservation of Post-1930s buildings, many of which are of a reinforced concrete construction. In the case of the Central Market, the conservation of reinforced concrete component is extremely challenging. The design life of these buildings is essentially for only about fifty years. Whilst there is now some discussion of moving toward using stainless steel for reinforcing to prevent concrete spalling for new and future buildings, this does not solve the problems we faced with conserving buildings from our recent past. We are faced with buildings whose designed life is only fifty years and, in many ways, conservation of bricks or stone like those found in Ancient Rome is actually easier, these structures have few issues surviving for the next several hundred years. The challenge for today is to look at new technologies and techniques in conservation to retain reinforced concrete buildings.

In Hong Kong, determining what ought to be preserved will I think, remain a matter of wider public discussion. But, personally, I think many of the iconic modernist buildings which still remain in Hong Kong such as the City Hall are of architectural significant, however the issue of reaching the designed obsolescence of reinforced concrete which I mentioned earlier, remains to be addressed.

HC: Thank you very much for your comments and views.



Mr. Michael Moir **Central Police Station Project Director** The Hong Kong Jockev Club

DATE

Friday, 2 March 2018

LOCATION

The Hong Kong Jockey Club Headquarters Hong Kong Special Administrative Region

ABBREVIATIONS

Michael Moir MM HC Hugo Chan

HC: Thank you Mr. Moir for joining me for this interview today, I would like to start by asking you: what do you think the term 'adaptive reuse' means?

MM: I think who designs and constructs a building obviously does it for a purpose and this is driven by social and economic reasons. But over time, of course, the original purpose often changes, and buildings can become redundant. In that situation, I think the choices that people are faced with are demolition, reconstruction or conservation. Conservation on its own does not necessarily guarantee the long-term survival of the building, unless there is a purpose for having the building. So the whole concept of adaptive reuse is to reuse buildings for a purpose which is required either for social or for economic reasons. To that extent. I think adaptive reuse has become the accepted practice around the world as a way of retaining valuable heritage assets.

I think the best example I can give in my opinion would be the TATE Modern, where a rather handsome power station, designed back in the 1930s, coal-fired, had become redundant - it was not economic to produce electricity using coal in that part of London and it has since been transformed into one of the best galleries of Modern Art in Europe. I think that is a very good example of adaptive reuse on a very large scale, which has produced a museum attended by over six million people per year.

HC: Building on that, I would then like to ask you about The Hong Kong Jockey Club and its involvement in adaptive reuse in Hong Kong community projects.

MM: The Jockey Club is a non-profit organisation, we operate horse racing in Hong Kong and we run eighty race meetings a year, with two race courses, one in Sha Tin and the other in Happy Valley. In addition to that, we do wagering on horse racing, wagering on football and we also run a lottery called the Mark Six. It is a pretty unusual model in that all of the surplus funds generated from this model are allocated to the Hong Kong Jockey Club Charities Trust, who have a mandate to use those funds to support the betterment of Hong Kong through community projects, supporting areas where there is need in Hong Kong and the HKJC has been doing this for a very long time. The Central Police Station project is a pretty large-scale effort on behalf of the HKJC, but it is not the first large scale project the club has done.

If we look back to the 1970s, the HKJC worked on Ocean Park and operated it for about the first ten years. Subsequent to that, we built the Hong Kong Park and Kowloon Park, those were operated by LCSD (Hong Kong Leisure and Cultural Services Department). More recently, we have designed, built and still operate the three public golf courses in Kau Sai Chau. Large projects is something that the club has done and will continue to do in future.

HC: In terms of the Central Police Station, I wonder if you could start by discussing its context as well as how the Jockey Club first became involved.

MM: The Central Police Station Project was first initiated in the early part of the 2000s. It is one of the largest and most prominent collection of historic buildings in Hong Kong in a very prime urban area. For about 150 years, it was the centre of law and order in Hong Kong. A very unusual combination again, as you had a prison, a magistracy and a police station in one location, essentially it represented this one stop shop for justice, where people could be arrested, tried, convicted and sent to gaol in one location.

Around that time, there was an increasing awareness in Hong Kong about the importance of historic buildings and cultural heritage, particularly amongst the younger generation. A lot of this had been triggered by the demolition of The Star Ferry, which was a very prominent example where there were a lot of protests against that, particularly the Star Ferry Clock Tower which was a very symbolic building in Central.

There had been a scheme in the past by the private sector to take the government's historic assets. There was a project in Kowloon, which was the Marine Police Headquarters, where I think the heritage conservation interest groups had felt that they had gone too far, in terms of commercialisation. Although they did retain and conserve the buildings, they lost the setting, because they allowed the parade ground to be redeveloped. Therefore, there was a reluctance on the part of the government to engage with the private sector, even though there were private sector offers to do that [for the Central Police Station]. I had actually worked on one with Swire Properties in preparing a commercial proposition for the use of that site.

I think it was through dialogues of what could the Jockey Club do, that this project obviously emerged as one which the HKJC could take on. So the question of whether the government asked the Club or the Club asked the government, I am not quite sure whether I could answer that, but essentially it was a good idea that the Club could get involved in this, if for no other reason that there was no other organisation that had the scale of financial resources that could take on this project in a way that we could.







HC: Building on that then, I would to talk a bit about the design and the process that you were involved in and that you went through in terms of decisions about what was to be retained and, what new development could take place on the site as well.

MM: The site is actually made up of three declared monuments, the declared monument status I think established in 1995 or 1996 and essentially includes the Former Victoria Prison, the Former Central Magistracy and the Former Central Police Station. Declared monuments is the highest status of conservation in Hong Kong, therefore, it is with a high degree of caution that you go into a site with a view to undertaking adaptive reuse.

We held a public consultation back in 2007-08 which ran for approximately six months. The Club had put a scheme into the public domain which had involved building a tall building at the back of the site and this was not generally accepted by the public.

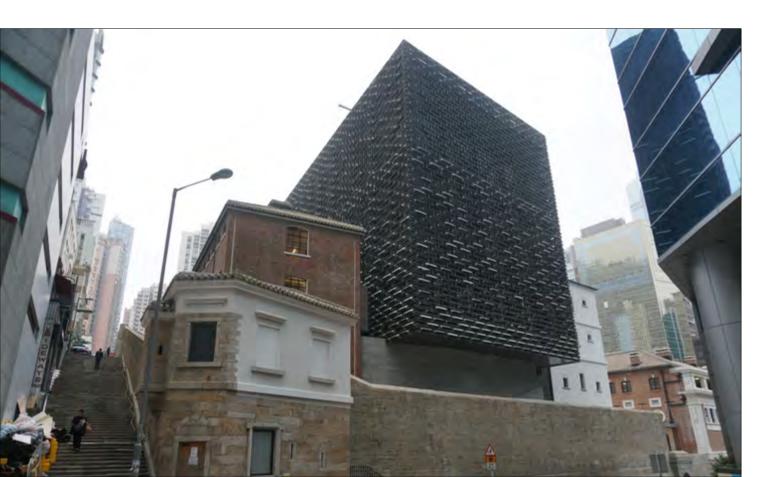
However, what did come out of the public consultation was first of all there was recognition that the heritage buildings should be conserved, there was support for a cultural use, particularly contemporary art, because interest in art was beginning to grow in Hong Kong at the time. There was also a desire to and acceptance that there

could be an element of commercial development on the site to provide support facilities and also to contribute to the financial sustainability. Those were the driving forces if you like from the public consultation.

What was difficult at the beginning was that we knew we could add two new buildings and there were two locations where we could add them but we were uncertain as to what scale the buildings should have. We identified it would be good to have a theatre or auditorium and also to have a gallery of contemporary art. It was only after a number of studies that we decided on what would be a reasonable scale.

HC: Can I ask more about this design process, who else was involved in terms of conservation and design development?

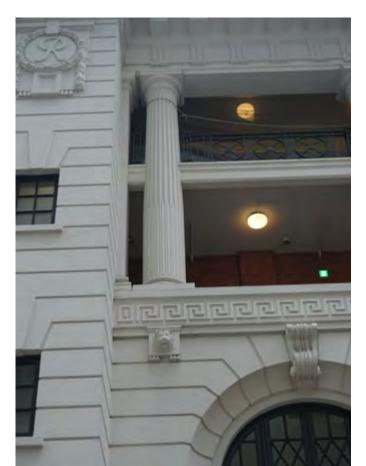
MM: The first consultant we appointed was Purcell, which is a United Kingdom based heritage architect with a great in-depth experience of projects throughout the United Kingdom. Back in 2008, they undertook a Conservation Management Plan for the site, which is a document which has subsequently been updated and will be updated in future. Essentially that document analyses the historic context of the site and it also sets out the challenges of conservation plus the opportunities for conservation and it also sets out some very



clear policies which could be applied to the site. That document became the guiding principle, taking the site forward.

We then appointed Rocco Design, Rocco Design is a well-respected international firm which originated in Hong Kong, they had the role to contribute to the design, but also to be the executive architect in terms of regulatory approvals and contract management. The final one we appointed was Hertzog de Meuron. Hertzog de Meuron really took the lead design role, in the context of the new buildings and the modern interventions.

This was the first time I think I had to work with three architects, two I had done before, but what I think was interesting for us was because the roles were so distinct and clear, there was a strong degree of collaboration to find the best outcome. It was not about individual architects trying to stamp their authority on the project, it was about how they collaborated together to do the tradeoffs and balances you need to come up with this combination of old and new which I think had not really been done in Hong Kong before. There are many examples of this in Europe but there are very few examples of this modern extensions to heritage buildings in Hong Kong.





HC: I would next like to ask you about some of the design challenges that you were faced with when working with not just with all these architects but also with three declared monuments, whilst also proposing new spaces inserted into the Central Police Station.

MM: Certainly the challenge of trying to adapt declared monuments to modern code requirements for a new use was very difficult and it took a long time for us to work with professional advisors that I mentioned before to find what were the optimum solutions and how could we persuade the various branches of the regulatory authorities. The main two involved were the Buildings Department and the Antiquities and Monuments Office. Over time we resolved all of these problems and came up with solutions which we will be documenting, and we will be sharing so that other people can use these as references in future.

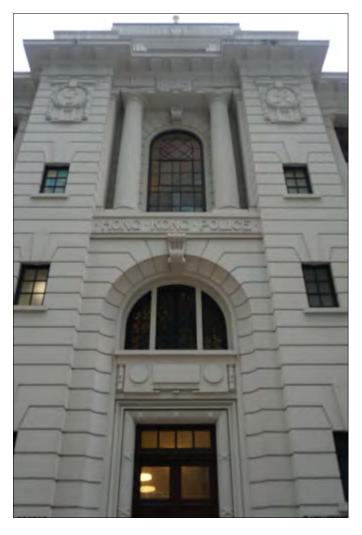
The level of experience in Hong Kong on heritage buildings before this project has been relatively limited, in fact some of the buildings which have been adapted and in fact are government buildings where they are exempt from following certain regulations. We had some interesting examples of visiting other buildings where this had been done which we were not allowed to do in this particular project. Overall we think we've come back with a very good outcome, in that the form, character and features of the heritage building have been restored.

Our goal was to make this an exemplar project, we set out with the objective of this being regarded as one of the best examples of international best practice approach to heritage conservation, certainly in Asia. That was the goal that was set form the beginning and it was quite a high bar, but we have put in a lot of time, effort and money to get across it. We are very happy with the outcome.

HC: Moving on to the operation of the site as it opens in May 2018. There are obviously economic and social considerations in terms of, often expenditure for adaptive reuse projects are more expensive than new purpose-built buildings. How have you been able to manage that side of the project?

MM: I think the Hong Kong Jockey Club Charities Trust has positioned this as a gift to the people of Hong Kong, and so it is certainly not looking to get a return on the capital investment, but we were seeking to establish a sustainable financial model. There had been acceptance that commercial elements which primarily are restaurants and retail could be included in the scheme and our objective was to set up a financial structure in which there would be sufficient commercial revenue to pay for the operation of the site, but not the content. It is a centre for culture and heritage basically, heritage and contemporary arts, predominantly arising out of the earlier public consultation and other expert advice that there was an opportunity to create something involving contemporary art in Hong Kong.

As we are about to open very shortly, the retail market and the restaurant market has gone through quite a significant downturn in the last few years we have not quite reached the financial sustainability that we would like, but over time, I think this will resolve itself. The auestion of the longer-term funding of the arts and cultural content is something which is no different from any other cultural organisation and we have a plan to eventually develop a more diverse funding structure. For the initial years the Hong Kong Jockey Club Charities Trust has already committed to funding the cultural programmes, which is something that it does anyway, it funds the Hong Kong Arts Festival for example and many other cultural events.



When we looked at the project initially, the principal content was arts funding, contemporary arts funding. The benchmark which I presented to the Board (of the HKJC) which has not significantly changed was the Serpentine Galleries in London. This was another example of transformation of heritage properties into a centre for art and roughly speaking they are approximately GBP 10 Million per year to run the programmes and they have a diverse source of funds very little of which comes from the Government.

In Hong Kong, for a variety of reasons, there has not been the opportunity for privately operated galleries to develop philanthropic funding models. Over time we think that Tai Kwun is positioned to do this.

HC: I would now like to talk about the future arts component of the project, is the Jockey Club going to be running the site or has it worked with other organisations to look at the funding and operation of the site?

MM: In the context of arts operations, we did about three or four years ago, look to outsource. We wanted to know whether there were any organisations with the level of expertise and experience who could come in and run, because it is not something that we do, we run horse meetings and events like that. However, following a request for proposal and assessment, it was clear that we didn't have the confidence to place this responsibility with another organisation so we took the view that we should build our own heritage and arts management team.

We have been doing this for a number of years. This team will work with partners, we are not a curating organisation, so all of the exhibitions we will put on, there will be a joint curation or managing the work of curators with other organisations. The operating organisation (Tai Kwun) is headed by a gentleman called Mr. Timothy Calin, who until last year (2017) was Director of Performance at the Sydney Opera House and he joined us to be the Director of the Central Police Station and run the operations there, including the cultural programs.



We do think that we have the opportunity here to create a very unique combination of arts, education, history, heritage with restaurants and other facilities which will enable the general public to come along, spend time and enjoy themselves. It is a large site, almost 1.5 hectares in a very prime location. It used to be closed off as a prison and we have created new openings to make the site more accessible. It is the intention that a vast majority of the events and programmes which run on the site will be free of charge. Hong Kong has not really had anything like this where you have this mixture of things going on in one location at the same time, so we do expect people to use this place and to regular attendees at the variety of events we intend to produce.

HC: Finally, I would like to ask you whether you see the Hong Kong Jockey Club continuing to work on potential heritage projects in Hong Kong such as the one you're feeling. And whether there are heritage buildings that you feel are important to the city and in future might be worth of adaptive reuse.

MM: I think that we will need a period of digestion of the one that we have, is the best way of putting it. Having said that, we still do funding of heritage projects, so for example, we were major contributors to the Asia Society Hong Kong and there are other projects which have received Jockey Club Charities Trust funding as well.

I'm not sure that there are any buildings that spring immediately to mind that we could or should look at. I know that Wan Chai Police Station has been sitting there for some time, looking a bit lost and forlorn, but I don't know what the future plan for that is.

We have a good working relationship with the Commissioner for Heritage and the Antiquities and Monuments Office. It has been quite a difficult journey for all of us because no one has ever done what we have done at this scale (in Hong Kong). Also I think that the underlying conditions of the building were in much worse than we expected when we took the project over, so a lot of effort has been but into creating Central Police Station and a lot of good lessons have been learned. So it would not surprise me if we took on something else in the future, but maybe a pause for digestion is needed first.

HC: Thank you, thank you very much.



Mr. Paul Appleton Partner, Allies & Morrison

DATE

Friday, 16 March 2018

LOCATION

Allies & Morrison London, United Kingdom

ABBREVIATIONS

PA Paul Appleton HC Hugo Chan

HC: Thank you very much for joining me in this interview today, Paul. I would like to start by asking you what the term 'adaptive reuse' means in architecture?

PA: For me, it means the re-purposing of a building for a function which it was not originally designed. But I have to elaborate by saying that in a way all buildings get re-purposed during their life, even when the principal use, for which they were designed, is the same. It is a complicated term which is understood differently by different people but for me, I am taking it to mean, for this discussion, the re-purposing of a building for a function which it was not originally designed.

HC: I would like to also ask about the social and cultural significance of this. Often for example, older buildings, heritage buildings are retained and repurposed. Why do you think that is? Why do we not simply demolish these buildings and build new purpose-built structures?

PA: I think the answer lies in our contemporary culture in a way, which is in a sense the accumulation of cultures. This is because the answer to the question is we did not always (retain and repurpose older buildings) and we have not always. What I think is interesting about our approach to heritage and culture now is that we are not only interested in making perfect things which then reflect exactly what the function of the building might have been, but we are interested in how we as human beings react to those. I think an analogy

of that is in the city itself, where almost any project that you do, whether it is re-using a building or a site which appears to be new, is in fact reacting to what surrounds it or what was before it. So, cities and buildings are an accumulation of centuries, sometimes millennia of social history and physical history. In a sense I suppose, your question was also why do we do that; well I think it is because we are constantly interested in time, actually and how the past and present and future are somehow umbilically linked.



HC: Broadly speaking then, when are confronted with an adaptive reuse project, as opposed perhaps to a completely new site, what challenges do you immediately face, or how does your design approach differ to when you would approach some of your other projects.

PA: Well I suppose it does differ, but I would like to say that it did not, because, almost going back to the first point, that what one is always looking for in the beginning of a project is the clues to how that particular context, which might well be a context rather than an existing building, will affect the way you think about the present problem or the present challenge in order to make a future for that place, which is an accumulation of all those things.

So, when one approaches the building which is to be reused, a physical structure, I think we probably do think about that rather like a site, it is just that there is more of it that is going to be reused specifically, rather than if you were building next to something. It is not that there is a fundamental difference in the approach, and I think that probably it is not true for all architects but for our practice, that idea that you are seeking something from what is there, in order to make things that you might not have arrived at if it was not for those clues.

HC: I would now like to turn to one project of your projects, the Chelsea College of Art and Design. Would you mind by first describing the building and site before it became the college?

PA: Immediately before it became what it is today, it was almost empty. It had been designed as the Royal Army Medical College at the beginning of the twentieth century, and therefore it was a collection of buildings which included a mess building, a barracks building, a married headquarters. The kind of things you would associate with an army medical college - there were surgical facilities and lecture facilities as well and these were all grouped around a grand parade ground.

I suppose what was very distinctive about it, in the history of London, was that it had almost been forgotten because it had a great 12 ft [Approximately 4 metres] iron fence around it and all those spaces, all those buildings and the parade ground had remarkably just evaporated in terms of cultural impact. It sits right next to TATE Britain, and yet when I visited TATE Britain, I barely noticed it, and the site is as big as TATE Britain, so it was a very surprising thing. So, in a way, nothing was there, but it had been a very important facility over the past century.









HC: When you were first confronted with the brief of transforming the site into the College for Art and Design, what were some of the functional considerations, what were some of the new spaces that had to be created to satisfy the brief?

PA: It was a bit of an experiment I suppose, I mean the University of the Arts, London came upon the site and when I started working with them on it, they had not yet acquired it. It was government owned, so we had to make a case to the government, that they should sell it to the university rather anybody else. And there were, as you can imagine, lovely buildings next to the River Thames, there was a lot of competition. The university was never going to win that battle on money, and so it had to beat that by saying there would be some public benefit.

The way we started to think about it was to ask, first of all, is it appropriate? Could an art college happen within these relatively constrained buildings there were lots of constrains within them from their original function, but they were incredibly robust. Our conversation was really all about, firstly was there enough space overall? If there is enough space, can it be used in the right way? Then there were certain things that the college brought with them that you realise quite early on could not be accommodated very well in those buildings. There were no buildings guite big enough for the workshops for example. Also, importantly, the buildings, though they were a set of buildings, weren't connected quite well enough. That provoked our initial responses I suppose.

HC: You mentioned connections and I would like to build on that, because one of the successes of the project is you have put in some very careful incisions really of new fabric in order to connect all of the buildings. Can you describe what that process was and also how that reinforces. reinterprets but also conserves the historic character?

PA: I think what we did with the college and the university, was to try to see the buildings, these robust buildings as something that could be repurposed fairly easily. In the end there were three principal buildings which were facing the parade ground, which was the college building, where

lectures happened originally, the barracks building and the married quarters. What we were after was slightly subverting the military purpose of the buildings by finding a way of unifying and making them legible as a group, without taking away the character of the independent buildings.

Our early decision was that the parade ground was the heart of that; first of all we would open that up to the TATE, make a proper connection with Atterbury Street, which was the street there and thus form a new London square. Almost without spending any money at all, we just got a sledgehammer and knocked down the fence and you had a new London square!

Then behind those three buildings, we inserted the circulation in new light, top lit spaces, meaning we could take out the rather ad-hoc circulation which had grown up over about a century, from the buildings themselves. For example, the Barracks building, where people had been billeted, had over time, become a chaotic building. It was a forest of rooms and staircases. We were able to take out the corridors and staircases because all of that was placed behind and having done that, they suddenly became rooms which were great for an art college because there was no clutter in them - and funnily enough they were nearer to the original intentions of the architects than they were before. By taking the circulation out and making these special modern insertions which stood slightly behind the buildings, one of the things we have recognised is that the life of buildings happens in the common spaces. You can have your studios and so on, but everyone actually bumps into each other in the common spaces so let us make those a little bit wider, let us make things happen in those and make those the active centre of the building and how people appreciate it. Behind that were new buildings like the workshops, which were placed behind that and could be new build, because all we had to do was demolish ad-hoc accumulations which did not have any value.



The buildings were listed, but they were listed Grade II and I think it is great credit to English Heritage that they saw the merits of being quite robust in one's approach to it. So yes, we kept the buildings and made them in my view more recognisably important than they were before, so we cleared things out. But, in order to do that, we could not be timid. Saying that, I think we were always careful that whilst we were making these general decisions (and in a building which is being adapted, this might be a principle that you apply) we took away everything that was bad and then did as little as possible and allowed the users to occupy it with as little change as possible, which is more or less what we did.



HC: I would also like to ask about the materiality, because some of the new incisions are very clearly defined and different. Is that something that is important as opposed to using similar materials?

PA: I think it can be a bit of a trick actually - you may think that but actually, before the new things were conspicuously placed there, a context for those was produced. In other words, we extended, quite subtly often, adapted the original building in order then, to give a context so that the new building seem as if they were comfortable there.

It reminds me a bit of the Asplund's Building in Gothenburg, where a classical building had been damaged and he appears to put next to it, law courts. He appears to put in a completely new extension, but what he has actually done is he has repaired, seamlessly the existing building before extending it. So if you look at the plan, the new buildings are in fact half the old buildings as well. I think that lesson learnt from Asplund is one that we take very seriously and we take it seriously in cities, too. We are not there in order simply to posit new buildings elegantly against old, we are there to extend the fabric, and where appropriate, and only where appropriate, to make things which look especially new. There is not an ambition I think to make these things, per se, look separate and new. But, equally, what we are doing is telling a complicated story. Our story is not "this was the existing, that is new, and you should tell the difference between them". Our story is more that, to describe the continuity of the new connections, one had to have an integrity

which was related to itself. Not so much that it was new, but that it is related to itself. Then, added to that, the methods of building now, and the ways that one can build, enable you, for example behind the barracks block, to make a completely glazed wall, and we made a completely single glazed wall, so we deliberately made that a cool, non-heated space. Outside that we placed a veil of aluminium rods in order to ensure that it would not overheat. So, it became something that was slightly different from the original building and the way it was different was more in the fact that it was unheated. it was outside, on the exterior, and that it was used differently, rather than it was explicitly modern or not modern. I think that is a very important thing for us.

HC: And were there any challenges physically on site, with the existing structures when you were confronted with this project?

PA: Yes. There were lots. To introduce these challenges, we were lucky in that Chelsea College were interested at this moment in how you could make art space, or space for teaching art, something which was itself responsive to context, which forty or fifty years ago, would not have been the case. People had been trying to build the perfect space, the perfect north lit painting studio. Those very specific constraints clearly could not have been accommodated within a series of existing buildings. If that conversation had not happened and if we had not understood that, then I think we would have had more difficulty. So, it was only in the new things that had very particular requirements to be like they had to be, which then had to be independent from the existing buildings, that we were in a sense confronting the buildings. The College was interested in the fact that people would be learning and be taught in studio spaces within an existing context.

Quite specifically, one of the buildings which was the married quarters, which was a series of flats essentially and they had party walls and English Heritage considered that those party walls were an important part of the listing value. We had, behind that, to create the circulation independent of that. It so happened, that the Army Medical College, because it was an army institution was inward looking, the part of that building which faced the street, like the great iron fence, did not care about the street at all. Unprepossessing blocks of lavatories were on the street side. So,

we could very easily make the case for making a new building which addressed the street, introduce seminar rooms there and consequently produce the corridor.

We completely turned the circulation on its head you do not go up a stair into a flat, you go up a stair into the corridor in the back which has seminar rooms on one side and the remnants of those rooms on the other. We could not adapt the rooms, and so it had to be part of the college which could cope with those kinds of spaces, but we were always talking to them about the fact that you should not purpose spaces too dogmatically. Because this year you may decide to have administration, the next year you may decide to have studios and the year after you may decide to have everyone working on computers, where you do not want light. You have to be constantly prepared to adapt and reuse the space. What the architect is really trying to do is to create a framework in which all those relationships can happen.

HC: I think this leads quite well into my next question which is why do you think the Chelsea College benefits form having spaces such as this rather than being in a wholly new purpose built structure?

PA: Again, I think it is a function of where we are in human history. I think it is very interesting that if you look back to the Bauhaus for example, at that point, there was an idea that one could make generic space for art. The whole point was, it could be as perfect as it could be and the architecture, the modernist architecture of the Bauhaus was as un-intrusive as it could be. It was not stylised, it was the lack of style almost, with as much light as possible. Now they may have got some of those decisions wrong, but the basic principle was, the painter or the sculptor would be able to be existing in space, and would therefore be able to intellectually separate themselves from their

context. But, over the ensuing period and probably kicked off by Marcel Duchamp, the interest in art which is actually guite specific to its location and I suppose installation art is the ultimate form of that. For example in Duchamp's Mile of String, that was not something that you could buy and put on your wall, it was a room that was strung with a mile of string. That happens to coincide with where art teaching has got to and I think in a way, the rest of culture has caught up, as usual. Nobody quite understands why that was interesting one nearly a hundred years ago, but now we do think that it is interesting for a slightly different reason, which is that it is interested in location and specific location, it is interested in place, as much as space; as well as particular time, rather than universal time.

I think that has been very interesting and watching the work of students in the following years, following the move from Manresa Road, Chelsea College's former, purpose-built art school (and considered a very good one). Watching them move and how their work changed in that move. I found some lovely little works - at the end of year show, someone had scraped away some of the plaster back to the brick and caught it on a little plate and that was their piece. This could not have been anywhere else, it had to be there and the fact that this was a building which could be adjusted and was robust and you could hit nails into it and all those things was quite important. Also, by being robust and generous (as an army building might have been robust for different reasons) it is does not encourage a prissy response - it's not that you're being controlled or contained by your context as an artist, but rather that you have the opportunity to respond to it more generally.

I do not know if that was why, at all, why they moved there, but I think it was why they were able to move there and in fact, it was quite interesting that during the process, the head of Chelsea changed from someone who was a painter, who wanted his





postgraduate painting studios to have north light and be four metres tall and all those sorts of things to someone who was not primarily a painter and was interested in how those other things would happen. There is no reason for me to think that the pendulum might not swing back the other way but what we are trying to do is to produce buildings which are tough enough and robust enough that they can respond to that and be useful, whichever way those thoughts go.

HC: Thank you. I would like to move into my last question which is essentially, what is your favourite contemporary building in London, and also if not also a building that might be worth retaining in that same kind of heritage or representation of our current era?

PA: I suppose the guestion really is whether there is a contemporary building which will one day be thought of as heritage. Well, I think the answer is firstly, everything. Secondly, we do not really know. The reason for saying that is I think each era, each generation produces buildings which are often very specifically targeted at a certain kind of use and the last generation, or the last twenty years, produced probably as much office building as any other. I think it is very interesting already that the way we work and the way we live is shifting and that therefore, people are beginning to think that

vou might use office buildings to live in for example or you might use them to do slightly different things in. I really like the idea there is not a sort of value judgement in that you make the judgement on the basis of the utility of the thing you have got, it has a kind of purpose. If it is a good building, in other words if it is built well and it has got light and so on, you very quickly can grow to like it in the same way that you can like a New York loft. Whereas fifty years ago or one hundred years ago, those New York lofts were empty and available to people who then came and occupied them for the very reason that no one thought they were any good. Over time, the appreciation of those buildings becomes much more and I think there is a generation of buildings and I tend to think that it is those buildings which are not driven by style, but are driven by genuine concerns. So it is harder for me to imagine Post-Modern buildings for example which are themselves a kind of an assumption of a kind of stylistic idea of a building, being reused in the same way that a city office building might be, whether it is a good office building or a bad one.

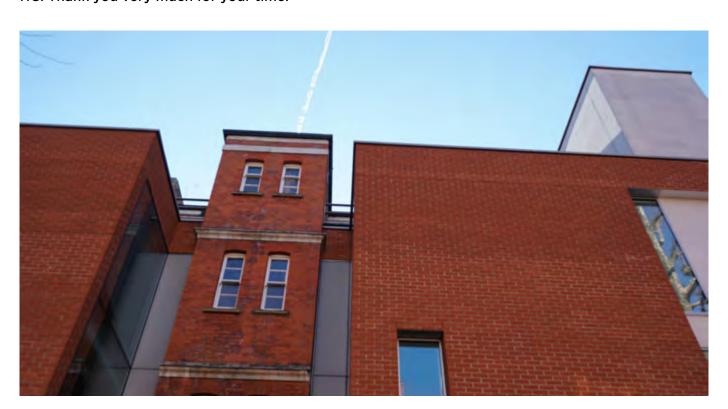
I predict that whatever I say, it will not be quite the same as the buildings we appreciate in twenty or thirty years' time. What will happen is, the city has always done, the bad things will get knocked down and it will be the good things that are kept. That does not always happen but the buildings that



people appreciate will have an ongoing life. I think the future for reuse is almost that, the bigger, the denser our cities become (in Britain by 1850, more people lived in cities than in the country - I think the world took until 2010 or 2007 to get to that same point) we are now in a position where more people are living in urban situations than are living in rural situations and I think that the sheer density of use produces a constant turning and returning, and reusing and knocking a bit down, which, fortunately or unfortunately, and I think fortunately, makes our cities more dense. The thing about a contemporary building is that it looks like the most you could build on that site at that time (and most developers, which is what it is usually driven by, are seeking as much as they can have). Then, suddenly, as culture changes and concentrations become greater something else happens to make us feel that it was not quite dense enough.

So, even in the Royal Army Medical College in Chelsea, we were adding accommodation to a site where they would have built probably what they thought was the maximum they could build. It is very interesting that if you constantly respond sensitively and properly to existing conditions, you are almost inevitably going to be reusing buildings and enjoying doing that.

HC: Thank you very much for your time.





Mr. Lee Bennett Partner, Sheppard Robson

DATE Monday, 26 March 2018

LOCATION Sheppard Robson London, United Kingdom

ABBREVIATIONS Lee Bennett ΙB HC. Hugo Chan

HC: Thank you Lee for joining me for this interview today, I would like to start off by asking you what do you think the term 'adaptive reuse' means.

LB: Thank you for inviting me. Adaptive reuse. When we think about the life of a building, we would like a building to endure and one aspect of that, in facilitating the endurance is usefulness. In order to extend the life of the building, it has to be adapted. On top of this, there is the idea of sustainability which is applicable in terms of avoiding the throw away and making sure that a building's life can be extended. In the case of the Sammy Ofer Centre, London Business School our office has adapted a carcass of a building and thrust it into the 21st century by tuning some of the existing spaces, rebuilding some of the existing spaces and finding space where there was not before. So, it is important in terms of finding longevity in the existing fabric which we think adds to the fabric of London and gives a historical anchor for the new use as well and as one of the elements which helps make a project a success.

HC: And do you think in both broader terms as well as for the London Business School project that there is greater merit socially and culturally in adapting these buildings rather than simply demolishing old buildings and constructing new purpose-built structures in their place?

LB: Absolutely, I think if one tries hard enough, most existing buildings of older historic value, or even some recent historical buildings, if we consider some of our Brutalist buildings, can be saved and adapted and are massively useful to the city. These buildings allow parts of the city to rest. When we look at London there is so much new build happening, concentrated in certain pockets that I find it hard to relate to. I think that the successes in London has been where new build sits with respect to the old and where old buildings are given new

HC: In your experiences then, what are some of the key differences or challenges that you are confronted within the process of adapting older heritage buildings, as opposed to working on a completely new structure on a greenfield site?

LB: When you are adapting a building, you do not have a blank piece of canvas in front of you. Whereas when you are presented with a greenfield site you do and there are challenges with being presented with a blank piece of paper. Some of the challenges we faced on the London Business School for example, included finding somewhere for the larger spaces of congregation within a fairly tight plan even though it is a large building, there was not a lot of clear span space and therefore, issues surrounding some of the larger gallery spaces were also difficult to find.



HC: Turning to the London Business School then, what were some of the challenges when you first visited the site and you were confronted by the existing buildings. I know for example that there were difficulties with the structural integrity of the annex building so how did you approach and resolve these issues?

LB: The principle issue was that of identity, in that there are two buildings in dialogue on the site - the annex and the main Westminster Town Hall. The Town Hall of course is associated with various civic functions, but the annex was a forgotten piece of civic architecture. Both were guite well defined by their celebratory entrances so the issue in terms of the program was to retain some of the civic functions, whilst also finding an entrance for the London Business School that would have its own identity and work in concert with the entrance for the civic functions. Was it to be through the established entrance of the annex? Was it to be the entry of the main building? Well it was neither ultimately because the new space was eventually found between the two buildings and became the new entrance atrium for the London Business School.

HC: You mentioned earlier that fitting the larger congregation spaces proved to be a challenge, but what were also some of the other new functional requirements which had to be integrated into this project?

LB: At the back of the building, there was an existing wing constructed after the Second World War arising from bomb damage built in the 1960s. That element of the site was where we found the larger spaces, the building had already been adjusted by the previous architect. In essence, we took out the newest additions if you will, surgically removed all of that including where the council chambers were and replaced that with the appropriately scaled volumes for the lecture halls and the larger congregation spaces and this also included a new home for Westminster's Council Chamber.

HC: And do you feel that there is a benefit by both the Council and the School in retaining this building and using it, rather than if they had decided to have a new purpose-built structure altogether?

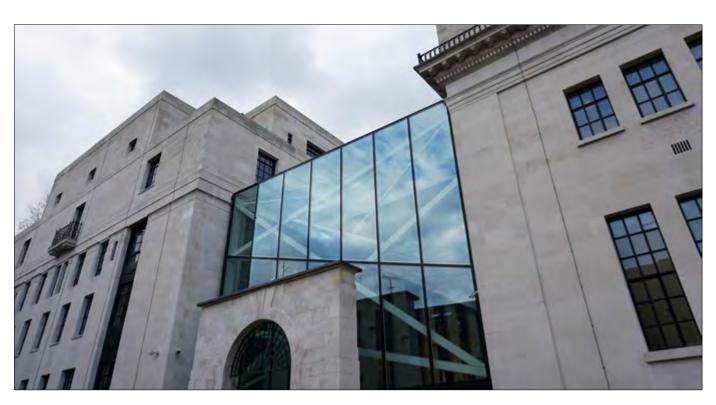
LB: I think it benefits both parties. It benefits London Business School in that you can argue that they are fairly introspective in their home in Regent's Park, and they have now reached out into the city proper with a very public face with this building. For Westminster Council, who owned the building, it has been re-purposed, but their primary civic function has been retained and by extension they have retained their identity as well. Both parties have their identities expressed in the building so I think overall it has met their aspirations incredibly well.

The identity of the old building and the civic function is defined by the grand gesture of the escalating steps with the lions on either side into the incredibly ornate interiors of the listed building. That was retained, and Westminster's Heritage Officers were key in conserving these spaces. For the London Business School, the new entrance within the glass link talks to the future and precision of the institution and is deftly located to give a prominent but not dominant entrance between the fabric of the two existing buildings.

HC: And finally, I would like to touch on Brutalism and recent heritage. Is there a building you are fond of which you could see being retained and adapted in the future?

LB: I will need to think about this question. We did mention Brutalism earlier and so I am trying to recall some of the Brutalist masterpieces that are dotted around London and I am struggling to narrow it down to one. Actually, I think the National Theatre as the principle Brutalist building would be a good example although it would be very sad if that building were to be re-purposed as housing for example, after all, it currently stands as the cultural crucible amongst that suite of civic buildings.

HC: Thank you very much for your time today to have this conversation with me.









Mr. Spencer De Grey Partner, Foster + Partners

DATE Tuesday, 13 March 2018

LOCATION Foster + Partners London, United Kingdom

ABBREVIATIONS

SG Spencer De Grev HC. Hugo Chan

HC: Thank you very much for your time today, Mr. de Grey. I would like to start by asking you what the term 'adaptive reuse' means?

SG: Adaptive Reuse is totally central to the way that we live today. Many cities, London is a very good example, have a huge stock of existing buildings, many of them built at the end of the 19th Century and the beginning of the 20th Century. I think with the increasing pressure of sustainability, of survival on this planet, we need, at all times, to be making the best use of what is already built. So, the challenge I think for today, is to find ways of bringing new life to those buildings.

This is particularly difficult when it comes to adapting existing buildings to meet higher and higher energy and sustainable standards. It is very disruptive to come in and convert buildings like the opposite [the river]. Very, very disruptive. You have to take all the tenants out, or the owners out, and re-do the entire building, so we are looking as a practice, at ways in which that disruption can be minimised, to meet the same high standards but to look at less invasive ways of converting and adapting existing buildings for the future.

HC: One of Foster + Partner's most recognisable projects is The Great Court of The British Museum. I would like to ask you, as it has now been almost two decades since that project was completed, at the time what were some of the challenges you were confronted with in creating that new space within the museum?

SG: Well I think the first thing was to discover the space. That space, nobody knew about. It was taken up with book stacks, built for the British Library, who moved out as part of the process of creating The Great Court. There was a tunnel, literally a tunnel, which led from the entrance hall of the British Museum through to the Great Round Reading Room. There was a completely unfound space between the original Smirke Courtyard and the circular drum of the Round Reading Room, which his brother built a few years later. It was this act of discovery of taking away the post-War book stacks, which were of no architectural merit whatsoever, to create a major new public space at the heart of the museum, which is what it so desperately needed. This is because whilst the galleries in the museum were and still are, wonderful, there was no, what I might call, general circulation space. No space for restaurants, cafés. No space for any shops. No space to just stop, think or admire your fellow visitors. So, I think, the challenges were, how can we create this public space in the heart of the museum to give it a focus, to make it understandable for people, and to provide a public space that was protected from the weather for the people of London.

HC: I would like to ask a bit about the design as well, which is decidedly contemporary in terms of how it is articulated. Would you mind describing what is the effect of having that contrast between the old, which is the original frontages, and then walking into this very modern space?

SG: I think that raises probably the fundamental way in which we've approached working with historical buildings which goes back to The Sackler Galleries at the Royal Academy, where we analysed the existing building in considerable detail, we identified with our client and the historic preservation bodies working on this, what was good, what should be retained and what was less good, and could be taken away. And then, of course the question is, what do you replace all of that with, or add to that to complete the project. We felt, I think, this was very much Morris' view, that you should express quite clearly, the different periods which have been built in a building, so that the original elements are clearly identified and understood and understandable, then the new building is likewise, understood and visible. We were very anxious that we did not use pastiche, we do not use copying of historic details and motifs. What is new is unashamedly of today and I think that reading of the building, I find very interesting, and

it is a philosophy that has served us well whether we were working on The Reichstag in Berlin, The Sackler Galleries, The Great Court, Museum of Fine Arts, Boston. It has been fundamental to the way we approach historic buildings.

HC: I would like to turn also to the Imperial War Museum in London and once again, what were some of the challenges you faced when you were confronted with this project.

SG: Of course, what happens is that over time, there are changes in the way in which a museum is organised, the way in which things are displayed and so on. At the root of the Imperial War Museum was a desire by the Director of the museum to alter really, the purpose of the museum. It was conceived as an Imperial War Museum, with the emphasis heavily on war. That now is perhaps seen as a rather outmoded philosophical approach and the remit of the Imperial War Museum has broadened. In broadening it, it has taken on conflict, which is slightly different to war and, considers aspects that also relate to peace as well as war, as well as conflict. In that process, I think the Director became very aware that the framework set up back in the 1970s-1980s really did not fulfil the new requirements and she was anxious to transform the





way exhibits were displayed. This led us to rethink the whole interior, again to reveal more of the original historic fabric and to add back, a different take on the museum.

Light control and elements like that were very important, some of the exhibits were light sensitive, so, we restricted the amount of light to the main exhibition areas and opened up the galleries so that things were more visible between the galleries. The next stage which we hope will happen shortly is also looking at providing a new entrance from the ground level as opposed to rising up steps, so that the access is more generous, more inviting and brings you to the ground floor which is the first floor of the exhibits, which then mounts up historically from that space. These were some of the driving forces behind the Imperial War Museum.

HC: Turning to the Hearst Tower in New York. which I understand as having a commercial client rather than an institutional client, do you see any differences in how you approach that as an adaptive reuse project.

SG: No and I think although, it is providing office space, it was not a traditional commercial office building - it was an owner-occupier project. I think the values that Hearst as a company have were very much reflected in what we did and they married up with our approach to the overall design of the building. The original building, the four and five storey podium building was designed to take a high-rise building, or a higher building which never got built so, in a way, what we were doing, seventy years later, was sort of fulfilling the architect's, and Sir Randolph Hearst's original dream for it to be a higher building. Therefore, I think the approach of keeping the podium at the base, using that for the communal facilities for the Hearst Corporation, in terms of mainly eating, exhibitions, talks and so on, that fulfilled a very good function within the historical framework. Then, a completely contemporary tower then emerges out of that courtyard.

I think that again, you can trace this back to The British Museum, the courtyard of the museum didn't have a void, it had the Round Reading Room in it, but I think that, the principles of the Great Court, can be seen very clearly in the Hearst. Of course, it is different, because it is the Hearst Corporation and the other is the British Museum and vice-versa. but the philosophy of how we tackle, in design terms, historic buildings, I think, is very clear and runs through both those projects.



HC: Finally, I would like to ask you, is there a contemporary building in London that you are personally fond of, that you would like to see one day, retained as heritage or adapted?

SG: It is interesting that you raise that, a favourite building of mine is the Festival Hall, which was built for the Festival of Britain in 1951. That building, represents I think, a truly public building. If you visit the Festival Hall, after this discussion, you will find that is crammed with people who are small start-up businesses, or people who are studying and working, nothing to do with the events that take place inside the hall. So, you get this extraordinarily rich mix of people coming to concerts, coming maybe to eat there, maybe just to have a drink and admire the view. At the same time, there are groups of people who are working or studying in the same space.

I think, it genuinely fulfils the function of a public building. It is interesting, it has just had a refurbishment, they spent a lot of money and I think it was very elegantly handled, you are hard pressed to see any significant interventions into the original building. It has been very sensitively updated and converted. It is essentially the same building and I think it is very important, it is a very good example, I mean, it was not a wonderful concert hall, the acoustics were not that fantastic, it might have been a decision to take it down and build a new concert hall. It has not been taken down, it has survived and that is totally about adaptive reuse and, in another fifty years, it will need another major refurbishment and may be even at that point, the function will change, and maybe become something else.

But I think, it is too easy to take buildings down, far too easy to take buildings down. There have been some demolitions here in London which have been very painful, at least as far as I am concerned. Very good buildings have been demolished, simply because at the time, when the technical abilities for architects and engineers were far more



challenging and the ability to resolve heat gain through glass was virtually impossible. Now, we have sophisticated glazing systems which handle that without any problem at all. So all that was needed was good adaptive reuse and remodelling the existing building, instead of which we have lost some great masterpieces and that is very sad.

HC: Thank you very much.



Mr. John McElgunn Partner, Rogers Stirk Harbour + Partners

DATE Monday, 26 March 2018

LOCATION Sheppard Robson London, United Kingdom

ABBREVIATIONS LB Lee Bennett HC. Hugo Chan

HC: Thank you very much John for joining me for this interview today, I would like to start by asking you, within the context of the practice Rogers Stirk Harbour + Partners, what does the term 'adaptive reuse' mean?

JM: Well the term adaptive reuse for us really means looking at existing buildings and understanding if you can reuse them. I think it also has a lot to do with designing new buildings, designing them in a way that they are not entirely tailored for the brief of today, because we know that the brief of today will have morphed during the evolution of the project let alone when it is finished, we have had several examples of this over the years where buildings we have designed have survived and gone on and been re-adapted and reused. At Lloyds of London, we were able to adapt for the explosion in computer use whereas buildings of a similar age, designed at the same time as Lloyds had to be demolished because they simply could not be modified. This is what adaptive reuse means for us, it is about a loose fit and long life for a building.

HC: So, building on this idea I wonder if you could elaborate on why this is important in architecture. Why do we simply not demolish our buildings when their useful lives are reached and construct new purpose-built structures?

JM: I think it is probably a twofold answer in that principally the amount of money, time and embodied energy that has gone into a building means that it is simply irresponsible to take something down if it does not exactly fit the purpose and try to rebuild it for a new brief. The world is changing so quickly that in many ways buildings struggle to keep up and I think you see that with some of the advancements in workplace usage now and collaborative working and office spaces at technology companies for example where by the time they are designed, they are out of date because the workspace has already moved on. If we continue to insist to try to make buildings really tailored to a specific function, I think we are chasing an end goal which we can never really achieve and therefore we need to design a more flexible framework. If the building is

a framework, and it can give a lot of flexibility inside that, not only for change of use for something relatively standard like an office tower, (although that has also gone through a great revolution in the last ten years), but across all sorts of things. At the moment for example we are looking at a project which could be a life sciences building or it could be an office building depending on how the development moves forward. So, it is necessary to think in much broader principles and allow flexibility within the design, within how the building is structured to allow it to change over time and I think this is very important.

When we were first at the British Museum, which is the main project we are discussing today, every room that we were taken into had four different names, four different uses, these rooms used to be libraries, they used to be public then they were private. We would then move on from conversations such as these to ones where they would say "Now, we need this room to specifically do this singular task and it needs to be in a certain grid or certain layout." You try to strip away all the requirements of the grid and the pre-adaptive ideas to what the solution might be. You ask, what are the basics of what you might need and how can we look at that in more broad terms and maybe put the room adjacent to another room which for a scientist may not be natural but for us as designers of space, work quite well together.

HC: I would like to move into the WCEC, the latest extension to the British Museum which you have just described and begin by asking what were some of the initial challenges you found when you were first confronted by this brief.

JM: I think some of the key challenges were understanding what was on the site and what we could keep for reuse and what we thought we would remove. One existing building which could have been deemed to have more historical interest was a Victorian book bindery that belonged to the British Library. The British Library, The British Museum and the Natural History Museum used to be all one facility and then the Natural History Museum broke off and moved to South Kensington and the British Library broke off and moved to Euston and the British Museum was left with the book bindery. All of the interesting presses and facilities that had been in that building had gone with the library to Euston and therefore it was the shell of a building and although it was a quite nice

purpose-built facility, the feeling was that it did not represent its function anymore. It was also very low, the building we put in like most of the site is five or six storeys, but the bindery was one storey sitting on the site, so it was very low and not very dense. Part of the issues of adaptive reuse are I think also related to how we densify our cities and how we use as much of the land as we can and in this instance, on the site of The British Museum, this was one of the last sites where they could do something significant – everything else on the entire compound was already built up.

So, that was the first challenge, determining how much of a clear site we could make and then it was literally mapping all the adjacent spaces and different levels. That was the first exercise that we did. We obtained a plan of all the levels and because



the museum is run by several departments, each department had their own keeper. So, you do not simply wander around the museum, you go from keeper to keeper. To get into every room on every level in the six levels surrounding the site, it took us several weeks and this was simply to get inside, understand what was happening, understand whether there were opportunities to connect to the new building or not and finally, because there was nothing outside previously, it was in a landlocked end of the site, so we did not want to put in a new building which would also be landlocked.

So, mapping what was there, understanding the rooms and trying to understand what opportunities they represented, as well as the fact that on either side of our site, there was an 1840s building to the



south and a 1914 building to the north with a long space in between where we would put our new building within and none of the floor levels were on the same level. So then we had to decide which levels we could use, which ones do we decide are key. We cherry picked levels from both buildings where you could make a flush transition with and other ones where it was acceptable to have a change in level. Overall it was about understanding the site, the site is a distorted 'T' shape, and we were surrounded on eight sides by different buildings. So, it was about understanding what was there, and the importance of what was there.

Apart from the Victorian building, another one which became quite controversial was a 1972 concrete frame building, but it had a Georgian skin on the front, they had made the building look Georgian. We immediately felt that it could go, it was a poor-quality building, it was a little concrete frame with a Georgian haircut and bizarrely it was very controversial because The Georgian Society wanted it kept and there were upset local community groups. No one particularly fought to keep the Victorian building, but they did fight to keep this odd 1972 concrete frame.

We worked our way gently into the site, arriving with no predetermined ideas about what to do and I was very glad that we did that and this was partially thanks to the British Museum because when they were selecting an architect, rather than asking us to design a building, they wanted us to see the brief and understand the problems they faced. As part of our presentation, they asked us to explain how we solve problems and so, we just came up with a series of little conceptual problems and suggested ways on how you might solve them, but not a building. Therefore, when we arrived at the site we were not trying to impose a design we had already worked with, we were able to simply read what was there and try to understand what was valuable. So, it was a very movable feast for the first six months I think before we began to see what we might do or what our intervention might

HC: You mentioned earlier that there were all these multiple departments and part of your design process was to link them together. So, in terms of this, what was this new WCEC building and what function does it serve for the British Museum?

JM: When we first received the brief, it was slightly unusual, because we read all these departments and we did not understand how they all sat next to each other. Once you then spend time at the museum and understand the journey of an object through the museum and how it goes from storage, through to special exhibitions, or, out on loan to another facility, then you begin to realise what all these departments do. The brief included that the primary component which was front of house and very public was a special exhibitions gallery. The British Museum is a free facility, so you can walk in seven days a week and it is free, but they do charge for some of their special exhibitions. Obviously for a great institution such as this, generating some income to support the conservation work that they do is very important. This special exhibition gallery was sized at approximately 1,100 sgm which is the size of most large international touring exhibitions, so for example when we were designing, the Tutankhamun exhibition was in town and that was last in London in the late 1960s which was displayed at the British Museum. This time, it was displayed at the Millenium Dome because the British Museum did

not have the size, space and logistical requirements. Our brief was to create a gallery which could house these kinds of touring exhibitions but even then, although it sounds very tailored to requirement, even that room's brief was to display anything, anywhere. From walls, to ceilings, to floors rather than being a specific gallery, it was like a large aircraft hangar and with the options to pick up power, data and optic fibre and security networks so the room can be configured for exhibitions in any way you wish.

To support this key public facility there was a series of conservation storage and logistic requirement spaces for all the objects going in and out of the exhibition. Logistics was probably the biggest issue, the Museum had been on the site since the 1759 when they took over the old Montague House but bizarrely, despite being on this site for over 250 years, they have never had a proper loading bay. Many objects were often manhandled from the front door so one of our key tasks was to give them a logistical bay that could handle really large vehicles, turn them around very quickly, loading and unloading in temperaturecontrolled conditions and within a high security environment. Then storage of objects, the Museum has something in the region of 10 million objects only about 250,000-300,000 are on display at any one time so a tremendous amount of the collection is in permanent storage. The quality of storage was

equally important. Whilst the collection may not be on public display, it is being studied both by the Museum and by students and external academics. So, to be able to get to the stores, easily, safely and not have to move the object is very important. These were the first storage facilities which were purpose built. All the other stores were converted from something else into storage and therefore, not necessarily ideal.

There was also a conservation department and a scientific research department. Of course when the Museum began back in the 18th Century, there was no such thing as conservation, it was a collection, people simply collected objects. When we first started working with the museum they did not have any scanning electron microscopes and by the end of the project, they had two. Conservation is becoming a huge aspect of what they do and scientific research as well, understanding the materials that they have and doing experiments on pieces of the collection. Then of course, perhaps the most simple space but also key, was office space for all the people working across the various departments. These departments covered conservation, research, logistics, special exhibitions and storage. All of these people have a level of office space as well and we tried to get them out of the basements where many of them had been, towards daylight so that they can have prospect and views.



HC: I would like to talk a bit about the design resolution. Along the King Edward VII frontage, the building transitions into the one component of the WCEC that you can see from the street, can you describe that design outcome was achieved.

JM: Sure, that was the position where the fake Georgian buildings were located. Although we had guite a large site and guite a large building, we only had about 34 metres of street frontage. Our relation to the King Edward VII building was obviously very important and essential that we got that right. What was there previously was the two fake Georgian buildings and they were reconstructions of two buildings which used to form a terrace of about seventeen or eighteen buildings. They knocked most of the terraces down to build the King Edward VII building and left two behind to be used as site offices. Then, in the late 1960s they effectively began to fall down and from a most expedient point of view they just constructed a new building with a mock Georgian façade.

In Bloomsbury, in looking at the neighbourhood and studying our context, we understood it was made up of two key components. One, the large three or four storey stock brick residential buildings, so you tend to have these great run of terraces, sometimes fifty or sixty residential properties long. Secondly, Bloomsbury is also full of large white institutional buildings like University College, like the School of Tropical Medicine, like Senate House and the British Museum itself. For us Bloomsbury broke into two categories, the slightly smaller brown stock brick residential buildings and the larger white Portland stone institutional buildings. Because we sat at the junction between two of these, we were trying to understand how we should sit ourselves. Early on we thought we should be brick, and lower and smaller but as we did the research and found that brickwork tended to be residential, we decided that. as a part of the British Museum, we really should be a white large scale institutional building. Then, how do you make a white building, how do you extend something effectively that is a symmetrical Beaux-Arts piece? The answer is that you do not extend it, the previous building had crashed into the King Edward Building and so we very much wanted to make a gap even though it is only three or four metres, there is an obvious finish of one building and the starting of a new one which also allowed for some daylight through the site.



Once we had established that we wanted to be white, we thought that it was important to be an intermediate scale between the domestic and the large institutional. We then started to look at what we should look like and we thought that there were clues from the King Edward VII building which would be an interesting way of going about it. We picked up the structural grid, which on the old building was about 16 feet cast iron steel frame, so we have a five-metre steel frame. Although the King Edward VII building does a very good job of pretending to be a single storey building with extruded columns hiding two storeys with another hidden in the roof, it is made up of many striations of stone. We picked up on the horizontality stone courses rather than the verticality of the columns and because our building was very much a workshop, quite private, quite hardworking, we did not necessarily want to put what was going on inside on display so masking the different floor levels was quite an interesting thing that we chose to do.

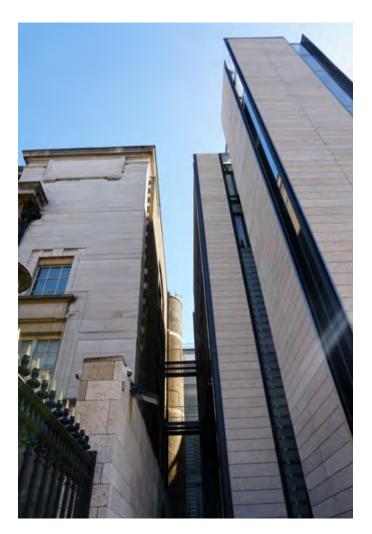
As our building was private, we also wanted to allow as much day light in as possible but without direct views. We ended up with creating a kiln formed glass screen which would effectively be a privacy screen between outside and inside but on the inside, you would be flooded with daylight but you retain a sense of privacy. Because of the various functional specifications, some of the floor to ceiling heights were also very different so we had six metres, three and a half metres, four metres, and to have expressed all the floor levels would not have necessarily made as much sense

as the way we normally work where you get a midscale horizontal march up a building. Overall, we picked clues on what we might do and then on the colouration of making it white, using Portland stone. Rather than using the base bed which is heavily detailed and carved on the neighbouring building, we used a Portland roach, which is encrusted with a lot of turreted gastropods. It is still a Portland stone but because it has been in the seabed for so long, all the little sea creatures have washed away, and you get these fossiliferous voids of where they used to be, with the intact clear colour of Portland stone and no shell inclusion. We were trying to make those connections between us and The British Museum. Finally we chose to continue the black cast iron railings in front of our building, matching the surrounding railings but expressed in a contemporary manner which would put us into that campus.

HC: I would also like to ask about the excavation works which were undertaken. Part of the structure of the WCEC involved underground facilities as well. What were some of the challenges with that aspect of the project?

JM: The key challenge was to not damage anything. This sounds very obvious but when you have buildings of that age, they guite often do not have any significant foundations, quite often the brickwork simply comes down and they are spread three or four bricks wide and they just sit on London clay. The primary exercise was to understand what foundations we had, so we had a number of trial holes where we could see where the structure was sufficient and where we would need to strengthen them. Then of course, going twenty metres below those foundations, the key thing was that while you have that huge excavation open, all those buildings want to do is to slip into the hole. We had a something known as a Category O of damage, which means these old buildings could move about one millimetre across the whole year so that allows for shrinkage in summer and damp soil in winter. This basically meant the buildings could not move at all. There was a lot of monitoring in place, not only of our buildings but the neighbouring properties on the Bedford Square side outside of the British Museum's campus. Of course, it is the same old thing, anytime there is a construction and people start to see cracks in things because they have heard a noise next door and it is not always the case, so we had to be clear on the existing condition and the final condition.

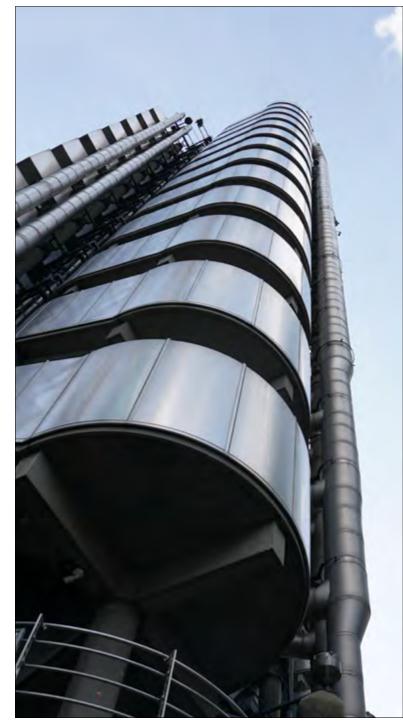
Principally it was about not damaging any of the existing buildings but almost more importantly, reputationally the adjacent spaces such as the Duveen Gallery and the Mummy Corridor are some of the most popular spaces in the museum and they remained open throughout the entire construction period so keeping noise and vibration to a minimum was important. Not disturbing those spaces was also important because it would have been embarrassing if construction work next door had meant that galleries needed to be closed. Other things like vibration, when you put vibration into the ground, it is never really clear where it is going to come back out and sometimes we found a lot of objects on glass shelves had to be put on rubber stoppers so that small forms of vibration does not mean it will march toward the edge of the shelf and ultimately drop off. Right on the other side of one of the walls we had the Amaravati Marbles which were sculpted against the grain of the marble and so were already incredibly delicate. We had suggested they were not on the other side of the



wall during construction, but the Museum said that they were so delicate they were safer there than moving them. So, all the time we had a fear that just on the other side of a wall were these incredibly valuable and, in many ways, irreplaceable objects. You are trying to care not just for the existing buildings but what is inside those existing buildings, a double level of responsibility really.

HC: Now that the WCEC has been opened for two years or so, how do you feel the British Museum benefits from having the new interventions on the original site, rather than simply moving to a wholly new purpose-built facility.

JM: Well I think because they have been on site for so long, every thirty or forty years, the British Museum commissions a new great building. It tends to be of an architect of the time and so the recent one before us would have been Norman Foster who did the Great Court roof in 2000, which completely transformed how the Reading Room worked. The history of the Museum and the fact that they have been on the site for so long, means that whilst sometimes they can't display objects in a certain way, it is nevertheless a part of the British Museum, a part of the charm and the history of the institution and not just the objects. Our building is quite interesting because it was described by one journalist as a new power pack for a phone, where you have an aging phone and you have plugged on an addition at the back to give it a longer life and a software upgrade. Mostly our building is private, apart from the new galleries, everything happens behind the scenes. For the people who have been working in those facilities, they are now able to have the ability to move huge objects on forklift trucks rather than pushing them by hand on skids or be able to use the truck lift which can take up to 42 tonnes fully laden truck off the street directly into the logistics area, they now have brand new and updated scientific facilities such as the electron microscope surrounded by a Faraday cage (to ensure there is no electromagnetic interference due to the sensitivity of those machines).



For me it is kind of the ideal mixture of old and new and I felt that the power pack analogy was quite nice, it was like an update for parts of the museum. They do not necessarily need to change the way they display things in the galleries, they work beautifully and the special exhibitions gallery allows them to display things differently as it can take much more of floor loading, it can take much greater weights from the ceiling and hang things from the walls whereas in the Enlightenment Gallery for example because it is such a listed room already they are very careful of what objects they display and where they can place them. In many ways I think the new addition enriches what they already have. Rather than saying lets go and have a new purpose built facility that does everything, for me it is a mixture, it is a richness for both the Institution and the display of the objects.

HC: My final question is, do you feel there is a contemporary work of architecture in London that you are personally very fond of that you see as one day worthy of being retained or would undergo a similar kind of change and adaptation.

JM: That is a very interesting question, recently Lloyds of London has been listed and of course Lloyds was designed to be very flexible - the pods can clip off in theory, you can change washrooms for meeting rooms, it was designed to expand and adapt. The fact that it has been listed means that it will never change, it will stay exactly as it was built and realised. I suppose that is a double-edged sword, it is great that it will be protected but, in some ways, it should be allowed to evolve as the nature of business, life and our society evolves. Having said that, Lloyds was a building I discussed earlier because it was designed pre-computer revolution and because of the way it was designed, with services on the outside and with raised floors, it was able to adapt whereas other buildings of its time like the John Maddin Library in Birmingham could not adapt. It was a brutalist concrete ziggurat and we worked on a replacement for it for some

time which was not realised, and another building was built instead. But that building has now been demolished, and it is only thirty to thirty-five years old, which seems ridiculous. So, there are many buildings in London which could be listed, but whether they should be or not, I think it depends on whether they are still fit for purpose. I mean The Shard for example, which is an amazing addition to the skyline of London and I cannot really see anyone taking that building down but whether it will be listed or not, because it is effectively a concrete core with a steel frame on its outer perimeter, it is very flexible and you can do within it, more or less whatever you want, which is demonstrated already as it hosts a hotel, restaurants, offices and apartments. I am sure it will go through many iterations over the years, whether it should be listed or not to be protected, I do not know. There is a building right next to us, the Aviva building which was built in the 1970s almost as a kind of Miesian box, designed I believe by GMW and that is rather beautiful and because it is of an era, it could be nice against something like the Cheesegrater and on the other side, Norman Foster's 30 St Mary Axe and I love the combination of three completely different buildings from three generations by three different designers. But even the Aviva building is scheduled for demolition to be replaced by a taller tower because the market has moved on, the world has moved on and people can get more area on the site and it is those kinds of commercial decisions which tend to drive what happens in the city and what happens with the planning regulations. I cannot think of one off the top of my head but I think many will be listed because London has a great mix of holding on to its history.

HC: Thank you John, Thank you very much for your time.



Ms. Elizabeth Leber Partner, Beyer Blinder Belle

DATE 17th April 2018

LOCATION

Beyer Blinder Belle New York, United States of America

ABBREVIATIONS

Elizabeth Leber FΙ HC. Hugo Chan

HC: Thank you very much Elizabeth for joining me for this interview today, I would like to start by asking you, as an architect, what does the term 'adaptive reuse' mean?

EL: I can tell you what adaptive reuse means within the context of Beyer Blinder Belle's work. To us, adaptive reuse means the creative reuse of existing and historic structures for a particular function. This can be the definition of it, but its greater meaning is to give life to old buildings and new chapters to old structures.

HC: And why do you think this is important, why do we not simply demolish these old structures and buildings when their original useful life has come to an end?

EL: In a world that is so focused on sustainability, particularly in the architecture and construction world, adaptive reuse is probably one of the most sustainable approaches you can take to architecture. This is because the embodied energy inherent within a building structure prior to its demolition has such great value and to demolish and start over again is an extraordinary misuse of that energy. So, we see preservation, restoration and adaptive reuse as an inherently sustainable solution from an architectural point of view. This is also not to mention the preservation of our cultural and historic resources.

HC: Broadly speaking then, before we move into one of your office's specific projects, within your work in adaptive reuse, do you see any particular or different series of challenges that you are confronted with as opposed to working with a completely empty site?

EL: One of the greatest challenges is just getting to know a building deeply, just as one gets to know a person deeply in a relationship. Our relationship to our buildings when we are working with existing buildings is an intimate one. We need to get to understand how the building was built, why it was built the way it was, and what were the changes over time. It is such a crucial process in the beginning of any renovation or rehabilitation project. I think one of the greatest challenges is just to have a very deep understanding of why the building was designed the way it was and where changes may have been made over time and, why those changes were made. This not only helps us in terms of the nuts and bolts of construction but also to have a deeper understanding of what the inherent logic behind the building is and whether our adaptive reuse can work within the logic or bend the bounds of that logic as well.

HC: I would not like to ask about one case study which is BLDG 92 at Brooklyn Navy Yard. Would you mind starting by giving an overview of what the Navy Yard is and how this project came about?

EL: The Brooklyn Navy Yard is a very old part of New York City, it is a very early 19th Century site that the US Navy developed, and it is a waterfront site with a manufacturing use from its conception. It really hit its apex and its occupancy and vitality during the World Wars and in particular during World War II, where it served as the headquarters of both ship manufacturing and repair as well as a naval command from that site. When it was decommissioned in the 1960s and 1970s, it fell into disuse and the city gained control of it, and over time, particularly in the last fifteen years or so, it has come back to life and is almost at 100% occupancy as a light industrial, commercial and manufacturing facility. It is an extraordinary collection of historic buildings.

HC: When you were confronted with Building 92, which has both new additions as well as conservation of a pre-existing building, what were some of the immediate site challenges that you were faced with?

EL: Well the real challenge when we went to the site for the first time in what was a pre-proposal conference, before we won the project, was that we could not even enter the building. That was how de-stabilised it was, its foundations had sunk given some of the ground conditions and water conditions, all of the windows were long gone, and the masonry was severely destabilized. The two wythes of brick at the masonry exterior walls were expanding from one another. It was a very beautiful small building, a Commandant's house from 1857, four storeys, a gem of a building that had gone into complete disuse. We knew that we had our work cut out for ourselves in terms of bringing it back to life and the Navy Yard's brief was really to triple the size of the complex by creating a new building that would be attached to it. That is one of the ultimate challenges, in creating new buildings which connect to old buildings and working out how it can work in harmony with old buildings.







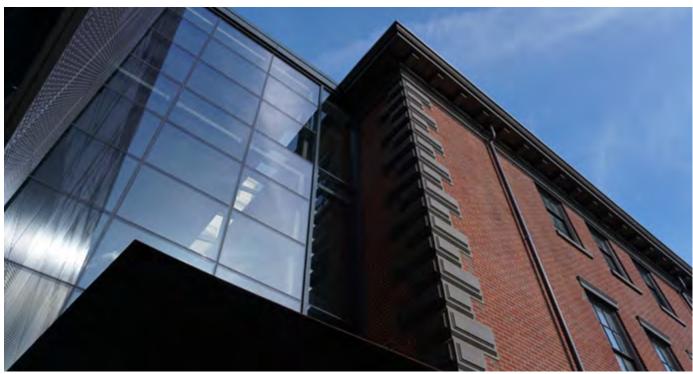
HC: After this early pre-proposal requirements, what were some of the details of this brief, you have mentioned the tripling of the footprint of the building, what was the new functional aspiration of this Commandant's residence?

EL: What was nice about it was that the Navy Yard recognised the history of the building and its historic significance and always had in the brief that the existing building would become an exhibit centre to celebrate the past, present and future of the Navy Yard. So, we knew that was going to be part of the program and in fact they had already commissioned an exhibition designer before they even hired an architect and that designer had been working with an advisory committee of historians, authors, archivists and others to start thinking about the story before we came on board to start thinking about the architecture.

The addition was meant to be lighter industrial and commercial space for tenants who were, as we call, mission aligned with the Navy Yard, so additional leasable space, whose presence would be more public. This was one of the interesting things about the Navy Yard was that all those years when it was in operation, it was a very inward facing community, because of safety and security which benefits many of these manufacturing businesses, but from the public's point of view, its role within the neighbourhood was a little less transparent. This was seen as the opportunity to have more public facing uses and to literally break down the wall and make Building 92, a part of the public domain.

HC: In developing this project, you mentioned the state of the original building, how did you go about resolving this, what were some of the technical solutions that you had to implement in order to make the building fit for habitation and for the new interventions and functions?

EL: A lot of the effort went into stabilising the building, so that included pouring entirely new foundations for the building within the building. So, we poured new grade beams and piles which served essentially as new support for the building itself and then we performed something called grout injection. This is a method of injecting a cementitious material, the grout, between the two walls of brickwork which had separated and bowed, we eventually filled that gap up with grout to bring it together. We also tied the masonry together with steel helical ties, which you drill through the wall to hold them together as well and improve the integrity of that wall. That was amongst many other things that we did, including completely repointing the brickwork, selective brick replacement where had been cracking, replacement of windows, and replacing a stoop which had been missing from years. This was all of the less challenging work so to speak as compared to the more significant stabilisation that was required.



HC: Having stabilised this building, how did you go about designing this connection between the new fabric toward the rear of the site and this existing historic building whilst also maintaining the integrity visually and spatially?

EL: We worked with workshop/apd, who were design collaborators, a small New York practice and in the proposal entry we submitted, we always felt strongly that the new building should be a background building to Building 92. If we consider Building 92 to be the gem, the new building had to sit as a quiet background to it and it would not upstage the historic building. My understanding was that there had been an impulse by other proposal entries to make the new building adjacent, creating an atrium at the front but what we decided to do was to make this front a landscaped courtyard. We were insisting that three out of four façades of Building 92 would be completely unencumbered by anything but for the landscape, so that could be seen as a freestanding object. We then created a very glassy three storey space as a gasket, a connector to the new building, which was about 24,000 sq ft (2,600 sqm) across four storeys. We decided to use glass on this new building in order to be a juxtaposition between the solid masonry of Building 92 and the glass wall of our new building. We felt that juxtaposition was the right approach within the context.



HC: Do you feel that it was important, in terms of materiality that you did not simply extend or replicate the brickwork or use a similar materiality to the original building?

EL: Yes, I think that there are generally two strategies with these projects, you can either take the historic material and define it in a new way, a way which speaks to the 21st Century and that is your juxtaposition, or you can take a material juxtaposition and that is you can identify new and old. This is not to say that it is a universal truth, but in general we do believe that new additions should speak to their own time, rather than be an immediate reference to a previous time or to convince the public that it was built in a time other than its own.

HC: You mentioned earlier that, after renovation. this building was one of the more public facing buildings of the Navy Yard as a whole. Do you feel that the community and the neighbourhood has benefited from this building and are able to enjoy the fact that this building has been carefully conserved and houses an exhibition which celebrates the local history, rather than if a decision had been made to demolish this structure and a new purpose-built structure taking its place?

EL: I think that there are a few responses to that. Firstly, programmatically in the new building, there is an employment centre, which helps the local community find employment within the Navy Yard. The Navy Yard is very dedicated to engaging the local community, both in construction as our



project was used for, as a construction site for teaching, but also for getting jobs within the Navy Yard itself. Programmatically there is a real and compelling reason for the local community to come here and use the space. In addition to the café which fronts the entry there is also a centre which teaches children about construction on one of the floors, so I think the Navy Yard was quite deliberate programmatically. I cannot say whether the exhibition would have been less successful being in a new building, but I know that people appreciate the history of the Navy Yard. Particularly those who have had family work in the Navy Yard which is a lot of people, particularly in Brooklyn. I think that by preserving the building it is a part of the story and I can only imagine that going into that building and re-live the story and to see the story of the Navy Yard is made that much more meaningful by being in a historic structure.



HC: Turning now to my last question and to end on a lighter note, I wanted to ask if there is a contemporary work in New York that you find compelling that you could see either a landmark or being adapted for a new purpose?

EL: That is an excellent question. If we looked one hundred years into the future, what building built now might find a new use...Well, perhaps this is too easy an answer but with the many towers going up now such as Hudson Yards, buildings that were once built for Commercial use in Lower Manhattan are now being adapted to residential use to create a more vibrant and mixed-use Manhattan neighbourhood. My sense is that a lot of that will never change, and that the market demands of various neighbourhoods will change so that the balance between commercial and residential spaces will always be in flux. I think that it is a benefit for people to design buildings now that we know can be flexible to what the future might hold. We are involved right now working the New York Public Library on a significant renovation project at their main research library in Midtown Manhattan. Do I think that the renovation says that for the next five hundred years the space to remain only as a library? I would say no, if they needed another academic or cultural use, I believe we could figure out a way to do it. I think it is a very good question because it is a good call for architects to always keep at the back of their minds what the potential use of a future building could be, given cultural, economic and other changes.

HC: Thank you very much for your time.



Mr. Richard Southwick Partner, Director of Historic Preservation

DATE

17th April 2018

LOCATION

Beyer Blinder Belle New York, United States of America

ABBREVIATIONS

Richard Southwick RS

HC. Hugo Chan

HC: Thank you very much Richard for joining me for this interview today, I would like to start by asking you, as an architect, what does the term 'adaptive reuse' mean?

RS: Adaptive reuse is a very widely used term, in a way it is code for the fact that buildings have long lives, much longer than our own lives in fact, and the physical nature of the building generally does not change significantly but, the program, the function, the use of the building becomes outmoded very quickly and adaptive reuse is the ability to revitalise the structure and give it new life. A technicality as well is that a lot of preservationists do not like the term 'adaptive reuse' because it is redundant, and their preference is to use the term 'adaptive use'.

HC: And I would like to build on this idea and ask you why do you think this is significant? Why is it when a building has reached the end of its functional life, do we not simply demolish these buildings in favour of new purpose-built structures?

RS: Why do we read books that Charles Dickens wrote many decades ago? There is a legacy, a history, a shared community of culture - buildings embody that as much as all the other cultural arts. One is that there is the continuity of the significance of these buildings, even though the function may be obsolete, the building in and of itself is not. The larger issue as well may not be just the building but how the building sits within its neighbourhood, its

precinct or even its whole city. To pull a tooth out of the smile, if you will, one component out of a larger whole, simply because its use is obsolete really compromises the larger whole. I think that it is incumbent upon us to find viable and current uses for buildings which are rarely adaptable.

HC: So, within your extensive experience working in New York as well as across the United States, when you are confronted with an adaptive reuse project, what are some of the differences in terms of how you might approach it, as opposed to a wholly new construction?

RS: Once you have established a program that is a baseline whether it is new construction or working on an existing building, beyond that, the design process is very different. Understanding the site, you are working on a new site, you might stand in the centre of that site and look around 360 degrees. The opposite is true within an existing building. You stand in the middle, but you go outside of the building look into the site and you work your way around the site with a very different perspective. The skill sets are very different as well. How do you document? How do you use or implement new systems? This is something we at Beyer Blinder Belle take very seriously, how can we take and integrate contemporary systems to make the building very functional without changing the historic significance of the building? There are tools of the trade, which I like to call the preservation toolbox, of applying

new security, new air-conditioning and the like. We love two storey buildings for example because you can come in on the lower floor and feed new services up, and then come in from the attic for example and feed everything down. You can then have minimal impact upon the historic fabric of that particular building.

When we go into a project of that nature, we also go in and do what is called preservation mapping. We go through and identify the parts of the building which are most significant. There are three different zones, identified as the Three 'R's - restoration, rehabilitation and reinvention. The most significant parts of the building, the most important parts which are architecturally impressive, falls into the first category of restoration and that gets rebuilt, restored to its period of significance. The second, rehabilitation, we have slightly more leeway, we try to keep the basic form and adjacencies and geometries of the space. The third might be mechanical spaces, underutilised shafts, backof-house areas which I would call a reinvention zone where we have much more ability in terms of reinventing these spaces. Once we have done that mapping, we can use that to inform how we integrate much of our new systems into the existing building.

There are many other tools within this toolbox. A lot of what we want to do also is to make sure that when we preserve the building, you find a suitable location and use for it. I consider moving a building a valid preservation tool. It is not very common, and it is quite severe, but we have utilised this on a number of occasions to actually preserve a building.

HC: I would like to build on this idea of moving a building actually as it is a method which has not been discussed in some of the other interviews. What does this process of moving a building involve?

RS: One, you need to make sure that the building is threatened to the extent that it would otherwise be lost. Two, you need to make sure the building is important enough to be worth saving. Three, you need to come up with a receiver site. Four, you need to come up with a use which would make sense at that site. I will give you a very quick example. One of my career goals has been to work on the most important and significant aviation buildings in New

York City, be it the Marine Air Terminal at LaGuardia Airport, TWA Flight Centre at Kennedy Airport or at Newark Airport, a seminal aviation terminal which was the first modern terminal in the United States. At the time it was threatened by a major extension of a runway and was to be demolished. In the late 1990s, we looked at the possibility of moving it. This was a 1935 building, one the very first observation towers, the first weather station, the first building where planes came to the building as a terminal rather than passengers walking along the tarmac to board a plane. So, it was steeped in very important aviation history. It would have been lost because of the very compelling need to extend one of the major runways at Newark Airport and so we look at relocating it half a mile (one kilometre) down the taxiways on a new site. It was a 35,000sqft (3,900 sqm) building, we tripled the size, adding all new contemporary architecture behind it, but we situated such that when you stand at the main point approaching the building from the public side, the historic scene is retained. This means that the height was such that you would see none of the additions and we turned what had been a very early terminal into the operations centre and safety centre for the entire airport. That would have never occurred without being able to move it. It was very complicated, like moving a lighthouse, the largest move of its type in the United States and not without many technical challenges, taking 100ft long (35m), 1930s Art Moderne building parts and ensuring they come together on all three axes.

HC: Turning now to the TWA Flight Centre at John F. Kennedy Airport, would you mind starting by describing the context of that building and the status of its current rejuvenation.

RS: TWA Terminal opened in 1962, designed by Eero Saarinen is probably the most celebrated of airline terminals, anywhere in the world. It is that very expressive cast concrete form which was one of the design concepts that Saarinen was exploring towards the end of his career. It was built interestingly at the same time as Washington Dulles Airport, both were cast concrete structures, both very expressive but TWA is very unique in its sculptural expressive form whilst Dulles was a wing with a two-dimensional, linear form and in the last ten years or so, has been extended by simply extruding more of the forms. The aviation industry has changed immensely in the last fifty years and



TWA was designed at the end of the prop era and the cusp of the jet age meaning it was designed in the 1950s when the first significant jet aeroplanes. the Boeing 707, the Caravelle all came on board. We have some wonderful photos of the Lockheed Constellation, this old prop plane on one side of the building and the Boeing 707 on the other side. Both of these aircraft sat 100 people, which is an important factor to take into account, and the building was opened just as the Boeing 707 was coming on board.

Saarinen was remarkable, he had one of the first uses of ietways on this building which could load and unload fore and aft, as planes became larger, the first baggage carousel was invented by him. He understood the dynamics of moving through an airport much more than the warehouse type terminals that were being built in that era. However, at the time people thought that the future of air travel was not the jet aeroplane but supersonic transport (SST), such as the Concorde. Those planes would have been no larger than the Boeing 707. The building was designed to handle 100-person passenger planes, every gate lounge, waiting area had about 100 seats. Very quickly, right after the terminal opened, the Boeing 747 went into full scale development and began commercial flights six or seven years after Saarinen's terminal opened. So you could say that the terminal, which opened in 1962, had become obsolete by 1968. It was adapted almost immediately to have larger gate lounges to accommodate 400 passengers. During the heyday in the first two decades after the TWA Flight Centre

opened, you had people sitting on the floor in the connecting tubes outside of the waiting areas. It was inundated because it was simply way too small. The functional success of that building, you could say, lasted less than one decade.

HC: So when you first went to the site and was given the brief to convert this site into a hotel, what were some of the opportunities you immediately noticed and what were some of the challenges you felt you would need to confront.

RS: The biggest challenge is the most fundamental, which is how do you convince the owner of the site, not to tear it down. TWA was designated a New York City landmark on its 30th anniversary, which is the earliest a New York City building can be designated. Within two or three months after that, we had received a call from the owners to explain what the implications of this was and what would happen if they tore the building down. The building is at a very important site at JFK Airport, if you know the airport, it is a large loop, and every airline constructed their own terminal, which was a way of actually transferring the cost of construction to the airlines rather than the airport. There is the international terminal which is the keystone, with Pan Am and TWA on either side. Those were wedge shaped building sites, which meant that you would have a small frontage, but a large amount of airfield. The Port Authority wanted to develop that for a new airline terminal. The irony was that it was so valuable that it was its salvation because jetBlue, or Terminal 5, was able to be built behind the TWA building because of its wedge-shaped site.

The challenge was how much of the TWA could be kept, and still have a dual site. The building originally had the head house, with two linear tubes leading through to the flight wings. We won a preservation battle for keeping the flight tubes, cutting off at the end so that the new jetBlue Terminal could connect to the old Saarinen terminal. This was done not just for posterity or preservation of historic fabric, which is important, because they are character defining features but more importantly we were able to back feed the airline population, the most heavily used terminal at JFK Airport, back into the Saarinen building so that it would not become an isolated sculptural item but it could be a much more active, functional building.

We knew that the TWA Flight Centre could not continue in a true airline terminal function. We explored general aviation for private planes for example, or as a VIP terminal but the site did not warrant that. So we and the Port Authority began to look at the types of ancillary functions. Unlike many airports around the world, Brussels or San Juan are good examples, where there are hotels right on the terminal building, the hotel farm (local hotel zone) if you will, for JFK Airport was quite remote. There had been a hotel nearer the airport which had closed some years ago so there was a real need to have a convenient airport hotel on the premises.

JFK Airport has an airtrain which connects across all the terminals so the hotel can be easily integrated with the rest of the airport. What was key was that as the aviation industry changed over the years, this building had more additions and by referring to TWA's period of significance, we were able to bring it back to its 1968 form. This enabled us to demolish some of the later-era baggage additions and ancillary structures which opened the site up for us to build two new hotel buildings.

The new hotel complex consists of the Saarinen Flight Centre, the structural form which serves as a hotel lobby, bars and restaurants, the ballroom and conference rooms as well as the mechanical functions for the complex. Then there are two seven storey hotel buildings between the Flight Centre and the Jet Blue terminal which consists of over five hundred rooms. What was important was that these two buildings were placed on the flanks of the Saarinen flight centre. The historic scene is very important, you want to be able to stand in front of the building, look back at the signature view and essentially the same view which has been there for the last fifty-five years. The buildings were built on the flanks so that when you look straight ahead at the Saarinen building these new additions are merely a backdrop. At the same time there is a new 50,000 sq ft (5,500 sqm) event space which is buried underground between the tubes.



This includes a banquet hall along with conference rooms and all the functions which support that. There was some sleight of hand in putting lots of new functions on a site to make it as inconspicuous as possible. I always describe this architecture as doing work with historic buildings using a very light touch.

HC: Were there problems, structurally, spatially and technical challenges which you had to confront as part of this process?

RS: The building was in remarkably good shape, meaning we expected the concrete shell to be in worse condition. It had been coated 15 years ago with a rather non-breathable coating, which from our research indicated that it had not resulted in damage to the shell. The underside of the shell was coated with asbestos, so we had a large project of mitigating this hazard within the building. One of the biggest challenges is that with this new use, we had to follow contemporary codes. This required sprinklers throughout the building, including the underside of the sculptural shell and travel distances for egress. This is both not technically feasible nor historically appropriate therefore we had to mitigate this requirement. There were many things in the codes which were not in the codes back in 1938. The Saarinen building was constructed under what is now called the New York City Old Code which

was in effect from 1938-1968. So, part of the project was about adapting the building to new technology or achieving equivalences or justifications for deviations from the codes. The challenge was very much subjecting a 1960s building to design codes in 2018.

HC: We discussed earlier about this broader understanding of adaptive reuse, do you feel that as a case study, this is one of those buildings where it is worth retaining? Do you feel that visitors in future will see that as something important, rather than if the Saarinen building had been demolished and a new hotel had replaced it?

RS: If you lost this building, you would lose this very unique piece of architecture which Saarinen gave. It has never really been replicated, nor would it ever be authentic if it were. It would be like asking if the Sydney Opera House should be torn down because the seating capacity was not right, and we should just build another opera house. There is a need to remember our history and remember the important architects that have put these buildings up. Because of some of the code issues I just mentioned, this building will never be replicated as is. It is a symbol of the forward-looking period of the 1960s. The early 1960s was a very special time, it was before the strife and cynicism of the late 1960s, it was the post-War era, coming out of the prosperity of the late 1950s

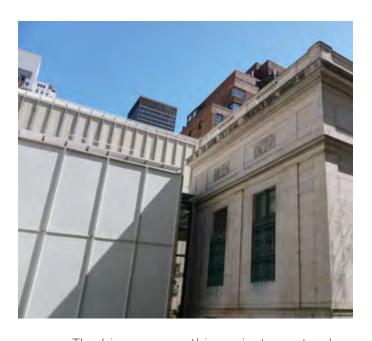


and it was a wonderfully concise but short number of years where you could epitomise the optimism of the world. When JFK Airport was built, these terminals were part of an expressive branding of the corporations and was similar to Columbus Indiana, contained an important grouping of architectural works by an important group of architects. Again, in preservation we would say that once you have lost it, you have lost it forever.

HC: I would also like to discuss with you another project, the Morgan Library and Museum. Once again, I would like to start by discussing with you what was its original function and why additions to the site were necessary.

RS: The Morgan Library and Museum located on Maddison Avenue, in New York City really started as a series of three 1850s brown stones, belonging to the Phelps Dodge families, the Morgan family bought the buildings in the 1880s, tore down the middle house to build a wonderful garden and as the years passed, JP Morgan began collecting manuscripts, artefacts and artwork as well and his collection became so extensive he needed a place to store it. His focus was on the manuscripts, hence the Morgan Library. He gifted much of his painting collection to the Metropolitian Museum of Art and formed one of their initial collections. He commissioned the Library by McKim, Meade and White, which was the first of three buildings which form the three landmark buildings we see today. The library was built to hold his collection of manuscripts and as the collection grew, he tore down the second of the three brown stone houses in 1928 and built the annex to the library. Then in the 1970s, the area between the two buildings was filled with what is called the Garden Court. It a was modest addition and so Renzo Piano was engaged in 2000 to re-do that work. Beyer Blinder Belle had been working with the Morgan Library and Museum on programming and completed multiple projects on site so we teamed up with Renzo Piano to do the latest addition, which began in 2000 and opened in 2006.

As an adaptive use project, we have a town house which houses the administrative functions of the museum including the shop and offices. The library has essentially remained the same, but it is a library as an exhibit rather than as a research library. Finally, the annex, has been turned into two large exhibition



spaces. The big move on this project was to clear out the interstitial space between these three buildings from three different centuries. The brown stone from the 1850s on the north, to the south, the annex by Benjamin Wistar from 1928 and finally the insertion in 2006. So, along Madison Avenue you have examples of architecture from the 19th, the 20th and the 21st Centuries. There was a lot of restraint on the design because the zoning codes would have allowed a much larger building, but it would have been inharmonious and unsympathetic to the scale of the annex building and the brown stone, which were both two or three storeys. As a result, the bulk of the work is underground. From a zoning standpoint this was free, from a construction standpoint this was anything but free. Boston has the Big Dig, and this was our version in New York - we went down almost 50 ft (16.5m) into New York bedrock and the heart of the collections, the vaults, are underground and protected. The large exhibit and auditorium spaces were also contained underground. Above the entry, which is the new 2006 building, there is a new reading room for scholars and temporary exhibition space. This project was very much about insertions, microsurgery to remove a poor 1990s addition which did not work well, with new connective tissue which will tie all the buildings together. There is one moment when you are in the common space between the three buildings where you can look in every direction and see a 1850s building, a 1920s building and also the 2006 addition.

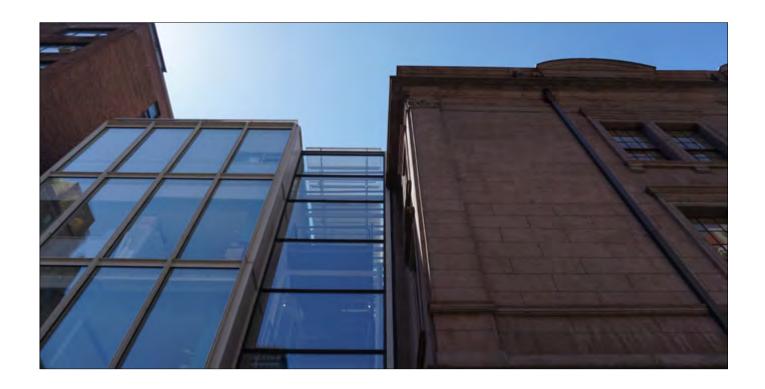
HC: In terms of that challenge of the additions and placing the vaults underground, what were the difficulties associated with protecting the existing buildings which were being retained during construction?

RS: We all lost a lot of sleep on that. I have a photograph in my office which looks out of the pit of excavation toward the street and it was the height of a four or five storey building. You see people on the street and just these shear walls and these buildings standing atop these shear walls. They look as though they are in the sky, but they are at street level. The primary issue was ensuring the rock was stable enough which turned out not to be problematic. Secondly, the collection was so invaluable that you want to make sure it is absolutely secure. Manhattan like many cities was constructed over old streams and waterways, so we discovered several streams which ran through the site. We essentially built a submarine. I might describe some of the collection items. I recall when I visited the collection the curator handed me a hand-made wooden box and I opened it up, this remarkable artefact and it contained the hand-written journals of Henry David Thoreau. The curator had pointed out 4000 year old papyrus scrolls. This was an invaluable, irreplaceable collection and we had to make sure wherever it went it would be secure

from fire, from water and from theft. In light of this, we built an 18 inch (450mm) concrete vessel, we built five ft (1.5 m) series of passageways around it, which would serve as an interstitial space so that if there was flooding for example, it would fill up the reservoir before anything else, alongside pumps and redundant pumps. To get into the vault itself, we essentially used submarine doors. These were big steel, five point locking doors and the whole door would seal. All of this would help make sure that the archives would be absolutely protected.

HC: Would you say that the condition of the existing surrounding buildings was able to withstand these immediately adjoining additions or was there also works which had to be done to the historic fabric?

RS: The building was actually in very good condition for several reasons. The Morgan Library is a very good steward of the site but also the quality of the work, particularly the two McKim, Meade and White buildings. The library and the annex were very solidly built in very tradition manners. For example the library is a grout less stone building, adopting the Greek method of having thin layers of lead between the stone, the lead then compresses and fills in the gap to ensure a totally dry set wall. This was a two storey building with such perfectly carved pieces of stone that it needed no joints other than these paper



thin lead joints. The buildings were in very good shape, whilst there was restoration and cleaning of the stone, in terms of the damage you often see, such as unequal settlement and displacement of walls, there was no problem with that. The brown stone had more damage, not structurally but the way brown stone is cut out of quarries, which is against the grain, like pieces from a pastry and due to acid rain and the harsh atmospheric conditions of the city, it had eroded a lot of the brown stone. We did a lot of cosmetic work on the façade. In addition to all of this we had to provide a new life safety system, adding sprinklers, fire protection and smoke detectors but all of those were very sensitively integrated into the building. The other challenge was to try to recapture space under the brown stone building. When we did the rock excavations for the vault, we had to hand dig the basement underneath the brown stone townhouse using small pneumatic tools. Like an iceberg, it was the work below the water level which was significant and intricate.

HC: Turning to my last question now, is there a reasonably contemporary building in New York that you are very fond of that you could see one day being listed as a landmark or if its function became redundant, it could be transformed and revitalised through this process of adaptive reuse?

RS: An interesting question. I think, the answer to that is that the building has to be somewhat timeless in form and style. The one that comes to mind is the American Museum of Natural History on the Upper West Side, it is the new planetarium. It has been up for about 15 years or so. The designer was James Stewart Polshek. Why it is very interesting is that the museum has been a landmark for many decades and a significant part of that landmark structure was the old Hayden Planetarium. It was dysfunctional, a nice Art Deco building but not the most significant part of the complex and when New York City looks at the appropriateness of demolition, they do it within context. This means they want to know what will be replacing the demolished building. So, a lesser landmark was replaced with what I think is an absolutely impressive piece of contemporary architecture. This is not a designated building, but it has a somewhat controversial history because it replaced another landmark, but I think this new addition will be a building which will stand the test of time.

HC: Excellent. Thank you very much for your time today.





Mr. Tim Greer Director, Tonkin Zulaikha Greer

DATE 12th June 2018

LOCATION Tonkin Zulaikha Greer, Sydney, Australia

ABBREVIATIONS Tim Greer TG HC Hugo Chan

HC: I would like to start by asking you, in terms of your practice and your work, what does the term 'adaptive reuse' mean to you?

TG: Well I think it means a lot of things, but it is about starting with a remnant structure, which may not be a building, it may be something that industry had left behind and building upon what has been left from before. I think why I find it so fascinating is that it is part of a continuum of the city or the cultural evolution of us collectively as a species because nothing we do is ever in isolation, it is always built upon what came before. I think that the buildings we inherit becomes a part of the project the way the city is, or the brief is, or the client's aspirations, they are just an integral aspect of the project.

HC: So in light of this, why is it significant, socially and culturally? Why do we simply not demolish these buildings when they reach the end of their useful or originally designed purpose?

TG: I think that there are two reasons for this. Firstly, there is efficiency. These old buildings embody a lot of material so by keeping that, it can be a highly sustainable activity and it always amazes me that when we start discussions around sustainability in the building industry, fifteen to twenty years ago, people did not even think about existing buildings. Ironically of course, the most efficient buildings were the ones we already have because we do not have to build them. After all, buildings are effectively the embodiment of energy which was put in to construct them.

So that is the first reason, which is the pragmatic and efficiency driven response. The other reason is that buildings also embody whether it is actual or associative, memories. They become a part of our cities and are containers of both collective and individual memories. Because of this. I think that is why people love them. I mean, why do we love old buildings? We love old buildings because of their associative memories, whether it was to do with the previous use, the current use, or a pleasant or unpleasant event which may have taken place when we were standing next to it. So, these buildings become a part of our personal consciousness, our collective consciousness through the city. These buildings become part of the city and we can see cities as a manifestation of a cultural collective, which is why cities around the world are unique and look different, because they arise from different groups of people with different value systems. Cities and buildings start to reflect those value systems and what is interesting about going to cities which you are unfamiliar with, is that we are actually experiencing hundreds and hundreds of years of cultural value systems that have been encapsulated in the stones. Cities are essentially made of the same materials, but different cultures have organised them and detailed them in different ways which gives a different expression. I think this is why our old buildings are interesting and important.

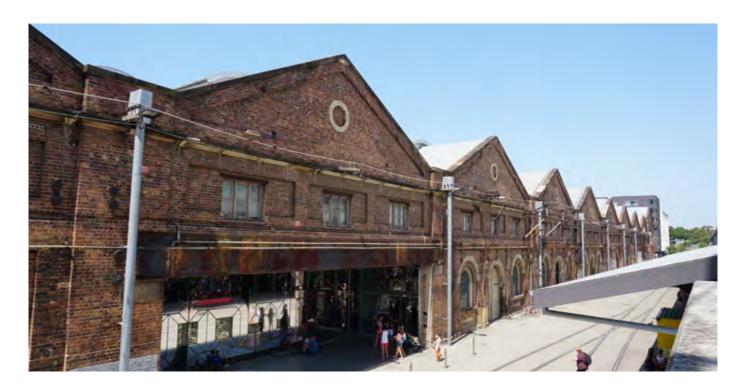
HC: From those two reasons you have just described, there is a sense of weight given to existing buildings when you approach that kind of project. How do you feel this differs from when you approach the design of a completely new building, whether it is demolition or whether it is on a greenfield site?

TG: Within the work of Tonkin Zulaikha Greer, which of course is a collective of many architects, I would definitely say that our adaptive architecture has had a profound impact on our new architecture. I think one of the things we see in adaptive reuse project is that they are both visually and culturally rich because they often have different systems which are not perfectly resolved. They are not about perfection, they are about building up different things over time and it is this layering of aesthetics or systems which makes it visually rich. When we approach a new building we begin to employ some of those techniques in a manner which somehow tries to make our contemporary architecture meaningful. I think that this sits at the base of everything which we do, we are trying to make architecture meaningful. The last thing we want is to have buildings which look as though they have been dropped in from outer space and look sterile. We want them to come out of their cultural context so when we work with the adaptation of old buildings, you find out about the old buildings and in finding out about the old buildings you go

through the bricks and the stone and the timber toward the values and philosophy that made those buildings. When we work on a new building I think we do the same thing but probably apply that to the context. We are very interested in finding out about the context, what does it tell us about the area. I think that we have expanded our adaptive reuse philosophies into a contextual philosophy, so that the surroundings take on the role of the building which we have inherited in an adaptive reuse project. This way I think we are able to make our buildings richer so that they are meaningful.

HC: Drawing on this description on your office's approach, I would like to turn more specifically about some of your office's projects and I will start with Carriageworks, which is now a public performance and exhibition space in Sydney and was most recently host to Sydney Fashion Week. So what was the state of that site when you first visited it and were confronted with this brief?

TG: It is very interesting because we went to the Carriageworks when it was already no longer a factory where train carriages were made for the rail network. We went there it was just an empty space. We were presented with these vast, majestic industrial interiors but of course the reality of when it was a carriage works, is that it was never viewed like that. It had great timber structures in different states of construction which enabled a



part of the carriage to be constructed before it would slide along to the next bay, it was all part of an overarching assembly line. Because it was such a large space and it would become cold in the winter, there were also smaller buildings inside the carriage works, such as little huts or workshops and dust free areas. Because of this, to some extent our first impressions of the building were not the genuine, or rather, was not the intention with which the building was originally made.

The other thing which had occurred was that the roof, a spectacular 19th century roof with glass windows integrated into the roof plane which allowed an abundance of natural light to filter through for the workers, had been entirely covered over. So, there was a kind of mysterious murky light when we went. When we began to do our research and started to think about how the building was intended, it was always intended to have an even and strong light, so we had to temper our emotional response and our experience of what we found with the actual intent or philosophy of the building. We actually found two things from this, one being our experience, which was probably not genuine to the building, and secondly, we also found through the historic records, a different carriage works.

HC: How did you start approach this issue of the two experiences? What were the challenges in merging them together and in due course generating the new exhibition venue?

TG: I think the first step for me personally, a phase of architecture which I like to say is just about looking. You look in different ways - there is the physical evidence where we are presented with the remnant of the building, then there is the history or the philosophy behind the building. It is going back through those process and examining the previous life in that building. This can be a tricky question because I think sometimes it is not conscious, what does always fascinate me is that you go to these buildings and because you are presented with something new, your mind is absolutely scrambling all over the place to try to make sense of what this is all about. When we finish the job, it feels calm and perfect, for two reasons - one is that we have had time to understand it and we have brought our new layer to the project. I often look at the completed

photo and the early photos and go 'Wow, it was just so confusing, it was whole cacophony of signals when we arrived" but by the end it seems calm and understood. In some ways the process we go through is one of understanding. We approach something, it is confusing, we seek to understand and employ processes to help us understand the building and the site.

HC: Often these projects employ elements or decisions that you have to make about what should be retained and what can be removed so that new programs can be accommodated as well as regulatory necessities? What were some of those decisions for Carriageworks and was that a challenging process for you?

TG: It actually was not too much of a problem at Carriageworks because it was such a large open factory. The factory is nothing more than a set of coordinates and you can see that in the naming of the bays, which are the gables and the tracks which ran through the building which gave two coordinates throughout the site. I think what happens is that you look at what is the new purpose, or new brief and what have we inherited. I am always thinking of the clues in the original building which will allow us to fit in the new brief. For Carriageworks it was very interesting because we worked with a wonderful group of performance artists who essentially were potential tenants and they gave us insight into their aspirations for what they wanted for a performing arts space. They would say things like "we don't want a theatre, we want an anti-theatre." They wanted the opposite of the theatre. We were working between the factory floor which was nothing more than a set of coordinates and this notion of this anti-theatre.

The theatre can be defined simply as a front of house, back of house and the space of engagement - where performers say something, patrons respond with laughter, tears, clapping etc....This summarised as the most simplistic level what a theatre is. Well we decided we could disrupt and subvert that thinking by taking all these different theatre uses and distributed them across the factory floor in a non-hierarchical way and took the step between anti-theatre and non-hierarchical as being translated values. We then presented the whole series of uses simply distributed across the factory





floor. We deliberately put the lavatories to the back and the performance space in the foyer so that people are constantly moving through the building. This organisation was enabling one space to inform the other, asking how two seemingly mutually exclusive concepts can be linked together and what relationships are established between disparate spaces. At Carriageworks we kept everything that we could. The only things we removed were select columns and trusses in what is now called Bay 17, which is the now the main performance space.

HC: Turning to another project by your office, the Paddington Reservoir Gardens which in some ways sits at the other spectrum of approaching adaptive reuse. So what were your initial thoughts once again when you first visited the site and received the brief for this project?

TG: Well, it is interesting that you have identified Carriageworks and Paddington Gardens as different because they are very different approaches. Carriageworks focused on a collection of ideas that were bought into a singular vast space. With the Paddington Reservoir Gardens, it was very much a ruin. It was a collapsed set of vaults and in fact during the process of documenting the gardens, one of the vaults collapsed and we had to come up with another building type to deal with that piece that had collapsed. This was a classic example of arriving and finding just a pile of bricks, it was chaotic. It was a highly ordered structure, but we could not see it the first time we went there, we had to go down through a hoarding and there were piles of bricks and overgrown plants, other layers of new structure during the one hundred and thirty years since it was first built. Once we had this idea of making a garden out of ruins, it seemed that we did not have enough to work with, it felt very small for a ruin, it was not as though these were Roman Baths, the site was about thirty by sixty metres. Having thought through this idea of what we have inherited as one of the fundamental early questions, it seemed that it would be a great architectural strategy to work with the notion that the concept for new use lurks within the artefact. What could we pull out of these remnants to make our new building?



Whist this started as an ephemeral notion, it quickly became a practical one. The existing building has three materials - brick, timber and cast iron. Our new building therefore will only have three materials, intuitively this told us the new building would not overwhelm the old building. The old structure was standard units of brick, pieces of wood, pieces of steel. So, all of our new insertions would also be in standard units, for example the new pre-cast concrete floors are modular elements. We then started considering the new aluminium vaults, effectively acting as a new sun screen would be the same size as the brick, effectively making the screening element the mortar joint of the brick. elevated up so that it had the same scale as the brickwork. This came out of this very simple idea.

Our consultant team worked similarly with these interesting ideas. Our lighting designer for example identified that if you put red and blue light together, because of the frequency it oscillates within the human eye, we would achieve a watery effect. So, within the chamber which is predominantly enclosed, it has this lighting mode alongside the conventional white light, but it also has this kind of ephemeral watery effect. This was quite a watershed moment for me as an architect to figure out how to convey ideas to other people. When we presented these very simple ideas to our consultants and they returned with these kinds of suggestions, suddenly I felt that it was a way of working as an architect which was like ripples, having layers which go out,

with consultants having ideas which are consistent to the central idea of the project, which means that we have a cohesive piece of architecture.

HC: This project is now very much enjoyed by the local community and we have touched on this idea of memory and ruin as well, do you attribute the success of this park to the fact that you were asked to retain these structures, rather than if it had all been removed and some plan of a generic park had been put there in its place?

TG: Yes, well again I think this is an interesting observation because the Gardens work on a number of different layers. The thing we touched on before, the site works as a collective of memory and when we did some community consultation, we had been concentrating on the 1860s and the 1870s and one person came up and said: "I always remember coming here with my dad, we used to fill up the car with petrol every Saturday morning here." And this was a very touching memory that this person had of the site with his father. We suddenly realised that the bowsers (fuel dispenser) which had long been removed which had existed on the site in the 1950s and 1960s when there was a petrol station was also important. It was then that Anton James, the landscape architect who came up with the idea of having the lozenge shape of the bowsers and we re-used the original colour scheme of the petrol station for some of the elements. So, for the people who recall this petrol station, it provides an associative memory for them. This is the process of giving people meaning in buildings so that they have a relationship and an understanding of the site.

This is one level of the project, but another key aspect when you have a remnant structure that has collapsed which is fragmentary is your mind is making up the bits which are not there. It is very much like a jigsaw puzzle where you have some pieces around the edge and a bit of the blue in the middle, but there is nothing else and you have to visualise the picture. I think that is what happens when people visit the Paddington Reservoir Gardens, you have to do a bit of work yourself, you have to imagine it for yourself. You have a clue because one of the chambers is still present and it is cellular and repeating, but then you walk around, and you start to make up the image of the space in our own minds.

I think that the other thing which happens is that keeping the remnant structure allows us to do things that are not considered acceptable. By this I mean, as a piece of public space, a large component of it is actually below street level and anybody who is involved in public domain and urban design, it is usually good logic not to design public spaces where you cannot see it. You want things open and have ease of access, so that if you proposed a new building where the public space was underground, I doubt whether any urban design review panel would approve it. The fact that this ruin already existed meant that there was some form of acceptance. We obviously had to work very hard around the safety the technical regulatory issues, but we were able to take people below street level because of the ruin. That brings a whole lot of benefits. It is very quiet, it is a very contemplative space in the middle of a busy city. You can just be. There are very few places in Sydney where you can just go and just be. We created a piece of public space which was different to most other public spaces in the city by virtue of what we had inherited. It is possible to start seeing the benefits which come out of working with these old structures.





HC: I would like to build on that and ask whether all of the fabric was there from the original period or whether there was already a layering in aside from the additions you made.

TG: It is interesting because I think of Paddington Reservoir Gardens as a contemporary piece of architecture. It just happens to have a series of old weathered brickwork arches and timber posts and cast iron beams. The philosophy is contemporary, and when I say contemporary I mean over the last fifty years, drawing from Carlo Scarpa and his work at the Castelvecchio in Verona. But there is this idea that the contemporary philosophy which has contemporary architecture, new architecture using contemporary materials and construction techniques which just happens to come out of this old building. I think what is very refreshing about now is that we are very comfortable about keeping old buildings, we do not have to be obsessed about the Tabula Rasa, we do not have to push buildings away and start anew. I think there is a type of urban maturity which we are seeing in Sydney whereby we can keep something because we feel it is interesting and often useful, but also confident enough to put the new thing next to the old thing. That actually takes a type of maturity and a type of confidence because I think for a long-time people wanted to demolish old buildings because they were actually better than what they were being replaced with. I find that really reassuring in our collective contemporary architectural thinking.

HC: You have mentioned this juxtaposition between an old and a new building sitting side by side and I think it leads quite well into the third project I would like to discuss with you which is the Old Clare Hotel which is again is different because it is a commercial client. So firstly, my question is, does this kind of a brief differ significantly from a public project and how does it impact your approach to adaptive reuse?

TG: We were I think, exceedingly lucky to have an inspired client who had actually built a number of very exciting hotels around the world which were all based upon existing buildings. We were birds of a feather in some ways so a lot of the difficult conversations which you might have with clients about why you might keep a building were already taken as read, the client could see the benefit. What is very interesting is that once you boil a hotel down to its essence, it is about creating a unique experience. Particularly for people who come from outside Sydney, the building was very much of its context, being a part of a former brewery. The Claire Hotel was made of three buildings - one was the Art Deco Hotel which defined the northeastern corner, the administration building for the brewery and finally, something which we did not originally see because it had been built over, but an old laneway. Working with these three entities, that was the way to make the uniqueness of the Claire

Hotel which comes out of its context. We then took the laneway and turned it into the foyer so that it had an immediate connection into the city. Often you see in hotels a big spectacular foyer which is a 'wow' moment but you are not really connected to anything other than to have this instantaneous sense of arrival. The Claire Hotel has this moment which is always connected back into the city.

This project was about using the different buildings to create this experience. In doing so we employed architectural technique very deliberately called un-building the buildings we had inherited. We spend a lot of time designing new buildings and so this project focused on how we might un-design an old building. When you move the central space and you move into what was the brewery administration building into what is now the wing of bedrooms, we just sliced the brickwork from the top of the building straight through and we employed this technique which was quite powerful and architecturally emotional and confronting. We did a similar thing to the Kensington Street building because the original ground level of the administration building was 1.5 metres above street level and we wanted to bring the building down to the street level to have a strong urban connection to the restaurants which open onto the streets.



HC: You mention some of these slices and changes which goes back to an earlier question about how these decisions are made. How did that process come about, in terms of considering the original and significance of the old fabric, balanced with new fabric which must also have its place in the building.

TG: One of the factors was that the administration building was not of high significance. We really just liked it because it was there, it embodied a lot of energy and it was ideal for hotel rooms. It was 18 metres wide, it was long and simply putting a corridor through the middle would enable great rooms on either side which was appropriately elevated above the street. The bay structure of the building essentially allowed one room per bay. The organising of the hotel, which comes about very pragmatically from the process and then to slice away a part of the fabric. In the case of the Claire Hotel, the question of how we remove fabric - we can nibble away, we can give the illusion of not having removed fabric. Our process is very much about making buildings visually understandable, so we can see what is new and what is not, there is not a lot of covering up. So this decision to slice the building came about I suppose because we had thought so much about designing the new, we also wanted to see how we could go about un-designing the old and being very purposeful about removing fabric. I think cutting is quite interesting because you can see that someone has come and they have cut it here because they needed to - there is something quite honest and open about that. Once we had placed the cut we inserted mirrored and reflective surfaces which enhanced that idea.

HC: Building on this, you mention the purposeful removal of fabric and deliberate contrast in materiality, do you think that is a conscious, significant and meaningful decision - Why do we not simply replace like for like. What is the rationale behind this?

TG:I think this comes out of the fact that as architects we work within a system. A building industry which builds in a particular way and throughout history we have built differently. To build in 2010, 2015, 2020 and try to make it look as though it was 1910 or 1870 is never going to be convincing. We have a metric system for example, the modules are all slightly out. So the idea of 'hidden repair' is very difficult. People who work on building sites have different philosophies. There has been a fundamental shift in the building industry so if we return to the

Paddington Reservoir Gardens, labour was not that expensive, but materials were hellishly expensive. So, things were designed to minimise the use of material but if it took a lot of time to implement, that was not an issue. Thus, the paradigm of the era was high material cost, low labour cost. We now work in a time where it is the complete opposite, labour rates are high, material costs are reducing though standardisation, so it is much easier to oversize something than to work out the nuance of it. We simply work in a totally different time, so we have to utilise the resources and the skills that we have at our disposal now to build. Otherwise we end up with incredible expenses and it becomes highly fraught with issues. I also think that there is something good about expressing our values now which by-in-large gets expressed at different levels, not just the architect but throughout the entire chain which makes up the building industry. There are a number of pre-sets in the building industry, for example when a steel beam comes out of the mill it is all perfect because of the quality of manufacturing which is different to what it was two hundred years ago. They are to some extent the constraints we have to work with in contemporary architecture even if it is not necessarily determined by architects.

HC: So I would like to conclude our conversation by asking you, your office has worked across a range of different project types and historical period buildings which have been adapted do you see a current Sydney building which you know, if its current functional use becomes obsolete that you would like to see undergo this process of adaptive reuse?

TG: I do not know if there is one single building that I can pinpoint. I will say that when I used to run a design studio at university, when we investigated any 19th century buildings was about on its third use and I think that is very interesting that uses simply change though need but the symbolic meaning is retained. When you have an old building, almost the only thing that is retained is its symbolic value, because its function can and almost certainly will change. As humans we are incredibly inventive, taking a building which was for one use, take it and turn it into something else. So then you ask what do we have at the end of it and I think what we have at the end of all of this is the symbolic value of buildings.

HC: Thank you very much for your time in speaking to me today.



Mr. Peter Lonergan Creative Director, Cracknell & Lonergan

DATE 4th June 2018

LOCATION Cracknell & Lonergan Architects, Sydney, Australia

ABBREVIATIONS

PLPeter Lonergan HC Hugo Chan

HC: I would like to start by asking you, in terms of your practice and your work, what does the term 'adaptive reuse' mean to you?

PL: I suppose most of the projects that we do are in urban contexts and quite often involve retaining all or part of a building on the site. So, in this sense, there is an element of adaptive reuse on all of the projects that we do. For me, adaptive reuse has a few categories of meaning. The bestknown meaning is related to heritage buildings but then, more generally, the adaptive reuse of existing structures does not always have to involve heritage, it could simply be a reuse of a building which is capable of being reused or adapted. There are multiple good reasons for this, starting with statutory requirements and environmental reasons for reusing buildings and parts of buildings. Repurposing or remaking buildings are all a part of adaptive reuse.

This building which we are in now for example has been adaptively reused. It is our office building and when we first moved here about twenty years ago it was an industrial warehouse wholesale building. built in the 1940s and originally operated as an aircraft parts manufacturing building. We purchased this building with a group of other people and had it split into apartments on the eastern end of the building and constructed our office on the western end of the building. In this sense, we always try to look for adaptive reuse opportunities on the sites and projects we work on.

HC: Building on this idea, why do you think it is important for us to adaptively reuse our buildings? Why do we not simply demolish them when they become obsolete and replace it with new purpose-built structures?

PL: I think that in cities and in my experience, there is a language which exists and continues to exist in cities. The buildings are part of this vocabulary and to retain that, or aspects of that, keeps a dialogue which speaks of its history which is then able to participate in the future of the city. I think that the voices which buildings have in urban contexts is very useful and important for us to maintain.

HC: Within your practice as you have mentioned you have encountered various adaptation projects including the building we are currently in. What are some of the challenges associated with these projects which you do not necessarily find in a new build project?

PL: In a way I find it easier to work in an existing type and context. It provides cues. Even within a typical residential context when you are knocking down an existing building, you are still within a strong context which you need to adapt to. So even small cleared sites have an aspect of adaptation where they have to respond to the buildings which remain around them. In this sense, I think that adaptive reuse is actually a little bit easier for the work which our office does. However, this is not always the case for larger projects. In Australia, I think architects

and developers quite often ignore the potential benefits of adapting existing structures and prefer a greenfield site, a new building, and an identity which they can claim as a sort of a dominant identity. There is a lot about identity in new buildings and people struggle with the personalities of existing buildings.

HC: Of course, in addition to your work with Ms. Cracknell, you also serve on the Heritage Committee of the NSW Chapter of the Australian Institute of Architects. I would like to ask in that role, would you mind explaining what the function of the Institute and the Committee is?

PL: I was first on the Committee about 15 years ago for a short period and then I re-joined the committee this year. The Institute would say that the main purpose of the Committee is advocacy alongside retention and promotion of significant twentieth century works of architecture in the state. Thirdly, the Institute is concerned with the promotion of the work of architects. The Institute maintains an extensive list of significant architecture in NSW and this has been maintained for seventy or eighty years, so it is one of the oldest lists in the country, pre-dating the National Trust, the Heritage Office and the planning legislation around heritage. In that sense, it is an extremely important list, but on the other hand, there are also some deficiencies - many of the architects are not known or unnamed, there is very little information on some of the buildings which are contained within the list. As a result, another of the committee's primary functions is to obtain information behind that list and therefore further develop and support this list of significant buildings.

HC: Turning back then to your work in practice. You have touched lightly on some of the policies and legislative frameworks which govern heritage in NSW. What are some of the challenges in working on adaptation projects in regard to these policies?

PL: I think the interpretation of policy is fraught. It appears that my interpretation is different to everybody else's, so it is fraught for me, but I believe the larger problem is that the legislation is interpreted in a manner which allows little room for adaptive reuse. A lot of people who administer the legislation, at both the local and state level appears to have little subtlety in how to manage or interpret the policies. I think that there are many who work in heritage who believe that a listing means 'Stop All

Work', 'Do No Harm', 'Do Nothing' mentality. That is certainly not the intention and has never been the intention of the founding documents which set up heritage legislation in NSW. I believe that it is becoming worse, more conservative in the wrong way. Adaptive reuse is really the key to ensure that heritage structures have an ongoing role in the city and can be recycled many times so that they can continue to participate and add new voices to the city.

HC: I would like to turn to one of your projects, the Jarjum College in Redfern. Would you mind starting by providing a context for this project in terms of the brief and the site?

PL: Yes, Jarjum College was built in the early twentieth century as a presbytery which actually had already been adapted to be a presbytery to service the small church, St. Vincent's Church on Redfern Street. The church was constructed in the late 19th Century and there was a smaller presbytery which eventually expanded and for much of the twentieth century the church and the presbytery functioned in the manner in which you would imagine churches function. In the early 1970s, after many years of rising poverty and disadvantage in Redfern and particularly amongst the Aboriginal people who lived in Redfern, the presbytery became a sanctuary for local and displaced Aboriginal people who had come to Redfern looking for work or families. The parish priest in the early 1970s, Father Ted Kennedy started allowing families to live in the presbytery, to the extent where he moved out of the presbytery and lived in the vesting sacristy in the church, giving his home over to Aboriginal families and homeless Aboriginal people. Unfortunately, several fires occurred, people died in the building and after Father Kennedy moved out of the church, the presbytery turned into a squat and later on, a place for destitute and homeless people.

Our active involvement began with a search to find a venue for this school, which was to be a street school for Aboriginal children. The Jesuits were on board with providing this school and Julie and I, with Alisa Gillette, seemed to come to the conclusion that the presbytery would be a good location, not just because it was a reasonable size but because it had an incredibly interesting and important social context, and appropriate context to enable a regeneration of the place. With some negotiation with the diocese, the presbytery was made free to be the site of the new school.

HC: So when you first visited the site, what were some of the things you picked up on in terms of functional specifications, structural alterations which would have to be made to accommodate the new school?

PL: Well the building was uninhabitable. We could not find a hazard management team who would be willing to go in and clean the building and for a time Julie and I had to clean the building ourselves. There were probably two or three thousand needles, there were old, filthy clothes, the roof had collapsed over a portion of the top floor meaning the attic had become a nesting ground for pigeons. Julie and I spent four or five weeks overseeing the clean-up of the building so that it was viewable, so that it could actually be visited. The building was determined to be unsafe, the structure had collapsed. As I mentioned there had been several fires previously which meant that there was severe fire and water damage to the structure. The inside of the building was a wreck, but the volumes of the building and its streetscape presentation was surprising good and wholly appropriate for a small school. Some of the small lean-to structures were present but there was a decent amount of open space which would enable development to accommodate the school's functions.



HC: So, in light of the state at which you found the building, what were the challenges of the conserving and reusing the building?

PL: The façade needed to be conserved as it was an early 20th Century building to a 19th Century building. The building was originally two terrace houses and the verandas had been taken off and a religious façade put onto the building, including a colonnade and a series of pointed vaulted windows built into the veranda structure. The old terrace existed behind that. There were problems with this as we needed to open up the terraces to form larger spaces for new classrooms. There were also spaces on the ground floor which needed to become open administration areas. The original terraces had a nine metre by nine metres by nine metre volume which we repeated twice behind the existing structures to come up with a reasonable amount of accommodation for the school. There was a formality in the front portion of the building, particularly in the façade which we were able to reinterpret for the construction of the two new cubic volumes at the back of the original building. This also left a small open space to the east of the building between the church and the presbytery so we were able to create a new outdoor open space for the school. Geometrically the school was quite easy to compose, the programmatic requirements were straightforward. I suppose it was unexpected - no one expected anything form the purpose other than to have a place for local Aboriginal families and their children who were having difficulties at other schools or to be in an environment which was more appropriate for their families. Other than providing some spaces for people to come to, the actual programmatic requirements were virtually unknown.

HC: You have mentioned the structural issues of the existing building as well as the many layers of history inherent in this project. When it came to decisions about the condition of the heritage fabric, how did you come about deciding what could be retained and what could be removed?

PL: I think superficially, it is very easy to satisfy the legislative expectations of heritage projects. There is a very facile expectation that the façade would be retained and continue to contribute to the streetscape. What Julie and I, and the Jesuits who were our clients believed to be important to maintain was actually the social significance of the place, the memory, the sadness of the place as well as the hope of the place. Very early on in the project, we managed to find an artist who had completed a life size statue of Shirley "Mum Shirl" Smith, an important Aboriginal activist from the 1960s-1970s in Redfern, and we had this sculpture cast in bronze and installed at the site prior to the opening of the school. This immediately engaged with the local Aboriginal community, there were people who came to the school to see this life size sculpture of this hero of Redfern. Symbolically and socially, we reintroduced the site to the community as an important sanctuary and memorial as well.

What we try to do in all of our adaptive reuse projects, though very few are as significant as Jarjum College, we look for a conservation and restoration of the memory, of the social spirit of the place, which is hard to do but also simple to do simultaneously. Julie and I believe that it is really the most important and logical thing to do – that you give life and memory back to a building so that it has a sentience which people can really relate to.





HC: This school has now been in operation for almost a decade, do you think that the users have benefited from this project as opposed to if the buildings had been wholly demolished and a new purpose-built school erected on the site instead?

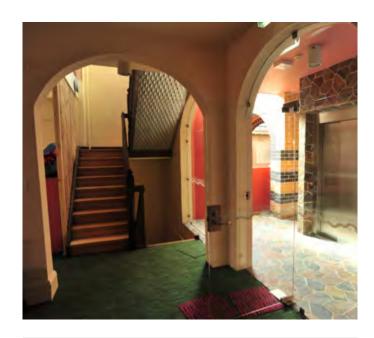
PL: I think that the building fits. I do not think that it is constrained by the reuse and there was and continues to be a community acceptance of 'the thing in the street'. There was a lot of suspicion at the start, but I think the reference to memory helped appease the scepticism and criticism at the start. When we did community consultation at the start of the project with one of the priests who was supportive of the project held a community meeting session, members of the community commented that it was inappropriate for the rich Jesuits to be pumping money into the school and that it was another whitewash. Lyell Munro, a community activist said however that if one child benefited from this street school then all of the money, all of the effort would be worthwhile. I took that away as my aim, which was for the site to work for just one child and it would all be worthwhile. Of course, the school has worked for many, many children but in that sense, we tried to be quiet about our work. The adaptive reuse in this scenario really helped, because if they had knocked it down and put a fancy new school on the site it would not have been contextually appropriate. Had the project been on a greenfield site, in the country, sure a new building is appropriate but here in the city, there is certain advantage to the work through the settling in and the acceptance of the new use.

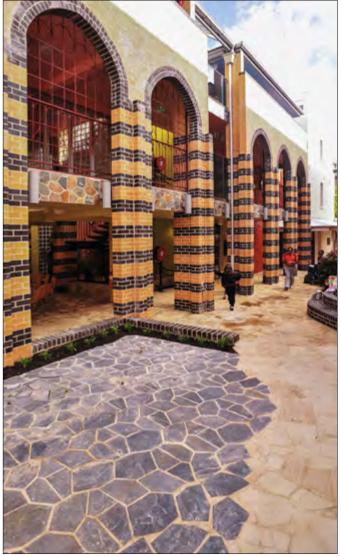
HC: Finally, to conclude, I want to ask you whether you have a building which you enjoy and you are fond of in Sydney and if its current functional use was to become obsolete, you would like to see it adaptively reused?

PL: They are probably not buildings I am fond of but there is a housing crisis in Sydney and I think the crisis stems from the lack of availability of transitional housing, that is, transitional housing for a whole range of different communities including tourists, students, homeless people, refugees. There is a whole range of transitional forms of housing which would adapt well to many of the empty or underused buildings in our city very simply. I think that would be a great thing to do - it would be useful, helpful and these I think can be interim uses while further, better uses are being defined or while even waiting for redevelopment to take place. Transitional uses for transitional buildings for transitional forms of housing I think is a great opportunity for many, many buildings to take up.

HC: Thank you Peter for joining me for this interview today.









08 CONCLUSION

"A thing of beauty is a joy forever: Its loveliness increases; it will never Pass into nothingness: but still will keep A bower quiet for us, and a sleep Full of sweet dreams, and heath, and quiet breathing"

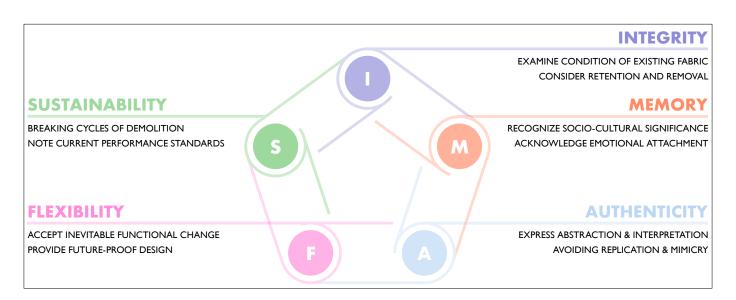
- Endymion, John Keats, 1818

// FIVE ELEMENTS OF PRAXIS: DISTILLING CURRENT TRENDS IN GLOBAL PRACTICE

There can be no doubt that the adaptive reuse of architecture, though not in and of itself a new concept, is certainly one which is facing renewed interest in the face of a heightened sensitivity to designing for context and countering the unsustainable cycles of demolition and tabular rasa construction which defined much of the 20th Century. Obsession with 'newness' has been replaced with an acceptance that our cities are not homogenous landscapes of monotonous structures but can actually be dynamic places of dialogue between different buildings across different periods of our collective social memory and history. In 2006, spearheaded by His Royal Highness Charles, Prince of Wales, alongside the International Network for Traditional Building, Architecture and Urbanism (INTABU), the publication The Venice Charter Revisited was released and critically examined and reviewed the implementation of the Venice Charter and its highlighted its shortcomings and broad misinterpretation. This renewed interest has not been confined or isolated - indeed, just as this research project moved towards its conclusion, the Government Architect of NSW (GANSW) officially a unched ts Better Placed Heritage Design guide which for the first time in Australia at least, began to interrogate the Burra Charter's goals of heritage adaptation from a design perspective.

Essentially however, these new policies are merely a starting point for how designers and practitioners should think about the heritage of our urban fabric. Within the modus operandi of adaptive reuse in architecture examined in this research project five recurring principles were identified. Across all thirty-eight case studies and twenty interviews, these principles returned time and again, providing initial insight into the current global trends in adaptive architecture.

^{• 08.01 //} The recently opened Empire Stores project by S9 Architecture in Brooklyn, New York.



Integrity

The first point is that of integrity. Preserving the integrity of the original fabric where conservation takes place with rigor and without detrimental changes. Repairs are made at the bare minimum and there is a marked avoidance of replication. Integrity also informs deciding what aspect ought to be retained and what can be removed and altered, whilst retaining key original qualities of social and cultural significance.

Memory

Secondly, and closely aligned to the theme of integrity, is memory, which recognizes that buildings are often, physical manifestations of a particular moment in history whether nationally important or locally significant, resulting in significant sociocultural and emotional attachment by individuals and communities. An understanding of place therefore enables practioners to begin considering how a site maybe reinterpreted, reinvented, represented or reused.

Authenticity

The cross section which was taken demonstrates the broad consensus that new fabric should be of its time and tectonic culture. They present a thoughtful abstraction of preexisting form and spatial qualities, not replication or re-creation of past forms. The result is the generation of new experiences in how the end user interacts with both the historical and the new built fabric.

Flexibility

We have seen that change is perhaps the only constant factor over the course of the development of our cities. There must be recognition that functional change is almost inevitable and that it is necessary to plan for the foreseeable unforeseen circumstances of the future. As a result, projects provide a degree of flexibility, where further changes might be easily integrated and no longer be bound by the rigidity of specific spatial forms and functions.

08.02 // Diagram of the five elements of praxis.

Sustainability

Recognizing the constant cycle of demolition and construction of wholly new, purpose-built structures is no longer a viable, reasonable or sustainable means of urban development. Projects take into consideration sustainable approaches from the recycling of entire structures on site, to the careful and critical analysis of which components should be demolished or replaced to reduce the overall ecological footprint of construction.

In bringing these five principles together, it is of course recognised that they are not universally applicable to each and every project. Whilst they are not always applicable it is undeniable that successful cases of adaptation are often, a mix of these, contributing to the overall success of a project which seeks to adapt, revive, reconsider and revitalise.

Adaptive architecture has been recognised through this research as not merely being confined to heritage buildings, and nor are they exclusively concerned with transforming a site from one use into a wholly new one. Many examples of the case studies showcased here are attempts to modernise, contemporise improve existing building stock, bringing them in line with current statutory requirements but them to generate new reinterpreting experiences. Simultaneously, adaptation reveals that many of our buildings are already composites of multiple periods, rather than artefacts frozen in time and place. The layering of multiple languages of architecture adds to a city's diversity and to the wider continuum of history. Fundamentally, adaptive reuse can be seen as a critical regionalist approach to architecture which reiterates to us is the significance of place: the fact that architecture is not merely a universal machine for living and working in, but actually an inseparable part of our individual and collective memories experiences of the city.

// STORIES UNTOLD: LEGACY CASE STUDIES

What started out as a small project of twenty case study projects more than doubled in size. What began as the hope of interviewing at most, eight individuals turned into a database archive of twenty audio-visual interviews (and still growing). This journal represents only the beginning of what I hope to be a serious, critical and wide-ranging interrogation into the field of adaptive architecture. As I began my travels and commenced documenting the cities I visited, there were naturally, additional projects which became evident and which I have been unable to include in greater detail. I have listed them here to demonstrate that the field of adaptive architecture is not bound by the typologies and case studies I have shown, but in fact have even more diverse and wide-ranging functions and second, third or even fourth lives as buildings.

HONG KONG The Pawn **Urban Renewal Authority**

Another initiative of the Urban Renewal authority, this tong lau was once home to a family-run commercial pawn shop and residence. In the late 2000s it was converted into a series of dining and retail establishments as part of its heritage conservation and adaptation.

Murray House Architectural Services Department

An interesting exercise in considering to what extent adaptation should be pursued. In order to prevent its demolition for the construction of the new Bank of China Tower in the late 1980s, the entire Edwardian Murray House was dismantled stone by stone and stored, finally reconstructed in the 2000s in the seaside district of Stanley, serving as a dining and retail premises and community hub.



Savannah College of Art & Design (SCAD) North Kowloon Magistracy LEO A DALY Architects

A primarily interior re-programming of the building, the project transformed gaol cells into artist studios. These interesting predicaments were some of the challenges faced by Leo A Daly Architects in the transformation of the former North Kowloon Magistracy into the Savannah College of Art and Design.

Murray Building Foster + Partners

An iconic mid-Century Modernist office tower is transformed into a new luxury hotel in the heart of the city. Another interior focused project, Foster + Partners makes appropriate use of the existing structure's strongly emphasised repeated geometry of blade walls to create the new hotel rooms and engages successfully in a dialogue between Modernist and contemporary architectural expression.

LONDON Battersea Power Station Wilkinson Eyre

Still under construction and not without controversy, the restoration of Battersea Power Station included the reconstruction of two of four iconic chimneys. The financial cost of restoration necessitated a significant increase of floor space development adjoining the site, raising the question of whether a line should be drawn between restoration or demolition.



NEW YORK Mulberry Street Public Library Rogers Architects

The conversion of an underground chocolate factory into a library in the SoHo district of New York raised the interesting predicament of how to direct visitors in, and take them into the main reading room, converted from a double volume atrium which previously housed a boiler. At the same time, the library had to operate wholly independently from the luxury loft conversion above, raising interesting constructional and mechanical challenges.

Empire Stores S9 Architecture

A new hub for retail and dining, Empire Stores scoops out the interiors of an old warehouse to create a new open atrium, with steel and glass framing the many levels of shops, whilst the existing openings are conserved to frame views from Brooklyn back to Manhattan.

St. Anne's Warehouse Theatre Marvel Architects

Set along the piers of the Brooklyn Bridge, a theatre is carefully inserted into the remnants of St. Anne's Warehouse. The additions are topped with a translucent glass block storey, providing a juxtaposition of materiality, but also continuing the horizontal pattern of brickwork which defines the primary warehouse structure.

SYDNEY

Macquarie Bank Headquarters Commonwealth Bank Building Johnson Pilton Walker

Carefully restoring the main banking floor of an impressive four storey entry to the Commonwealth Bank Building, JPW was also engaged with providing new additions, a new atrium. Small incisions, including custom designed steel and glass elevators provide improved access and circulation, whilst these small additions also means that from the street, only the heritage building remains visible.

Sydney Living Museums Francis Jones Mohen-Thorpe

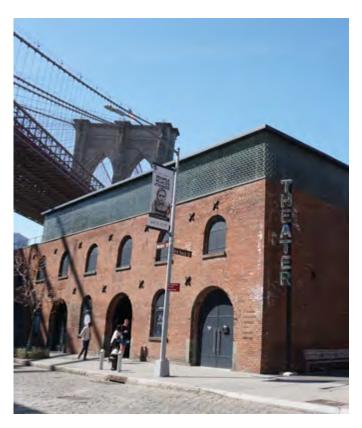
Transformation of the Mint, one of Sydney's oldest Colonial buildings, adapting the dilapidated former mint press into the headquarters of Sydney Living Museums. Contemporary architectural forms, referential to its site in scale and bulk is decidedly new and creates a comfortable juxtaposition to connect the many isolated buildings and enable its new programmatic needs.

Paramount House Hotel Breath Architecture / Fox Johnson

The site of a former film studio. Paramount House Hotel provides two additional storeys expressed in copper chevron-shaped tiles, screening the full height openings of glass for the new hotel rooms. The materiality and tone, directly contrasted against the paired back pale pink brickwork, provides a stark contrast between old and new.

Australian Museum Extension **Neeson Murcutt**

Realising James Barnet's original vision for the Australian Museum, the glass entry addition to the Australian Museum is part of a wider reconfiguration of access and circulation into the museum, improving the experience of visitors and orientating access back in line with the city's northsouth axis.





Top to Bottom: 08.05 # St. Ann's Warehouse Theatre located beside the Brooklyn Bridge in Brooklyn, New York.

08.06 $/\!/$ The Macquaire Bank Headquarters, with a new addition on the top floor not visible from the street.

// LEGACY PROJECTS: **FUTURE RESEARCH DIRECTIONS**

As I quoted T.S. Eliot in my opening preface, the return from travel allows someone to see their starting point from a fresh perspective and in that sense, this project has barely commenced. Whilst ten interviews have been showcased here, another ten are currently being edited and reviewed, with several more interviews in Sydney planned to take place in 2019. All of this, in addition to the as yet unexamined legacy case studies I highlighted earlier, opens up multiple pathways for further research into this area. I have attempted in this short journal to identify and highlight some of the recently completed adaptive use projects but I am certain that globally, there are many more case studies which will showcase architecture's broad challenge of working with history.

Having established five recurring themes, or elements of praxis which appear to broadly reoccur across the examined case studies, I feel that it will be important to continue developing working definitions for these ideas and establish a stronger framework for how architects appear to be approaching the concept of adaptive architecture. In August 2018, I was fortunate enough to have presented these ideas and three case studies at the University of Sydney's Centenary Symposium on Cathedral Thinking and I believe that moving forward, further refinement of these ideas would be appropriate and necessary.

Another legacy of this project are the many unanswered questions which have only begun to appear in this document. The nature of memory, the intangible, social reasons for adaptation and the current critique of broader global practice are just some of the identified areas which could easily be subject of future research. As a new age of buildings pass into what we arbitrarily identify as 'the past,' as though they are somehow distant and archived, the adaptation of Modernist and even contemporary buildings will come to be and questions will arise about how heritage policy, originally drafted to conserve stone and brick, will have to adapt to a new era of materials and expressive forms.

Finally, and most importantly, the digital footprint which has arisen out of this project. The massive archive of digitally recorded interviews, whilst available for access via the NSW Architects Registration Board, will also gradually become released as a podcast and Youtube series. The podcast series will detail each interview in full, whilst shorter videos of each city, project and interview will be shown via Youtube.

The updates of this legacy project may be accessed via the link below: https://www.studiohc.org/arpodcast



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APPENDIX

APPENDIX A: LIST OF ABBREVIATIONS

The following is a list of abbreviations for places, projects, documents, organisations which have been referenced or mentioned throughout the research document.

American Institute of Architects AIA

AAB Antiquities Advisory Board, Hong Kong

AMO Antiquities and Monuments Office, Hong Kong

ASD Architectural Services Department, Hong Kong

BD Buildings Department, Hong Kong

CPS The Former Central Police Station, Hong Kong (Now: Tai Kwun)

CSM Central Saint Martins, University of the Arts, London, United Kingdom

ICOMOS The International Council on Monuments and Sites

HK / HKSAR The Hong Kong Special Administrative Region

HKIA Hong Kong Institute of Architects

HKJC The Hong Kong Jockey Club

LBS London Business School, United Kingdom

LCSD Leisure and Cultural Services Department, Hong Kong

LPC Landmarks Preservation Commission, New York City

NGO Non-Government Organisation

NSW New South Wales State. Australia

NSWARB The New South Wales Architects Registration Board

New York State. United States of America NY

NYC New York City, United States of America

NYU New York University, United States of America **OMA** Office for Metropolitan Architecture

PRC The People's Republic of China

RAIA Royal Australian Institute of Architects

RIBA Royal Institute of British Architects

RSH+P Rogers Stirk Harbour + Partners

UAL University of the Arts, London, United Kingdom

UK The United Kingdom of Great Britain and Northern Ireland

UN The United Nations

UNESCO The United Nations Education, Scientific and Cultural Organisation

USA The United States of America

URA The Urban Renewal Authority of Hong Kong

WCEC World Conservation & Exhibition Centre, British Museum, London, United Kingdom

V&A Victoria & Albert Museum, London, United Kingdom

APPENDIX B: LIST OF PARTICIPANTS

I am deeply grateful to the following individuals who participated in this research project and who gave me the opportunity to speak with them during my travels for this research scholarship:

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APPENDIX C: COPYRIGHT & FAIR USE STATEMENT

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All interviews contained within this document adhere to standard ethical procedures for interviews and signed interview consent forms have been included for all transcripts of interviews. Interviewees for this research project have acknowledged that they voluntarily took part in the interview, understand that the work may be quoted (in part or in full) and have been provided with an opportunity by the author to review and correct factual errors. Digital originals of these interview consent forms are held by the NSW Architects Registration Board and by the author as part of the digital archive.

The author apologises for any errors or omissions contained within this document in relation to appropriate acknowledgment or referencing. Where possible or reasonable, will seek to make appropriate amendments and corrections to such errors or omissions in future publications and/or research.

Hugo Chan January 2019



ABOUTTHE AUTHOR



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HUGO CHAN

RAIA Grad., M.Arch (High Dist.), B.ArchSt (Dist.)

Hugo Chan is an architectural graduate, designer and independent researcher who currently works at Cracknell & Lonergan Architects as Associate, with a primary focus on heritage adaptation and conservation, planning, environmental law and urban residential development. Between 2010-2012, Hugo worked between Hong Kong and Sydney, obtaining experience in the fields of architecture, construction management and client-end project management. Since 2016, he has also served as a sessional academic at UNSW Built Environment, tutoring and lecturing in history and theory of architecture across the undergraduate and postgraduate programs.

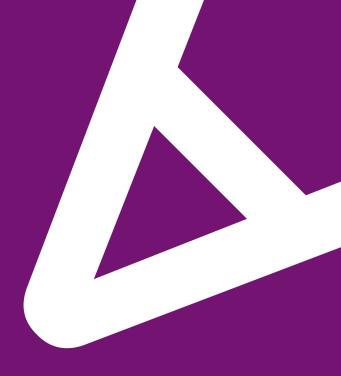
At the conclusion of this Byera Hadley Travelling Scholarship, Hugo will continue to develop the archive created during his travels between Hong Kong, London, New York and Sydney to launch an extensive podcast series and YouTube Series on adaptive reuse in architecture in March 2019. His first public presentation of this research project was showcased in August 2018, where Hugo was a speaker as part of the University of Sydney School of Architecture, Design and Planning's Centennary Symposium on Cathedral Thinking.

Prior to this research project, in 2014, Hugo was part of a collaborative team representing UNSW who won the 2014 inaugural National Disability Insurance Scheme (NDIS) Affordable Housing Design Competition, entitled HarmonioUS the project was subsequently exhibited at the State Library of Queensland (Brisbane) and at the UNSW Luminocity 2015 Exhibition.

Running parallel to his ongoing professional development, employment and teaching, Hugo also maintains a commentary blog on this website, Perspectives: One Small Voice, where he writes on a range of architectural issues as well as essays on architectural theory and history. His various engagements have been complemented by several international exchanges, including at the Institute and University of Architecture in Venice (July 2014) completing a project entitled #Aquadynamics and at the Architectural Association Visiting School Sydney (February 2015) hosted at The University of Technology, Sydney. Most recently, in July 2015, he participated in the Architectural Association Visiting School London's ECCENTRICITY Summer School Program, engaging in a critical discourse on social-urbanism and architectural proposition for the King's Cross Masterplan.

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