

Tectonic Theories and Practices of David Chipperfield

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The Neues Museum, Berlin (Form Matters, 2009)

Introduction

David Chipperfield is a difficult architect to categorise there are a great number of labels you can charge him with. He's a humanist, a functionalist, an intellectual, a conservative, a realist, an optimist and a pessimist; you can call his work modest, challenging, innovative, equipoise, bucolic, empathic, rational and circumspect. This is a testament to the eclectic array of work he and his practice has produced since its conception in 1985.

On receiving his Stirling Award for the Museum of Modern Literature Chipperfield described the trophy – a foot long metallic cuboid – as 'not tectonic enough' (Chipperfield, 2007). This sums up his one of his theories perfectly.

His architecture is 'driven by a consistent approach which leads to the creation of individual buildings that are intimately connected to both context and function' (David Chipperfield Architects, no date). Therefore for him the trophy should relate more to architecture, building and construction, it should be more than just a cuboid.

Theory

Chipperfield believes that architecture should be a pluralistic harmony. Architecture should be a combination of theories and factors but central to this there should be a single vision, idea or concept 'that can give order and direction to all other decisions' (Chipperfield, 2009a, p. 35).

This mantra is repeated throughout each project he completes, he will take a single idea and from that one idea the architecture begins to emerge. One of the best examples for this is the Neues Museum; Chipperfield's consistent aim was to 'retain the spirit of the ruin he found' (Moore, 2009, p. 82) to do so he and restoration architect Julian Harrap wrote a philosophical document to serve as an intellectual framework to hold all the thousands of decisions that needed to be made throughout the project together. For a project that involved 'preserving every flake of damaged paint from a building mutilated by war and dissolving the rain of decades of post-war neglect' this was a necessity (Sudjic, 2009a, p. 7).

Form Matters

In 2009 Chipperfield presented an exhibition of his work under the title Form Matters. The exhibition demonstrated five beliefs Chipperfield holds on current architectural practice.

The title Form Matters identifies the two entities that an architect must realise in every project: form and matter; those are a building's shape and its materiality.



Above: Exterior Perspective, River and Rowing Museum (David Chipperfield Architectural Works, 2003) Below: Interior Perspective, River and Rowing Museum (David Chipperfield Architectural Works, 2003)



Assertions

In our work as architects we must find justification for what we do, and our buildings must express meaning within their every detail. This, however, is not an easy task as there are so many places from which to draw ideas and meaning, we can look at its physical, cultural and historical surroundings, we can be inspired by the latest technologies and innovations. There is a wealth of inspiration from which we can draw from and this poses a challenge to the architect, as where to draw from and how to balance them.

We work in a commercial climate with financial constraints where the majority of buildings adhere to just the lowest standards enforced. Our commercialised, globalised, media led climate demands every building be iconic, but this should not be the case. Not every project is an 'opera house in a brand new city' (Chipperfield, 2011)

Chipperfield asserts that he sees himself as a 'mortal' (Chipperfield, 2011) who works on the projects that bind together our cities. He believes the profession is healthy, with a plentiful supply of architects to complete those iconic projects and 'some brilliant architects who do those more flamboyant projects' (Chipperfield, 2011).

There are too many criteria to fulfil with each project therefore 'each building must define its own ambitions and the criteria that it attempts to satisfy'. The architect must decide whether to be flamboyant or conservative; to push innovation or rely on tested technologies; to embrace history or reject it and these ideas must be resolved through 'matter and form' (Chipperfield, 2009a, p. 11).

Form

Although Chipperfield believes in the need for justification and meaning within a project this should not be the only force driving the architect. If it is then the final product will never be truly understood as when people judge architecture they do so without knowledge of the architect's intentions; the 'architecture must speak for itself' (Chipperfield, 2009a, p. 35).

As such each project should have that single idea at its centre; so when somebody judges a building all the evidence will lead them to the same conclusion; there will be no possibility of conflicting theories.

The process for determining what the vision of a new project should be is a complicated one. The idea should not be too abstract as that would be detrimental, nor should it be confined to the practical or technical that there is no freedom for expression.

Louis Kahn's belief was that a building should find 'what it wants to be' by which he meant the building's identity should develop from its context and culture, it should





Above: Madrid Social Housing Model (David Chipperfield Architectural Works, 2003) Below: Exterior Facade Madrid Social Housing (David Chipperfield Architectural Works, 2003) reject historic style but return to the 'spatial, volumetric and tectonic traditions of architecture'.

The form of a building should develop from these theories, but the form cannot be considered without thought of the space within a building. The building volume describes the envelope and the ambition of the architect is to balance whether the envelope should influence the interior or the interior should influence the envelope. Chipperfield's belief is that neither should be consequent of the other but they should work in a harmonic balance with one-another.

Composition

The appearance of a building is composed of three things: its materiality, its shape and its openings. The composition of openings is an important consideration within any project as it will dictate the language of the architecture and this should be inline with the vision of the project. This will particularly be the case if the materiality is conventional and inconsequential. The composition defines whether the building conflicts with its context or is influenced by it.

The inspiration for the River and Rowing Museum at Henly-on-Thames grew from the traditional timber barns of Oxfordshire, but the composition of glazed walls on the ground floor adds a modern twist to the vernacular. The first floor galleries are lit by rooflights so the horizontality of the untreated oak is accentuated as much as possible.

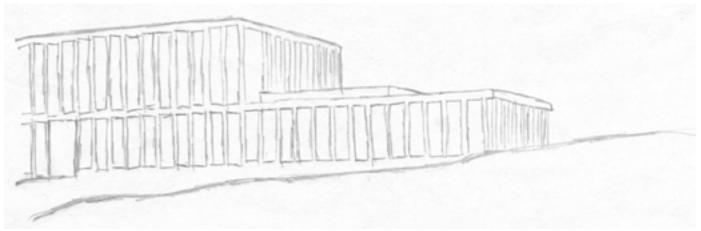
This composition is clearly related to the physical context, the glazing permits an intimate relationship with the landscape between the interior and exterior. While the timber composition and form resonate the vernacular architecture.

As with the form the composition does not just affect the exterior of the building but also the interior plan, therefore we must strive to reach a harmony between the two.

The brief for Chipperfield's Madrid Social Housing was very strict, specifying a 'U-shaped block, 15m deep and with a footprint of just over 2,000 sqm ... eight storeys high and the appearance of a pitched roof' (Weaver, 2003); this did not allow for a great deal of creativity and expression so Chipperfield explored the composition perhaps a deal more than usual. The final composition is an anarchic hierarchical façade, the number of openings per room is determined by its size and the fenestration is not repeated throughout the floors. The absence of order creates a fresh design which enables it to stand out from other apartment blocks in the development.

Language

Modern architecture rejected the historical styles that previous centuries had been obsessed with and it pushed the technical boundaries of the early 20th century but it





Above: Sketch of the Museum of Modern

Literature

Below: BBC Scotland (Form Matters, 2009)

failed in two places. It should have maintained the established historical forms that have evolved over time and Le Corbusier's belief that house was a machine for living neglected the importance of humanity in architecture.

In a rush to prove itself as the future, modern architecture's style became the 'smoothness of the machine world' (Chipperfield, 2009a, p. 102) setting it apart from the imperfect 'hand of the craftsman' (Chipperfield, 2009a, p. 102). This led to a lapse in empathy within architecture that David Chipperfield is keen to explore by referencing social and historical context.

The Museum of Modern Literature in Germany speaks strongly of Chipperfield's belief in the language of architecture; he reintroduced classicism into German architecture. Since the second world war Germany had been avoiding neo-classical architecture as it had become a symbol of the fascism and instead they opted for an 'informal and casual' (Chipperfield, 2007) style of architecture.

Chipperfield built an arcade of rectilinear, concrete arches around the façade of the building in a clear modern interpretation of classical order. When challenged as to whether what he had created was fascist Chipperfield responded that it's a 'legitimisation of modern classicism' (Chipperfield, 2007). Adolf Loos believed that ornamentation was crime and ornamentation caused objects to go out of style. Chipperfield drew from this and kept his arches bare and rectilinear resulting in a timeless elegance.

Chipperfield believes strongly in a more humanistic, rational architecture he echoes strongly his belief in architecture being responsible. It should be 'coherently organised' (Chipperfield, 2009a, p. 103) and designed for the occupants of a building. It should not be eye-catching for the sake of being eye-catching. While it is acceptable for monuments to inspire awe this should not be the intention of the majority of architecture. He phrases it as 'architecture is something to be occupied and adopted, not to be held at a distance and puzzled over' (Chipperfield, 2009a, p. 103).

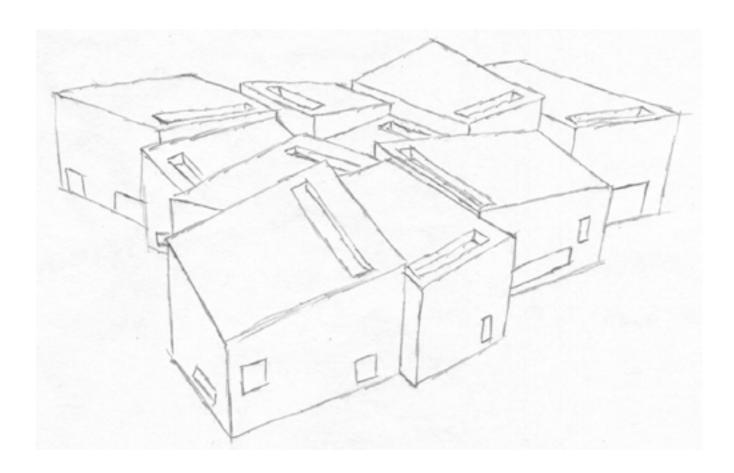
The BBC Scotland building represents a radical approach to humanist architecture. The vision was for the offices and studios to surround a social space. That social space took the form of a terraced atrium with a series of staircases connecting informal meeting areas and the office floors leading off.

In conception Chipperfield was pessimistic whether people would actually walk up so many staircases or if there would be demand to install a series of elevators. These fears however were unfounded as now it's occupied the 'people there love it, they love going to work in those spaces' (Chapman, 2011).





Top: The Hepworth Wakefield (Architectural Review, 2011) Middle: Gallery Interior of The Hepworth Wakefield (Architectural Review, 2011 Bottom: Sketch of The Hepworth Wakefield



Materiality

Our current methods of visualising architecture through plans, sections, photographs and renders are static; this has led to a loss in the importance of atmosphere, the texture and materiality. Architecture is about the 'feel underfoot, the weight of the door, the touch of the wall' (Chipperfield, 2009a, p. 141) and this is not communicated through our current proposals; because of this we no longer see materiality as it was once was.

Materiality no longer carries the weight of stone; we now consider materiality as just a cladding or skin to a building. But cladding has no limits and no demands save a surface to clad; this has given us a technical freedom to explore but it has also brought with it a challenge.

With too much freedom we have nothing to ground us and with no limits there are too many possibilities we could explore. We must therefore impose limits upon ourselves. We must ensure that what we build 'enhances the ritual of our daily life' (Chipperfield, 2009a, p. 141). It should be innovative but not just for innovation's sake. It must relate back to a central vision that should respond to context and bind all the decisions together.

The colossal concrete materiality of the Hepworth Wakefield is very apparent. The city is a mish-mash of architecture; industrial victorian warehouses that have been 'stripped down, spruced up' (Allen, 2009, p. 41) and reborn; there's the elegance of the Chantry Chapel and the brutal motorway slip-road slicing through. A great palette for the Hepworth to draw influence from but for Chipperfield the forgotten River Calder was a great opportunity to explore. The river once served a commercial purpose but now it has been hidden from view as the city intruded upon it.

Chipperfield's substantial trapezoidal concrete blocks rise from the 'angry churn of water' (Allen, 2011, p. 42) in what is described as a picture postcard view, but this is not how Chipperfield sees the building he describes it as 'dipping its toes in the water'. This metaphor references the humanism of the gallery; Chipperfield believes it's 'a very friendly, comfortable building, a good art space' (Chipperfield, 2011), it's also a space for the individual to 'reflect and re-examine what they know' (Schwarz, 2009).

Light

It's not documented as part of his Form Matters exhibition but light plays a very important role in architecture and in his conversation with Tony Chapman (2011) Chipperfield identifies that when you have daylight in a gallery you can do a number of things. The two examples he gives are the Turner Contemporary and the Hepworth.

With the Turner there was light coming off the North Sea, which was 'too good an opportunity to miss' (Chipperfield, 2011), he used 'the light to wash the walls and not



Top: Gallery with Clerestory and Roof Windows Turner Contemporary (Architects' Journal, 2011)

Middle Left: Cafe of the Turner Contemporary (Architects' Journal, 2011)

Middle Right: BRE Offices, Garston (Feilden Clegg Bradley, 2007)

Bottom Left: Centre Pompidou-Metz (ArchiThings, Unknown Date)

Bottom Right: Guggenheim, Bilbao (Visit at World, 2011)









cast shadows'. This was achieved through clerestory windows with flush reveals which meant no shadows were cast. Black out blinds and anti glare blinds were hidden flush with the windows should the light need to be adjusted.

While Turner used daylight to light the room the Hepworth used a more decorative light. The admission of daylight in the Hepworth was a humanist touch, it was used to keep the visitor 'in touch with the time of day' (Chipperfield, 2011). As so many galleries are dark voids it is possible to get lost in the art and become out of touch with the world around you.

Modesty

David Chipperfield is often described as modest. When you look through his portfolio of works you can see that in the choice of materiality and colour. For instance in the Turner Contemporary in Margate the 'aesthetic palette consists of white walls, glass and concrete' all very conventional and vanilla.

Conservatism

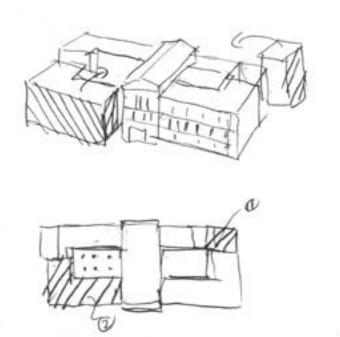
The current fashion is for iconic architecture, such as the wow-factor of Frank Gehry's Guggenheim in Bilbao or Shigeru Ban's Centre Pompidou-Metz but Chipperfield maintains he's 'interested in another type of architecture' (Chipperfield, 2011). His type of architecture is modest or you could perhaps say conservative. Adolf Loos believed that ornamentation led to architecture becoming dated, if we consider iconism and flamboyance as a form of ornamentation then it may be that by sticking to a conservative palette Chipperfield is creating timeless architecture.

Environmentalism

Chipperfield's modesty is very apparent in the environmental aspects of his work. While some practices such as Feilden Clegg Bradley allow environmental consciousness to heavily influence their work such as the Building Research Establishment Environmental Office or the Woodland Trust Headquarters the environmental aspects of Chipperfield's works are very understated. The Turner Contemporary was the first gallery in Britain to achieve a BREEAM 'Very Good' which is no easy achievement for a gallery, but to look at the building you would not perceive it as being an environmental building.







Top: Neues Museum, West Facade showing the conservative restoration (David Chipperfield Architectural Works, 2003)

re-estassin ment or form + Figure

Left: Neues Museum, Preliminary studies showing potential levels of restoration (David Chipperfield Architectural Works, 2003)

Right: An early sketch showing the rebuilt blocks (David Chipperfield Architectural Works, 2003)

Neues Museum

It's impossible to study David Chipperfield without looking at his greatest work to date. The Neues Museum takes your breath away when you enter; the immense detail that Chipperfield has gone to to preserve every detail of the building's original craftsmanship is staggering.

Philosophy

His vision for the building was to protect the ruin of the museum, freezing its history in a point of time, as a document of 'not only the destruction of the war but also the physical erosion of the last 60 years' (Chipperfield, 2009b, p. 11). The success of his endeavour comes from the adept attention to detail that went into the project. Every room was treated according to its design and decoration as when it was first built in the mid 19th century. In some rooms the decoration was superficially intact, in others only the faint remnants remained, and that's the state in which they have been preserved.

The same philosophy is used on the exterior; the classical detailing has been assessed individually and only minimal intervention is used where necessary to provide 'physical and conservational support' (Harrap, 2009b, p. 124), with priority always given to the existing material.

Theory

The spatial strategy, the composition, the language and the materiality all follow the same philosophical vision. Chipperfield maintained the original floor plan where possible but integrated modern features as well. In particular the cloakroom, education room and cafe are all modern interventions but they're done with the same attention to detail as the rest of the building so you almost don't notice that you're entering a newly constructed part.

The original composition of windows is maintained on the façade preserving the classical composure and elegance. Where the building has been rebuilt, particularly in the central stairway and the north wings the materiality and language do not try to mimic the original, nor do they try to override it. In the stairway 'sections of the wall were rebuilt with alternate bands of striated industrial red brick and edge-laid terracotta blocks' (Harrap, 2009b, p. 126). It maintains a sensitive composure with elegance and dignity through the attention to detail of the craftsman.

The staircase is one of the most powerful additions to the museum. It follows the form of the original stair but the materiality is fresh. The precast marble concrete with a stone aggregate provides a contemporary, yet conservative, grace. 'The elements of the stair that are to be touched, such as the treads and handrails, are polished, while



Top: Neues Museum, the restored floor contrasts with the unrestored decor (Neues Museum Berlin, 2009)

Middle: Neues Museum starway (RIBA, 2010)

Bottom Left: Hans Döllgast's Alte Pinakothek (Wolfsraum, 2011)

Bottom Right: The Bank of England in Ruins (Joseph Gandy, 1830)







the rest of the structure has been distressed to provide a roughened finish' (Harrap, 2009b, p. 126).

Compromise

Although Chipperfield went to great care to maintain his philosophical vision there were compromises. With 1 million expected visitors per year the floors could not be preserved in the same manner as the columns, walls and ceilings.

The second compromise, which led to a great deal of debate, was the removal of the 1980s interventions. Consolidation works in the 1980s had introduced large areas of red engineering brick. In keeping with the philosophical approach these should have been retained as they were a part of the building's history; but Chipperfield believed they would detract from the harmony of the building. His compromise was to restore the building to the form recorded in photographs taken before the intervention.

Precedent

The precedent and inspiration for Chipperfield's vision comes from two sources, the first is Joseph Gandy's watercolour The Bank of England in Ruins. Friedrich Stüler – the original architect of the Neues Museum – would have seen this painting on a visit to Sir Joseph Soane in London, and the lightweight clay pot construction visible in the Bank of England is something Stüler was inspired to incorporate into his Neues Museum. So it is quite coincidental that a century and a half later the Neues would stand in a very similar state to the watercolour, and a fitting image from which Chipperfield could not abstain.

His second precedent was Hans Döllgast's Alte Pinakothek in Munich. Döllgast restored the war ravaged museum in a manner very close to what Chipperfield has done with the Neues; he retained all the elements he could and preserved their damaged character. However Döllgast's approach differed, he radically reordered the interior plan, and his ambitions were 'far simpler, less complex and sophisticated'.

Context

Chipperfield states that if he had made the same proposal to a ruin in England there is no way it would have been accepted. Germany on the other hand is a lot more open to suggestion. Chipperfield is very sensitive to cultural and political context and takes it deeply into consideration in his projects such as how he used the Neues' philosophical document to gain approval for the proposal. His sensitivity is also noticeable where he pushed the boundaries of using classical order post-war in Museum of Modern Literature.

Conclusion

The architecture of David Chipperfield is a consideration of form, composition, language and materiality woven together by a central idea. He builds upon the foundations of the modernist movement but is more rational and humanistic. Chipperfield avoids iconic architecture and instead designs conservative buildings, which consider local culture, history and geography. Through his philosophies and his attention to detail David Chipperfield design buildings that will not fade with time.

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