

Memories,

Metabolism,

+ Mackintosh

A Reccollection of Architectural Experience
+ Provocation for a Circular Future

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Memoire 01:

‘The Corridor’



The trouble with a memory is that one is left to ponder the reliability of their own mind. Does such a reality physically exist? You begin to convince yourself that you have in fact exaggerated it, embellished it over the years for dramatic effect. It is only then, that you stumble upon a drawing, memoire, photograph or film that captures the very essence of your recollection. It sets your mind to rest, finally confirming the truth in what you were prepared to dismiss as simply the nostalgic daydream of a relentless imagination.

Alissa Sutcliffe's entry to the Mack photographic archive- The Mackintosh Building Ground Floor Corridor (Pictured Above) The Mackintosh Ruinscape (Pictured Left)

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How does the human brain know when to slow down, to stop and to capture a memory. What experiential parameters must be met to qualify a moment as one of such significance that it becomes ingrained in our subconscious, to be formed and reformed, as a musing of the wandering mind. It would seem, irrespective of the scientific technicalities, that the act of meandering up a fluted stone staircase and stepping over the dark oak threshold into the heart of Charles Rennie Mackintosh's masterwork, will evidentially spark the precise neurological pathways, to produce such a freeze frame.

It seemed beyond the realm of possibility at the time, that this fleeting moment of exploration in 2013, passing the minutes as I awaited my cousin finishing her portfolio class, was my one and only chance to witness Glasgow School of Art's Mackintosh Building in the form it was intended it to be experienced. Little did I know, the timbers on which I stood, would cease to exist, just the following year.

In leu of the tragic fires and the piranesian shell that remains of the site- I count be myself lucky to be one of few, recent students, with a vivid recollection of the dual-vistaed corridors which once rooted the entrance and circulatory passageways, for the art school patron.

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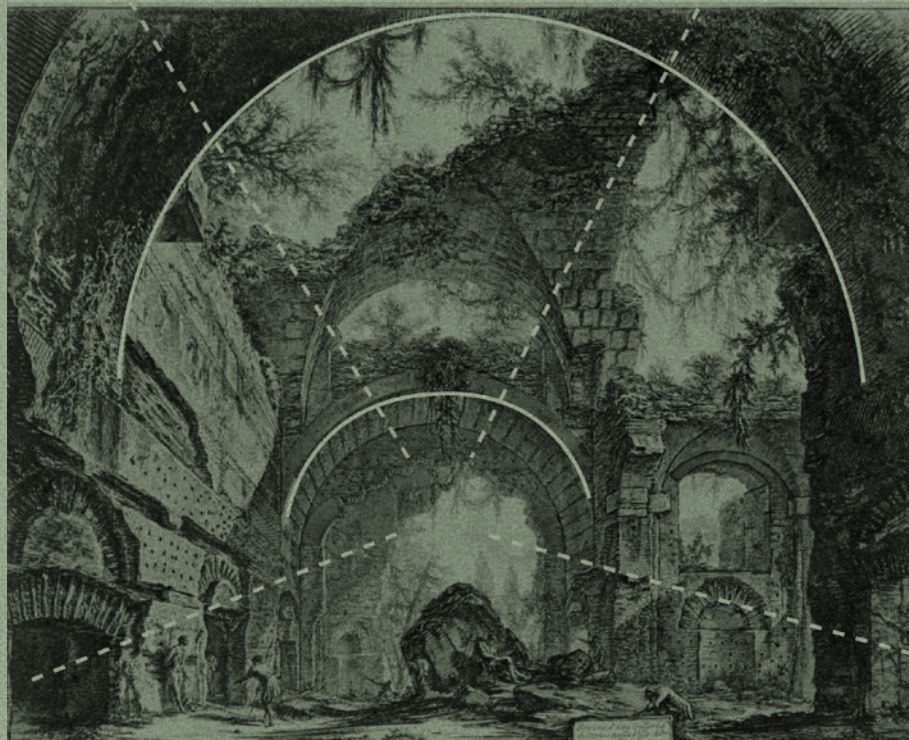
'I recount the walls, dark and ominous, true to the idiosyncrasies of Mackintosh's style. They were rhythmically punctuated by high level windows- which illuminated ghostly busts as glowing spectres standing at attention. The staccato created by the contrasting black and white materiality was further emphasised by the metal crafted spotlights, highlighting the beauty of the sculptures within enfiladed moments of pause. This juxtaposition evoked curiosity within myself, as the viewer, a silent promise of artistic academia, that such skill and craftsmanship could only be unlocked by venturing further into the bones of the building.'

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It is needless to say, I departed from Glasgow's art school that day with a solemn longing to one day return to uncover the secrets of Mackintosh and his fellow alumni, held at the end of those forbidden, diverging corridors. However, on the 25th of May 2014, this recurring memory of academic utopia was recomposed in my mind as the makings of a film noir. Devastation unfolded on the BBC broadcast that evening- iconic sandstone blocks slipping away beneath a vengeance of flames. As the masterwork turned to ruin-scape, I was struck with the realisation that the iteration of the building I was once captivated by, was now forever fated to remain my pandoras box, of unresolvable intrigue.

Memoire 02:

‘A Ruin-Lust’



Analysing the layering, whimsical overgrowth and deep perspective that encourages the viewer to look deeper into Piranesi's etchings to evoke a sense of ruin-lust. The image above is an extract from my final year thesis and features an attempt to apply these techniques to the Palais de Justice law court in Brussels, to emanate that same ruin-lust.

Ruins of a Gallery of Statues at Hadrian's Villa, 1770 etching by Giovanni Battista Piranesi (Left)

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'Ascendancy over minds have the ruins of our stupendous past, the past of history, legend and myth, at once factual and fantastic, stretching back and back into ages... romantic melancholy engendered by broken towers and mouldered stones....'

- Rose Macaulay, 'The Pleasure of Ruins' 1953

Since the dawn of romanticism humanity has forged an obsession with the idea of the 'ruin'. This may stem from a longing for lost nostalgic power, or the fact that prior to the industrial revolution, ruins symbolised an unlocked materiality with the potential to create something new and unknown. Whether it is nostalgia or the anticipation of what is to come, there is an undeniable beauty held within the moment when nature begins to reclaim humanities intervention. Giovanni Battista Piranesi recognised this in the 1700's, producing etchings of buildings in a state of ruin which often juxtapose various times and places. This juxtaposition attempts to convey how ruins are not stagnant- they are a multi-faceted reflection of the past contained in the present, serving to inform the future. And so, humanity is inevitably fated to fall victim to ruin-lust and the torturous yet fantastical day-dreams it elicits within us, featuring impossible worlds which transcend the constraints of linear time, space and the politics of our corrupted reality.

It is now with the retrospect of my final year a thesis, that I recognise my subsequent application to study Architecture at the Glasgow School of Art as an act fuelled by a lingering ruin-lust 'engendered' by the '...broken towers and mouldered stones' of the Mackintosh building.

From relentless cranes hoisting blackened bricks, to further flames and sprawling scaffolding. Between the years 2017 and 2023- reconstruction and stabilisation became the omnipresent backdrop to my six year long academic career. Over this time, the ruin appeared to slowly personify into a living organism fed by a constant stream of workmanship, its heartbeat the persistent life force, catalysing the research and learnings of on looking students. Whether or not we were conscious of it, the construction site at the Mack has given myself and my peers a unique perspective in the field of design, one that has taught us resilience in the face of our climate crisis. Just as the recovery team had to sift through and salvage the fire damaged materiality, so too must we, as future designers, make efforts to pick up the pieces of our planet and continue historic storytelling through material reuse, as opposed to adopting an attitude of tabula-rasa.

It therefore seemed predestined that my fifth-year research would serve to embody this concept of quarrying our Anthropocene from the perspective of pre-emptive urban ruins.

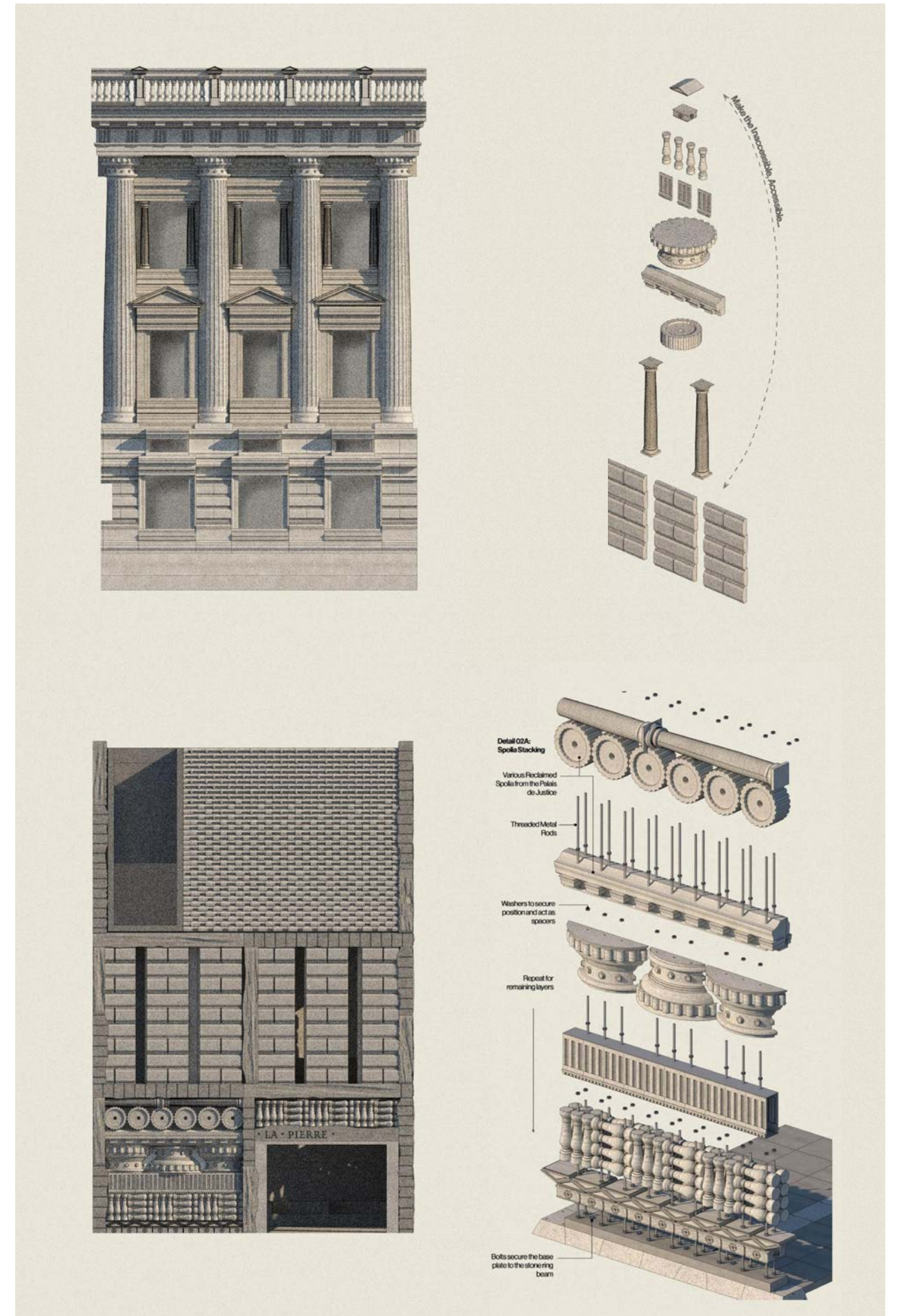
Memoire 03:

‘Spolia’



- A material asset, salvaged and transferred in ownership -

2022 - 2023



Reorganising Ruinscape Spolia for Human Scale Legibility in the Circular Stone Masons: ‘Quarrying the Ruinscape’ (above) Palais de Justice, Brussels (Left)

Entitled; ‘Quarrying the Ruinscape’ my thesis was intended as a provocation as to how a global circular economy within our construction industry isn’t so far out of reach. Over the course of the two semesters my project morphed into a piece of subtle propaganda in favour of government intervention to kick start a closed-loop process that would minimise the need for raw-material quarrying. As a result of this, Brussels, the capital of Belgium, with its political power and potential to influence change was selected as the ideal case study site for experimenting with this circular concept.

Drawing from Kengo Kuma’s essay on the Anti-Object alongside the concept of ‘Ruin-Lust’ as previously described, I began to set up a framework to identify redundant buildings as pre-emptive ruins to be quarried and recirculated in attempt to re-ignite this global circular economy.

After spending time in the Brussels’ Marollen and witnessing the stark dichotomy between oppression and expression that exists there, it seemed only fitting that my impetus ruinscape would be responsive to this socio-cultural imbalance. Towering over the district’s artisan flea market, atop the historic gallows hill, sprawls the behemoth ‘Palais de Justice’. This burden on the landscape was once the world’s largest lawcourt however is, at present, condemned to crumble and fall to redundancy. The structures vast scale, whilst

making repair an economic impossibility, also allows its dome to assume a status of omnipresence. It plays the role of 1984’s ‘big brother’ visible from almost all streets within the territory as a constant symbol of legislative power. On top of this, it has gained a societal rejection stemming from its associated expropriations and problematic history, being funded by the Congolese genocide in the late 1800s. These factors combined, allowed the site to fit my parameters for ruination, where the act of quarrying its spolia for district ownership, would not only address the climate crisis but also dismantle the oppressive shadow the Palais casts over the Marolles District. It transitions a vertical power structure that condemns to a horizontal one that provides.

By pairing five district gap sites with the five key materials to be dismantled, a network of circular workshops would be established providing the initial usage for the Palais’ spolia. These workshops would remain in place following the exhaustion of its quarrying to support a re-alignment to circular practices. Of these workshops, my thesis had a technical focus on the stone masons, to test a set of rules that could be applied to the subsequent sites- constructing in a way that displays secondary material to its maximum potential. The remaining spolia would be dismantled and debated for at the ‘ruinscape’ before being transported by a funicular railway into the district to be work-shopped and re-purposed.

The resultant ruinscape as Kuma's ultimate 'anti-object' and a district owned amenity, would serve to continue the circular momentum by functioning as a site for debating what morally justifies the future use of our planet's finite material.

I was able to estimate through calculations that the Palais could exist as the sole resource for construction in the district for 4.5 years- during this time the citizens would identify another site which could become the next ruinscape to be quarried- therefore once the Palais has been exhausted the process could pick back up at the next site using the already established material workshop infrastructure, so a circular economy can continue in the Marolles district indefinitely.

The output of my research and theoretical proposition was therefore a framework, that can, not only be applied to remaining material workshops but then, wholistically, can be applied to different sites in different countries to kick-start this circular economy at a global scale. Realigning the construction industry for a future that is both sustainable and self-metabolising.

And so, on finally stepping back from my completed degree show composition in May last year, I was left to ponder the inevitable question, of how a concept such as this might actually be adopted into modern day society.

Once stubborn mindsets have accepted the necessity of change, it becomes a challenge of perennialism, one that is only limited by our ability establish communications out with our own discipline and generation. Overcoming these social and environmental blockades is then made reliant, not only on the transfer of materials, but on the transfer of knowledge and technique. As architects we need to collaborate with software designers, with deconstruction specialists and with engineers in order to set up data bases that will enable the quarrying, quantification and exchange of secondary materials across our country. It is exciting to me that by breaking it down in this way, circularity begins to feel achievable, a realistic possibility for the future of construction. It, therefore, becomes less a question of how but rather of when, we will begin to see this crucial change as we continue our race against time and the repercussions of forcing our planet into such a critical state.

Memoire 04:

‘A Fragile Equilibrium’



*‘The Crichton Centre for Memory and Wellbeing’
O’DonnellBrown + White Arkitekter (Pictured Above)*

...

- Balancing Memory, Material and Innovation -

2023 - 2024

In tandem to my studies, I was provided with constraint on reality through my summer and part-time work at O'DonnellBrown Architects. This experience provided me with encouragement and optimism while advocating for a circular future, stemming from my experience working on 'The Crichton Project' in particular. This was a competition run by the RIAS which the practice won at the beginning of 2023 in collaboration with the Scandinavian firm White Arkitekter. The project was to give new life to the laundry building on the site of the Crichton Estate in Dumfries, as the only building that breaks the character of the historic sandstone medical campus and parkland.

I was involved in early discussions regarding concept where it was agreed that the building was to embody the term 'in and of the landscape'. It would undulate with the topography, respect key view corridors and, where possible, maintain the bones of the existing intervention. It was proposed that the metal framed primary structure would be retained, and a new envelope would be created around it, using rammed earth- physically extruding the context upward. The rammed earth would be pigmented by the reclaimed brickwork from the existing structure crushing it and mixing it with the earth- a circular process that both strengthens the earth mixture and allows it to harmonise aesthetically with the colour palette of the context. In doing so the team are proposing to allow the iteration of the

building that was built in the 1960s to be remembered within the contemporary intervention by metabolising the redevelopment with its harvested spolia.

Over the course of the competition, it began to seem as though there was a subconscious awareness of my ambition to push for an accessible circular reality in the industry. This was made evident when almost in direct response to my academic speculations on the topic, the team at White suggested the integration of their newly developed 'ReCapture' software to facilitate the work at the Crichton. As a result of this, the project in Dumfries was set to become my initiation into the world of technical innovation and digital platforms in the field of circular construction. Referred to by the firm as a 'catalyst for reuse'- ReCapture digitally scans existing structures to create BIM models of the building dissected into individual component parts that can each be tagged following condition analyses to improve the accessibility of harnessing secondary materials as a primary resource. This tool has already been successfully deployed in Sweden to facilitate the adaptive reuse of Bromma Hospital where the software has enabled the identification of secondary wooden doors as candidates to be interlocked to form suspended ceilings within the new structure.

While recognising the necessity of these programmes in making the required shift toward a circular mindset, I think it is equally important to recognise the hesitations that persist to accompany the idea of dismantling and re-using. This hesitancy ultimately stems from the balance between the memory and the material and the delicate equilibrium that exists between the two. This balance leaves the concept of architectural circularity in a constant state of volatility as with these innovative techniques which allow for the ease of digitally scanning, cataloguing and reorganising building components, there is an accompanying risk of sterilising the humanity, perception and observational experience from the process of architectural reworking. However, should we tip the scale too far in the opposite direction, we would fail to allow our structures to progress with the evolving needs of contemporary society, in favour of exact preservation for nostalgic indulgence.

I therefore feel it is essential that we strike a balance and accompany digital 'quantification' with a more tangible and human scale approach to documentation and understanding. To do so, it seems we must turn to humanities historic, multi-faceted tradition of storytelling and the act of imbuing a narrative within every aspect our design process.

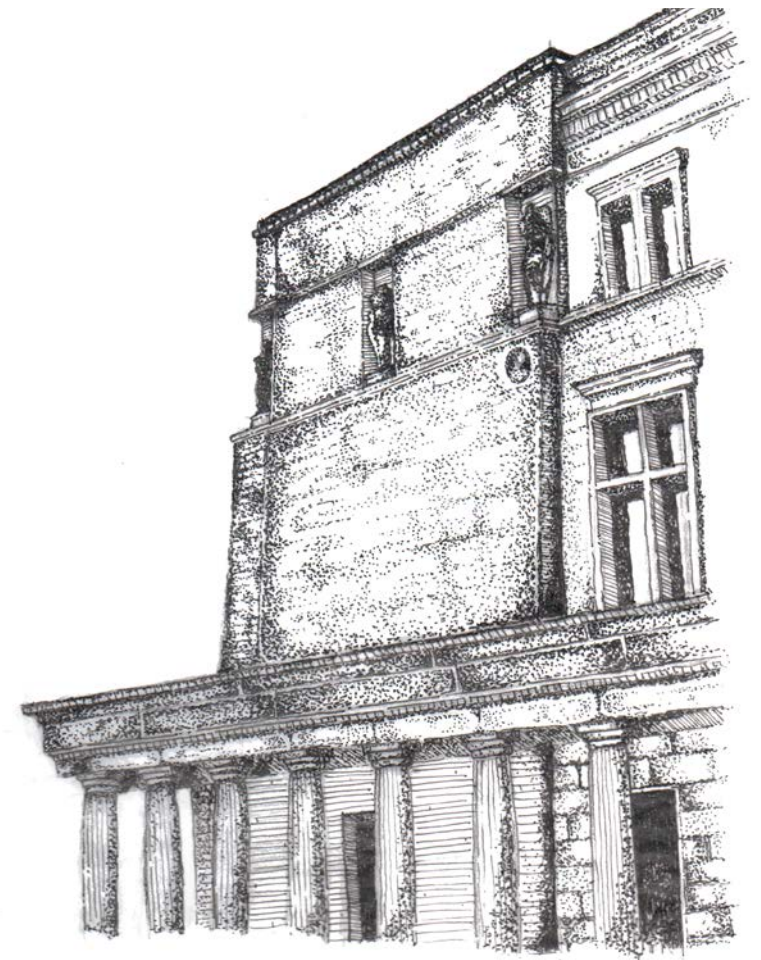


*White Arkitekter ReCapture BIM Model
Bromma Hospital, Stockholm*

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Memoire 05:

‘Embracing the Tabula-Plena’



Despite initial appearances there is no distinct division between old and new in the restored Neues Museum in Berlin. Parts of the block that now appear as though they survived the WWII bombing unscathed- were similarly left in varying states of disrepair. It therefore required a delicate patch-work treatment in the areas that were to appear ‘existing’. However, as the architects approach was to not cover up any repair work and display the ‘narrative’, the finish on this patch work was made to be a thinner layer than the surrounding facade this allows the bricolage to remain identifiable while still harmonising with the tones of the surviving render.

On walking around the structure the patron is able to appreciate the differing textures that make up the facade construction, while not entirely tactile, being held at a high level, light and shadow allow the textures, materials and history to be made legible at the human scale.

Sketch of the Neues Museum Corner ‘Infill’ (above) - Completed upon travelling to Berlin in November 2023, Neues Ruinscape (Left)

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Following the completion of my studies I was awarded the Charles Rennie Mackintosh Travelling Scholarship to continue my academic research on a metabolising a circular economy of both material and intangible culture. This award has provided me with the invaluable opportunity to reflect on my architectural journey so far, distil its narrative and take forward that resultant critical point of interest: how we adapt to circular practices in construction while avoiding the reduction of spolia to a series of noughts and ones in a BIM database. Doing this through the continuity of material stories, maintaining human-scale memories and documenting metaphysical associations.

To allow me to develop this thread of circular intrigue, it was agreed with the scholarship panel that I would travel to Berlin to study Chipperfield's 2006 restoration of the Neues Museum as a particularly successful example of maintaining history and respecting material legacy throughout the process of reconstructing a ruin.

The Neues Museum was the second museum to be constructed on Berlins Museum Island designed by Friedrich Stüler in 1855, following Schinkel's Altes Museum built in 1830. It was designed originally as a supplementary building to the Altes which couldn't accommodate the vast collections of Berlin. In order to fulfil its function and house as many antiquities as possible, the Neues became the first

multi-storey museum in Europe allowing it to more efficiently categorise, preserve and illuminate the remaining artefacts creating a plan with dual courtyards for maximum light penetration. The museum was characterised by its frescos which plastered the walls and ceilings in attempt to replicate and transport the viewer to the context of the artefacts, be it Ancient Egypt, Greece or Rome.

Following its opening, the Neues was embraced by a period of positive public reception being praised as a 'sanctuary for art and science' until 1943, when it became inevitably embroiled in the warfare of World War Two and was left a devastating fatality to the conflict. The bombing reduced the museum to a mountain of rubble and while other buildings on the island were reconstructed, it was fated to remain in a state of ruination for almost five decades.

It wasn't until 1997 that David Chipperfield Architects were eventually commissioned to lead the restoration in recognition of his ability to balance the conservation of contextual heritage and modern technique as displayed in his 1989 work at Henley's River and Rowing Museum. The Neues was described as a 'Piranesian Pile' by Chipperfield when he first began tackling the reconfiguration-acknowledging the projects sensitive nature which would inevitably involve the careful reincorporation of decaying war tarnished spolia.

As a result, an understanding of the fragmented building elements became essential to Chipperfield's process which revolved around a rigorous mapping and forensic analysis of segments of the building at a human scale.

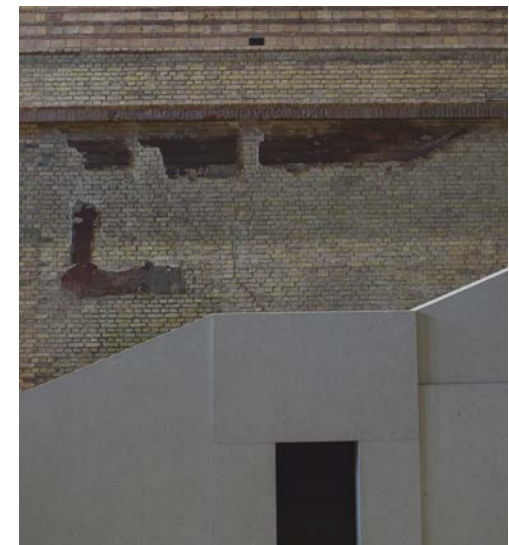
To achieve this, he used a combination of a CAD base alongside the tactility of pen and paper hatched annotations. These drawings were taken to site regularly to make notes and analyse the condition of the remaining structure. The following annotations with corresponding hatches was established to convey how Chipperfield felt each surface should be treated: Fesigung (stabilise), Ergänzung (add), Entfernung (subtract), Kombimaßnahme (combine), Ziegelergranzung (repair), Ausgleichsputz (return to prior state), Splitter (conserve war damage).

This process allowed Chipperfield to achieve a reconstruction that repairs, conserves, restores and respects the building to produce a modernised circular reconfiguration that narrates history with contemporary additions which 'reflect the lost' without imitating it.

Experiencing the museum with the knowledge of these analytical drawings and what had existed on site originally, I feel I gained a true appreciation for Chipperfield's process. Where the museum once prided itself on its ability to display the artefacts within falsified murals the restoration has replaced these with raw material finishes bearing the scar of

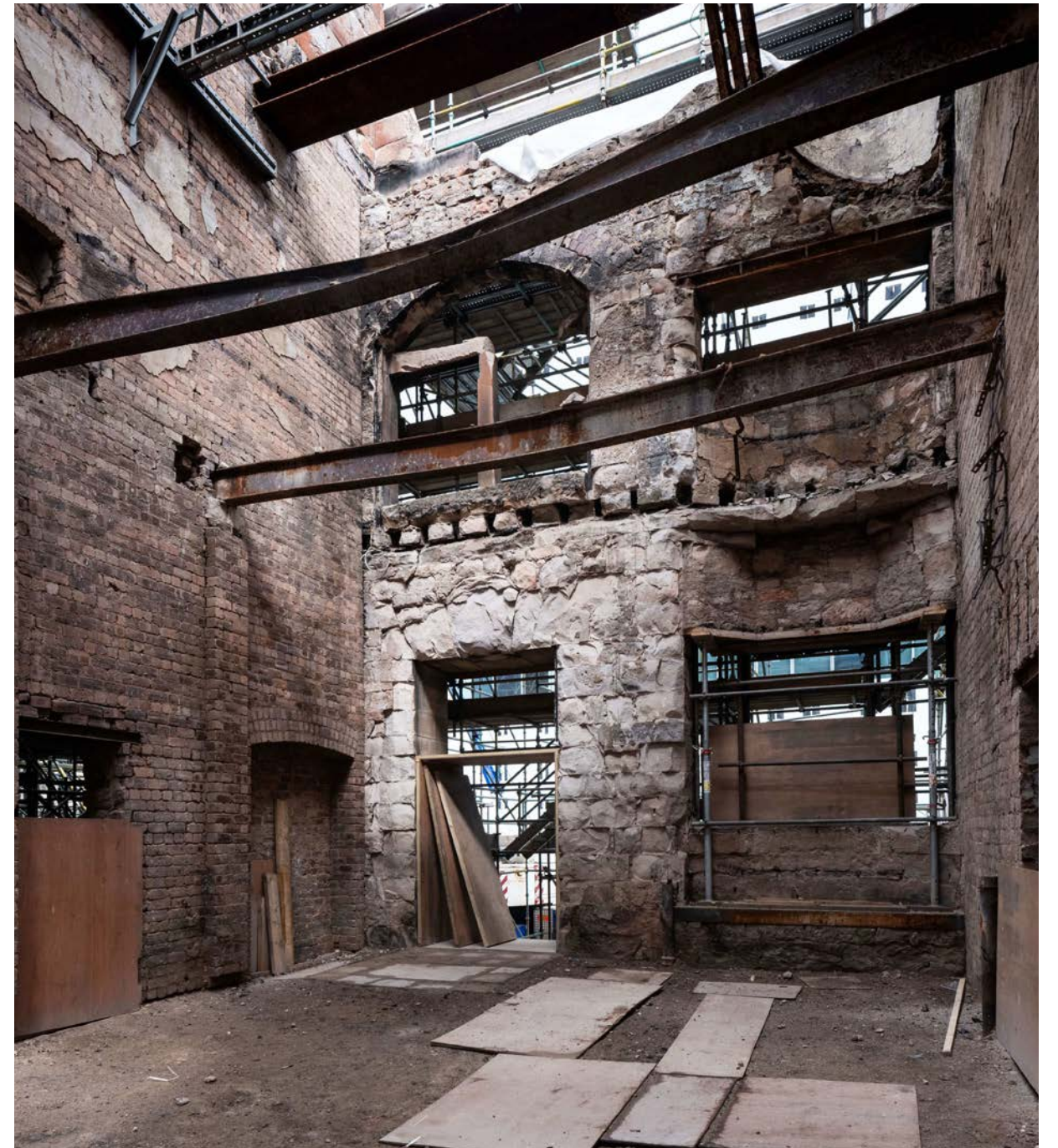
war, decay and bricolaged repair. This instead allows the preserved exhibits to be read in stark juxtaposition to the raw reality of Berlin's past- the context they are now perceived within. The remnants of murals and iconography Chipperfield has reintegrated within the internal facades highlights this shift from an imitation of classicism to historic honesty. His approach of restoring, stripping back and re-incorporating recovered spolia allows the building to become interwoven in various timelines, the patron reads the building as a complete form that can be refracted into three co-existing states; the neo-classical museum, the Piranesian ruin and contemporary metabolised space – all equally significant phases of the building's life span.

There I feel there is therefore the potential for this drawing technique to accompany the modern-day digital databases to ensure a balance is struck between technical accuracy and historic socio-cultural respect.



Output 06:

‘A Drawn Provocation’



The Mackintosh Building: Ruinscape 2014-Present (above)
Chipperfield Analytical Drawing of the Neues Central Stair (Left)

On returning to Glasgow from Berlin, I was able to reflect on my visit to the Mackintosh ruin earlier in the year which is in a similar state of disrepair following the second fire, as the Neues Museum was after the war. I feel that it is important to appreciate this moment of staccato in the Mackintosh's life span and take the time to reacquaint ourselves with the school its current form, tracing the surviving features and documenting its new scars. There were several recognisable elements that punctuated the 'Piranesian Pile' with memories of life and how the site was once occupied- evoking a 'ruin-lust' and a longing to reinstate activity within its crumbling walls. Alongside this want for restoration, it feels just as important that we expand our outlook and appreciate how the fire is now part of the Mackintosh's narrative just as the history of war became integral to the story of the Neues. It is a tale of modern history that deserves to be captured within whatever form the re-instated structure assumes.

As a result, I recognise this moment in time as an opportunity to take the knowledge I have gained from Chipperfield's Neues Museum and recompose it as the lens through which I now view the Mack. I therefore propose to visually document the Mackintosh building in its ruined state following the methodologies of Chipperfield's drawings, as testament to my theory that this analytical technique should accompany all future adaptive reuse projects. I feel that in following this process it will, enable the

continuation of historic storytelling in structures conforming to circular practices. As the original Mackintosh Building is sufficiently documented through archived photographs and technical drawings, and its current state will be visible upon physical site visits, I have chosen to draw and memorialise the state of the building directly after the 2014 fire, as the iteration most likely to be forgotten going forward.

This analysis should therefore act as a provocation for the future reconstruction work, serving to emphasise how significant the devastation has been from the fires and how this time the building has spent as a ruin is just as integral to its timeline as the time it spent as an art school. The Mackintosh Buildings narrative has changed; we will never experience it the same way again, and as such, I feel this should be reflected in the form that metabolises from the material memories, 'broken towers and mouldered stones' of Glasgow's School of Art.