STUDIO BECHER

Profile

Studio Becher was established in London in 2007 as an international practice for architecture.

Founding director Peter Karl Becher holds architectural diplomas from both a polytechnic university and a school of arts. This dual training puts his studio in the increasingly unusual position of incorporating the widest spectrum of aspects into its architecture, stretching from theoretical research on conceptual design to the latest technological knowledge. His experience ranges from the development of architectural strategies and concepts to the design and realisation of projects of all scales in a number of countries.

Part of his business philosophy is to avoid specialisation in a certain building type to ensure that the practice remains sensitive to innovation and able to incorporate the inspiring influence of different types and scales.

Having studied and worked in Germany, the USA, Switzerland and China, German born Peter Karl Becher believes that in times of increasing globalization it is essential to think and operate at an international level; thereby maintaining awareness of, for example, the latest construction technologies and logistics, and ecological situations in other countries. The studio cultivates a growing global network of architects, consultants, manufacturers and contractors, as well as architectural critics and artists.

Studio Becher incorporates sustainability at every work stage and the practice endeavours to avoid long supply chains and supports the use of local resources and skills. In projects outside the UK, the studio's approach is to split the scope of service with a local architect from an early stage. This is essential in order to fully comply with local work stages and building regulations, to understand regional culture and history and to be able to develop a project with authentic characteristics. In every case Studio Becher maintains responsibility for architectural design.

Trying to define the practice's artistic position, Studio Becher is not interested in finding its own, globally applicable style, but believes in a local, distinctive and individual architecture. The context (a unity of spatial, material, historical and socio-economic factors) is hereby considered most important, so the project cannot be separated from it. The studio attempts to continuously reconsider its methods and develop new concepts rather than to reproduce a certain characteristic style.

One field of the studio's research is the development of new programmes by redefining and blending traditional architectural functions. The right mix of programme is understood as the recipe of an architecture that does not only function well, but that is also capable of initiating new ways to inhabit space as well as new building typologies. The studio is on a continuous quest to rediscover and/or reinvent lost or declining craft and does not hesitate to push for quality workmanship and skills.

Studio Becher is not interested in architectural form as 'aim', but form as 'result' of a thorough assessment of the project's identified challenges, followed by the development of a conceptual framework; the latter derived from precise analysis of a client's needs and interests and the opportunities of the site and surrounding context.

Hereby the studio attempts to stay at an abstract stage for as long as possible, that is, to develop a project to a large extent without the strait-jacket of a pre-conceived concrete form. In this respect the studio's approach is scientific-analytical rather than creative-imaginative in nature. This flexible and individual approach goes hand-in-hand with the studio's scepticism about 'ideas'. A scepticism that demands a strong idea be handled cautiously to avoid a project being dictated by imagination.

Studio Becher understands architecture to be a quality that happens beyond shape, and as such, to be independent of its actual geometrical shape. In this respect the studio's work is not about 'box' or 'blob', meaning not about research into form. It believes that shape should not be generated by geometrical intension, but rather by the most elegant solution for the intended programme. Does a crooked vinyard shed not contain more architecture than a 'created' house somewhere in a new suburban district?

The studio is very interested in 'minimisation' (a process of compressing the essentials) as a contemporary medium of architecture, but rejects 'reduction' (a process of simplification, of making something banal). However, as minimisation requires complexity as an opposite pole, one of the studio's major research topics is on how to achieve a maximum of complexity with a minimum of means, resources and environmental impact. This also includes minimisation of interior-spatial sensation by which the studio hopes to gain a so to speak de-informative effect in its architecture, this is an alternative concept to the common 'event architecture'.

In summary, Studio Becher commits itself to a contemporary, self-confident, distinct (but not necessarily controversial) and contextually sensitive architecture, which, in times of total information overload, is still capable of provoking perception. A strong architecture made for hurried passers-by rather than for strolling flâneurs. An interactive urban architecture rather than a passive integrated architecture. An architecture that is able to form context, rather than simply being contextual. And an architecture that dispenses with the formal elements of typology, rhythm, harmony and symmetry, and that does not fear 'Minimal is Enough' as opposed to the modernistic 'Less is More'.

Studio Becher carries Professional Indemnity Insurance and is registered as a Chartered Practice with the Royal Institute of British Architects (RIBA) and the Architects Registration Board. Peter Karl Becher is also a member of the Chamber of German Architects.

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Architect's Registration Board (ARB):
Peter Karl Becher, registration no. 072096H

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Peter Karl Becher, Principal
Architect RIBA Freier Architekt AKBW Dipl.-Ing. (FH) Dipl. (Städelschule)
Design Fellow at the University of Cambridge

Biography

Peter Karl Becher received his diploma in Architecture from the University of Applied Sciences in Karlsruhe, Germany in 1995. Gaining a postgraduate diploma in Conceptual Design in 1998 he studied at the Staatliche Hochschule für Bildende Künste - Städelschule - in Frankfurt under Enric Miralles, Peter Cook, Stan Allen, Mark Wigley, Wilfried Wang and Cecil Balmond. In 1998 he was granted a student scholarship at the Southern California Institute of Architecture (SCI-Arc) in Los Angeles under Joseph Giovannini and Mike Davis.

From 2003 to 2005 he worked for internationally renowned architectural practice Herzog & de Meuron on the Beijing National Stadium - the Main Stadium for the Olympics 2008, in both Switzerland and China. As senior architect he managed the design of the twin layer membrane roof, primarily living in Beijing in 2004 and 2005.

From 2005 to 2007 he worked as project architect for Herzog & de Meuron (UK) Ltd on a mixed use project in East London combining residential highrise buildings with a medical centre.

In 1996 and 1997, and from 1999 to 2003, he worked for Carsten Roth Architekt, a nationally acclaimed practice in Hamburg, as both project architect and site supervisor. He was a key figure in various award-winning industrial, commercial and cultural buildings and projects in Germany. These include a printing factory and a logistics centre in Röbel, and in Hamburg the office building complex 'Medienpool Waterloohain', the St Nicolai Memorial Meeting Centre and the 'Haus im Haus' competition for the Chamber of Commerce.

In 2007 he established Studio Becher as an international practice for architecture based in London.

Peter Karl Becher is currently a Design Fellow at the University of Cambridge. Between 2010 and 2012 he led a diploma unit at the Architectural Association in London, focusing on experimental building design in historic context. From 2008 to 2010 he led a degree studio at Kingston University, and from 2007 to 2010 he taught diploma at London Metropolitan University with David Grandorge. In 2009/10 he was a visiting tutor at NTNU Trondheim (with Geir Brendeland and Olav Kristoffersen).

Peter Karl Becher has taught at various workshops, most recently at the AA Visiting Schools in Beijing, Berlin and George Town, Malaysia. He has been invited as a guest critic and lecturer internationally, including the Architectural Association (AA), the Bartlett, London Metropolitan University (The Cass), Kingston and UEL (all London), the universities of Bath, Braunschweig, Cambridge, Cardiff and Darmstadt, the ETH Zurich, NTNU Trondheim and Tsinghua University Beijing.

Peter Karl Becher is a Chartered Member of the Royal Institute of British Architects (RIBA) and is both registered with the British Architects Registration Board (ARB) and the German chamber of architects, Architektenkammer Baden-Württemberg (AKBW). He is a co-founder of the Ernst May Gesellschaft, Frankfurt, and a member of the Kulturkreis Schriesheim.

(September 2014)

Placed on the edge of the Odenwald forest, this music room for a violinist in Schriesheim near Heidelberg offers an unforgettable panorama of the Upper Rhine Valley and the Rhine-Neckar metropolitan region. Designed as a prefabricated timber frame and erected in just one day, the single space house extension provides a low carbon, sustainable and recyclable contribution to contemporary regional architecture.

A Music Room

Extension of a 1958/74 house, Schriesheim/Germany, 2013-15

Perched on the beautiful Branich hill in Schriesheim near Heidelberg, this music room with roof terrace for a violinist offers an unforgettable panorama of the Upper Rhine Valley and the Rhine-Neckar metropolitan region, with Speyer Cathedral in the far south, and Biblis nuclear power station in the north.

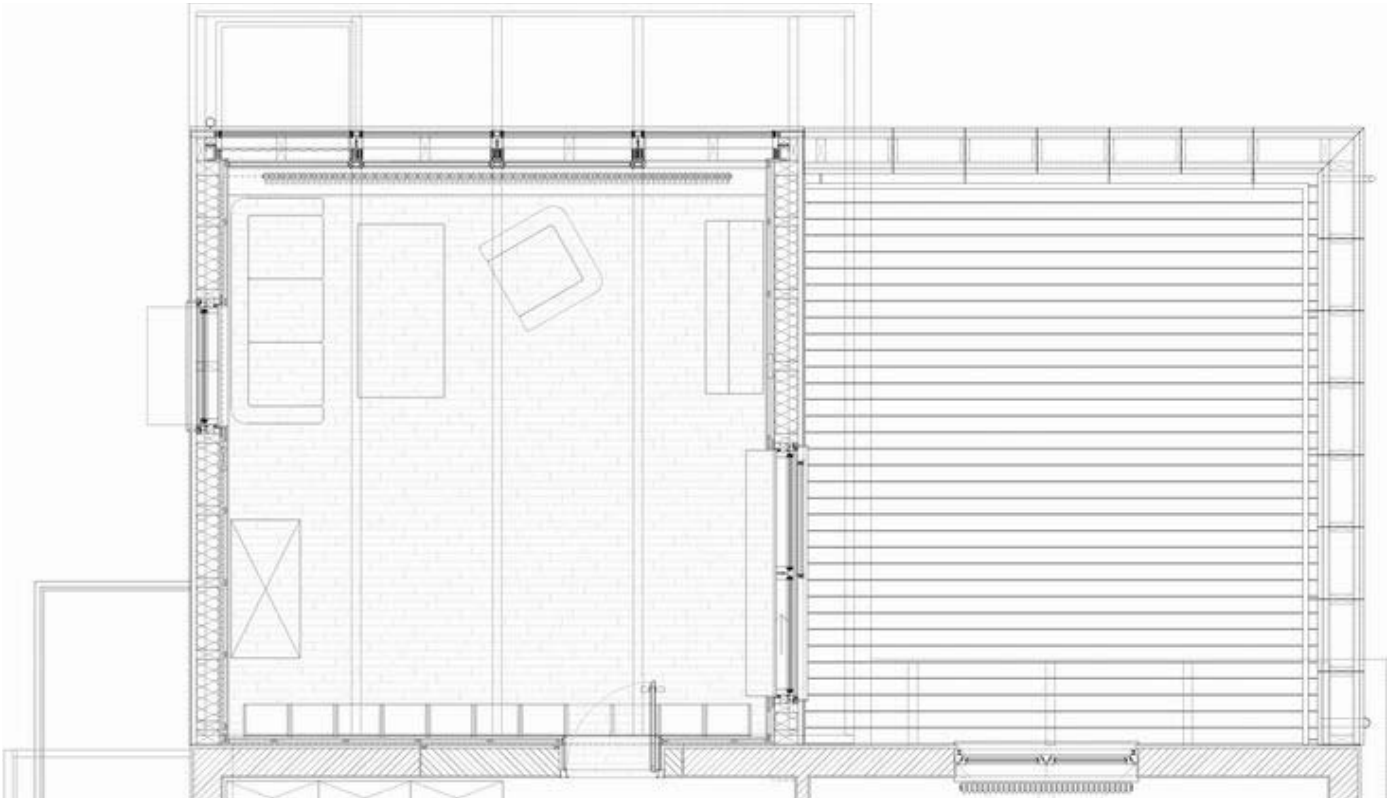
Built by a widowed mother of two in 1958, the original blockwork house was converted into a two-family house in 1974 with the option to vertically extend at a later stage. The resulting 50m2 roof terrace proved to be too large and exposed to the elements to be used comfortably. The music room sits atop half of the 1974 extension, and, along with the new timber decked terrace, is the last piece in completing the house.

New building regulations and the fact of current inhabitation called for a light and fast construction method. Designed as a prefabricated timber frame construction, the lightweight structure of the room and terrace was delivered in five parts and erected in a single day.

The sandwich walls are insulated with wood fibres blown under high pressure into the construction. On the outside the timber structure is clad with an insulated render system in a dark-beige colour on wood fibre boards. The deep and distinctive horizontal brush finish of the mineral render is in stark contrast to the smoothed walls inside.

The dominant colour inside is dark brown. Used for both the walls and the ceiling it is contrasted by the pine wood window frames and sills, and the maple wood of the floor.

The music room sits atop half of the 1974 extension, and, along with the new timber decked terrace, is the last piece in completing this typical house of the late 1950s.



The dominant colour inside is dark brown. Used for both the walls and the ceiling it is contrasted by the pine wood window frames and sills, and the maple wood of the floor. The dark hue dims the generous sunlight which travels through the large openings and which is reflected by the pale floor.

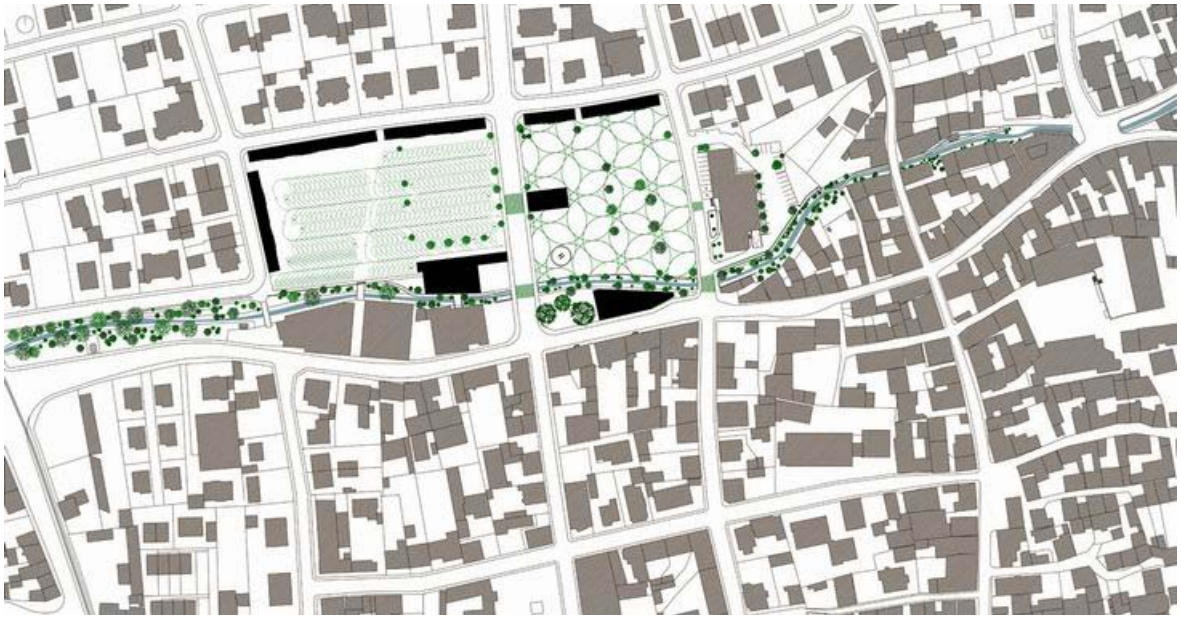
The three openings are positioned in such a way that they offer unobstructed views onto the valley immediately after entering the music room from the existing living room.

All windows are top hung and fully reversible aluminium clad timber windows. A deep canopy on the west facade protects the panorama window from direct sunlight. Eight curtains are drawn into niches integrated into the structural mullions of the panorama window. The small side window and the sliding door can be closed with insulated aluminium roller shutters.

Like the floor, the bespoke door is made from maple wood but stained dark to match the walls. Similarly, all services parts such as sockets, switches, luminaires and radiators are of anthracite colour.

The music room provides a low carbon, sustainable and recyclable contribution to contemporary architecture. It was designed, cost-estimated, specified, tendered, negotiated and contracted by Studio Becher, London. A local architect was commissioned to coordinate the construction site. The London office of Studio Becher remained lead designer during the construction phase, visiting the site on a regular basis.

Project duration: 2013-2015
Private client
Contract value: €90'000
Gross internal area: 23m2
Project architect: Peter Karl Becher
Site architect: Architekt Schuhmacher, Schriesheim
Structural engineer: Ingenieurbüro Thulke, Mannheim
Timber construction: Georg Grüber, Schriesheim
Windows and joinery: Armin Dremel, Schriesheim
Render system: Vasco Pereira, Schriesheim



Insgesamt werden bis zu acht neue Stadtbausteine vorgeschlagen: ein Feuerwehr-Ergänzungsbau mit öffentlichen Toiletten; ein Bürgerhaus mit modernem Gewölbekeller, Ausschank, Saal und Ausstellungsfläche; ein Wohn- und Geschäftshaus mit Kino; bis zu fünf gewerblich und zum Wohnen genutzte riegelförmige Stadthäuser. Das Bürgerhaus, Geschäfte und die Öffnung des Kanzelbaches wirken als „Besuchermagnete“. Grüne Linien verweben nicht nur beide Platzhälften miteinander, sondern binden den Platz auch an den Grünzug des Kanzelbaches an. Grüne Leitlinien statt der typischen weißen Fahrspurbegrenzungen und Autoumrisse statt der sonst üblichen Rechtecke helfen, eine typische Parkplatzatmosphäre zu verhindern. Einem floralen Muster gleich verbinden sich die Linien mit der „Grünen Oase“ entlang des Kanzelbaches.

Stadtplatz mit Geschäften, Bürgerhaus und Kino

Der neue Festplatz Schriesheim: kontextuell, typologisch, urban. Ideenwettbewerb, 2014

Mit der Erweiterung Schriesheim Nord ist der ursprünglich am Stadtrand gelegene Festplatz weiter ins Zentrum der 15.000 Einwohner zählenden Stadt gerückt. An der Schnittstelle von Alt- und Neustadt gelegen stellen sich heute folgende Kernfragen:

1. Wie kann der deutlich zu große Platz optisch verkleinert werden, ohne die Größe des Mathaisemarktes einzuschränken?

2. Wie kann der bisher als Funktionsfläche genutzte Platz als urbaner Raum aktiviert werden?

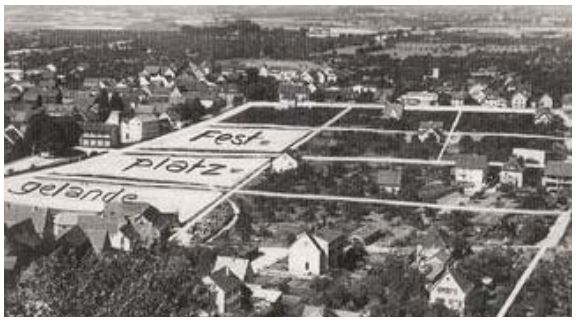
3. Wie können die Oberflächen des Platzes aufgewertet werden, ohne den finanziellen Rahmen zu sprengen?

Der Beitrag versucht, diese Probleme mit möglichst wenigen strategischen Eingriffen zu lösen:

1. Eine räumlich-geschlossene Einfassung des Platzes mit Wohn- und Gewerbenutzungen reduziert die optische Größe des Platzes deutlich, ohne den Mathaisemarkt zu verkleinern.

2. Ein neues Bürgerhaus mit Biergarten im Zentrum des Platzes, Geschäfte und die Öffnung des Kanzelbaches wirken als „Besuchermagnete“.

3. Eine Teilung des Festplatzes in einen autofreien Stadtplatz und einen funktionellen Parkplatz ermöglicht Platzbeläge unterschiedlicher Qualität.



Oben: Das „Steinachgebiet“ vor dem Bau des Festplatzes. 1961 (K. Groß: Schriesheim. Vom Dorf zur Stadt, 2009)

Unten: Der Festplatz während des alljährlichen Mathaisemarktes vom Paragleiter aus gesehen.

Das neue Wohn- und Geschäftshaus an der Talstraße fasst den Festplatz in seiner südöstlichen Ecke ein, ohne ihn optisch von der Altstadt zu trennen. Im UG könnte ein Kino eingerichtet werden, welches in Schriesheim seit Jahrzehnten fehlt. Die Stadthäuser vermitteln mit ihren langen Zickzackfronten zwischen geschlossen bebauter Altstadt und den hohen Satteldachgiebeln der lose gefügten Neustadt und fassen den Platz räumlich ein.

Bebauung

Insgesamt werden bis zu acht neue Stadtbausteine vorgeschlagen: ein Feuerwehr-Ergänzungsbau mit öffentlichen Toiletten; ein Bürgerhaus mit modernem Gewölbekeller, Ausschank, Bürgersaal und Ausstellungsfläche; ein Wohn- und Geschäftshaus mit Kino; bis zu fünf gewerblich und zum Wohnen genutzte riegelförmige Stadthäuser, die mit ihren langen Zickzackfronten zwischen geschlossen bebauter zweigeschossiger Altstadt und den hohen Satteldachgiebeln der lose gefügten dreigeschossigen Neustadt vermitteln.

Sowohl aus Gründen der zentralen Lage und damit schnellen Erreichbarkeit, als auch aufgrund der Nähe zur Mathaisemarkt-Großveranstaltung wird vorgeschlagen, die Feuerwehr nicht an den Rand der Stadt zu verlegen. Stattdessen soll ein zweiter Bau ähnlicher Größe den Bestand ergänzen. Ein zweigeschossiger Steg verbindet die beiden Gebäudeteile. Offen ausgeführt ermöglicht er eine Fortführung des Kanzelbachweges bis zur B3.

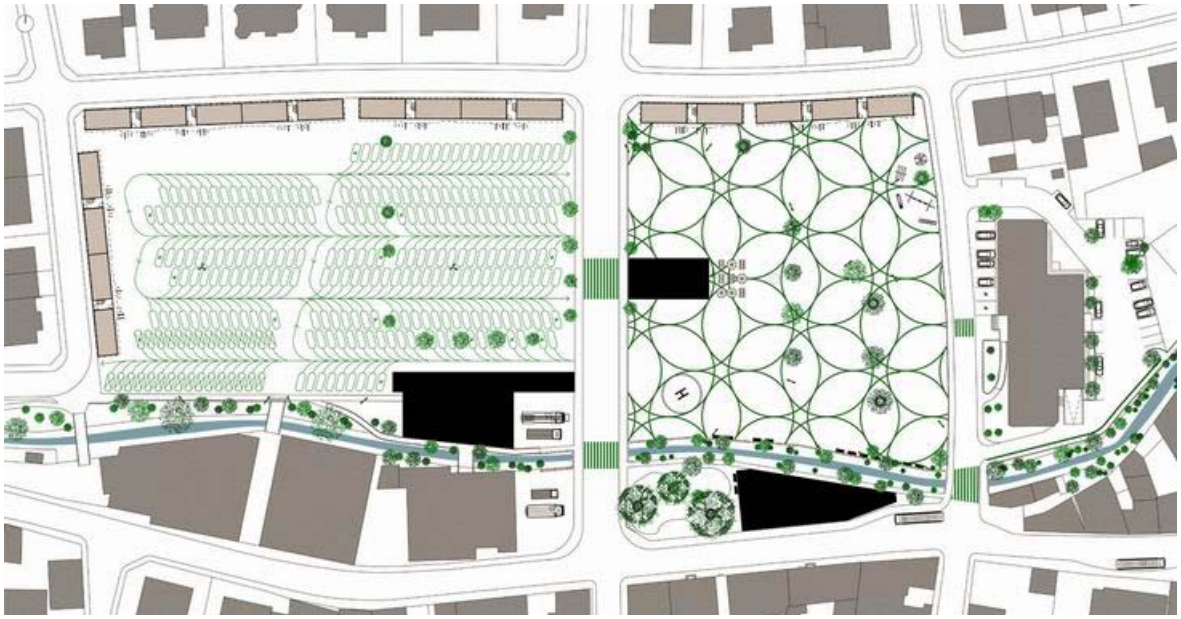
Das Bürgerhaus ist so positioniert, dass es den Mathaisemarkt nicht einschränkt. Im Erdgeschoß kann es auf allen Seiten großflächig geöffnet werden. Zwei Treppen führen in den transparenten Bürgersaal und die darüberliegenden Ausstellungsbereiche.

Das neue Wohn- und Geschäftshaus an der Talstraße fasst den Festplatz in seiner südöstlichen Ecke ein, ohne ihn optisch von der Altstadt zu trennen. Im Untergeschoß könnte ein Kino eingerichtet werden, welches in Schriesheim seit Jahrzehnten fehlt. Als Theaterbühne ausgeführt würde dieses „Theater-Kino“ ein besondere Attraktion darstellen, insbesondere auch für Besucher aus dem Odenwald.

Die von beiden Seiten zugänglichen, reihenhausbreiten Stadthäuser könnten im stützenfreien Erdgeschoß gewerblich genutzt werden: auf dem Stadtplatz für Geschäfte, auf dem Parkplatz für Kleingewerbe oder ständige Ausstellungsflächen von im Industriegebiet ansässigen Unternehmen. Mietwohnungen und/ oder Büroflächen in den oberen Geschossen helfen, das neue Quartier zu finanzieren.

Oben: Das Bürgerhaus kann im Erdgeschoß großflächig zum Biergarten und den Fontänen geöffnet werden. Zwei Treppen führen in den transparenten Bürgersaal und die darüberliegenden Ausstellungsbereiche.

Unten: Holztranport durch die 1250 Jahre alte Schriesheimer Altstadt, die vollständig in Fachwerk errichtet wurde. Das transparente Bürgerhaus ist eine zeitgemäße Interpretation dieser CO2-neutralen Bauweise.



Plätze

Statt beide Platzhälften mit einem Belag mittlerer Qualität zu versehen wird vorgeschlagen, den Stadtplatz passend zur Altstadt mit Porphyrpflaster, und den Parkplatz mit Asphalt im „Porphyrlook“ zu belegen. Verankerungspunkte für die großen Zelte und den Autoscooter werden vorgehalten. Eine Belegung mit Dränasphalt oder Schotterrasen ist aufgrund der jahrzehntelangen Nutzung als Schotterplatz nicht möglich.

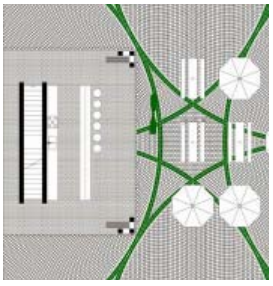
Grüne Linien verweben nicht nur beide Platzhälften miteinander, sondern binden den Platz auch an den Grünzug des Kanzelbaches an. Auf dem Stadtplatz werden diese durch glasierte Backsteine gebildet, auf dem Parkplatz hingegen durch grüne Straßenmarkierungen. Leitlinien statt der üblichen Fahrspurbegrenzungen und Autoumrisse statt der sonst üblichen Rechtecke helfen, eine typische Parkplatzatmosphäre zu verhindern. Einem floralen Muster gleich verbinden sich die Linien mit der „Grünen Oase“ des Kanzelbaches.

Dem Bürgerhaus und seinem Biergarten gegenüber könnte ein bodengleicher Fontänenbrunnen zum Spielen anregen. Der Spielplatz findet in der nord-östlichen Ecke eine neue Heimat. Der Uzès-Platz wird unter die besonders schöne Baumgruppe mit der alten Linde verlegt und mit einem Zugang zum Kanzelbach versehen. Bei Regen kann das Boule-Spiel unter der bachseitigen Auskragung des neuen Wohn- und Geschäftshauses an der Talstraße fortgesetzt werden.

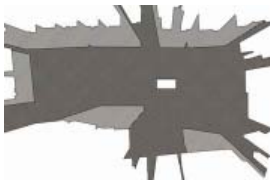
Unterhalb der Hüb’schen Mühle und als Endpunkt des Kanzelbachweges könnte ein kleiner Winzerplatz mit dem großen Fass, der Winzerstatue und regionalen Weinreben eingerichtet werden. Im bewitterten Bereich mit Kupfer beschlagen würde das Faß die von der B3 kommenden Besucher in der Weinstadt willkommen heißen.

Die Bäume sollen soweit möglich erhalten bleiben, insbesondere die größeren auf dem oberen Festplatz. Kreisförmige Bänke, grün unter grünblättrigen Bäumen, dunkelrot unter dem rotblättrigen Ahorn, umschließen ausgewählte Bäume und dienen als

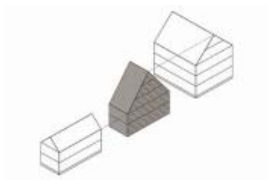
Die oberen Stockwerke der Holzbauten kragen pro Geschoss etwas aus, um die vermarktbare Fläche nach oben hin zu vergrößern. Das Bürgerhaus ist so positioniert, dass es den Mathaisemarkt nicht einschränkt. Der Stadtplatz soll passend zur Altstadt mit Porphyrpflaster belegt werden, der Parkplatz mit Asphalt im „Porphyrlook“.



Die von beiden Seiten zugänglichen, reihenhausbreiten Stadthäuser werden im Erdgeschoß gewerblich genutzt: auf dem Stadtplatz für Geschäfte, auf dem Parkplatz für Kleingewerbe oder ständige Ausstellungsflächen von im Industriegebiet ansässigen Unternehmen. Mietwohnungen und/ oder Büroflächen in den oberen Geschossen helfen, das neue Quartier zu finanzieren. Die bestehenden Bäume bleiben erhalten.



Eine räumlich-geschlossene Einfassung des Platzes mit Wohn- und Gewerbenutzungen reduziert die optische Größe des Platzes deutlich, ohne den Mathaisemarkt zu verkleinern.



Die schlanken, hohen Häuser vermitteln zwischen den schmalen zweigeschossigen Satteldachhäusern der Altstadt und den dreigeschossigen Mehrfamilienhäusern der Neustadt.

schattenspendende Sitzgelegenheiten. Ebenso sollen die bestehenden Platzleuchten nicht ersetzt, sondern passend zum Bodenmuster grün lackiert und zur Auflockerung propellerartig verdreht werden.

Die vor dem Bachschlössl gelegene Bushaltestelle wird aufgrund ihrer guten Lage nicht verlegt.

Baukonstruktion

Insbesondere die Stadthäuser könnten als KfW-Effizienzhäuser in vorgefertigtem, kostengünstigen Holzbau ohne Keller ausgeführt werden. Dies liegt nicht nur nahe, da Schriesheim eine besonders große Waldfläche besitzt, sondern ist auch ganz im Sinne eines zeitgemäßen CO2-neutralen Bauens. Dabei könnten alle Bauteile mit Anforderungen an den Brandschutz in mehrschichtigen Massivholzplatten ausgeführt werden. Die oberen Stockwerke der reihenhausbreiten Einspänner könnten pro Geschoss etwas auskragen, um die vermarktbare Fläche nach oben hin zu vergrößern. Die aussteifenden Fassaden des transparenten Bürgerhauses könnten in modernem Ingenieurholzbau mit CNC-gefrästen Knoten und Zugstäben ausgeführt werden. Dies würde nicht nur das Gewicht und damit die Kosten reduzieren, sondern auch den Holzverbrauch.

Solar- oder Photovoltaikanlagen auf den der Hauptblickrichtung abgewandten Dachhälften könnten die Stadthäuser mit nachhaltiger Energie versorgen, und einige Car2Go-Kleinwagen könnten in unmittelbarer Nähe für Stadtbewohner ohne Auto vorgehalten werden.

Architekt

Studio Becher/ Peter Karl Becher

Beratende Firmen

Küffner Hof, Langenbrettach (Zelte)
Pflanzenhandel Huben GmbH, Ladenburg (Bäume)
Sax + Klee GmbH, Mannheim (Asphalt u. Pflaster)
Elsässer GmbH & Co. KG, Mannheim (Holzbau)

This catalogue house is an ultra-adaptable home that can grow and shrink, and gradually be rented out as smaller units. The houses can be arranged as terraces, or semi-detached/ detached houses. It can be used as a house or separated into flats with, for example, senior housing, retail, office, workshop or parking on the ground floor.

The All-in-one House

International architectural competition, Cambridge, UK, 2013

"If I had asked people what they wanted, they would have said faster horses." Henry Ford

Following the 2008 financial crisis, the property market needs a model of minimum risk and maximum flexibility for both developer and buyer. This catalogue house is an ultra-adaptable home that can grow and shrink, and gradually be rented out as smaller units. The houses can be arranged as terraces, semi-detached or detached houses. The plan is structurally free; it can be a house or separated into flats with, for example, senior housing on the ground floor, or a shop, office, café, gallery, workshop or garage.

The slender yet spacious house is available with one of three typical roof shapes, window patterns and building heights, providing maximum variety and complexity when applied on the Wing master-plan and ensuring a "memorable and vivid image of the city" (Kevin Lynch, urbanist). The walls and roofs are clad with clay tiles in typical Cambridge colours, giving each house a homogenous and modern appearance. Constructed with zero-carbon cross-laminated timber panels it can be prefabricated and erected in large segments over a couple of weeks, even during winter. New storeys can be added to flat roof types at a later stage.

Internally the houses are designed to be highly flexible and variable by avoiding load-bearing partition walls. The timber panels can be left exposed or concealed. Plywood or plasterboard lined partition walls can easily be added, be moved or removed, and ensure maximum flexibility over the life-time. The stairs can be separated as semi-public access to rented flats.

The ground floor is fully accessible for wheelchairs and would be particularly suitable for senior residents. The party wall on the ground floor provides a concealed structural opening to enable the future combination of two adjacent flats, for example for flat-sharing. The ground floor can be lowered by 0.5m to provide a 3m high space at street level for use other than housing.

„The vision for Wing is to create a new urban village for Cambridge whilst retaining the benefits of being on the edge of the City and located in South Cambs. Wing will consist a balanced supply of new homes, commercial uses and extensive community facilities."

Wing Cambridge 2013

Cone House Alpha One

Proposal for a private residence, Anywhere, 2013

Proportioned according to Fibonacci numbers in plan and section, this prototype concrete house with conical library offers a purist environment that combines living and working space under one roof.

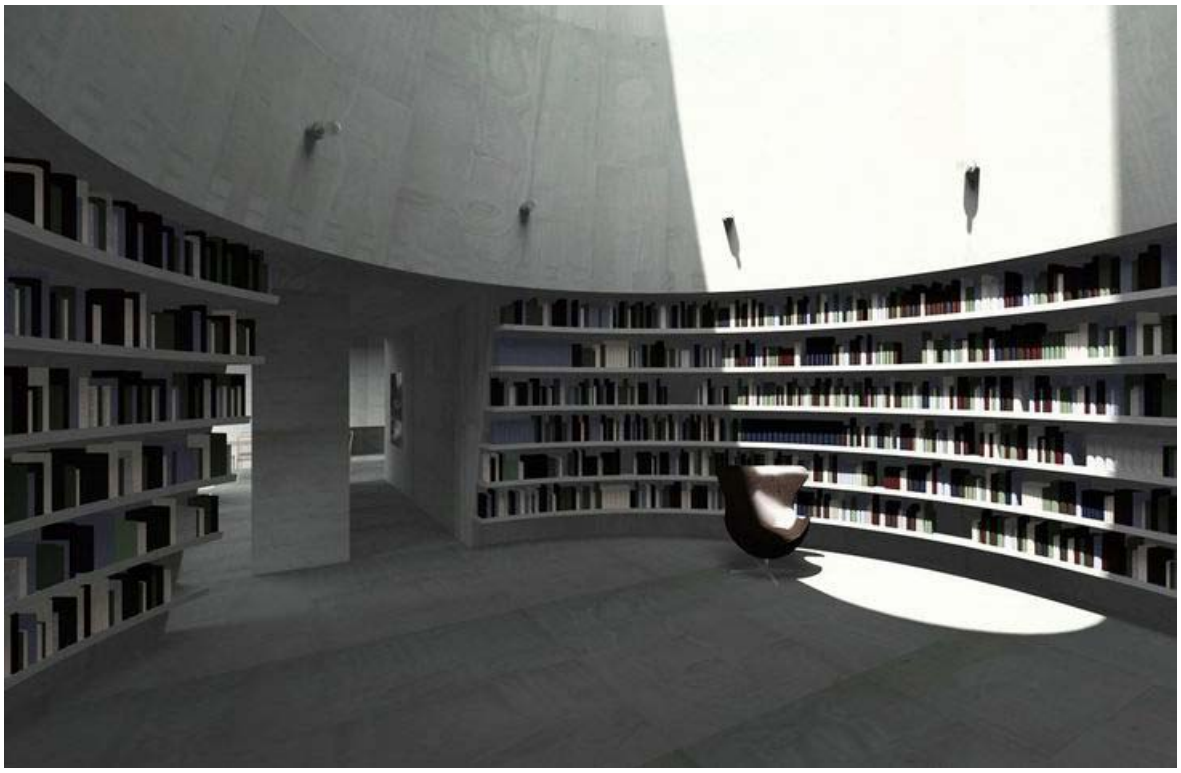
Cast in thermo-concrete and fitted with concrete core tempering of walls and slabs, the house aligns with the emerging trend to demand solidity in times of excessive use of multi-layer insulation systems. Its thermal mass enables the solid concrete construction to absorb and release heat, both internal and external, in step with its daily heating and cooling cycle.

In plan, the house is organised in two halves of square proportion: one for dwelling, one for working. A conical library over two floors forms the centre of the working half.

A dynamic space of knowledge, this library is divided into a double height conical space of introverted, contemplative character. A curved staircase around the outside of the cone leads up to the higher part of the library. Square in plan this higher part encloses the cone and offers panoramic views over the surrounding landscape. An optional circular window cut into the cone connects both parts of the library.

Chamfered off at its southern end, the pitched roof truncates the 13m cone and creates a large oculus. A second circular skylight allows for sunrays to travel deep into the upper part of the library.

Cast in thermo-concrete and fitted with concrete core tempering of walls and slabs, the house aligns with the emerging trend to demand solidity in times of excessive use of multi-layer insulation systems. Its thermal mass enables the solid concrete construction to absorb and release heat, both internal and external, in step with its daily heating and cooling cycle.



The poché spaces on the ground floor provide room for two halls, a shower room and the curved stairs leading to the upper library.

A double height dining hall with feature fireplace and large sliding doors on both ends forms the centre of the dwelling part of the house. On the ground floor this part is completed by a large guest room with en suite shower room, a small gallery and a functional kitchen with large panorama window.

The grand hall's three clerestory windows follow the profile of the two upstairs bedrooms, one of which is master bedroom size, and the main bathroom, creating the effect of extending the rooms to the outer wall. The bathroom's luxuriously tall nave is fitted with sanitary objects cast in concrete. Likewise, internal and external luminaires are made from concrete and consequently contribute to the overall aesthetics of the house.

Similarly, internal doors match both hue and texture of the exposed concrete. When open they sit flush with the wall in recesses. Insulated like external doors they allow for temperature zoning when shut and offer excellent protection from airborne sound across the house.

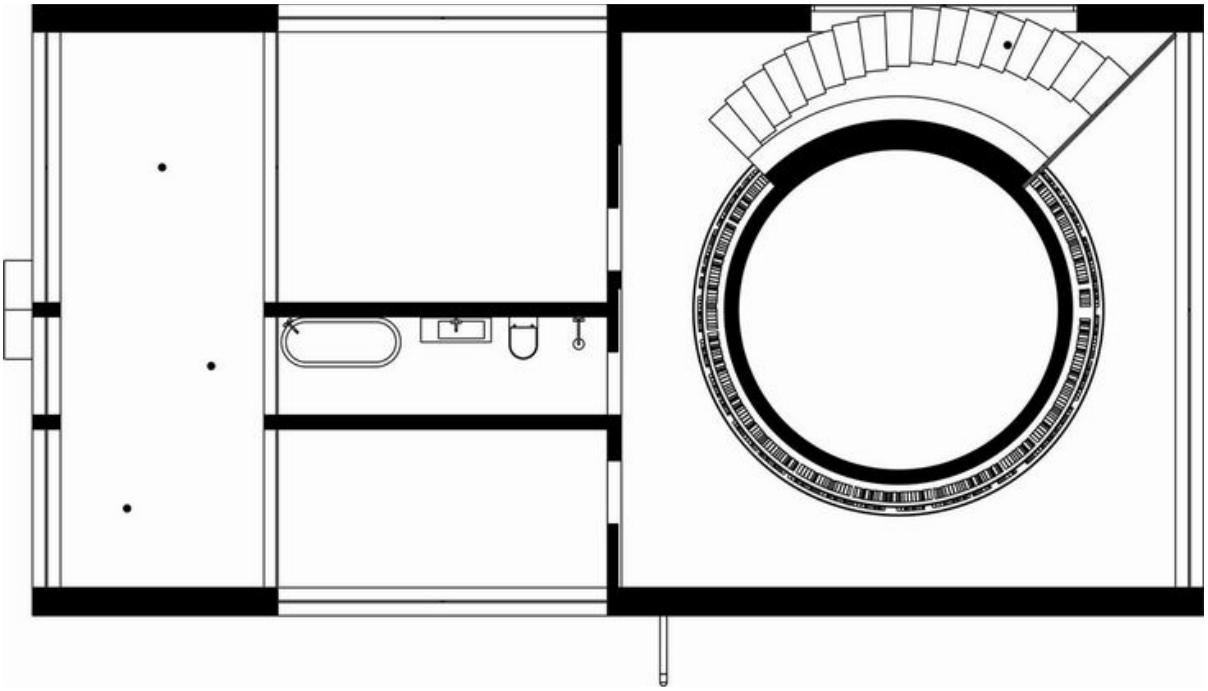
Outside, a concrete barbecue grill connects to the three-way flue with air inlets just below the eves and an outlet flush with the pitched roof.

All fixed glazing is positioned in the middle of the reveal in order to celebrate the opening as a void rather than a framed window. Openable doors and windows are pronounced and form key features of the house. Constructed as flush structural glazing elements with grey aluminium frames they slide sideways into wall recesses similar to the internal doors.

The front door is distinguished from other doors by its arched form. Optionally it can be trapezoid, projecting the truncated cone behind.

Top: View from the library through the kitchen and the small gallery to the dining hall.

Centre: The dining hall and master bedroom with view to the library's upper part.
Bottom: A potential location somewhere in the countryside.

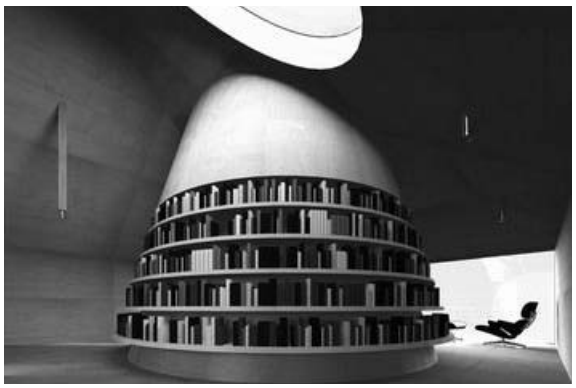


In plan, the house is organised in two halves of square proportion: one for dwelling, one for working. A conical library forms the centre of the working half. This library is divided into a double height conical space of introverted, contemplative character and, square in plan, an upper part which encloses the cone and offers panoramic views over the surrounding landscape.

The grand hall's three clerestory windows follow the profile of the two upstairs bedrooms and the main bathroom, creating the effect of extending the rooms to the outer wall. The bathroom's luxuriously tall nave is fitted with sanitary objects cast in concrete. Likewise, all luminaires are made from concrete and contribute to the overall aesthetics of the house.

„Then, when the whole world has been most horribly and tastelessly and criminally cluttered up by buildings, it will be too late, the face of the earth will be dead. We are helpless against the destruction of our global surface by the architects! he once exclaimed."

Roithamer in Thomas Bernhard: Correction



One of the main architectural moves was to connect three major rooms on the ground floor. This spacious and airy reception area provides room for dining and living, with a smaller intimate room with TV and stove inbetween.

Private Residence

Conversion of a 1970s catalogue house, Wiesbaden-Bierstadt, Germany, 2012-14

Erected in 1971, this catalogue house was originally designed for two single-child families. When purchased by the clients in 2012 it did not comply with the energy saving act (EnEV), the top floor flat hadn't been inhabited for some time and the internal and external timber frame walls on that level were contaminated with Formaldehyde.

With exceptionally high land prices in Bierstadt, suburbanised in 1928 and strategically located just outside Wiesbaden proper, the budget left over for bringing this house back to standards was limited to 280'000 Euros. A significant portion of this money had to be secured for a new façade system including triple-glazed windows, new roof cladding and the replacement of most domestic services. The latter included the exchange of the oil heating system by gas incl. disposal of the tank, rewiring, new kitchen and bathrooms. The remaining money was invested in quality products and finishes as well as a few strategic interventions in line with the 1970s aesthetics of the house.

The main architectural moves were: the opening of three rooms into a continuous reception area, the relocation of the main entrance from the rear to the side and the insertion of long garden views across the ground floor. The former entrance door was replaced by a clear double door to the back garden. This move upgraded the former entrance lobby to a central hall, which enables views from the living room and the kitchen to the surrounding garden.

The dominant colour inside is white. Used for walls, windows and internal doors it is contrasted by the dark smoked oak parquet in the living area and the dark grey rubber flooring in the kitchen, corridor and hall.

The dining room window was replaced by a double door to the terrace, which, in the course of the redesign of the garden, will be covered and clad in timber decking. The glass bricks on the upper floor were replaced by clear windows.

The spacious and airy reception area provides space for dining and living, with a smaller intimate room with stove and TV. The three rooms can be separated by double doors.

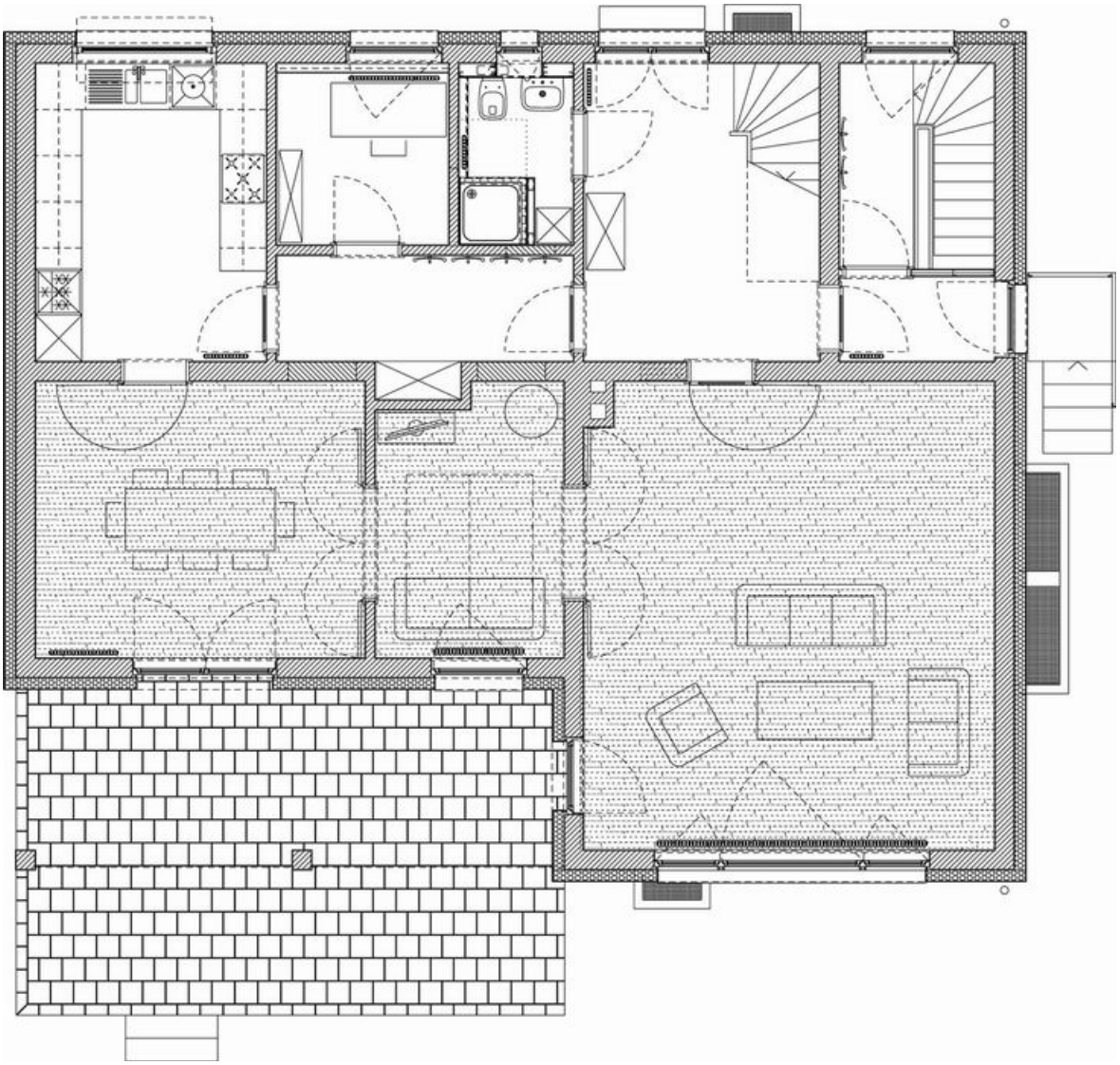
Typical for that time, the house was constructed in blockwork with precast concrete T-joists & block filler slabs. Upstairs between the gables the house was built as timber frame structure with narrow timber trusses supporting the roof.

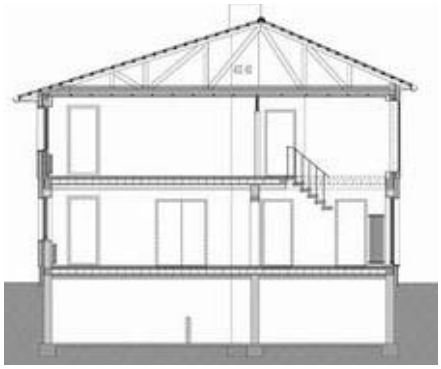
The timber frame structure had to be completely stripped due to the contaminated chipboard and mineral wool in both external walls and partitions. The boards were replaced by OSB and taped along all joints for vapour proofing. The new stairway window at the rear reveals the timber construction upstairs.

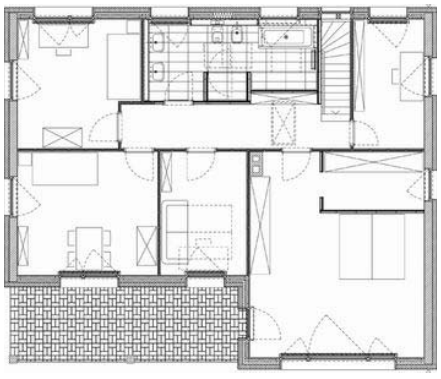
All external walls were clad with a 140mm insulated render system, interrupted by high-quality timber-aluminium windows and doors. The grey-beige colour and the deep distinctive horizontal brush finish of the mineral render are in stark contrast to the smoothed plaster inside.

The dominant colour inside is white. Used for walls, windows and internal doors it is contrasted by the dark smoked oak parquet in the living area and the dark grey rubber flooring in the kitchen, corridor and hall. Glazed timber doors offer long views across the ground floor into the surrounding garden.

The main entrance was relocated from the rear to the side. This move upgraded the former entrance lobby to a central hall, which enables views from the living room and the kitchen to the surrounding garden. The grey-beige colour and the deep distinctive horizontal brush finish of the mineral render are in stark contrast to the smoothed plaster inside.







Top to bottom: Ground floor plan, section, first floor plan
Left: View from the dining room

The bathroom on the upper floor was extended to match the demands of the family of four, and the one on the ground floor split into a small bathroom with shower and adjacent study/guest room.

The project was designed, cost-estimated, specified, tendered, negotiated and contracted by Studio Becher, London. A local architect was commissioned shortly before signing the building contract and coordinated the construction site. The London office of Studio Becher remained lead designer during the construction phase, visiting the site on a monthly basis. The house meets KfW Efficiency House standard.

Project duration: 2012-2014
Private client
Contract value: €280'000
Gross internal area: 222m2
Project architect: Peter Karl Becher
Site architect: Jan Peter Dahl, Wiesbaden
Structural engineer: W. + J. Unverzagt GbR, Wiesbaden
General contractor: Direct Sanierung, Wiesbaden
Render system: Brillux

The new stairway window at the rear reveals the timber construction upstairs. The bathroom on the upper floor was extended to match the demands of the family of four.

All external walls were clad with a 140mm insulated render system, interrupted by triple-glazed timber-aluminium windows and doors with a dark finish on the outside.

Rather than demolishing the existing brick shed the project supports the coexistence of different historic layers in the city. Simplistic in its shape and iconic in its façade and roof, the rigorously conceived but practically designed vertical extension duplicates the existing pitched roof on its new top floor as if the shed had been stretched upwards.

nef Headquarters

Feasibility study for the New Economics Foundation, London, UK, 2011

Bearing nef's logo on the front gable of the building, the design for their new headquarters exemplifies what the London based think-and-do tank stands for: innovative solutions that challenge mainstream thinking on economic, environmental and social issues.

Rather than demolishing the existing brick shed that is nef's current home the project supports the coexistence of different historic layers in the city. A pre-fabricated timber structure is inserted into the gutted shed and re-uses the existing walls and windows as cladding on the ground and first floor levels, in total rising to five storeys like its neighbours. This re-use design is emblematic of the creative transformation towards a sustainable future that nef envisages.

Putting the planet first, the new headquarters is designed as a largely self-sufficient and low-carbon building. Fitted with the latest building technologies ranging from low-energy LED lighting to rainwater collection for sanitary facilities, the inventive building brings to life aspects of nef's ideas for a Great Transition by creating an environmentally sustainable, high well-being habitat for work and community life.

The building houses a public auditorium, a videoconferencing room and a library whose unique collection of new economics literature is likely to become the largest of its kind. A greenhouse integrated in the roof provides the users with fresh food throughout the year and continues nef's tradition of urban gardening to enhance staff well-being.

A pre-fabricated timber structure is inserted into the gutted shed and re-uses the existing walls and windows as cladding on the ground and first floor levels, in total rising to five storeys like its neighbours. This re-use design is emblematic of the creative transformation towards a sustainable future that nef envisages.

The building not only functions as a new headquarters for nef but also offers cooperative workspace for like-minded organisations, entrepreneurs and non-governmental organisations. This crucially generates sustainable income for nef's activities whilst it also creates high well-being working space for others in central London, brings additional trade to the local economy and could develop into a hub of networking activity in the sector.

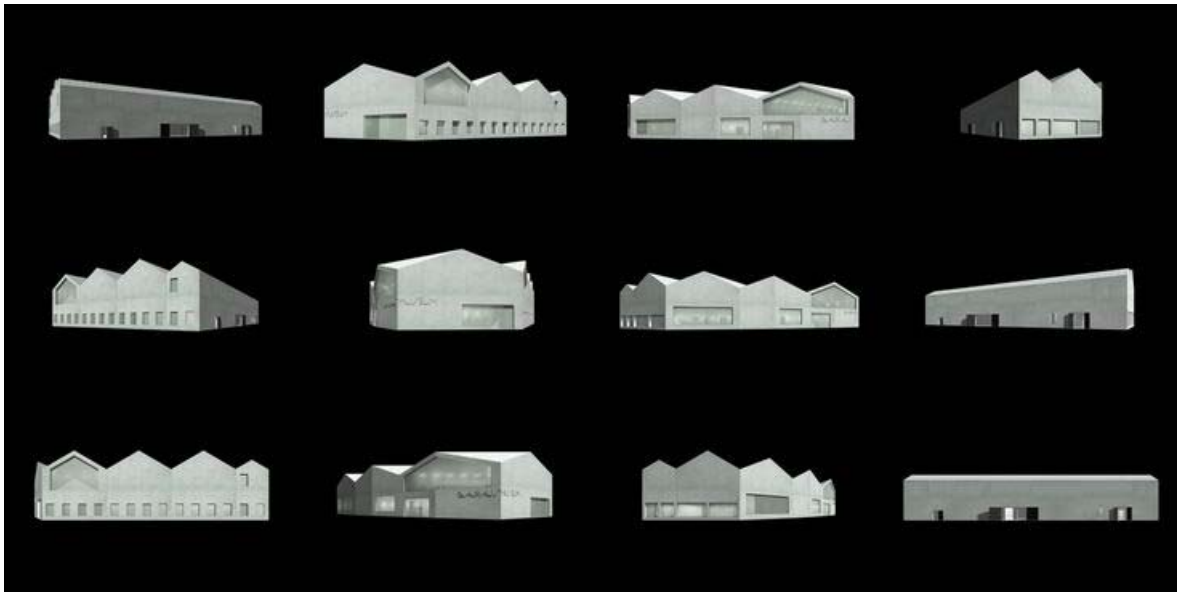
Using both evergreen climbing plants as wind and water repellent natural cladding and deciduous creepers to shade large glazed areas in the summer, the extension's living façade and roof becomes a dynamic feature of the literally green building. In order to contain their growth the plants are rooted in façade-integrated troughs rather than open ground soil. These rainwater irrigated containers are mounted to a prefabricated steel trellis that wraps around major parts of the new extension above the preserved brick façade and ensures that the extension enhances the local environment visually. Inside the timber finishes are left exposed on both walls and ceilings.

Simplistic in its shape and iconic in its façade and roof, the rigorously conceived but practically designed vertical extension duplicates the existing pitched roof on its new top floor as if the shed had been stretched upwards. Chamfered off at its western end it communicates with the adjacent building and maintains its neighbour's right to light.

Maximum spatial flexibility for the future is ensured by avoiding load-bearing partition walls and exposing services such as cabling and ducting wherever possible. The pre-fabricated timber structure can be erected within the shortest time-frame possible and with a minimum of dirt and disruption. Avoiding water based materials such as brickwork, concrete or plaster further reduces the construction time significantly.

The building houses a public auditorium, a video-conferencing room and a library whose unique collection of new economics literature is likely to become the largest of its kind. A green-house integrated in the roof provides the users with fresh food throughout the year and continues nef's tradition of urban gardening.

Chamfered off at its western end it communicates with the adjacent building and maintains its neighbour's right to light.



Following the irregular outline of the triangular plot of land results in different widths and orientations of the gables and disrupts the repetitive order of the building.

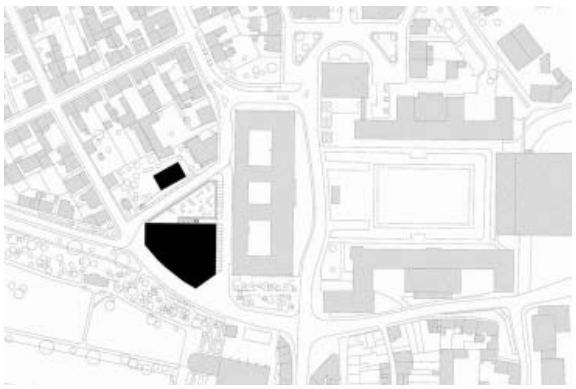
In size, the new museum mediates between the late 19th century domestic quarters to the north and west, and the large buildings of the former Gauforum to the east (right).

The New Bauhaus Museum in Weimar

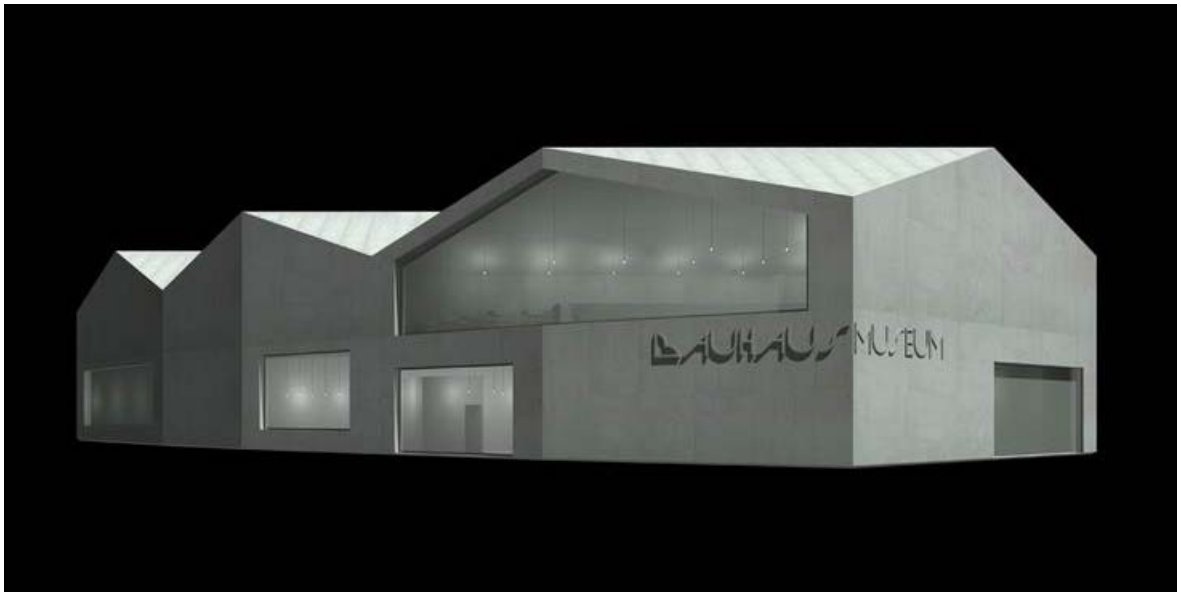
International architectural competition, Weimar, Germany, 2011

When in 1919 Walter Gropius became director of the newly formed Staatliches Bauhaus Weimar – a merger of an arts and crafts school and a school of art – he couldn‘t have known that only six years later he would have to move it to Dessau to escape increasing pressure from local craft-workshops that perceived the new school as a threat to its industrial design interests; the city of Weimar, famous in the late 18th and early 19th century for its intellectual and cultural life, had lost the avant-garde institution to an industrial town. In Dessau, the school found a new home in the iconic modernistic building designed by Gropius himself, established a Department of Architecture in 1927 and became acclaimed for its functionalist approach to architecture and industrial design.

This shift in the Bauhaus history from craft to industrial design is seen as a central question of this competition: how should the New Bauhaus Museum be represented and positioned for 21st century Weimar? Should it imitate the white modernist language developed in Dessau, or should it rather recall its arts and craft origins under Henry van de Velde? Both would be looking backwards in time therefore a different route was taken: the marriage of functionality and context.



The distinctive building is composed of parallel building bars with pitched roofs. Their dimension of 12m width and 13m height is derived from the context. Following the irregular outline of the triangular plot of land results in different widths and orientations of the gables and



disrupts the repetitive order of the building. In size, the new museum mediates between the late 19th century domestic quarters to the north and west, and the large buildings of the former Gauforumto the east.

The main exhibition space, windowless for functional reasons, is located on the upper floor, adjoining the museum shop and café which offers grand views over the park. Smaller exhibition spaces for the rug and print collections and the art storage are on the ground floor.

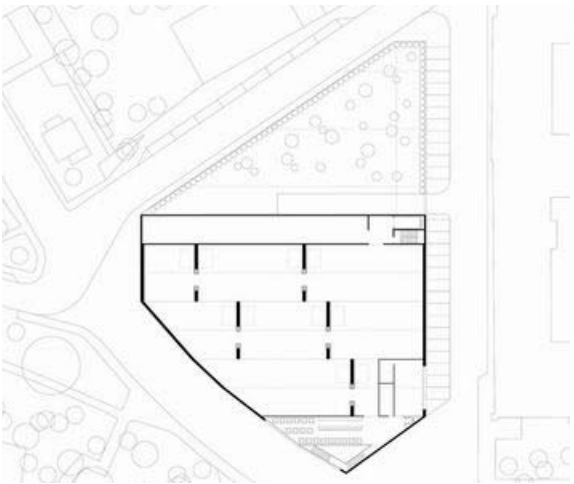
For ease of access and fire escape the lecture hall, cinema and public workshops are on the ground floor. The workshops face the nearby park with large windows enabling views in and out of the space. All administrative spaces are lined up opposite the former Gauforum, now Landesversicherungsanstalt.

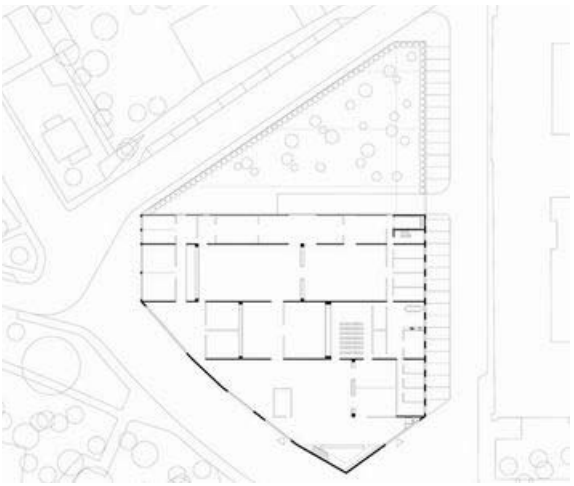
High flexibility was a major criterion for the design of the main exhibition space. The open plan space comprises of eight differently sized ‚inversed houses' defined by free-standing gable ends. These gables support the pitched roof and contain domestic services such as ventilation and power supply.

The eight ‚inversed houses' correspond with the outer image of the New Bauhaus Museum: an accumulation of small houses. Inside, the pitched roof spaces form an appropriate environment for the domestic objects of the Weimar collection, comprising of furniture, lamps, rugs, pictures and toys.

The exhibition spaces can be subdivided with fabric-covered panels along the eaves to allow for temporary exhibitions with smaller spaces. The height of the main exhibition space ranges from 3 to 6.5 metres. Skylights are proposed on both sides of the internal gables to allow for naturally lit temporary exhibitions and smoke ventilation. For daylight sensitive exhibits, the skylights are fitted with black-out blinds and luminaires for the simulation of daylight.

The volume of the functionally organised museum is kept as compact as possible with a gross to net floor area ratio of just 1.29. Omitting a basement, the main plant room is strategically situated on the upper floor which





The main exhibition space, windowless for functional reasons, is located on the upper floor. The adjoining museum shop and café offers grand views over the park.

Smaller exhibition spaces for the rug and print collections and the art storage are on the ground floor, supplemented by a lecture hall, a cinema and public workshops.

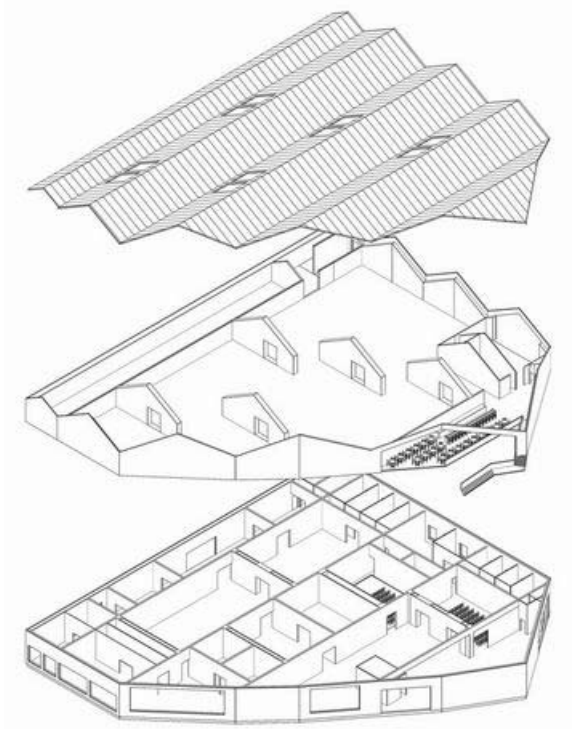
All administrative spaces are lined up opposite the former Gauforum, now Landesversicherungsanstalt.

keeps servicing costs as low as possible and allows for a future extension of the museum to the north.

Combining in-situ and prefabricated concrete construction the building follows an oblong grid of 1.2 x 12 metres in plan. Longitudinal walls on the ground floor and internal gable walls spanning across on the first floor support the pitched roof. All other partition walls can be moved so that the museum can easily be adapted to future changes in plan.

It is suggested to use the space reserved for a future extension as a temporary museum garden. It offers space for a 1,500 square metre extension. The museum kindergarten is proposed on a separate site north-west of the museum.

With the New Bauhaus Museum the city of Weimar has a unique opportunity to realise Gropius' idea of a ‚Great Structure' (Großer Bau), a building in which all applied arts are reunited in a ‚unified work of art' (Einheitskunstwerk) similar to a medieval cathedral. It is proposed to design bespoke furniture, show cases and lighting fixtures, as well as tableware and cutlery with Weimar based craftspeople and designers.



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Combining in-situ and prefabricated concrete construction the building follows an oblong grid of 1.2 x 12 metres in plan.

Longitudinal walls on the ground floor and internal gable walls spanning across on the first floor support the pitched roof.

Competition team:

Client
Klassik Stiftung Weimar

Architect
Studio Becher, London
Peter Karl Becher, George Barer

Civil Engineer
Arup, Frankfurt

The Room – architecturally a ring of vaults supporting a spherical dome above – combines the archetypal models of Christopher Wren's multi-layer cupola for St Paul's Cathedral (1673, below) and Étienne-Louis Boullée's visionary idea for a Newton Cenotaph (1784) and transforms them into a new type of translucent dome.

Perched atop the tough concrete landscape of the Queen Elizabeth Hall, this temporary hotel room for two guests offers a plant-like interior for reflection and contemplation, in stark and almost surreal contrast to the frenetic rhythms of the metropolis outside.

A Room for London

Shortlisted entry for Alain de Botton's Living Architecture competition, 2010/11

Perched atop the tough concrete landscape of the Queen Elizabeth Hall, this temporary hotel room for two guests offers a plant-like interior for reflection and contemplation, in stark and almost surreal contrast to the frenetic rhythms of the metropolis outside.

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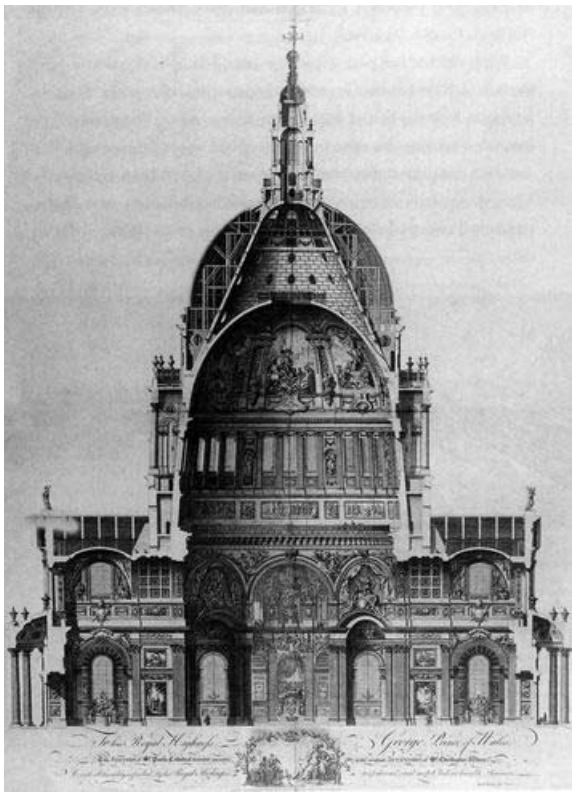
When seen from the city beyond, the proposal performs, like an urban Fabergé Egg, as a small ornament with a contemporary and highly distinctive presence amongst some of London's most prestigious landmarks - St Paul's Cathedral, Westminster Abbey, Big Ben, the Houses of Parliament and London Eye.

The oval structure with a central oculus is made of laminated timber with a green coating, and enveloped in two layers of semi-clear foil tightened by negative air pressure in between. Using the same technology as for inflated cushion facades, this innovative idea of simply reversing the air pump drastically reduces the number of foil penetrations and the risk of leaks.



Drawing by Samuel Swayle and John Gwynn, 1755

The outer skin of the twin-layer construction forms the waterproofing roof and withstands the potentially strong Thames winds. The inner layer shapes the dome and the vaults, and functions as thermal separation and buffer space between inside and outside. The latter gives the guest the feeling of security and separation from the outer world which is of particular importance given the exposed placement on top of the 1960s flat roof.

Views through the semi-clear foils are refracted due to their biconcave shapes. This ensures privacy and creates unprecedented visual phenomena: the play of reflections and sunlight, the refracted image of adjacent high-rise buildings, the distorted firmament at night etc. Six arched windows offer an unforgettable panorama of London's skyline and its daily life.

A six-petal flower in plan, the Room divides the single space into seven areas: one central hall surrounded by six circular areas for sleeping, eating, relaxing, bathing, hygiene and reception. Three of those areas are enclosed by textile, Physalis-like 'pods' with foldable openings. Soft, shaggy rugs mark the round areas reserved for the table and the sofa.

The oval geometry of the Room is, in section, composed of a semicircle and a semi-ellipse. Its diameter is 7m, its height 7.75m and the floor is 1.375m above roof level. The projected footprint is 38.5m2, the floor area 32m2 and the seven sixfoil circles are 2.25m across.

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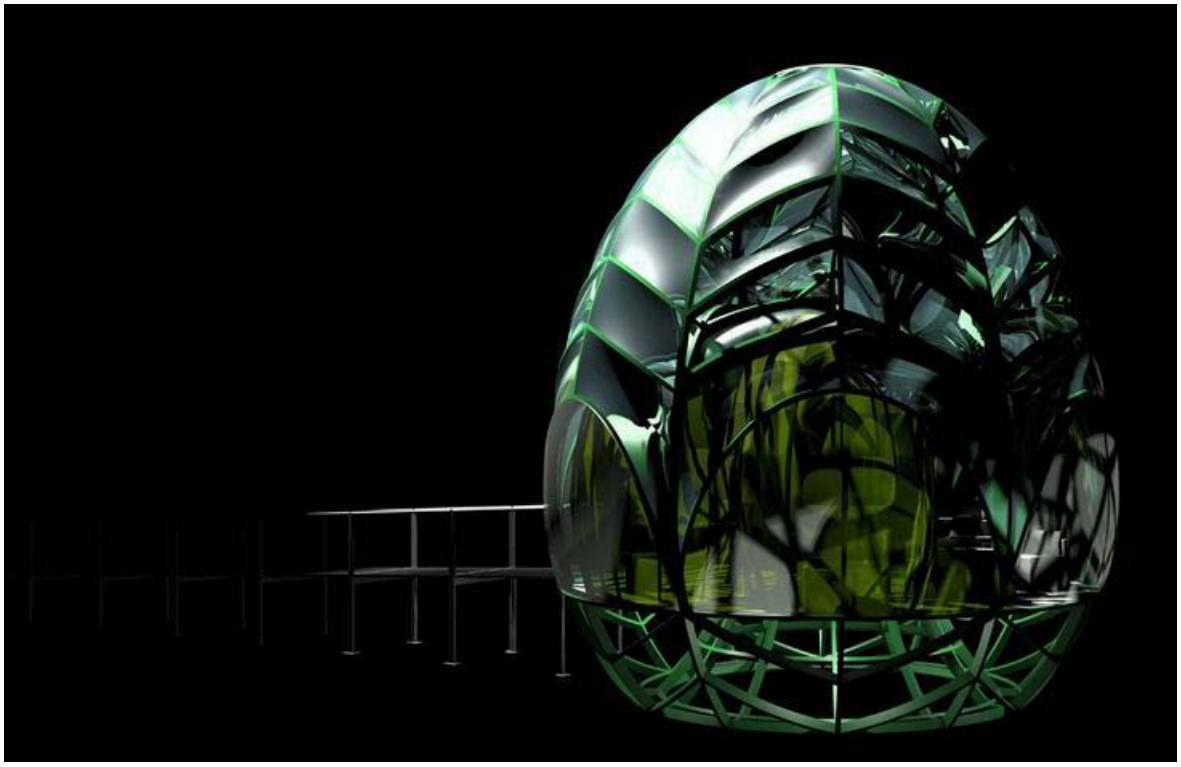
Six arched windows offer an unforgettable panorama of London's skyline and its daily life.

Model photograph by David Grandorge



The Room provides a low carbon, sustainable and recyclable contribution to contemporary architecture which can easily be assembled and disassembled, and re-connected to services in other locations.

The idea is to place six polished plaster statues by artist Hilary Koob-Sassen in the interstitial voids between the circles along the façade, and to sell them, as part of the funding, to the highest bidding guest before being dismantled again. Those voids also hold wardrobes, and foliage-like tables fixed to the bent columns could be used for small items like toiletries, alarm clock, mobile phone etc.

The central hall is unoccupied by default. It is meant to be a flexible space that can be used for contemplation or observation. A mobile telescope would, for example, be a nice tool to enable views into the night sky and over the city. Other ideas for activities within the space include a Jacuzzi, a trampoline, an umpire's chair allowing contemplation inside the dome, or stage props borrowed from the Southbank Centre of which the Queen Elizabeth Hall is a part.

The white interior provides a clean and light atmosphere. Fixed furniture such as the circular sofa and the bed are designed especially for the Room and could be made in the workshops at the Southbank Centre. Those bespoke, yet simple designs are supplemented by carefully selected off-the-shelf furniture and sanitary objects.

The Room provides a low carbon, sustainable and recyclable contribution to contemporary architecture which can easily be assembled and disassembled, and re-connected to services in other locations. Domestic servicing works in a similar manner to floating homes or house boats, with flexible connections to on-site facilities.

In the sense of Francis Picabia's idea that 'our heads are round so our thoughts can change direction', the iconic urban sculpture offers a spherical space of tranquillity and pure aesthetic, ideal for reflection and contemplation.

The project was one of four proposals shortlisted out of over 500 international entries.

Competition team:

Client
Alain de Botton/Living Architecture, London
Artangel, London

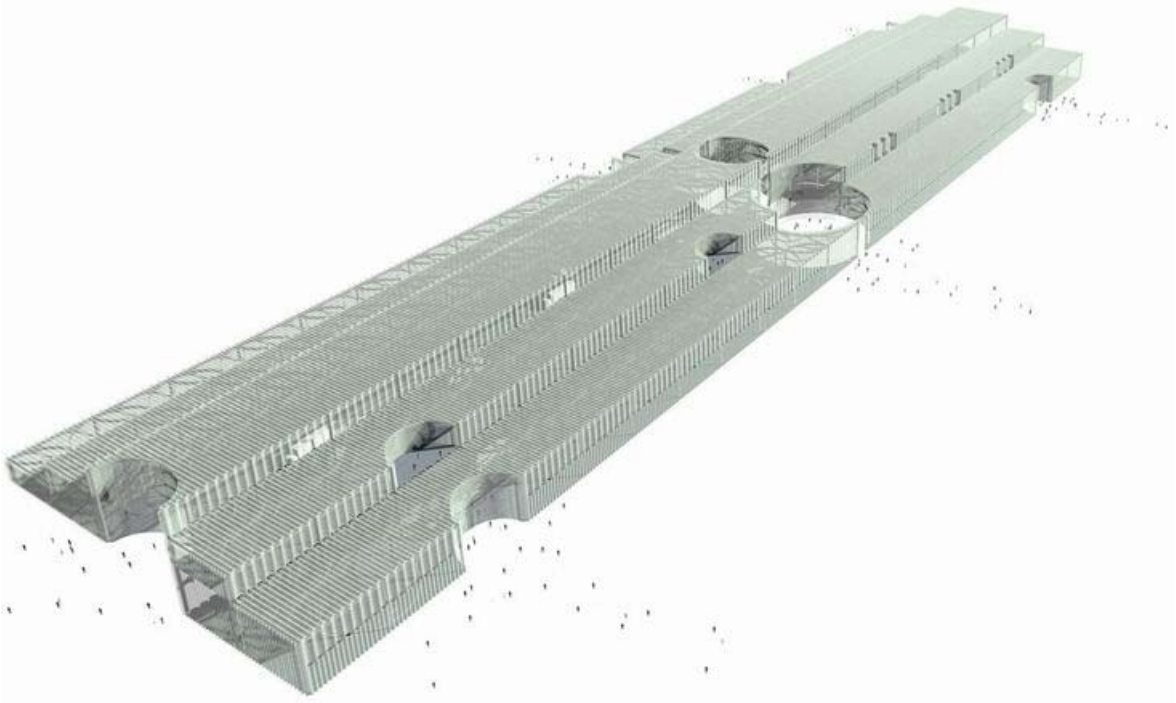
Architect
Studio Becher, London
Peter Karl Becher, Sarah Huelin

Sculptures
Hilary Koob-Sassen, London

Structural Engineer
Price & Myers, London

Membrane Engineer
Tensys, Bath

Cost Consultant
Davis Langdon, London



The proposed exhibition building traces the footprint of Sydenham Palace but uses Paxton's initial unrealised Hyde Park design as an archetype (centre right). The corrugated cast glass façade reacts to the building scale by using smaller radii along the short ends and on park level.
Bottom: The palace as built for the Great Exhibition of 1851.

Crystal Palace Revived

Proposal for a new exhibition building in Sydenham, London, 2009/2014

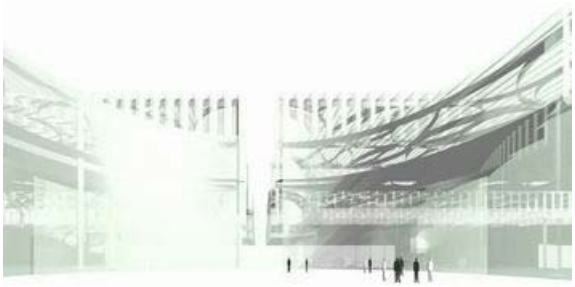
The Crystal Palace was one of the largest buildings ever to have been built. This *'stupendous masterpiece of modern art'* (Heinrich Schliemann, 1851) stood for 85 years before it was destroyed by fire in 1936.

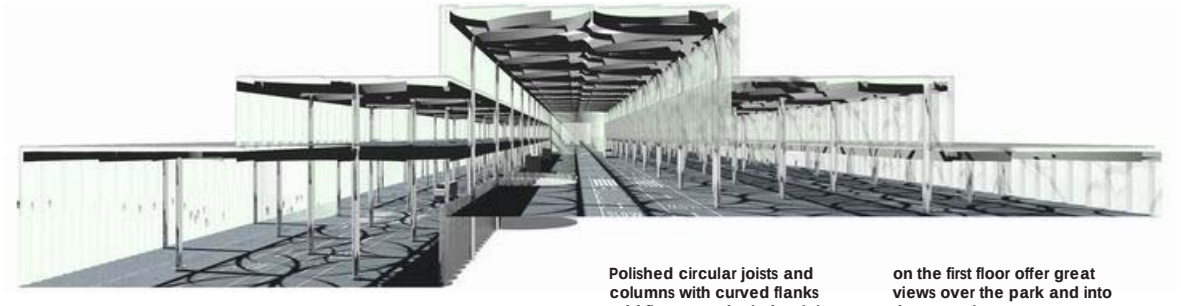
Originally designed by Joseph Paxton for the Great Exhibition of 1851 in Hyde Park, the giant modular steel and glass structure was eventually relocated to Sydenham and transformed into a Winter Palace, re-opening in 1854.

Today, the site in Sydenham is a blank rectangle on the A-Z Street Atlas, but hidden between blackberry canes one can still find remains of the former palace, such as column bases. Most of the original infrastructure is still in place, or could be repaired easily, which makes the site predestined to be re-used by a building of equal size.

The new proposal traces the original footprint of the Sydenham Palace but uses Paxton's initial unrealised Hyde Park design as an archetype. Transcribed into metric it measures 482.4 x 115.2m, comprised of 67 x 16 structural modules each 7.2m in edge length (Paxton's design was based on 24 x 24ft).

Used as an exhibition building, comparable to its predecessor in Hyde Park, it forms an equilateral triangle with London's other exhibition venues Earls Court and Excel.





Polished circular joists and columns with curved flanks add finesse to the industrial building. The ground floor opens up to the lower hall, and offices and restaurants on the first floor offer great views over the park and into the central nave.
Bottom: Sydenham Palace before it was destroyed by fire in 1936.

Making reference to the Hyde Park building it is defined by its stepped profile, with a steel structure supporting its transparent envelope. But different to its famous predecessor, which was defined by arched façade modules of 8ft width, it is encased by cast glass elements of semi-circular profile. The corrugated façade reacts to the scale of the building by using smaller radii along the short elevations and on park level. It is supplemented by an ETFE roof comprised of equally wide vacuum cushions of bi-concave section invented by the architect. The rough glass elements are 7.2m long and fixed along the top and bottom. Their circular profile makes any additional substructure obsolete.

The structure is comprised of beams and joists, circular in plan, and cruciform columns with curved flanks. Beams and joists also work as a lattice reflecting and diffusing daylight. Like this lattice, the columns have a polished finish which adds finesse to the otherwise rather industrial aesthetics.

Spatially the building is split into two separate halls of equal size, divided by a great and a small courtyard. The circular shape of these courtyards can be seen as reminiscent of the barrel vaulted transept of the Hyde Park building.

A central nave on ground floor level traces the height of the Hyde Park nave. Due to its great height the central nave is ideal for tall exhibits. The ground floor opens up to a broad hall on park level and reveals views over

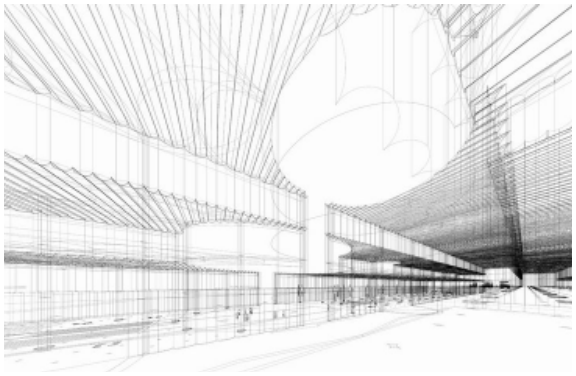
Photograph © Crystal Palace Museum

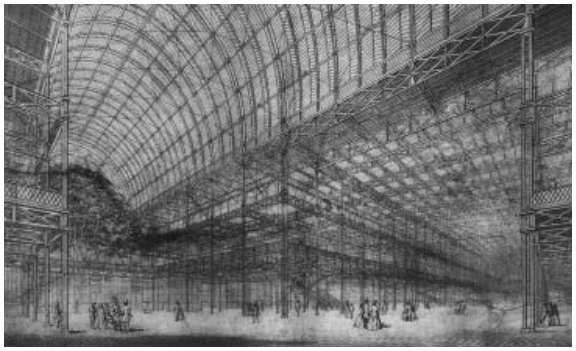
the exhibition and the park. An administration and restaurant level is placed on the first floor facing the park and offering great views into the central nave.

Organisationally, both the central nave and the lower ground hall are accessible by large lorries. The aisles are accessible by forklifts and smaller vehicles. Internal road markings and signage on asphalted floors regulate both vehicle and visitor movement, and a grid subdivides the halls into compartments and sets different exhibition layouts similar to sports hall markings.

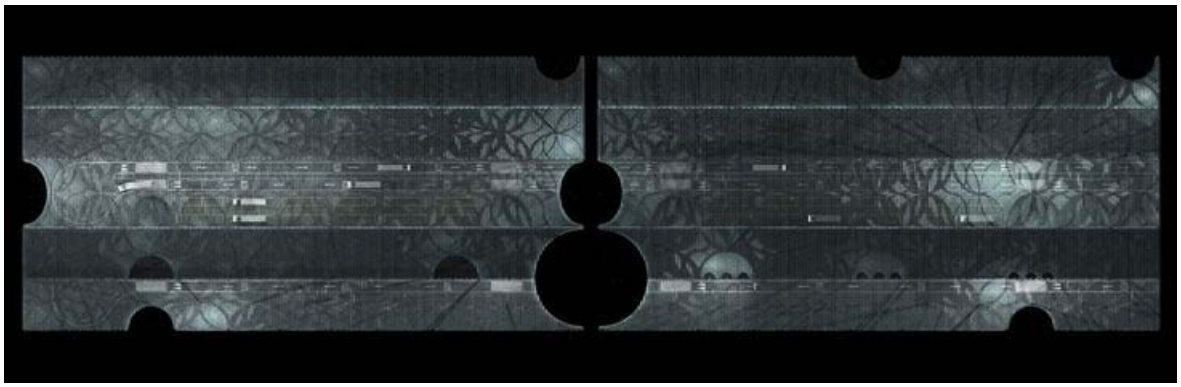
Aesthetically, the asphalted halls form a space of exterior quality. This is reflected by low key building services with an absolute minimum of local heating of stands, restaurants/cafes and offices similar to train stations; natural lighting and ventilation contribute to the idea of a highly sustainable, prefabricated and easily dismountable building comparable to Paxton's groundbreaking design.

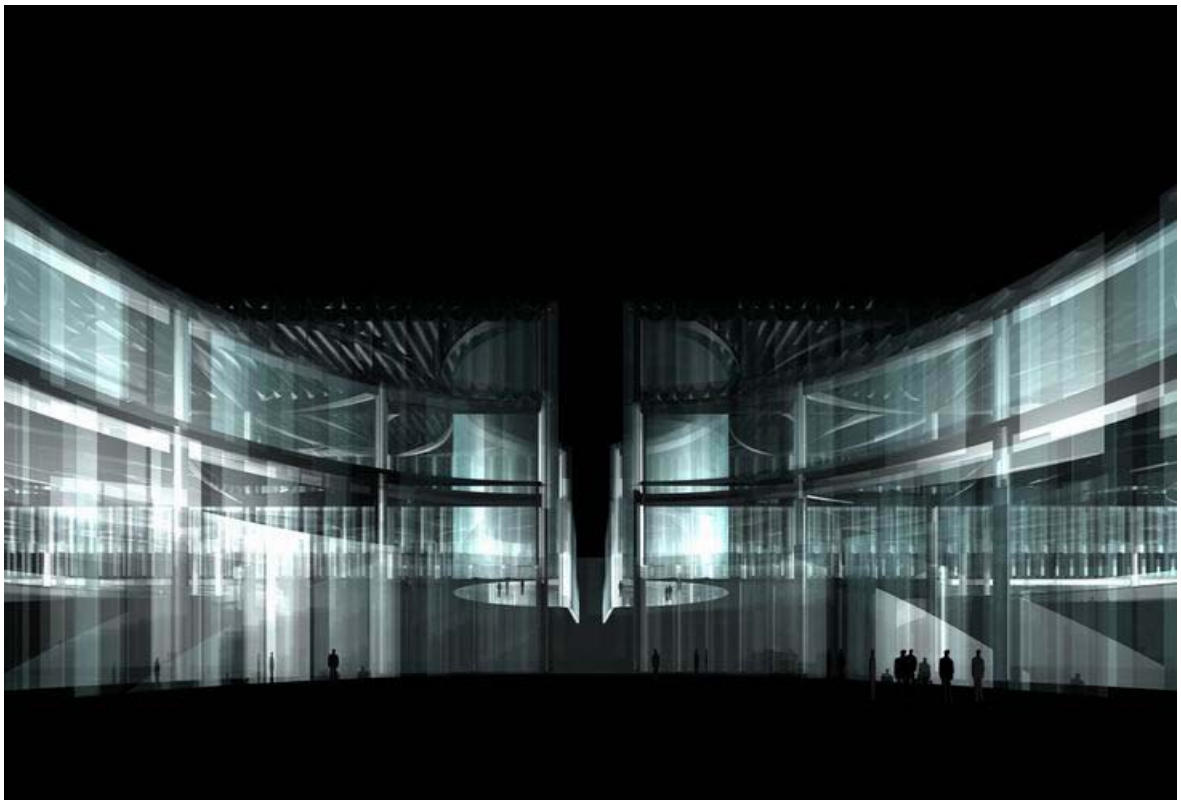
The remains of the original terrace walls and stairs are to be repaired and re-used as links to the park.





Right: The nave of the new proposal in comparison with a Hyde Park engraving of 1851.
Below: Two circular courtyards split the 482.4m long building into halves.
Bottom: The Great Courtyard at night. The circular shape can be seen as reminiscent of the barrel vaulted transept of the Hyde Park building.





A vibrant and inviting urban plaza with shops, café/pub and communal facilities at the western end of the complex, and a green and shaded square at the eastern end, create two public poles with limited car access.

Sustainable Community, Dartford, UK

Study for BioRegional Quintain, 2009

Situated on the former *Fantaseas* water-park site in Dartford, Kent, the proposed development preserves many of the existing roads – previously used to access car-parks – as a re-use idea. This idea governs the basic layout of the future settlement which is characterised by shifted and angled blocks of terraced houses and private gardens, forming narrow streets and public squares of different sizes and qualities.

A vibrant and inviting urban plaza with shops, café/ pub and communal facilities at the western end of the complex, and a green and shaded square at the eastern end, create two public poles with limited car access. The new development is surrounded by allotments and woodland as part of the settlement's sustainability idea.

Classic urban elements like bollards, street-lighting, benches and fountains provide a richly diverse urban atmosphere. Different building heights, window patterns and a balanced mix of mansard and pitched roofs as well as roof terraces ensure a 'memorable and vivid image of the city' (Kevin Lynch).

The proposed settlement is formed by a new type of ultra-adaptable house that can grow and shrink with the family and gradually be sublet as smaller units. The plan is structurally free; it can be a house or separated into flats with, for example, senior housing on the ground floor, or a shop, café, gallery, workshop or even garage.

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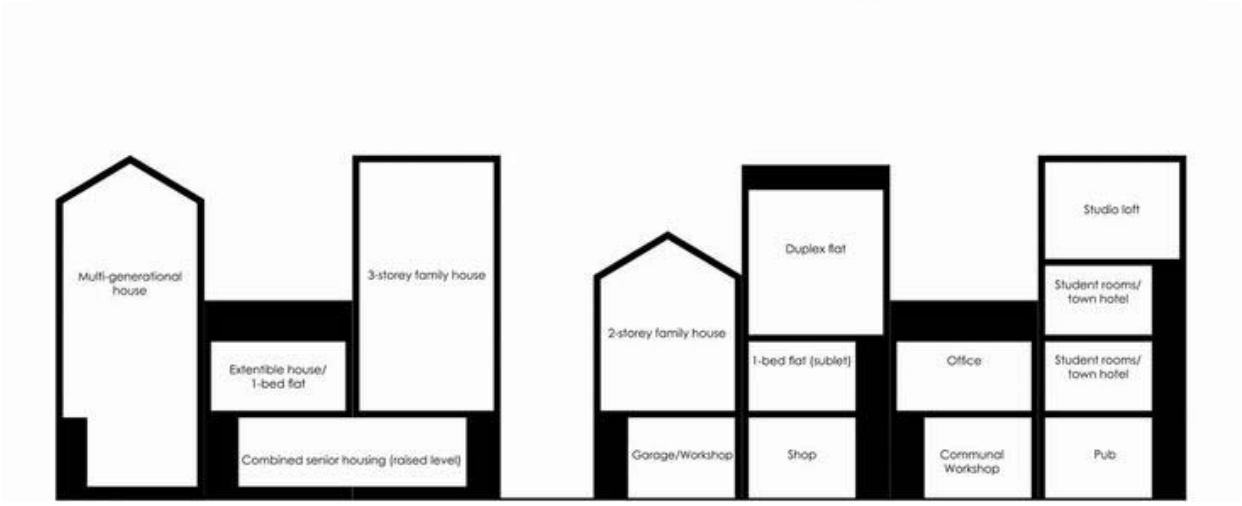


The proposed settlement is formed by a new type of ultra-adaptable house that can grow and shrink with the family and gradually be sublet as smaller units.

The plan is structurally free; it can be a house or separated into flats with, for example, senior housing on the ground floor, or a shop, café, gallery, workshop or even garage.

On the rear, a private garden provides spacefor growing vegetables, leisure or a conservatory.

The house is available in three different cladding materials, roof shapes, window patterns and heights, providing great variety and complexity when applied on a masterplan scale.

Constructed with cross-laminated timber panels it can be prefabricated and erected in large segments and over a couple of weeks, even during winter. New storeys can be added to flat roof types at a later stage. The house complies with the Code for Sustainable Homes and the whole complex could be independently supplied with renewable energy by CHP plants and ground source heat pumps.

Internally the houses are designed to be highly flexible by avoiding load-bearing walls. Plywood lined partition walls can easily be added, moved or removed, and would ensure maximum flexibility over the life-time. The stairs can be separated as semi-public access to sublet flats.

The ground floor is fully accessible for wheelchairs and would be particularly suitable for senior residents. The party wall on the ground floor provides a concealed structural opening to enable the future combination of two flats, for example for senior flat-sharing. The ground floor can be lowered by 0.5m to provide a 3m high space for street level use different to housing, for retail for example.

Organised in three layers the new London Bridge accommodates a spacious and largely transparent arcade at street level. Similar to the Venetian 'piano nobile', a second storey provides commercial spaces with grand views over the river. Reminiscent of the medieval bridge, the third level forms a small and complex village.

London Bridge 800 - Inhabiting the Thames

International ideas competition, 2009

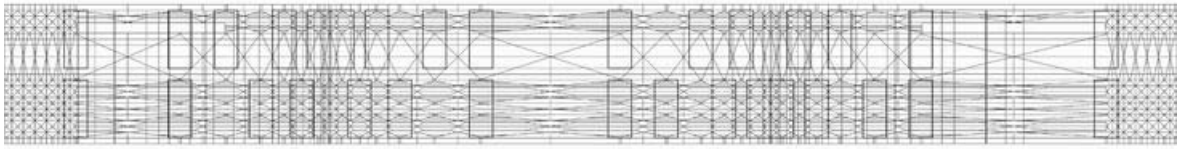
The proposed megastructure is comprised of an intricate second bridge placed on top of and merging with the existing London Bridge of 1972 and a small 'village' of unique housing and amenity space above.

Like an urban sculpture it bridges the Thames and provides a covered but light passage for the mass of commuters between the bustling London Bridge and Monument stations. Organised in three layers each with different spatial qualities, the new London Bridge accommodates a spacious and largely transparent arcade with shops, cafes, restaurants, galleries and other public functions at street level.

The vaults at street level create an exciting 'under the arches' feel above the river offering framed river views both east and west to St Paul's Cathedral and Tower Bridge. They follow the geometry and structural nature of the existing bridge with its two cantilevers in the centre and its four parallel girders.

The spine of the arcade is formed by an internal, pedestrianized street which also allows access for delivery vans and maintenance/emergency vehicles. Parts of this arcade can be fitted with travelators, as installed in many airports, in order to speed commuting between the two stations. The arcade provides access to all other levels including a new pier.

Engraving by Claes Van Visscher, 1616



Similar to the Venetian ‘piano nobile’, a structurally free second storey provides large, flexible commercial spaces with grand views over the river. These spaces could be used for offices and conference rooms providing new business opportunities and establishing London Bridge as a first class conference and events venue.

Reminiscent of the medieval bridge, which supported seven storey houses on either side and was inhabited between 1209 and 1758, the third level forms a small and complex village of detached and semi-detached houses with different heights of pitched gables facing the river. With public plazas, narrow alleys and private courtyards the compact village atop the carved out bridge plinth provides exceptional habitable accommodation as either private housing or hotel/ hostel provision just minutes from London Bridge Station.

The megastructure fully covers the existing bridge with new cladding that extends the future vision from the river to the rooftops of the village.

The new London Bridge accommodates a spacious and largely transparent arcade with shops, cafes, restaurants, and other public functions.

The vaults at street level create an exciting ‘under the arches’ feel above the river offering views to St Paul’s Cathedral and Tower Bridge.

Private Residence in Westminster

Exclusive conversion proposal for a Victorian flat in west London, 2009

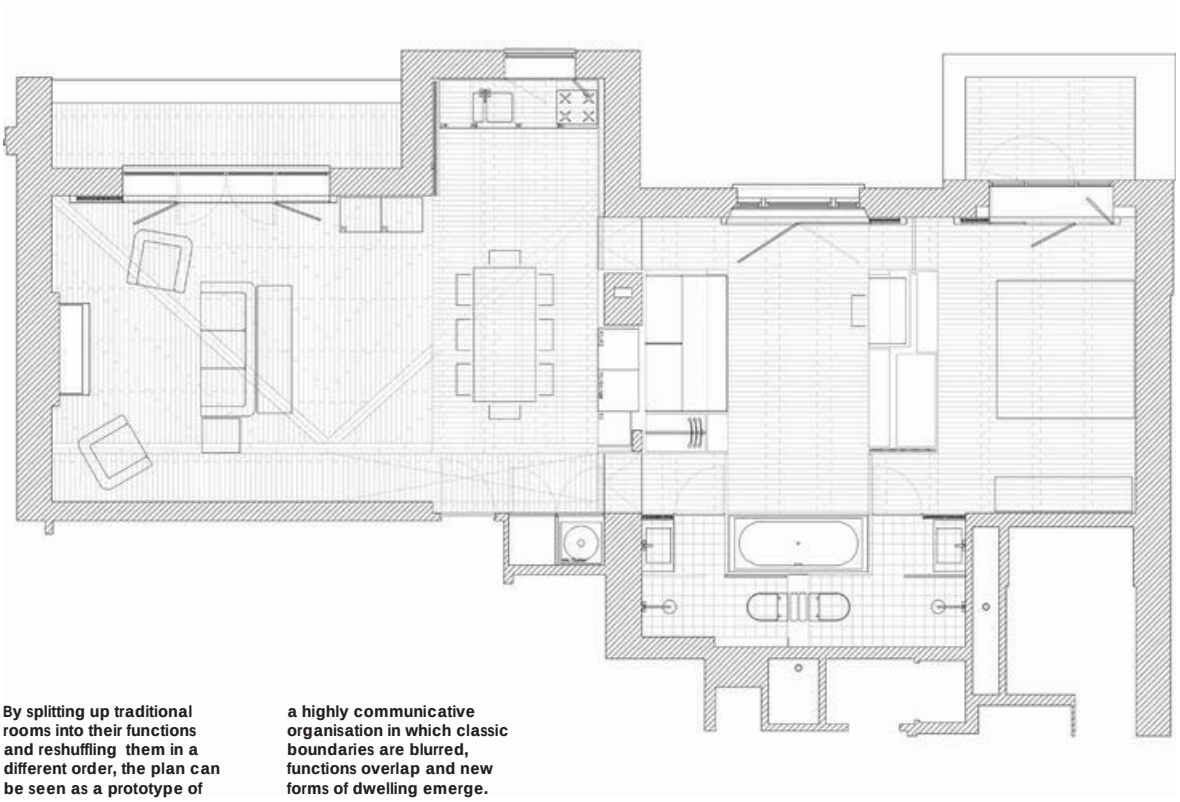
Comprising two top floor flats in a listed Victorian terrace block in an exquisite location, this proposal suggests a new form of dwelling for a single resident and one guest by challenging the rather rigid and functionally limited organisation of a typical Western flat into living room, dining room, kitchen, bedroom and bathroom.

By splitting up traditional rooms into their functions, that are sleeping, bathing, eating, living, working, cooking etc., and reshuffling them in a different order, the 106sqm large plan can be seen as a prototype of a highly communicative organisation in which classic boundaries are blurred, functions overlap and new forms of dwelling emerge. In this way the architect can be compared with a chemist who would extract hydrogen and oxygen from water in order to create new compounds with them.

For example, the fully enclosable box bed in the centre of the flat serves both as a wide settee and as a guest bed; the guest room is a library and study at the same time; the study is home cinema and a place for bathing. The bathtub can either be used from the bathrooms or from the library. When opened up to the library it communicates not only with the settee, but also with the fireplace in the distant living room. It can be covered and used as a tabletop for buffets when a larger group of guests is expected. The table in the dining room contains drawers for cutlery, table cloths and napkins and as such serves as a kitchen cupboard. Consequently it is part of the architectural design rather

© Bing Maps

The proposal suggests a new form of dwelling by challenging the rather rigid and functionally limited organisation of a typical Western flat into living room, dining room, kitchen, bedroom and bathroom. The ceiling above the existing living room is opened up into the roof to provide a grand space with expressed roof structure.



By splitting up traditional rooms into their functions and reshuffling them in a different order, the plan can be seen as a prototype of a highly communicative organisation in which classic boundaries are blurred, functions overlap and new forms of dwelling emerge.

than a piece of loose furniture fitted afterwards. The freezer is concealed in a cupboard in the open plan living room to keep the kitchen as small as possible. This way of dealing with furniture and sanitary objects refers to old Victorian bathrooms which, with their wallpaper, curtains, carpets, armchairs and side tables often looked more like a living room than a bathroom. Bathing in rented zinc plated tubs, placed in front of the warm fireplace in the living room, used to be common in the 19th century which is another example of cross-over.

The ceiling above the currently rather low living room is opened up into the roof in order to provide a grand space with expressed roof structure. Two new skylights, one triangular, allow south light to travel deep into the east facing living room and its picture gallery. A small attic is fitted above the dining table and can be accessed via ladder.

Dark and light hardwood is used for the bespoke furniture and the floor, complemented by new timber frames around the original sash windows and steel doors with frameless glass casements and integrated heavy curtains. The dining room can be separated from the living area with a secret electrical curtain. The glossy black front door, plug sockets, switches and lighting fixtures can be seen as a reference to railings, bollards and street lights of Victorian London, painted black under Queen Victoria as a sign of mourning for her late husband Prince Albert in 1861.

The fully enclosable box bed in the centre of the flat serves both as a wide settee and as a guest bed. The bathtub can either be used from the library, or from the bathroom.

When opened up to the library it communicates not only with the settee, but also with the fireplace in the distant living room.

Multi-Flexi-House No. 1

International architectural competition, Stockton-on-Tees, UK, 2008

This Multi-Flexi-House, the first of a series of case studies, represents a new type of ultra-adaptable house that can grow and shrink with the family and gradually be sublet as smaller units. The plan is structurally free; it can be a house or separated into flats with, for example, senior housing on the ground floor, or a shop, café, gallery, workshop or even garage. On the rear, a large private garden provides space for growing vegetables, leisure or a conservatory.

The house is available in three different cladding materials, roof shapes, window patterns and heights, providing great variety and complexity when applied on an urban scale.

Constructed with cross-laminated timber panels it can be prefabricated and erected in large segments and over a couple of weeks, even during winter. New storeys can be added to flat roof types at a later stage. The Multi-Flexi-House easily complies with the Code for Sustainable Homes and groups of houses could be independently supplied with renewable energy by CHP plants and ground source heat pumps.

Internally the houses are designed to be highly flexible by avoiding load-bearing walls. Plywood lined partition walls can easily be added, moved or removed, and would ensure maximum flexibility over the life-time. The stairs can be separated as semi-public access to sublet flats.

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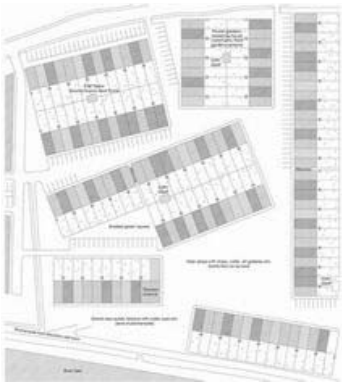


The houses are available in three different cladding materials, roof shapes, window patterns and heights, providing great variety and complexity when applied on an urban scale.

Applied to the new development area called 'The Home Zone' in Stockton-on-Tees, shifted and angled blocks of parallel houses and gardens form narrow streets and public squares of different sizes and qualities.

The ground floor is fully accessible for wheelchairs and would be particularly suitable for senior residents. The party wall on the ground floor provides a concealed structural opening to enable the future combination of two flats, for example for senior flat-sharing. The ground floor can be lowered by 0.5m to provide a 3m high space for street level use different to housing, for retail for example.

Applied to the new development area called 'The Home Zone' in Stockton-on-Tees, shifted and angled blocks of parallel houses and gardens form narrow streets and public squares of different sizes and qualities.

Classic urban elements like bollards, street-lighting, benches and fountains, supplied with water from the nearby river Tees, provide a richly diverse urban atmosphere. Different building heights, window patterns and a balanced mix of pitched roofs and green roof gardens ensure a 'memorable and vivid image of the city' (Kevin Lynch).

A vibrant and inviting main plaza in the centre of the new quarter with street level shops, cafés, art galleries, pubs etc. creates a lively public realm with limited car access. A river promenade re-connects with Stockton old town and invites long-term residents to visit the new main plaza with its public terrace and its great views over the river Tees.

The Multi-Flexi-House represents a new type of ultra-adaptable house that can grow and shrink with the family and gradually be sublet as smaller units.

The plan is structurally free; it can be a house or separated into flats with, for example, senior housing on the ground floor, or a shop, café, gallery, workshop or even garage.

Floating Homes

International architectural competition, Lausitz, Germany, 2008

This project was originally designed for the Lausitzer Seenland, a vast brown coal mining area in East Germany which was abandoned after the reunification of Germany and is now being flooded. Within the next few years the area will become the largest cluster of lakes in Europe, comprising of ten large lakes connected by canals.

Different to a hull-based houseboat, a floating house is built on top of a standardised and heavy-weight concrete or steel pontoon; this makes it easily accessible, without steps leading down into a hull. Being virtually unsinkable, it sits above the water and is therefore less affected by damp coolness. It can be toed and moved to a different pier which makes it much more attractive than a house on a lake shore, not to mention the saving made in not having to buy a plot of land. As a modular system, pontoons can be coupled and extended without limitation and could even form a circular floating settlement in the middle of a lake. Technically and organisationally comparable to a land house it is however responsive to the movement of wind and water and this raises the question about its typology: is it ‘building’ or ‘boat’?

The proposed design tries to merge the two typologies. Referring to typical lakeside buildings such as boathouses it looks like a building but its interior reminds the user of a timber boat. In such an environment, movement caused by water or wind would not seem incongruous.

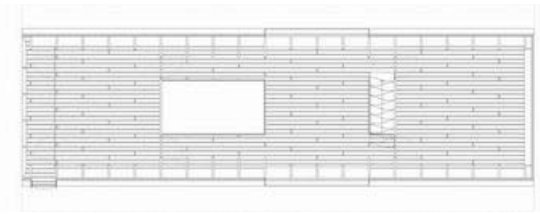
The project was designed for a former brown coal mining area in East Germany which is now being flooded. Within the next years the area will become the largest cluster of lakes in Europe, comprising of ten connected lakes.

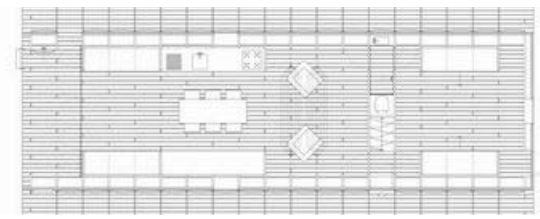
© Google Maps

The size of the floating house is defined by standardised pontoons. It is available in a one and a two storey version where the latter is comparably cheaper due to the better floor area to pontoon cost ratio.

Ultra thin Multiplex plywood ribs of different profile form a lightweight structure which allows for maximum flexibility in positioning openings and windows. Inside, the ribs are lined with plywood. Outside, traditionally fixed timber boards refer to the aesthetic of timber ship hulls. Depending on density and organisation of the 'home pier', the façade can either be rather enclosed or very transparent. As known from boat construction, the interior is organised symmetrically in order to avoid irregular load cases. It can be marketed fully fitted or empty without partitions, floors and finishes.

The standard version provides four bunk beds which are separable with curtains. Two of the beds can be pushed together and used as a double. Hammocks provide additional space for guests. A small bathroom with toilet, shower and basin is provided underneath the stairs.





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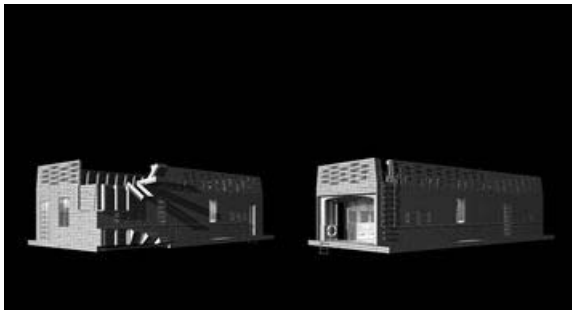
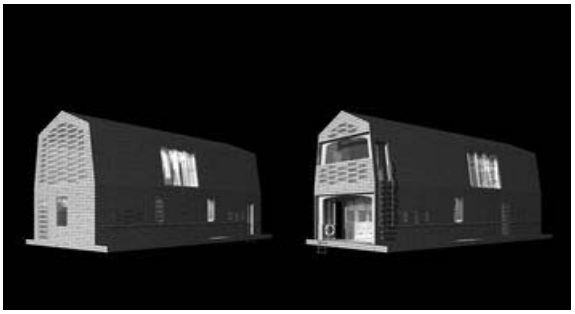




Technically and organisationally comparable to a land house, a floating house is responsive to the movement of wind and water.

This raises the question about its typology: is it 'building' or is it 'boat'?

The project tries to merge the two typologies. Referring to typical lakeside buildings such as boathouses it looks like a building but its interior reminds the user of a boat.

The proposal forms an independent, prefabricated timber box. It does not transmit any loads into the fragile Victorian structure.

The box can be installed within a couple of days and with a minimum of dirt and hassle by avoiding water based materials.

Victorian Miniature

Extension proposal for a Victorian house in east London, 2008

The initial problem of this proposal was the conflict emerging from its tiny size, and the structural and legal complexity of the situation. Originally intended as a 4sqm small cantilever extension of the first floor only, it soon turned out that the cost per square metre would be beyond reason. Therefore it was proposed to include the space beneath this extension into the project in order to reduce the cost per square metre significantly. A small, but spatially complex hall on the ground floor was developed as a result, which could be used as a private gallery to display works of art.

Structurally, the proposal forms an independent box, prefabricated in cross-laminated timber. Forming an addition rather than an extension, it does not transmit any loads into the fragile Victorian structure, and thus reduces the risk of cracks and leakage. On the contrary, due to its great stiffness it is able to take additional loads from the existing roof and allows for a large, arched opening of the existing masonry wall. The box can be installed within a couple of days and with a minimum of dirt and hassle by avoiding water based materials such as concrete, plaster, and screed or the like.

Because the addition is placed along a party wall, the edge of the first floor is, in planning terms, designed as a pitched roof rather than a straight wall. This allows for integration of a roof opening and for sunlight to filter down to the ground floor. Thereby the privacy of the first floor bedroom is maintained.

Conceptually, the addition is a transcription of the existing Victorian house. By reflecting its street façade features on the rear, the small courtyard gains an innovative quality of urban micro-cosmos and forms a new typology, combining two architectural objects of different times. A chimney connects to an outside barbeque in the small courtyard.

Aesthetically one could say the extension forms an architectural miniature of a typical Victorian house.

Due to its great stiffness the cross-laminated timber box is able to take additional loads from the existing roof and allows for a large, arched opening of the existing masonry wall.

A small, but spatially complex hall on the ground floor could be used as a private gallery to display works of art.

Because the addition is placed along a party wall, the edge of the first floor is, in planning terms, designed as a pitched 'roof' rather than a straight 'wall'. This allows for integration of a roof opening and for sunlight to filter down to the ground floor.

Aesthetically one could say the extension forms an architectural miniature of a typical Victorian house. A chimney connects to an outside barbeque in the small courtyard.

The design for the first inner-city hedge maze in London is like the floor plan of an open-air house, comprising of a series of rooms for public functions such as relaxing, playing, communicating, dining etc., connected by a maze of winding, medium-high corridors and could contain a modest Roman theatre.

Mallon Garden

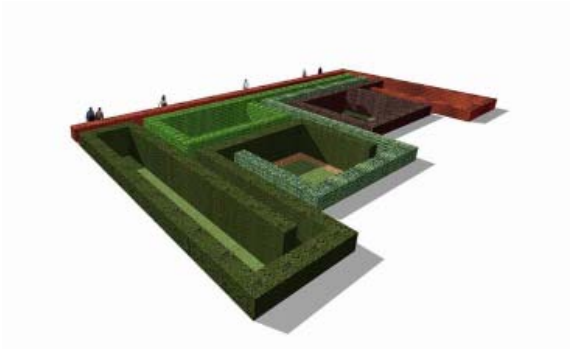
A communal maze for Tower Hamlets, London, 2008

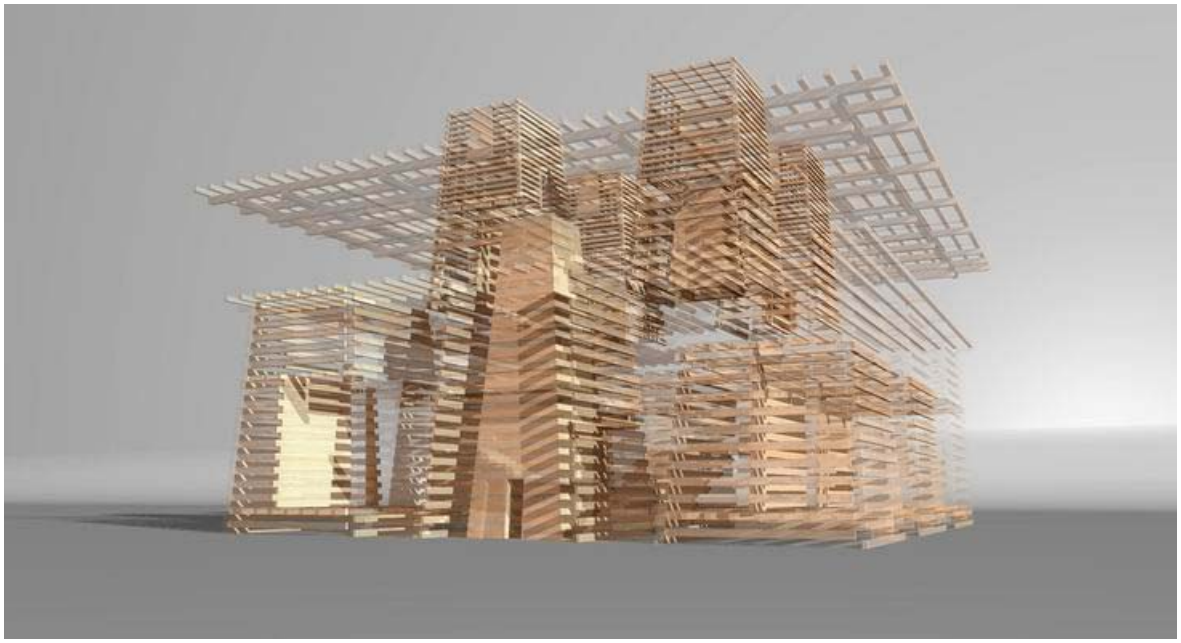
This proposal for a new design of Mallon Garden, presented to the London Borough of Tower Hamlets, is believed to be the first inner-city hedge maze in London and as such it would be a unique regeneration opportunity for the area.

The modern design of the maze would be fully visible from street level and takes into account local residents' concerns about anti-social behaviour. By maintaining the current garden's lowered level and removing the existing high wall along Commercial Street the maze would open the historic courtyard in front of local charity Toynbee Hall and the café of the adjacent arts centre, Artsadmin, to the street.

The design is like the floor plan of an open-air house, comprising of a series of rooms for public functions such as relaxing, playing, communicating, dining etc., connected by a maze of winding, medium-high corridors and could contain a modest Roman theatre, appropriate for a contemporary arts organisation like Artsadmin, or a small pavilion for example.

These rooms are furnished with fixed outdoor tables, benches and loungers in a robust design. In order to make orientation easier, to intensify the aesthetic qualities and to allow for different appearances throughout the seasons, the maze is made of several kinds of deciduous and evergreen hedges of different colours and textures.





Forming a structure of thirteen corbelled piles of timber logs amongst the vast wooded plains of the Yucatan peninsula, the radical concept rejects the use of glazing or concrete. Pre-stressed logs of engineered timber, reinforced by integrated tensile rods, challenge and develop traditional wood carpentry and craftsmanship.

Chichén Itzá Lodge Museum

International academic competition, Yucatan, Mexico, 2007

This design responds to a competition brief asking for a lodge with twenty double-beds and a small museum just next to the famous Maya pyramid by proposing a radically new type of accommodation: a cross between a hotel and a camp.

The concept is to sleep in a luxurious bed *just above* the trees, but unlike in a conventional, air-conditioned 'grand view hotel', the lodge accommodation is exposed to the open air and at one with the jungle, amongst the sounds, scents and breeze of the forest. A night among the calls of toucans and howling monkeys, the new type of lodge provides an unforgettable and unique jungle-atmosphere experience next to one of the most important world heritage sites: intense, pure and authentic.

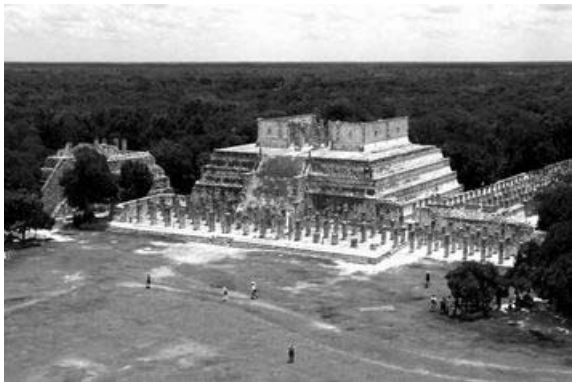
Forming a structure of thirteen corbelled piles of timber logs amongst the vast wooded plains of the Yucatan peninsula nearby the Caribbean Sea, the radical concept rejects the use of glazing or concrete. Using locally sourced timber for logs and foundation piles, the proposal provides an economical, sustainable and fully recyclable contribution to contemporary architecture in Central America. With its low energy operation and a minimum of maintenance, its construction is truly contemporary and its pyramidal structure highly referential. Pre-stressed logs of engineered timber for large spans, reinforced by integrated tensile rods, challenge and develop traditional solid wood carpentry and craftsmanship.

© Google Maps

With an absolute minimum of installations, low energy LED-technology lighting and the rejection of air conditioning, the project represents a radical alternative to conventional hostels and hotels. Due to the arrangement of spaces extending deep into the building and the absence of panorama glazing with its heat gain problems, the building achieves a naturally shaded and ventilated climate with a tolerable temperature attuned to the forest. Additionally, the open structure of the building prevents the accumulation of smoke in the case of fire and makes mechanical smoke vents unnecessary.

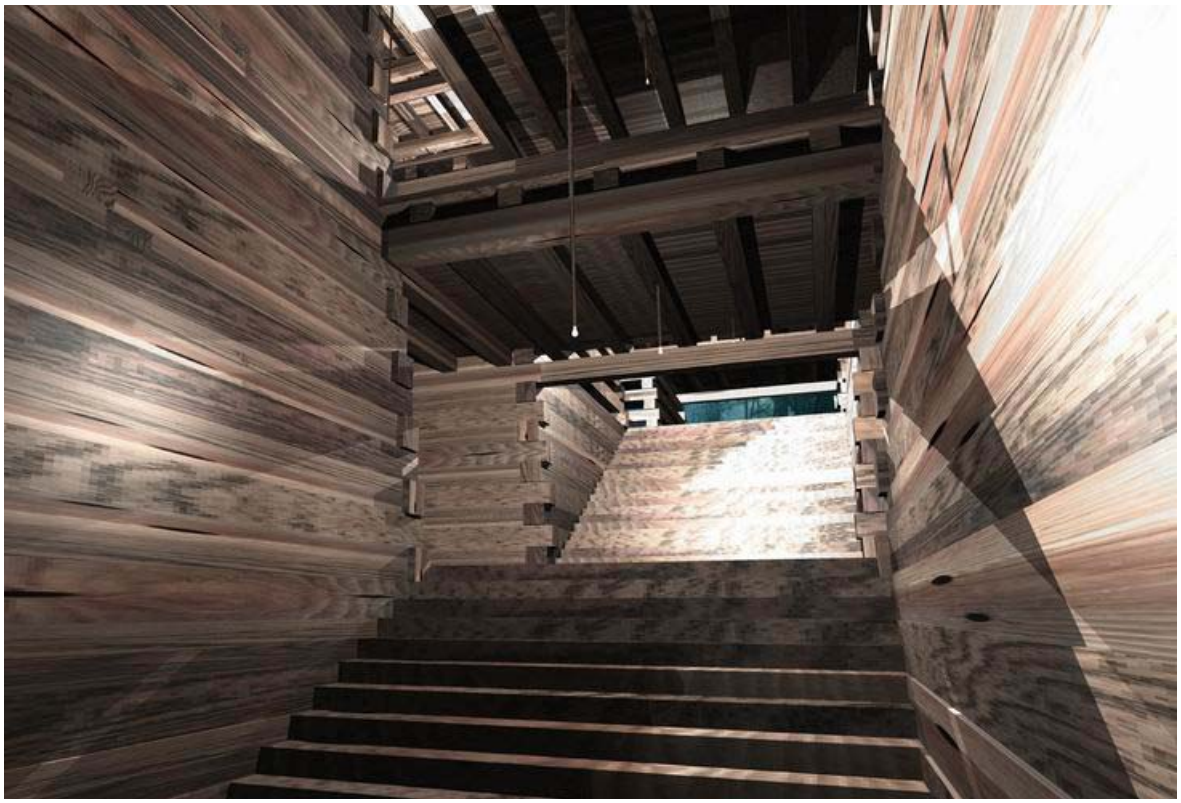
The small Maya museum is located on the ground floor and consists of three exhibition spaces of different height, light and character, providing a dim, almost cave-like atmosphere. Nine monumental piles of timber support the lodge and its service facilities and form a variety of spaces of which the central one is an impressive 9m tall. Sensitive Maya antiquities are displayed in conditioned, spot-lit show-cases, but larger exhibits are exposed and glow in mystical light providing an authentic and intense museum experience.

A grand staircase leads up to a public restaurant which provides the guests with fantastic views into the treetops and down into the central museum space. The restaurant serves ancient Maya food like breadnut, turkey soup, manioc and Theobroma cocoa rather than café latte, chilled drinks or 'continental breakfast'.



The 30m tall Temple of Kukulkan, El Castillo, and the Temple of Warriors, Early Postclassic, c950-1050 A.D.

The small Maya museum with its 9m tall central space is located on the ground floor and consists of three exhibition spaces of different height, light and character, providing a dim, almost cave-like atmosphere. A grand staircase leads up to a public restaurant. Due to the arrangement of spaces extending deep into the building, the building achieves a naturally shaded and ventilated climate with a tolerable temperature attuned to the forest.



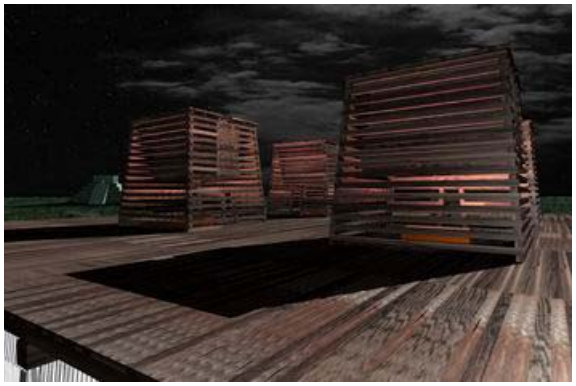
The lodge comprises of twenty membrane-cabins which span between the main platform and the massive timber roof hovering above. Translucent high-tech membranes, reinforced with steel cables and rods, protect the guests – most staying for one night only – from the rare but heavy rain or thunderstorms. In addition, curtain-like shutters can be drawn to fully enclose the openings.

This special construction allows the promised feeling of maximum contact with the jungle and its nocturnal life. Gathered like curtains the corrugated skins blur clear projection of human shadows and ensure privacy to make the innovative concept commercially viable. In addition, each bed is surrounded by a mosquito net. In total there are four layers of translucent skins separating the guests from each other.

In order to reduce nuisance from lighting in adjacent cabins and to keep the building as muted as possible after nightfall, there is only a minimum of spots and point light fixtures installed, providing a dimmed light just enough for reading and safe circulation.

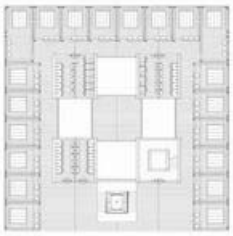
**The guests sleep in a luxurious bed just above the trees, exposed to the open air and at one with the jungle.
A night among the calls of toucans and howling monkeys, the new type of lodge provides an unforgettable and unique jungle-atmosphere experience next to one of the most important world heritage sites.**

A public restaurant provides the guests with fantastic views into the treetops and down into the central museum space.

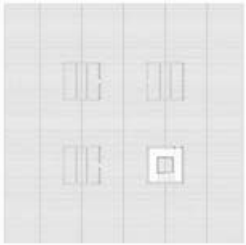


Ground floor: museum/salons

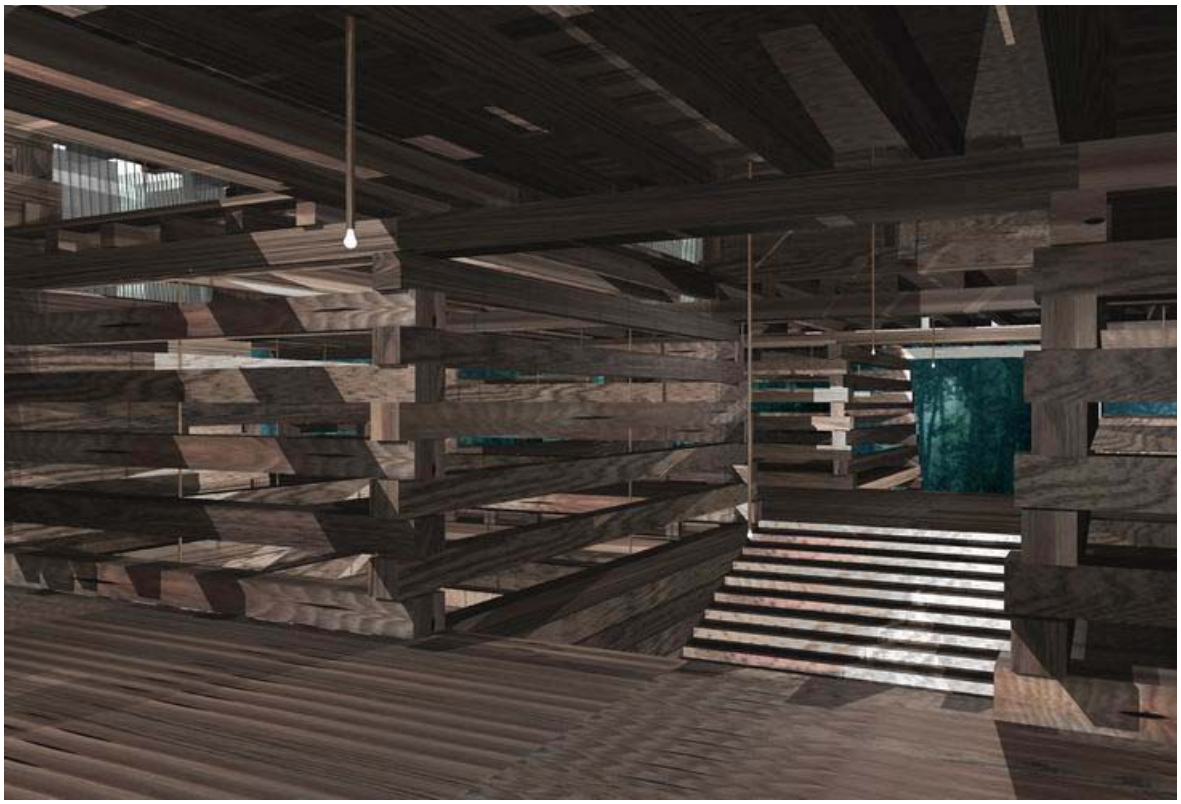
1st floor: restaurant



2nd floor: lodge



Roof: guest terrace/BBQ-huts

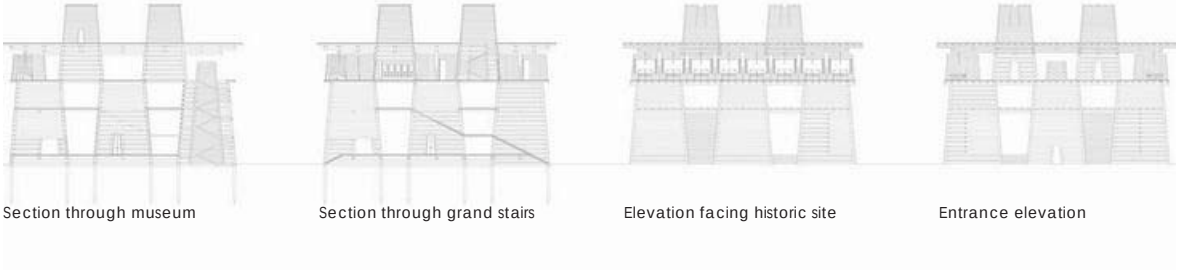


Tall beds with integrated castors, large lockers, pull-out bedside tables and extra-tall and protective headboards with integrated LED reading lamps can be arranged by the guests as one double or two single beds, and polished wooden floors provide a clean and comfortable environment in the cabins. In order to make the experience more authentic, there are no televisions or fridges provided in the cabins. A rule of conduct as known from museums or libraries is suggested to ensure the nocturnal peace.

A roof terrace on top of the building provides the guests with grand views, day and night, over the site and offers an alternative atmosphere to the two salons on the ground floor for meeting companions and other guests. Pyramidal barbeque huts with low doorways allow small groups of guests to socialise around polished brass barbeques.

In summary the Lodge Museum represents a wooden megalith which hosts both ancient relics and a new type of traveller in an authentic and brut atmosphere. A prototype lodge in the form of a referential monument which represents a counter-position to the conventional 'fun'-oriented holiday resort. Set back in the forest it is almost invisible from the archaeological site and off the main photographic views. Positioned by the second and almost forgotten well it provides perfect panoramic views of the entire site with the existing holiday resort and pools out of sight.

Chichén Itzá – 'At the mouth of the well of the Itzá'.



Section through museum

Section through grand stairs

Elevation facing historic site

Entrance elevation

The internal condition of an extruded long-section is expressed by asymmetric gables, which, contrary to the adjacent houses, are on the long sides of the house.

Studio House

Proposal for a single person residence in south Germany, 2007

Designed for a musician/healer in a remote village in the woodlands, this proposal breaks with the plan of a traditional local house. Rather than dividing the house into hall, kitchen, living room, bedroom, bathroom, cellar and attic, it provides a single multi-functional space, folded in section, with exposed sanitary and kitchen objects.

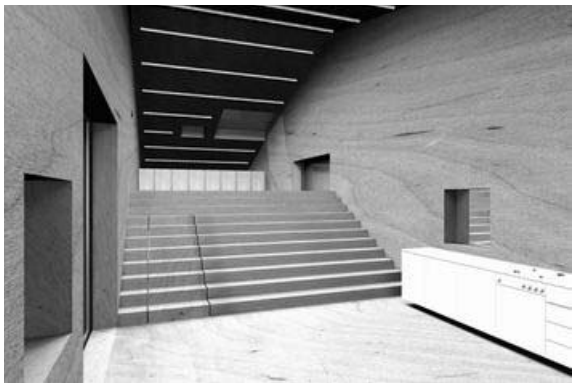
In order to keep both construction and operating costs as low as possible, it was designed as a rather enclosed studio house with a minimum of partition walls and façade openings. Instead of proposing multiple windows per elevation it has only one large opening on three elevations and one skylight, each fitted with integrated roller blinds. In addition, there are secret doors and top-hung ventilation hatches with mirrors on the inside. When opened outwards, the mirrors reflect the flowers growing along the façade.

The Studio House is constructed with lightweight timber frames, clad with untreated larch boards of various colourations on the outside and bright birch plywood lining inside. Keeping the carbon footprint to a minimum by using local sawmills and timber contractors for pre-fabrication and erection, the design is highly sustainable and contemporary.

As a healer the client believes in the connection between magnetic radiation and well-being and originally intended to build an in-situ concrete house and to enrich the wet concrete mix with magnetic radiation before pouring it into the formwork. This led to the concept of using a product known as HEMCRETE® for insulation of the external walls. Being applied wet, the client believes that it allows for a similar treatment to concrete for which he invented a special magnetic appliance to be fixed around the end of the pump hose.

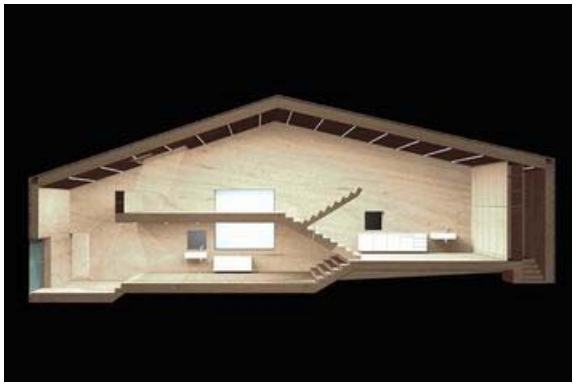
One of the key features of the house is the grand staircase that stretches from one side to the other, becoming more of a stepped floor than purely an element for changing levels. Not only can the steps be inhabited, for example by using them as a small auditorium, a bookshelf, for plants or as a bedside table on the lower level, they also serve as the only partitioning element in the folded space. An integrated hydraulic hatch, which when closed forms a normal part of the staircase, provides access to the more private lower level. Usually open, it can be closed when patients or visitors are expected.

Spatially, the house works like an extruded long-section, meaning that, in plan, all spaces apart from the slender utility zone with entrance lobby, fitted cupboard, shower and toilet, have the same width. This internal condition is expressed by asymmetric gables, which, contrary to the neighbouring houses, are on the long sides of the house rather than the short ends. Internally, the pitch follows the necessary headroom above the four split-levels and provides the house with very different room heights and qualities. In fact, the house



is more about ‘pitched shape’ than ‘pitched roof’. This is emphasized by using the same cladding on all sides which makes the house appear very monolithic. Its slightly inclined ground line follows the soft slope of the landscape.

The oddly shaped and long plot of land is landscaped to enable the resident to live a self-sufficient life. The aesthetically wild garden includes tall hedges and bushes along its boundary, as well as vegetable patches and meadows with fruit trees in the centre. Chickens, ducks, sheep and goats live freely all over the place and provide the resident with eggs and milk.



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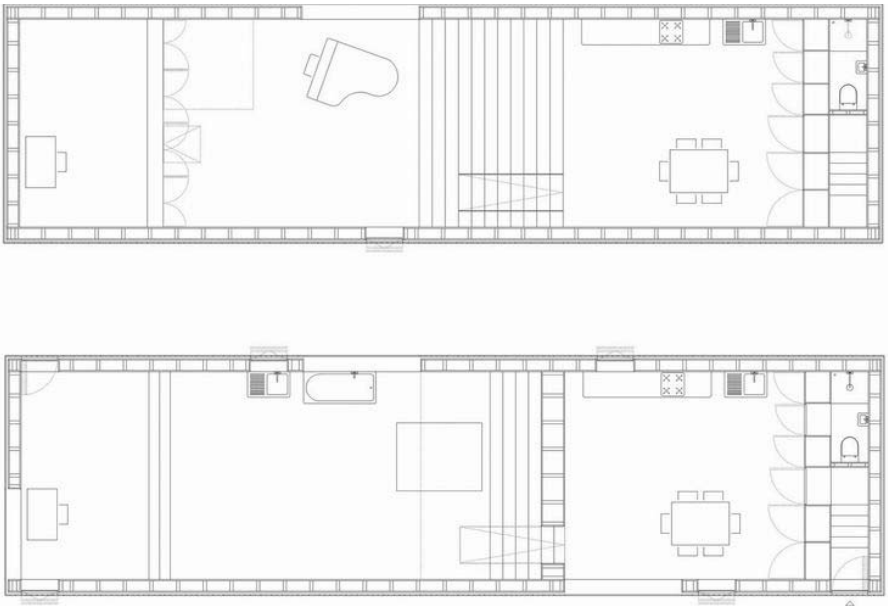
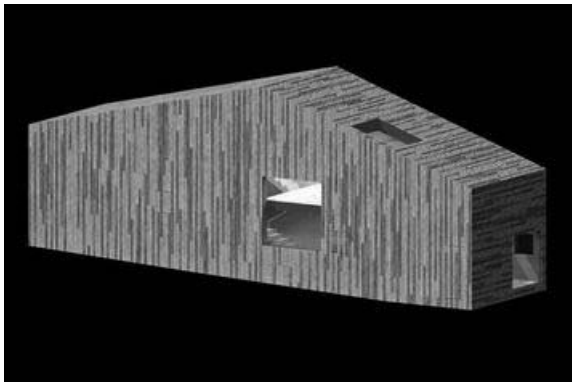
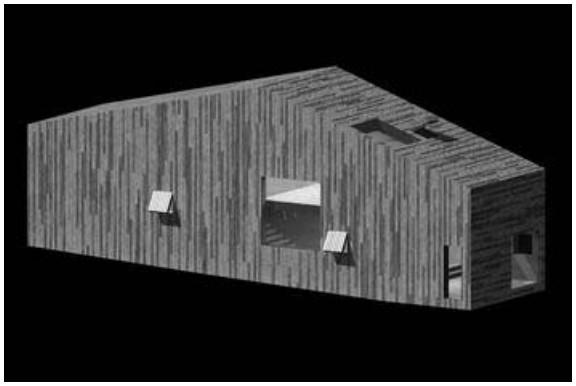
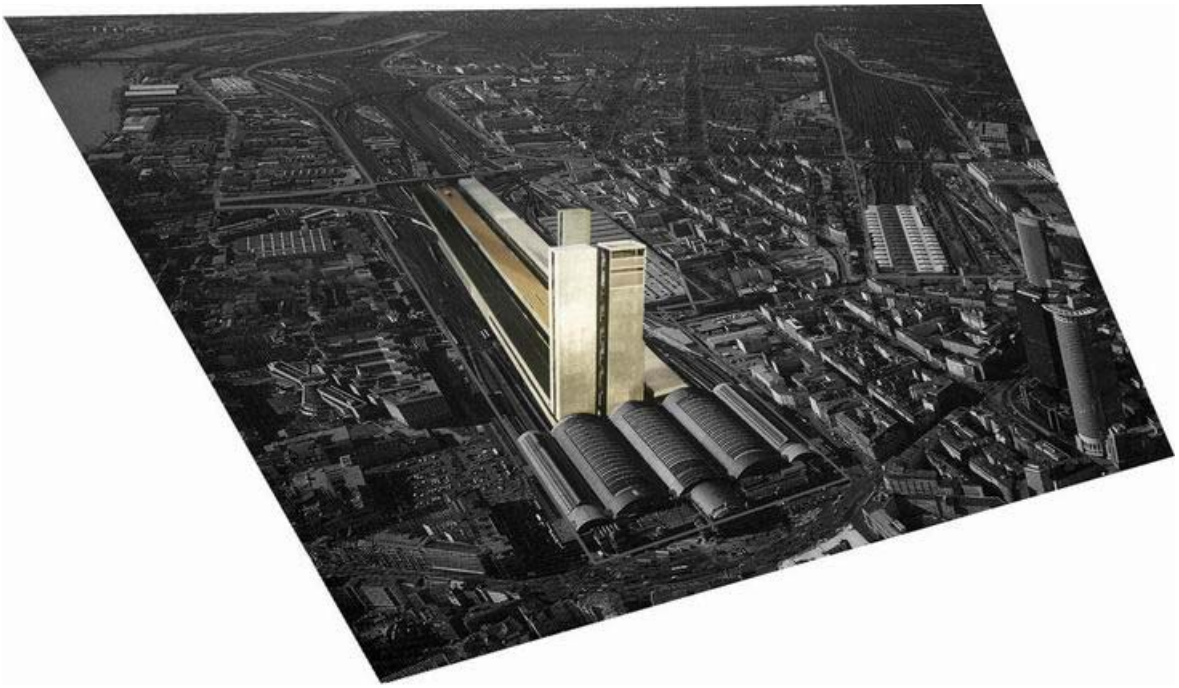








Forming three lines with a length of 1.1km, the mega-structure rises up to three 220m tall skyscrapers. This giant urban sculpture is organised as a multi-layered piece of city, comprising of twelve new tracks for high-speed trains, shopping mall, exhibition hall, park & ride, casino, conference centre, hotels, offices, studios etc.

Central Station Frankfurt

Mixed-use extension and development study, 1997-98/2010

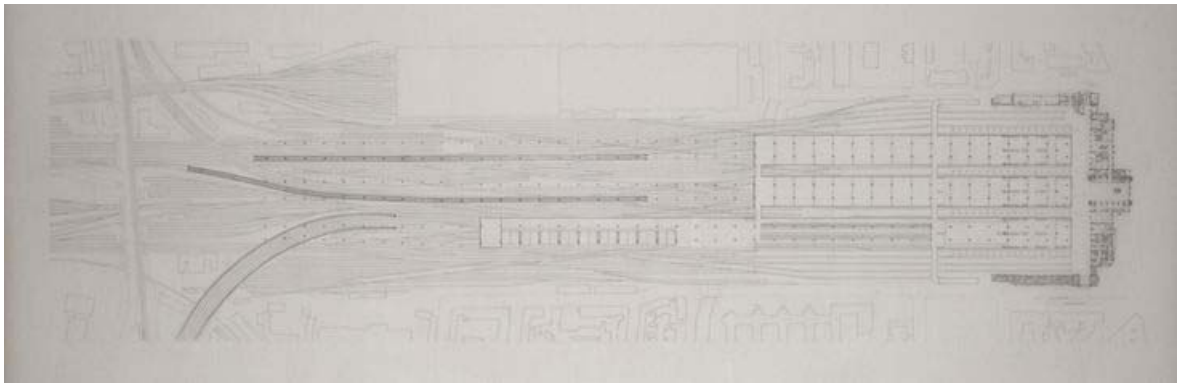
This conceptual project represents a counter-position to the current debate on transforming important terminus stations into underground through-stations in order to resolve logistical clashes between local and high-speed trains, and to sell the cleared track fields to developers.

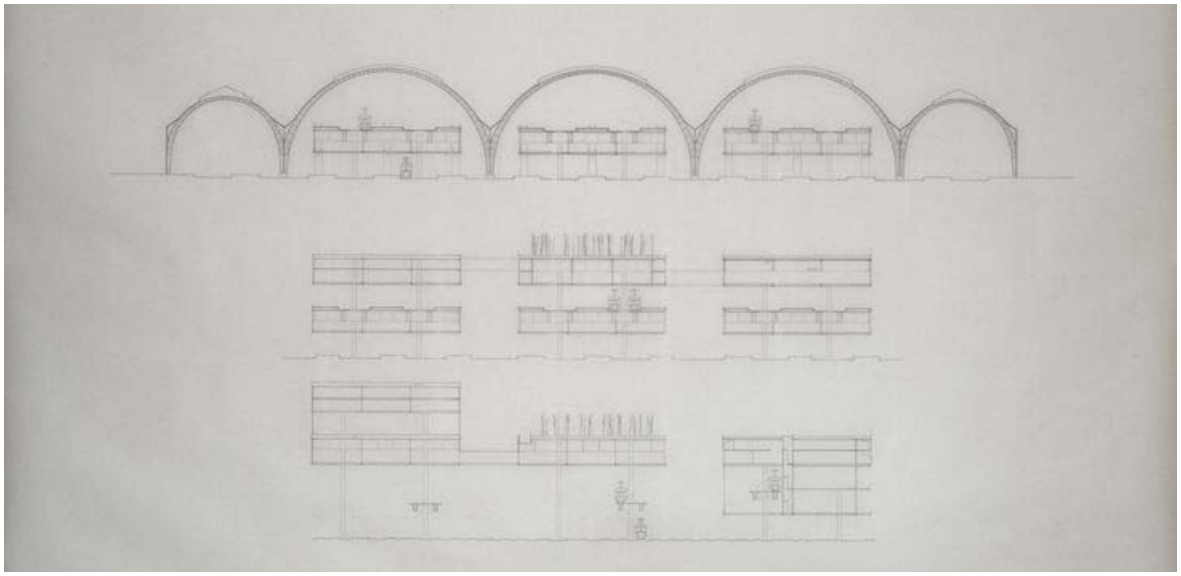
In order to meet the logistic and economic interests of the Deutsche Bahn AG, the proposal suggests skipping plans for a new tunnel underneath Frankfurt and instead to introduce a second 12m high level of tracks for long distance trains. The existing tracks would be modernised, reduced in number, and have a new megastructure built above. This alternative solution is based on the firm belief that vision is psychologically vital when approaching the city and that railway tracks form an important historic and aesthetic part of the image of the European city. The lack of flexibility and the enormous costs of tunnel constructions are seen critically, not to mention the conflicts with the existing underground network, or foundations of present and future high-rise buildings.

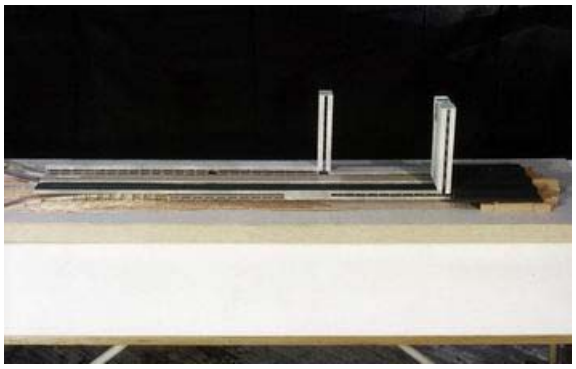
The new level of twelve tracks would unravel high-speed from local traffic and enable the smooth and reliable operation of both services. The major logistic disadvantage of terminus stations compared to through-stations – the time-consuming shunting of locomotive driven trains – could be solved by attaching a second driver's cabin to the last carriage of these traditional trains which are still in use for local services in Germany. The proposed twin-layer solution might serve to guarantee the future of terminus stations in major German cities; the terminus station with its advantages for urban development would remain a contemporary form of train station.

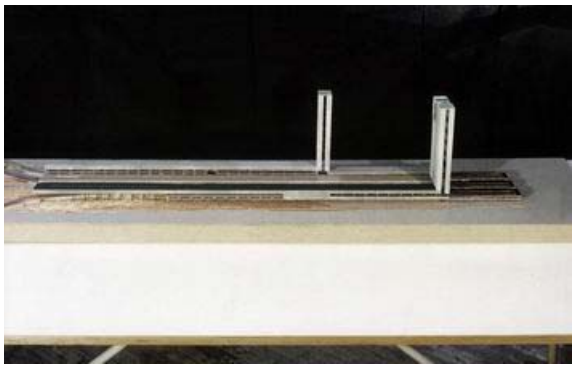
The new platforms within the three main halls, built in 1888, define the basic geometry of the new megastructure. Forming three parallel lines in plan with a width of 40m and a length of 1.1km, the 28/42m high megastructure rises up to three 220m tall skyscrapers which contribute as irregularly positioned triplet-towers to the prestigious Frankfurt skyline. This giant urban sculpture, accessible through the station or via ramps along the existing building wings, is organised as a multi-layered piece of city, 152m x 1,100m large and traversed by indoor roads and bridges.

The three 430m long spaces underneath the new platforms are allocated to the station and used as exhibition hall (north), shopping mall (centre) and park & ride/supermarket (south), as well as waiting rooms at the end of each building. The two towers closest to the station comprise hotel rooms, hourly let work station and meeting rooms for business travellers. The huge window on top of the central tower frames a sky-bar, a cinema with translucent night-time screen, a restaurant and a club. A casino at the bottom of this tower and a public media centre/library in the northern building are also connected to the station. The third tower is for internal administration and separates a congress centre and









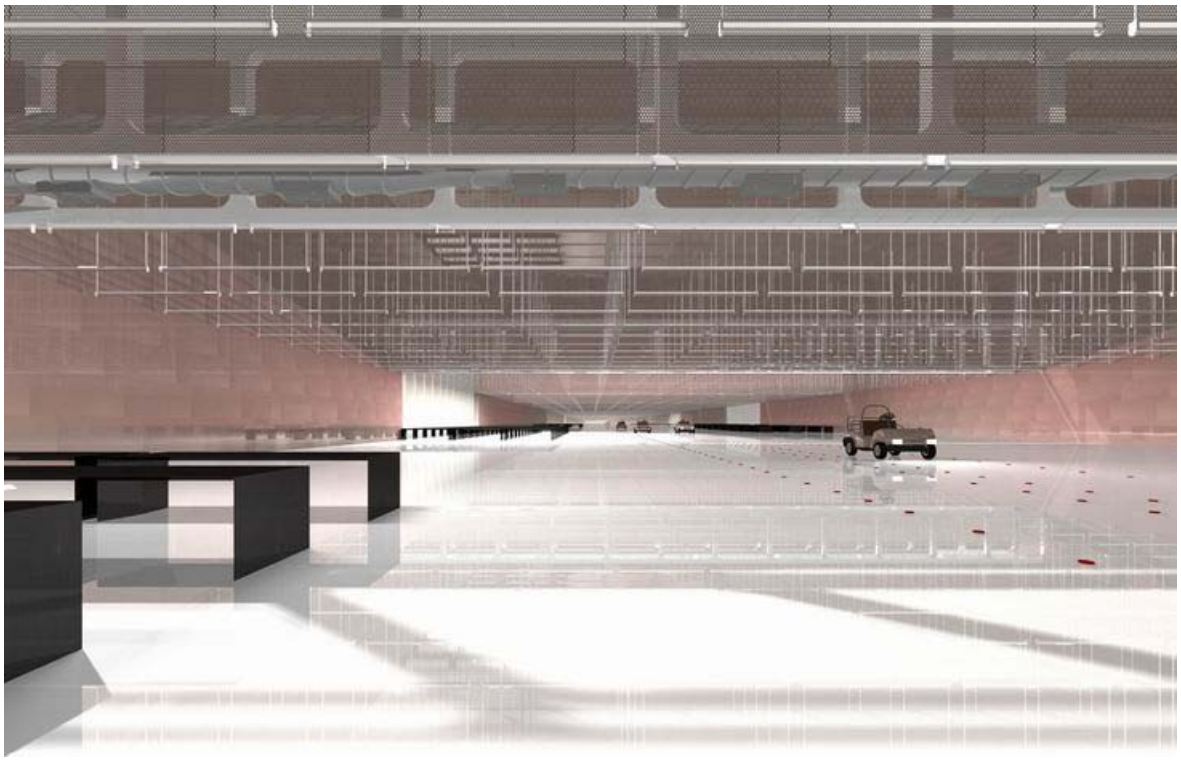
an institute for visiting scientists from the railway station. A sports centre occupies the far end of the central building and is connected to the city via a long public park on top of the central building; this park consists of red and brown-leaved trees and bushes only in order to avoid the look of naturally formed green space. The southern building opens to the city and contains studios and short-term let flats for visiting artists and scientists. Black beach sand, absorbing solar warmth in non-Mediterranean Frankfurt, forms a long artificial shore with pool, and provides an 'urban beach' for the studios and flats underneath.

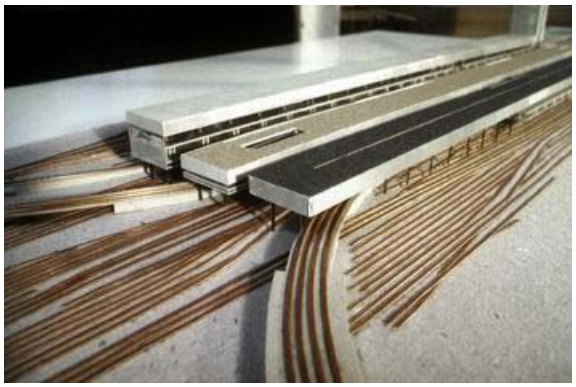
Matching the corporate design of the building, modes of internal transportation are copper-coloured 'house-bikes' and, in the copper lined congress centre, copper-coloured electric golf-carts. Bicycles, skateboards and inline skates could also be used as private means of transportation. Where necessary, travelators, as known from airports, are added in highly frequented areas. The three buildings are fully accessible with fire engines and rescue vehicles, and helicopters can land on top of the congress centre.

The new level of raised tracks would unravel high-speed from local traffic. Positioned in the existing halls of 1888, they define the geometry of the new mega-structure.

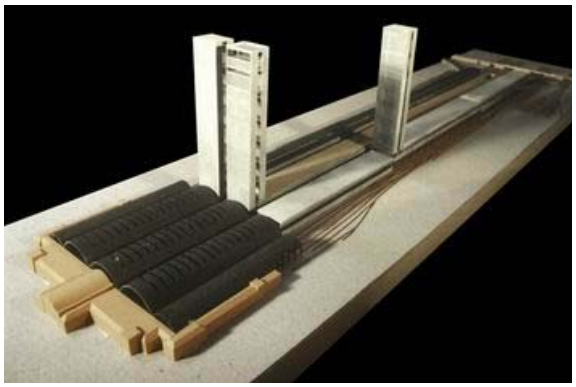
A long public park, consisting of red and brown-leaved trees only, leads to a public sports centre at the far end of the building. Black sand and a linear pool provide an 'urban beach' for studios and short-term let flats underneath.

The huge window on top of the central tower frames a cinema with translucent night-time screen and a bar.

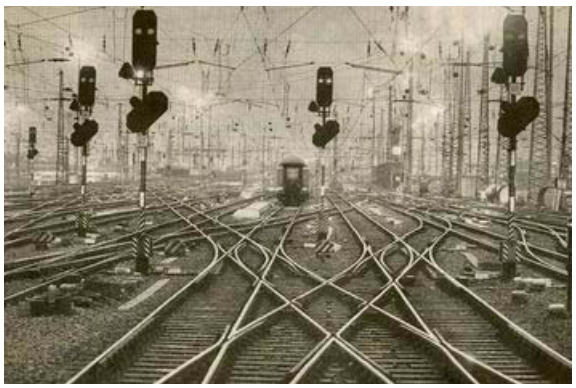




The steel construction is dominated by deep trussed girders spanning 40m across; they are clad with perforated sheets of copper in all reception areas such as lobbies, conference halls, auditoriums etc. The columns, which are positioned irregularly between the existing tracks, connect the facilities in the megastructure with the city's sewerage system. In order to shield off potential electro-magnetic radiation from the overhead cables, and due to the difficult accessibility for maintenance, the building is clad with extremely resistant, partly perforated, sheets of lead. Flush frameless windows are integrated to provide a homogenous aesthetic. Both the underside of the building and its columns are clad with pre-corroded weathering steel (COR-TEN®) to resist the aggressive, rusty abrasions from the rails.



The aesthetic of this urban sculpture refers to the lines formed by the endlessly long rail tracks, the 400m long, slowly moving high-speed trains underneath and within the building, the continuous embankment walls along the nearby River Main and its long, flat and often coupled river boats with their slow, steady rhythm.



Reception areas such as lobbies, conference halls, auditoriums etc. are clad with copper. Matching the corporate design of the building, modes of internal transportation are copper-coloured 'house-bikes' and electric golf-carts.

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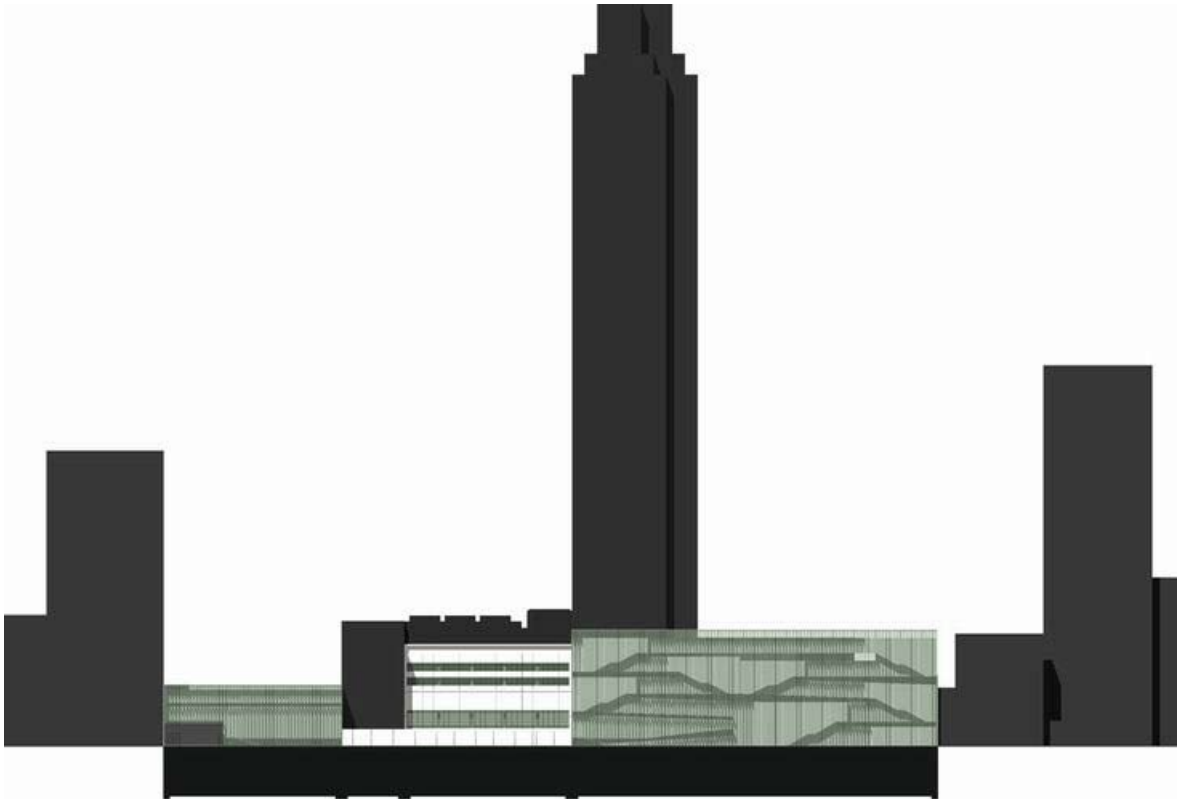

The Museum of Modern Art, New York

Gallery extension study, 1998/2003

Following a competition organised by the MoMA some months before, the brief asked for an extension of the famous museum on a site adjacent to its rear garden and occupied by the vacant Dorset hotel.

The central thought behind the new extension along 54th Street was to propose a continuous exhibition space of unprecedented length which allows for chronological and parallel display of the various collections, comprising Painting & Sculpture, Drawings, Prints & Illustration, Photography, Film, Media & Performance Art, Architecture & Design. This enables the visitors to gain a more complex understanding of art in its temporal, cultural and theoretical context.

The 23m wide, up to 10m high and in total 390m long space winds up to 27m and down again, and forms a folded loop of ten different exhibition spaces. The loop contains only two very large windows; one of these connects to a loggia overlooking the famous Abby Aldrich Rockefeller Sculpture Garden designed by Philip Johnson. The circulation of the different levels happens via stairs and ramps integrated as circulation cases into the twin-layer façade. Inside the gallery, these stairs and ramps appear as changing shadows on the inner façade layer of satinised glass, and are key components of the minimal aesthetics of the gallery. Alternatively, all levels can be directly accessed via lifts and stair wells along the inner party wall.

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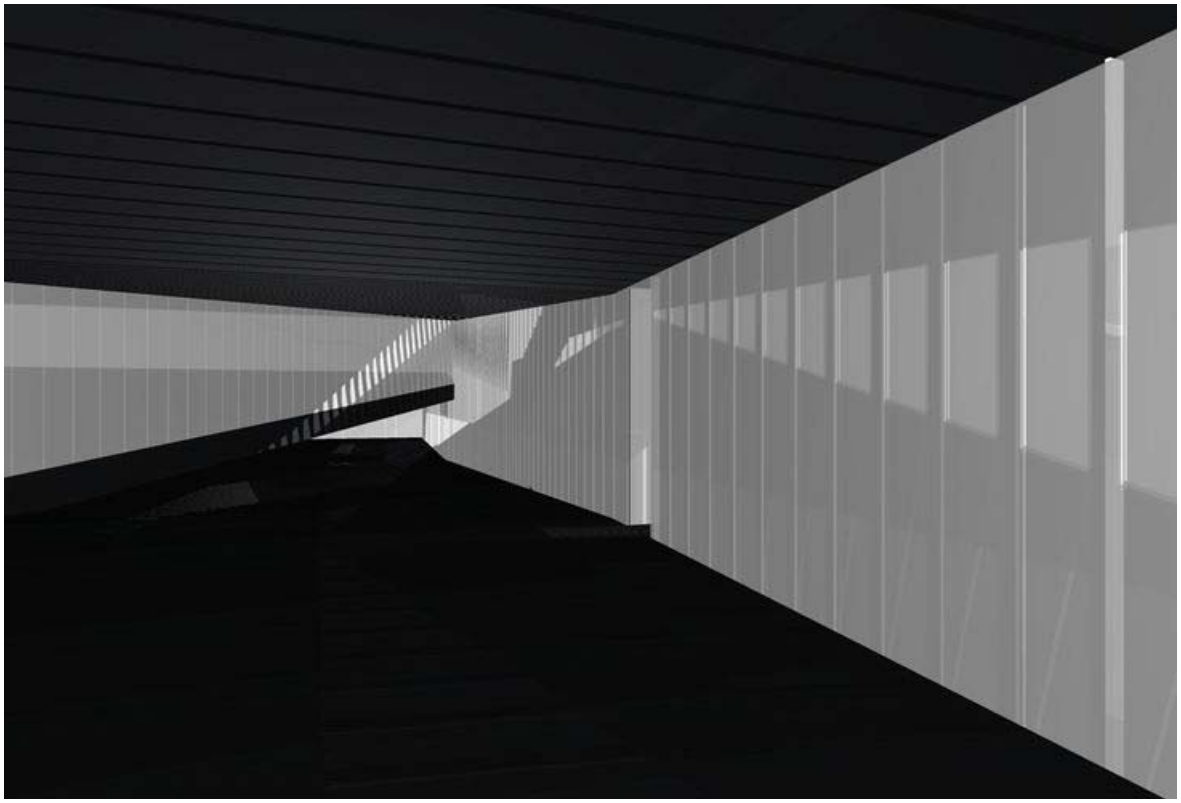
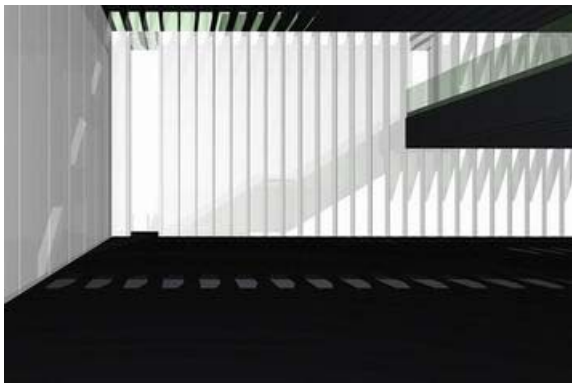
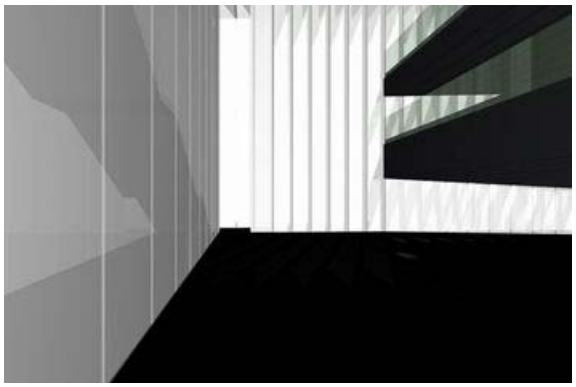
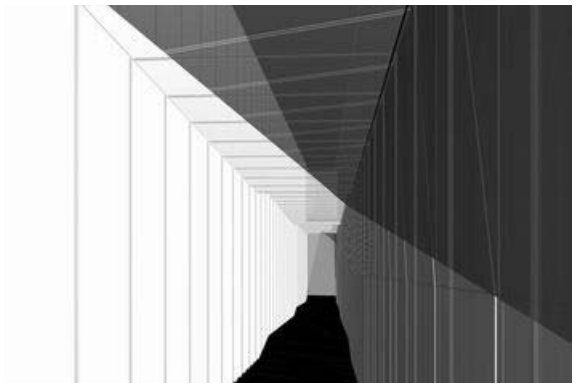




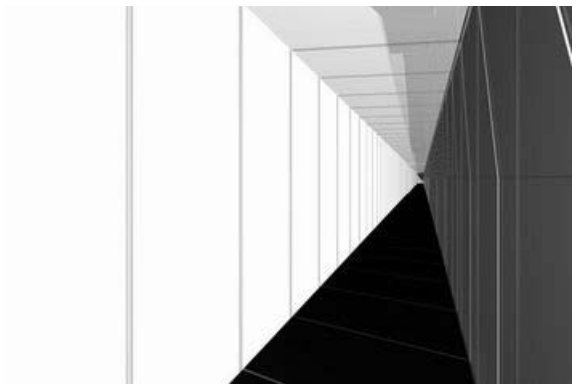


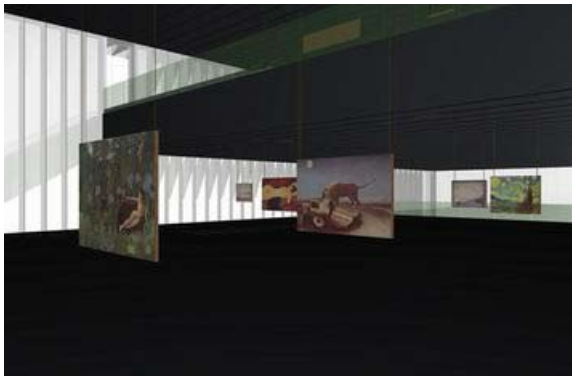
Inside the gallery, architectural elements like doors, windows, partition walls etc. are avoided, or abstracted, in order to achieve a maximum of architectural passivity. The classic exhibition space, subdivided into separate compartments, is superseded by a total and anti-hierarchic space.

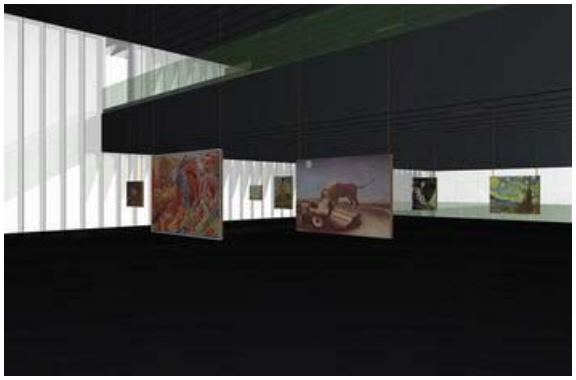
A 23m wide, 3.5m to 10m high and 170m long hall below ground provides an unprecedented space for temporary exhibitions of giant sculptures, paintings, installations etc. New glass floors fitted into the two existing garden ponds provide the lowered areas with dimmed 'underwater light'. A large window connects the existing bookshop with this new underground hall.



The new building, 190m long, 26m wide and variously 27m, 14m and 40m tall, measured from the basement, is accessed through the original MoMA building as designed by Philip L. Goodwin and Edward Durell Stone in 1939. A new grand staircase, as wide as the original building, leads from the existing lobby down to a new platform right underneath the sculpture garden. This platform provides an impressing view over the temporary exhibition hall below. To make this new entrance possible, the famous sculpture garden is lifted by 2m.







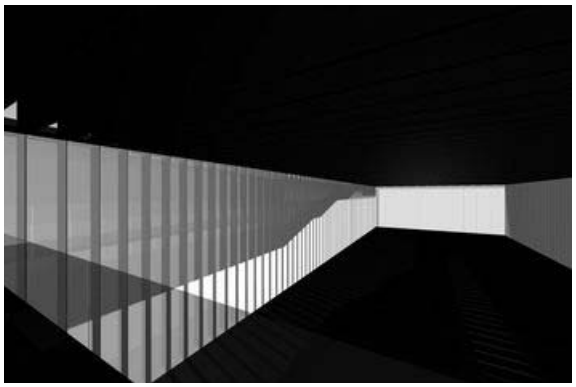
The structure consists of ultra-thin steel fins with narrow spacing and a black finish achieved through bluing. By keeping their structural depth defined by the 23m span, the ceiling fins partly change height to define different spatial qualities and to adjust to slightly inclined floors. The non-structural parts of these fins are used for sound absorption, lighting, cooling and other services functions. The floors are made of blued steel panels with a peened finish.

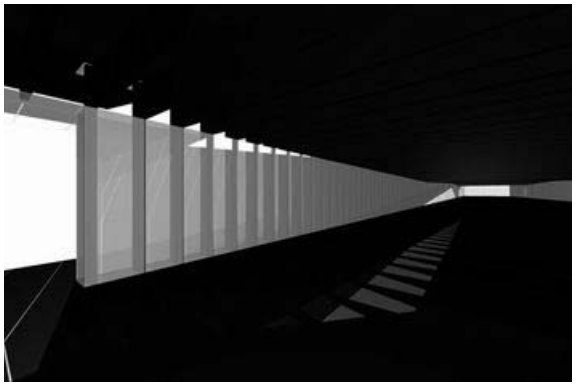
Sadly, most museums are unable to show more than a fraction of their collection due to space restrictions and a vast number of exhibits are stored away and hardly ever on display. For that reason a computer-controlled exhibiting system was invented especially for the MoMA as part of the project scheme which enables the majority of planar exhibits to be shown in frequent rotation.

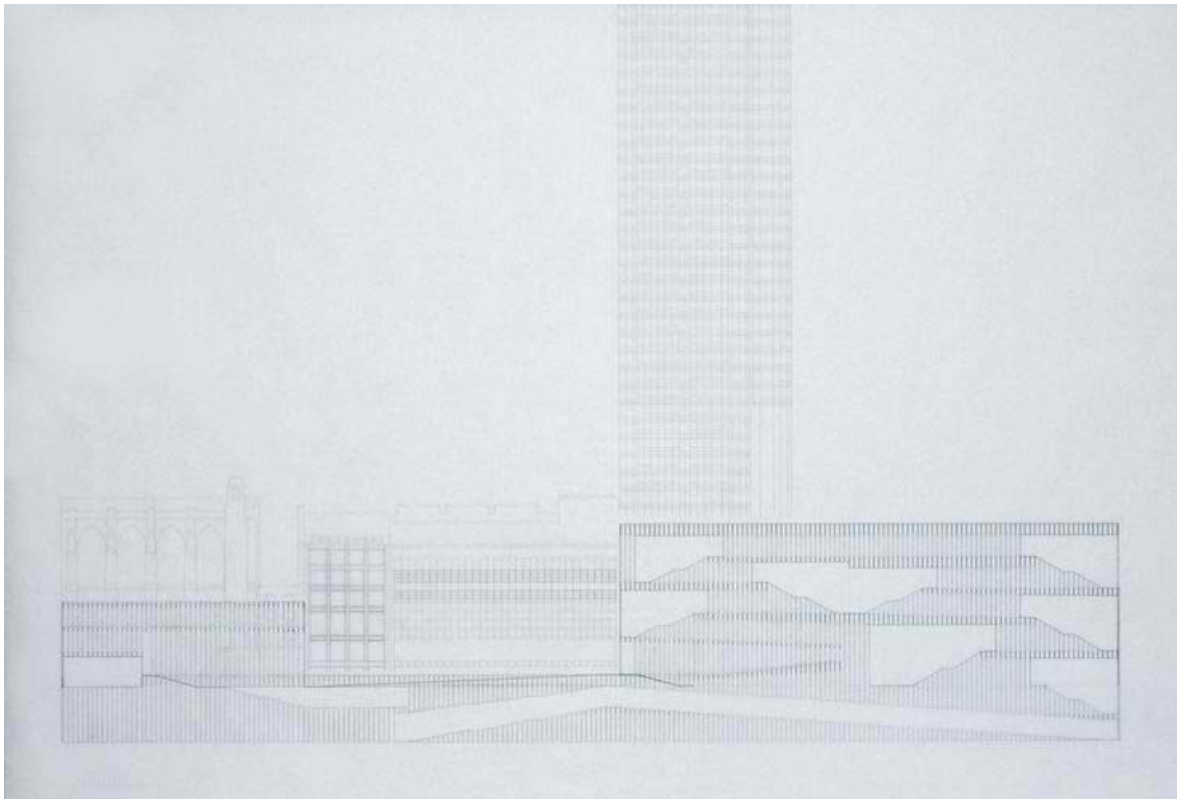
Light, lime-wood sheets, suspended on brass wires, function as large-format panels for planar works of art like paintings, drawings, photography etc. These panels can be drawn back electronically into the ceiling. Fitted with air control services, these spaces serve as individually controllable pockets protecting the exhibits from daylight, moisture and theft. This reduces additional storage space drastically and thus running costs. Additional partition walls for display become superseded. This system provides retractable display surface of about 9.15km total length and enables an uncountable number of display combinations and spatial arrangements. Following a pre-set display programme famous works of art can be supplemented by lesser known pieces in a daily rhythm. In this way, the MoMA collection will continuously appear in a new light and remain interesting and informative even for frequent visitors. Complex historic connections can be conveyed and new vistas and perspectives of different ways of exhibiting open up.

Most museums are unable to show more than a fraction of their collection due to space restrictions. For that reason a computer-controlled retractable exhibiting system was invented which enables the majority of flat exhibits to be shown in frequent rotation.

A 170m long hall below ground provides an unprecedented space for temporary exhibitions of giant sculptures, paintings, installations etc. A new platform provides an impressive view over the giant underground exhibition hall.







Eight flights of stairs are fitted into the façade space. Fully enclosed by satinised glass, they do not allow views into the façade or onto the street. The elevation is determined by the location and shape of the stairs and is not designed according to aesthetical principles; the pattern is purely a reflection of the building's organisation. The façade space reaches down to 10m below ground level.

The original MoMA building on 53rd Street, designed in 1939 by Philip L. Goodwin and Edward Durell Stone, with its currently sheeted glass façade is restored and used for temporary exhibitions.

The famous Abby Aldrich Rockefeller Sculpture Garden designed by Philip Johnson is lifted by 2m to allow for the integration of a new grand staircase leading from the existing lobby down to a new platform right underneath the sculpture garden. New glass floors fitted into the two existing garden ponds provide the lowered areas with dimmed 'underwater light'.

In order to avoid the artificial environment typical of most museums, the gallery is lightened by soft daylight, supported by simulated daylight in darker areas and after nightfall. To achieve this, the vertical steel fins are clad with frameless glazing on both the inside and the outside. Thereby the inner surface, facing the exhibition area, is satinised in order to achieve a very even and smooth daylight quality; where necessary, the inner layer can be fitted with additional UV-filtering films. The outer layer however remains clear glazing. On the inside, the vertical fins remain visible only in shadow.

Eight flights of stairs are fitted into the 3m deep façade space along 54th Street. These stairs are fully enclosed by satinised glass and do not allow views into the façade or onto the street. The elevation is determined by the location and shape of the stairs and is not designed according to aesthetical principles; the façade pattern is purely a reflection of the building's organisation. The façade space reaches down to 10m below ground level and provides the temporary exhibition hall with diffuse daylight along its entire length. Glass cladding to fire walls along existing MoMA buildings, fitted with back-lighting, provide the new extension with artificial daylight along its entire length. This gives the illusion that the single-aspect extension is flanked by a second glass façade along its inner edge.

In addition to the new gallery the building contains a large auditorium and a new block for delivery/interim storage and a café/restaurant. Both the café and the facing auditorium can be fully opened to the sculpture garden. Part of the design is to restore the original MoMA building with its currently sheeted glass façade and to use it for temporary exhibitions. Cesar Pelli's 1984 building would be re-organised under the scheme. On 53rd Street a new MoMA cinema with two screens is proposed which can be accessed directly from the new gallery. This steel-frame building is mounted on cart-wheels with rails so that it can be shifted by 13.5m to fit onto the adjacent site of the same width which is likely to be acquired by the MoMA in the near future. By doing so the then vacant space can be used for extending Pelli's design.

Markelius' design of 1932.

The new transcription.

Concert Hall Helsingborg

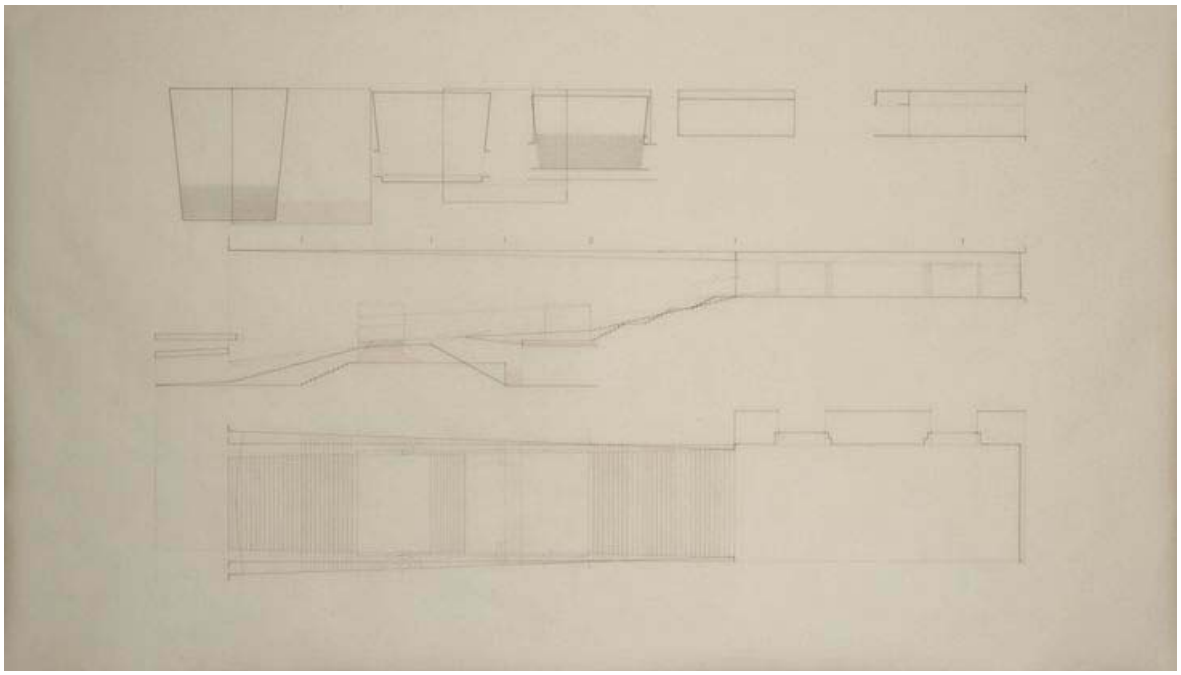
Transcription of Sven Markelius' entrance hall, Helsingborg, Sweden, 1997

Designed by the highly regarded Swedish modernist architect Sven Markelius, the 1932 concert hall impresses with its spatially complex entry scenario. Comprising of a tapered sequence of stairs, the elongated entrance hall with its two semicircular cloak rooms provides the visitor with a theatrically composed 'promenade architecturale' à la Le Corbusier.

The concept of this study was to analyse, notate and reinterpret this elaborate composition of spaces, light, views, directions, movement, functions etc. by introducing subtle changes to architectural elements, forms and materials without altering or distorting its original dramaturgy.

The outcome could be called a transformation, or more precisely a transcription.

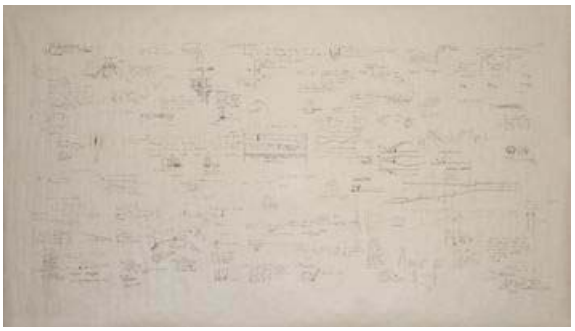
The 1932 concert hall, designed by Sven Markelius, impresses with its elongated entrance hall and its tapered sequence of stairs.

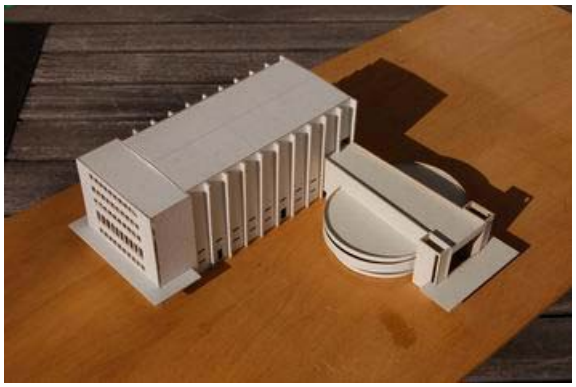


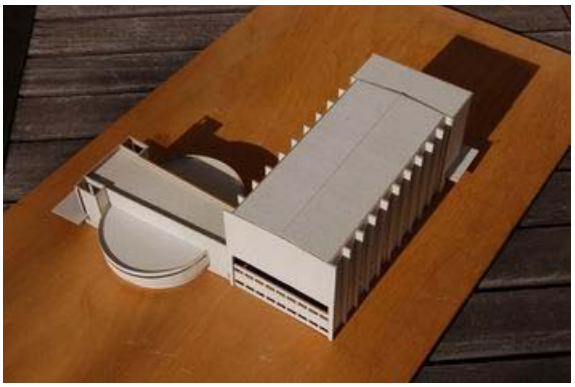
Superposition in plan and section. Markelius‘ original design in brown ink, new transscription black.

Right: conceptual scribbles.

The concept of this study was to analyse, notate and reinterpret this elaborate composition of spaces by introducing subtle changes to architectural elements, forms and materials without altering or distorting its original dramaturgy.







The 2.5km long housing megastructure follows exactly the shape of the highway. By crossing this barrier with cuts through the building it provides passage to the coast. A dense, 5km long 'façade park' covers the entire building with its semi-public, partly roofed pedestrianized street in the centre.

Highway Megastructure Barcelona

Large scale housing study, 1996-97

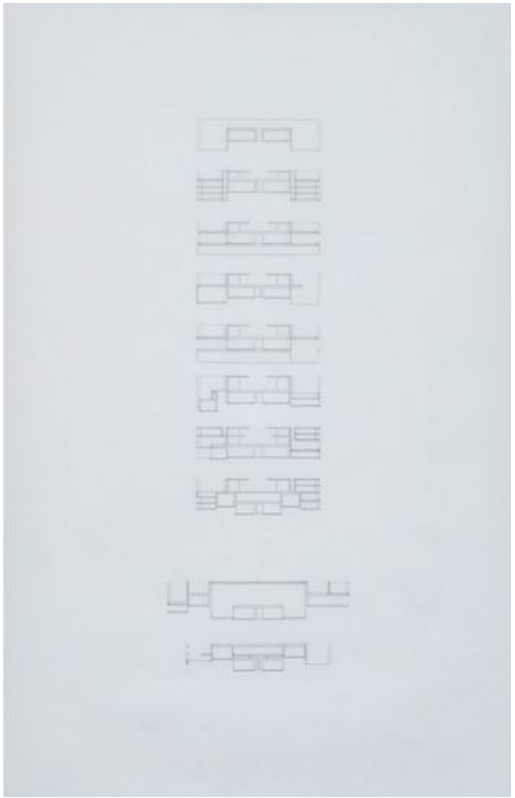
Right at the end of Barcelona's famous axis Avinguda Diagonal and parallel to the coast runs the Ronda del Litoral, a highly frequented highway which cuts off the city from the sea.

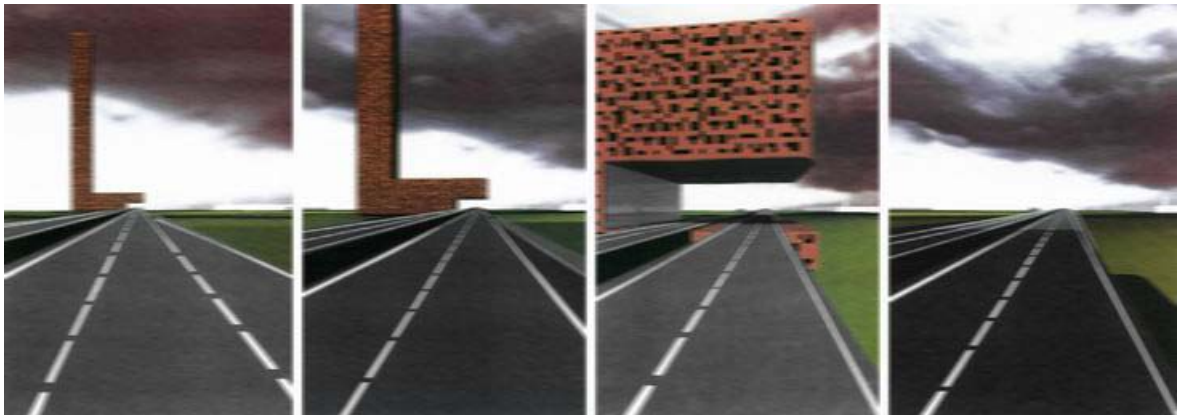
The proposed housing project covers this barrier over a length of 2.5km and extends existing roads to cross this barrier and provide passage to the coast.

The building encloses the highway completely and shields off its emissions and noise. The architectural design of this new tunnel, in particular its natural and artificial lighting, is an important part of the project.

Forming an unprecedented long but only five storey high megastructure it follows exactly the shape of the highway and provides its residents with a dense, 5km long 'façade park' of different widths with up to 15m tall trees and a semi-public, partly roofed, pedestrianized street in the centre with a courtyard quality.

Its solid structure is made from recycled in-situ concrete with a dark brown colouration and completely covered with plants. One initial thought was to re-use the rubble from dwellings destroyed in preparation for the 1992 Olympics.





The 410m tall megastructure is accessible via car or tram from Amsterdam. Clipped onto the motorway like a peg on a washing-line the design symbolises the skyscraper's displacement in the countryside. By providing a huge canopy above the motorway, the building manifests its public presence.

The Vertical Village, Amsterdam, The Netherlands

International student competition, 1995

Justifying a high-rise typology in the marshlands of Amsterdam soon became the central problem of this student competition.

In order to address the rather absurd idea of a skyscraper in the countryside, a so called 'Tele-Forum', a kind of semi-public television-forum is proposed at the top of the high-rise, communicating with nearby Amsterdam. High up in the sky it can be seen from Amsterdam and gives reason for the height of the building. A giant transparent monitor, which at the same time serves as a huge public window offering grand views towards Amsterdam, continuously transmits information between the forum and central Amsterdam. This double-layer window, fitted with a matrix of tricolour pixels, can be seen as a public monitor with a skyscraper as its stand.

The solitary megastructure is accessible via car or tram from Amsterdam. Clipped onto the motorway like a peg on a washing-line the design symbolises the skyscraper's displacement in the countryside. By providing a huge canopy above the motorway, the building manifests its public presence. Its 42m square and 533m long profile forms a horizontal 'foot' of 165m length, and a vertical 'stand' of 410m height.

With reference to local brick houses, the building is clad with a perforated skin of large format terracotta tiles manufactured in local brick factories and frameless box-type windows.

Inside, the building offers a mix of functions comprising television studios, offices, a conference centre with hotel, sky-lobbies, shopping mall, sports facilities etc., but also housing in the form of apartment clusters with tall courtyards, nursery, school and other social services. A separate underground building with multi-storey car-park serves as a structural counter-weight for the megastructure.

In collaboration with Thomas Schinko and Michael Soor.

A so called 'Tele-Forum' is proposed at the top of the high-rise. High up in the sky it can be seen from Amsterdam and gives reason for the height of the building. A giant transparent monitor, which at the same time serves as a huge window, continuously transmits information towards Amsterdam. This double-layer window, fitted with a matrix of tricolour pixels, can be seen as a public monitor with a skyscraper as its stand.

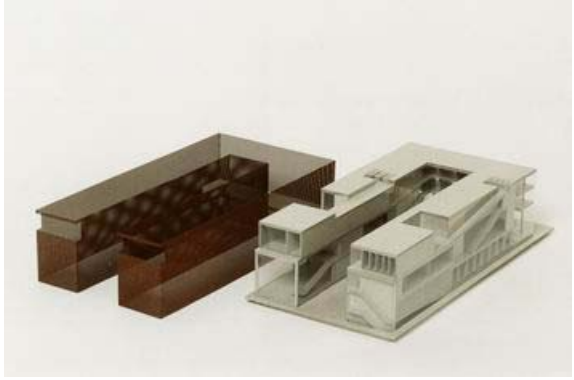
The structure of the building is directly derived from the programme with an absolute minimum of subjective design input. Its anthracite-tinted concrete structure is silhouetted behind a glass skin of different transparency grades and sheets of weathering steel.

Institute for Lighting Research, Karlsruhe, Germany

Diploma project, University of Applied Sciences, Karlsruhe, 1994

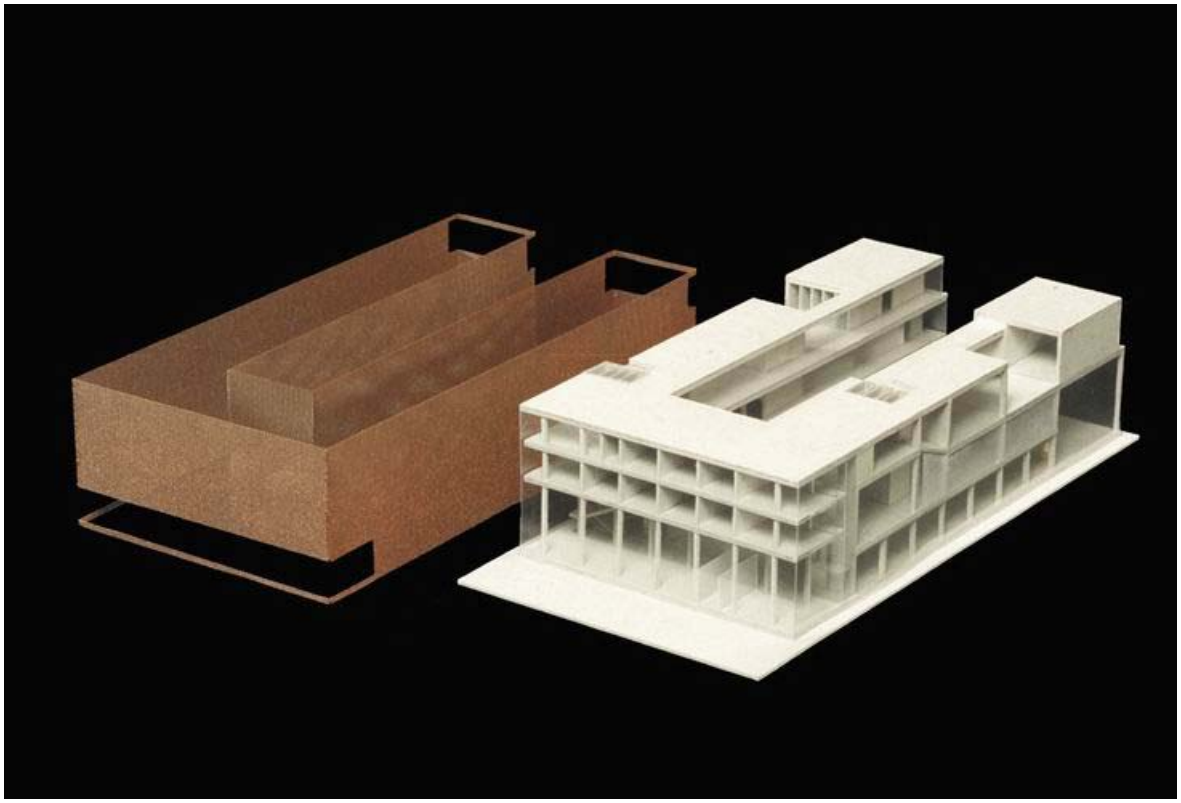
The aesthetic appearance of the building is defined by the spatial structure silhouetted behind its transparent, but highly textured skin of perforated and pre-corroded sheets of weathering steel. This structure is directly derived from the programme with an absolute minimum of subjective design input.

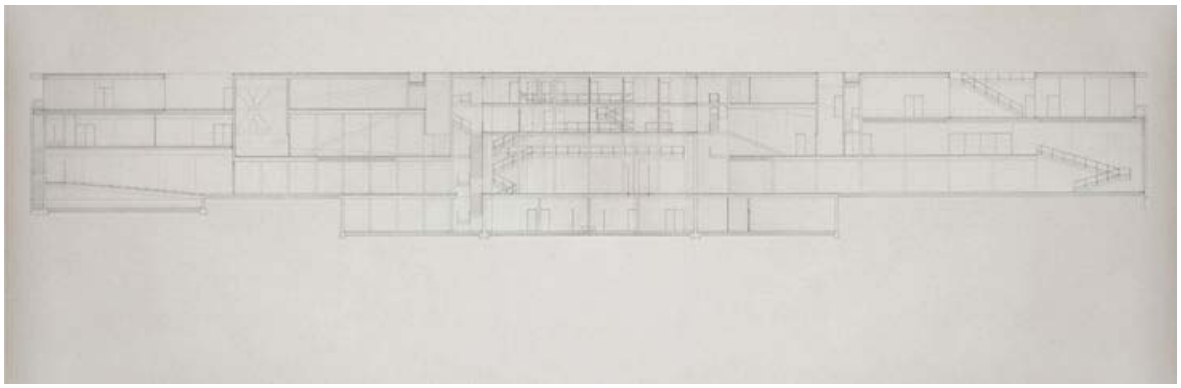
The purpose of the institute is the research of daylight and artificial lighting, in particular the testing and exhibiting of international lighting products and constructions under realistic, long-term conditions and furthermore the development of innovative lighting resolutions and project specific lighting simulations, and the provision of vocational training sessions in the form of lectures, seminars, conferences and public exhibitions.



The starting point of the project was the definition and organisation of a bespoke programme. The need for special areas and spaces of partly extreme proportions (deep shafts or long corridors), the demands for different light qualities and light directions, as well as the public accessibility of selected spaces and some roof areas, made it impossible to follow the route of conventional building organisation.

In order to unravel this spatial and organisational complexity, the programme was firstly organised in the form of an organigram, then transformed and scaled into a sectional drawing, and lastly extruded into a building. In this way the building represents a direct



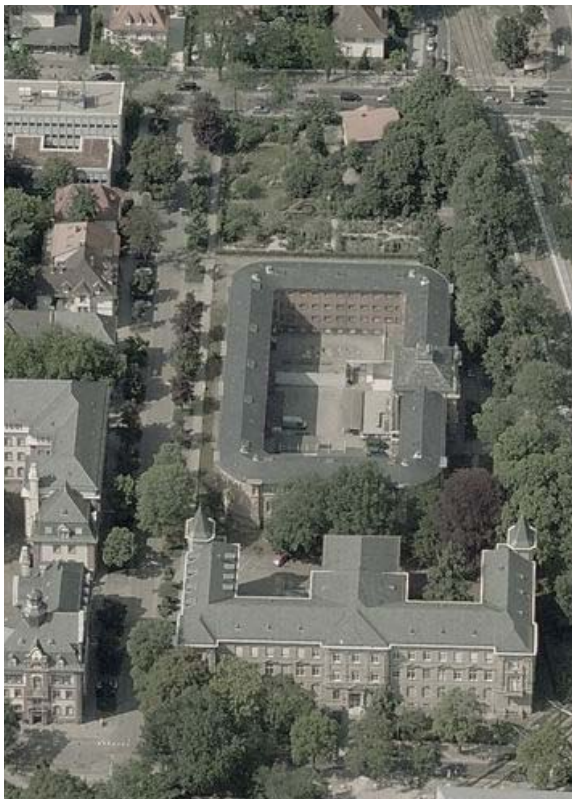


conversion of an organigram into an architectural structure. This structure is without any tectonic order.

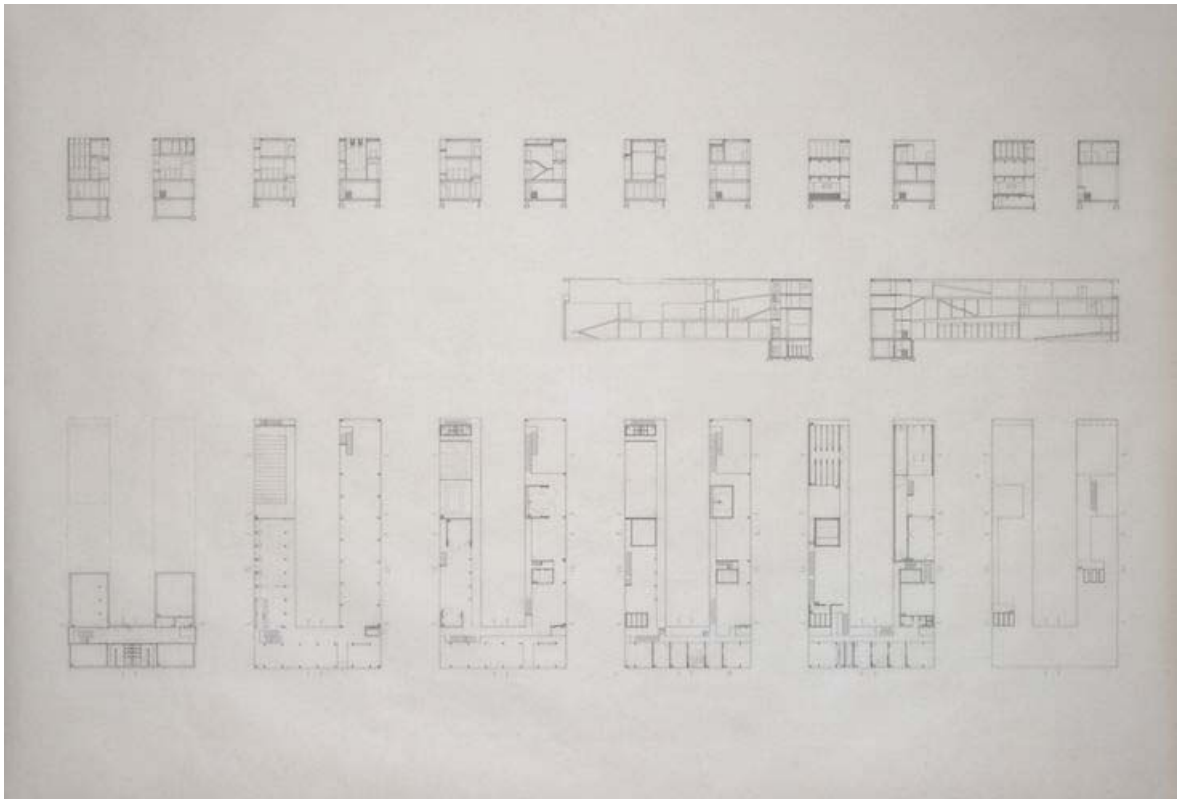
The 110m long, 12m tall and 8.5m wide structure is folded twice to fit into the site boundaries and correspond to the historic urban context. The inner organisation does not follow the urban u-shaped figure, and the external space between does not form part of the building and is not accessible – a void as pure consequence of the folding.

The structure of the building consists of anthracite-tinted in-situ concrete, fibre cement sheets and grey felt, and is enclosed by a glass skin of different transparency grades. The skin of the building consists of large format, twin-layered and identically perforated sheets of steel, fixed to vertical glass supports. The outer layer consists of pre-corroded weathering steel (e.g. COR-TEN®) and the inner of stainless steel, enamelled white to provide the rooms behind with a light and pleasant façade. A 3mm gap between the two layers ensures that the inner, bright white surface is not discoloured by rusty rainwater from the outer layer.

The need for special spaces of partly extreme proportions, different light qualities and directions, as well as public accessibility of selected areas, made it impossible to follow the route of conventional building organisation. In order to unravel this complexity, the programme was organised in the form of an organigram, then transformed into a sectional drawing, extruded into a building and folded to fit into the historic urban context.



© Bing Maps



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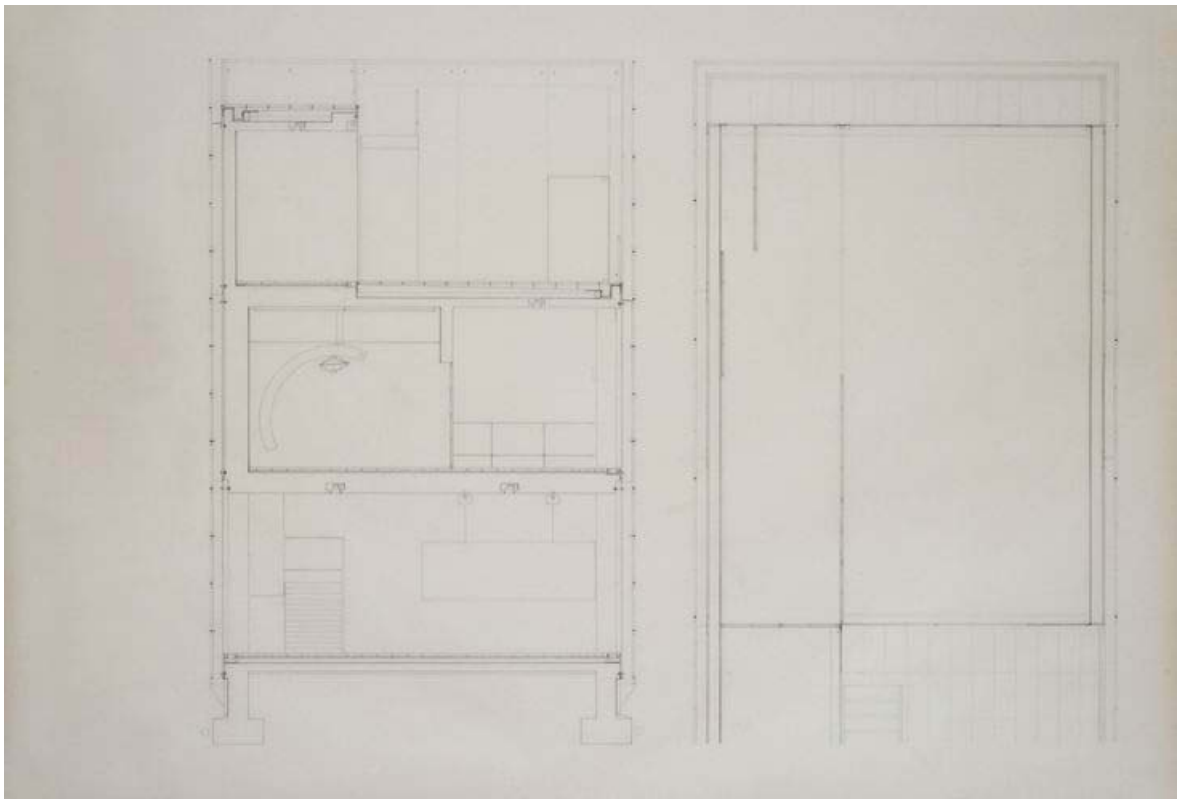


Intellectual Property

APPENDIX

PETER KARL BECHER
Architect RIBA, Freier Architekt AKBW, Dipl.-Ing. (FH) Dipl. (Städelschule)

CURRICULUM VITAE

PROFESSIONAL EXPERIENCE

since 10/07	**Studio Becher, London, UK** Founding principal, RIBA Chartered Practice
07/05 - 05/08	**Herzog & de Meuron, London, UK** Senior architect
02/04 - 07/05	**Herzog & de Meuron, Beijing, China** Senior architect, Olympic Stadium team
06/03 - 02/04	**Herzog & de Meuron, Basel, Switzerland** Senior architect, Olympic Stadium team
01/99 - 06/03	**Carsten Roth Architekt, Hamburg, Germany** Project architect and construction supervisor
07/97 - 10/97 + 01/96 - 03/96	**Carsten Roth Architekt, Hamburg, Germany** Project architect
06/95 - 08/95	**Bothe Richter Teherani Architekten - BRT, Hamburg, Germany** Project architect
09/91 - 12/92	**Architekt Gerd Gassmann, Karlsruhe, Germany** Student collaboration
07/91 - 08/91 + 08/89 - 09/89	**Reinhard Bau GmbH, Mannheim, Germany** Construction site internship
04/89 - 07/89	**Burock und Partner Architekten, Heidelberg, Germany** Internship
04/88 - 12/89	**Radio Operator on German Navy auxiliary ship 'A-1415 Saarburg', Kappeln, Germany** Compulsary military service

TEACHING AND RESEARCH

since 2012	**Design Fellow at University of Cambridge, UK** Year 3, Studio 2, with Karin Templin
08/13	**Unit tutor at AA Visiting School Berlin, Germany** AA Berlin Laboratory directed by Olaf Kneer and Marianne Müller, with Christoph Zeller
01/13	**Unit tutor at AA Visiting School Beijing, China** AA Winter School directed by Yan Gao
08/12	**Unit tutor at AA Visiting School Berlin, Germany** AA Berlin Laboratory directed by Olaf Kneer and Marianne Müller, with Christoph Zeller
07/12	**Researcher at AA Workshop in Penang, Malaysia** Design and research workshop directed by Naiara Vegara, Nathalie Rozencwajg, Michel da Costa Goncalves
2010 - 2012	**Unit master at the Architectural Association, London** AA School of Architecture, Diploma Unit 3, with Matthew Barnett Howland
2009 - 2010	**Visiting tutor at NTNU Trondheim, Norway** Studio Brendeland & Kristoffersen, with Christoph Schindler
2008 - 2010	**Design studio leader at Kingston University, London, UK** School of Architecture and Landscape, Third Year Studio 1, with Matthew Barnett Howland
2007 - 2010	**Design unit tutor at London Metropolitan University, London, UK** Department of Architecture and Spatial Design, Diploma Unit 7, with David Grandorge

REGISTRATIONS AND CERTIFICATES

since 2008	**RIBA Chartered Member and Chartered Practice** Royal Institute of British Architects, membership no. 12371865, office no. 3286360
since 2007	**Registered architect at the ARB** Architects Registration Board, UK, registration no. 072096H
since 2003	**Registered architect ('Freier Architekt') at the Chamber of German Architects** Architektenkammer Baden-Württemberg - AKBW, Germany, registration no. 087294
1998	**Postgraduate diploma in conceptual architectural design** Staatliche Hochschule für Bildende Künste - Städelschule, Frankfurt, Germany
1994	**Diploma in architecture** Fachhochschule Karlsruhe - University of Applied Sciences, Karlsruhe, Germany

1988 **Certificate in morse code and type-writing telegraphy**
Marinefernmeldeschule Flensburg-Mürwick, Germany
1987 **Abitur (A-level, mathematics, history, German language and religion)**
Kurpfalz-Gymnasium and Institut Sigmund, Schriesheim, Germany

EDUCATION

10/96 - 11/98 **Staatliche Hochschule für Bildende Künste - Städelschule, Frankfurt, Germany**
Postgraduate diploma under Enric Miralles, Peter Cook, Wilfried Wang, Mark Wigley, Cecil Balmond and Stan Allen
01/98 - 05/98 **SCI-Arc - Southern California Institute of Architecture, Los Angeles, USA**
Student exchange scholarship under Joseph Giovannini and Mike Davis
04/96 - 07/96 **Kunstakademie Düsseldorf, Düsseldorf, Germany**
Postgraduate studies under Laurids Ortner, Paul Good, Wolfram Heubach, Gerhard Merz and Gia Edzgveradze
10/94 - 03/95 **Universität Karlsruhe (TH) and Staatliche Hochschule für Gestaltung, Karlsruhe, Germany**
Guest student under Joost Meuwissen and Peter Sloterdijk
10/89 - 11/94 **Fachhochschule Karlsruhe - University of Applied Sciences, Karlsruhe, Germany**
Diploma in architecture, thesis on designing for people with disabilities
10/87 - 03/88 **Marinefernmeldeschule Eckernförde and Flensburg-Mürwick, Germany**
Compulsary military service - training in morse code and type-writing telegraphy
08/78 - 05/87 **Kurpfalz-Gymnasium and Institut Sigmund, Schriesheim, Germany**
Grammar school
08/74 - 07/78 **Strahlenberger Grundschule, Schriesheim, Germany**
Primary school

LIST OF WORKS

BUILDINGS

2013 - 2015 **A Music Room, Schriesheim, Germany**
Prefabricated timber extension of a 1950s house
2012 - 2014 **Private Residence, Wiesbaden, Germany**
Conversion of a 1970s catalogue house
2003 - 2008 **National Stadium Beijing - The Main Stadium for the Olympics 2008, Beijing, China**
Herzog & de Meuron, Basel, Switzerland and Beijing, China - architect for the roof membrane package
Schematic design, preliminary design, tender advice
2001 - 2002 **W9 - extension and conversion of a 1960s bowling centre into an offi ce building, Hamburg, Germany**
1999 + Carsten Roth Architekt, Hamburg, Germany - part project manager and construction supervisor
Architectural concept, schematic design, construction documents, tender, site coordination, documentation
1999 - 2001 **W5 - extension and conversion of a 1950s industrial building into an office building, Hamburg, Germany**
Carsten Roth Architekt, Hamburg, Germany - part project manager
Architectural concept and design, schematic design, planning application, construction documents, tender
1999 **International logistics- and fulfillment centre for Optimal, Röbel, Germany**
Carsten Roth Architekt, Hamburg, Germany - part project manager
Architectural concept, schematic design, planning application, construction documents, tender advice
1997 **Printing- and service centre for Optimal, Röbel, Germany**
Carsten Roth Architekt, Hamburg, Germany - architectural designer
Architectural concept and design, schematic design

SELECTED PROJECTS

2014 **Urban Fairground, Schriesheim, Germany**
International competition
2013 **All-in-one catalogue houses for The Wing, Cambridge, UK**
International competition
2013 **Timber House, Schriesheim, Germany**
Pre-planning application for two semi-detached hillside houses
2012 - 2013 **Cone House Alpha One, Anywhere**
Concrete house with conical library
2012 **Beaconsfield House, London, UK**
In collaboration with MPH Architects, Eaton, UK
Feasibility study for a student house in Surbiton
2012 **Zehntkeller, Schriesheim, Germany**
Facade proposal for a public wine cellar
2012 **Shophouse 2012, Georgetown, Penang, Malaysia**
Peter Karl Becher in collaboration with the AA London
Feasibility study
2012 **Portobello Pop-up Cinema, London, UK**
Design for a movable ticket booth and bar
2011 **New Economics Foundation (nef) headquarters, London, UK**
Extension and conversion study
2011 **New Bauhaus-Museum, Weimar, Germany**
International competition
2010 - 2011 **A Room for London, London, UK**
International competition, short-listed entry

2010 **Brownsea View Close, Poole, UK**
In collaboration with MPH Architects, Eaton, UK
Feasibility study for a 1960s apartment block extension and conversion

2009 + 2014 **Crystal Palace Revived, London, UK**
Proposal for a new exhibition building in Sydenham

2009 **Sustainable community, Dartford, UK**
Feasibility study for BioRegional Quintain

2009 **London Bridge 800: Inhabiting the Thames, London, UK**
International ideas competition

2009 **Private residence in Westminster, London, UK**
Exclusive conversion proposal for a Victorian penthouse

2008 **Catalogue houses for Northshore Development, Stockton-on-Tees, UK**
International competition

2008 **Floating homes, Lausitz, Germany**
International competition

2008 **Victorian Miniature, Mile End, London, UK**
Extension proposal for a Victorian house in east London

2007 **Chichén Itzá Lodge Museum, Yucatan, Mexico**
International ideas competition

2007 **Studio House, Mudau, Germany**
Design for a single-person residence

2005 - 2007 **St Pauls Way medical centre and residential high-rise buildings, London, UK**
Herzog & de Meuron, London, UK - project architect
Schematic design, planning application, construction documents, tender

2003 **Four star hotel on the Reeperbahn, Hamburg, Germany**
Carsten Roth Architekt, Hamburg, Germany - project architect
Architectural concept and design

2003 **Chamber of Commerce: A House in the House, Hamburg, Germany**
Carsten Roth Architekt, Hamburg, Germany - project architect
Architectural concept and design (competition)

1999 + 2003 **Glass façade for a commercial and office building on the Colonnaden, Hamburg, Germany**
Carsten Roth Architekt, Hamburg, Germany
Architectural concept and design

1999 **Office building complex Medienpool Waterloohain, Hamburg, Germany**
Carsten Roth Architekt, Hamburg, Germany - project architect
Master plan, architectural concept and design, schematic design, outline planning application

1998 + 2010 **Central station Frankfurt extension and megastructure (diploma project), Frankfurt, Germany**
Staatliche Hochschule für Bildende Künste - Städelschule, Frankfurt, Germany
Tutors: Enric Miralles, Peter Cook. Critics: Luis Mansilla, CJ Lim, Charles Walker, Mark Wigley, Simon Herron

1998 + 2003 **The Museum of Modern Art extension and renovation, New York City, USA**
SCI-Arc - The Southern California Institute of Architecture, Los Angeles, USA
Tutor: Joseph Giovannini. Critics: Christophe Cornubert, Michael Rotondi, Steve Diskin, Fred Fisher, Jay Vanos, Dagmar Richter, Bill McDonald, Shulan Kolotan, Michele Saee, Tim Benson, Kevin Collins, Mehrdad Yazdani

1997 **International meeting centre St Nikolai Memorial, Hamburg, Germany**
Carsten Roth Architekt, Hamburg, Germany - project architect
Architectural concept and design (competition)

1997 **Concert Hall Helsingborg - a transscription of Sven Markelius' entrance lobby, Helsingborg, Sweden**
Staatliche Hochschule für Bildende Künste - Städelschule, Frankfurt, Germany
Tutor: Enric Miralles. Critics: Peter Smithson, CJ Lim, Josep Mias, Cathreen Spellman, Stephen Gage

1997 **Highway megastructure, Barcelona, Spain**
Staatliche Hochschule für Bildende Künste - Städelschule, Frankfurt, Germany
Tutors: Peter Cook, Stan Allen. Critics: Jesse Reiser, Christine Hawley

1995 **The Vertical Village - a 410m skyscraper, Amsterdam, The Netherlands**
Universität Karlsruhe (TH), Karlsruhe, Germany
In collaboration with Thomas Schinko & Michael Soor. Tutors: Joost Meuwissen, Jürgen Kahl. Critic: Rob van Gool

1994 **Institute for lighting research (diploma project), Karlsruhe, Germany**
Fachhochschule Karlsruhe - University of Applied Science, Karlsruhe, Germany
Tutor: Rudolf Kleine

ACADEMIC PAPERS

1998 **Minimal Architecture: An approach to the Critical Aspects of an 'Architecture of the Less' (diploma thesis)**
Staatliche Hochschule für Bildende Künste - Städelschule, Frankfurt, Germany
Advisor: Mark Wigley

1997 **Notes on the Contemporary Metropolis: A Synoptical Walk through Problems of European and US American Cities**
Staatliche Hochschule für Bildende Künste - Städelschule, Frankfurt, Germany
Advisor: Manuel Cuadra

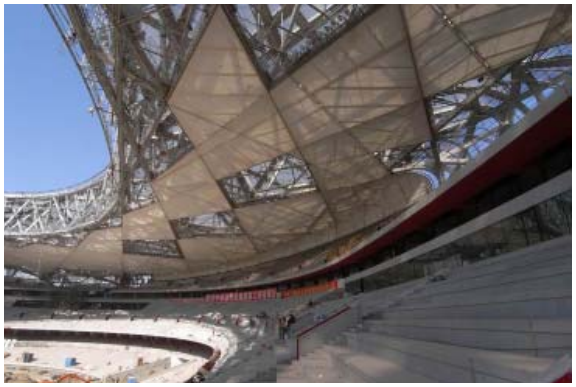
1997 **A Sociocritical Interpretation of the Genesis of a 'Human Culture of Natural Uncoupling'. An Attempt**
Staatliche Hochschule für Bildende Künste - Städelschule, Frankfurt, Germany
Advisor: Wilfried Wang

Image: Herzog & de Meuron

St Pauls Way, Poplar, London, UK
Medical Centre with highrise buildings for 36 flats

Architect:	Herzog & de Meuron (UK) Ltd
Job description:	Project Architect
Job duration:	2005 - 2007
Project phases:	Design, planning application, construction documents, tender
Client:	Poplar Harca
Contract value:	£14m

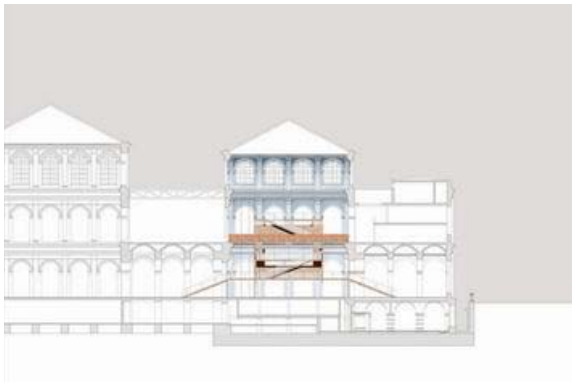
Photograph: Liu Peng



Photograph: Herzog & de Meuron

National Stadium Beijing, China
The Main Stadium for the Olympics 2008

Architect:	Herzog & de Meuron, Basel & Beijing
Job description:	Architect for the roof membranes package
Job duration:	2003 - 2005
Project phases:	Schematic design, preliminary design, tender advice
Client:	National Stadium Corporation Ltd
Contract value:	$24m (membrane package)



Images: Carsten Roth Architekt

Chamber of Commerce, Hamburg, Germany
'Haus im Haus' competition

Architect:	Carsten Roth Architekt, Hamburg
Job description:	Project Architect
Job duration:	2003
Project phases:	Competition
Client:	Handelskammer Hamburg

Photographs: Klaus Frahm/artur

W9 - Office Building, Hamburg, Germany
Extension and conversion of a 1960s bowling centre

Architect:	Carsten Roth Architekt, Hamburg
Job description:	Part Project & Site Manager
Job duration:	2001 - 2002
Project phases:	Masterplan, concept, design, construction documents, tender, site coordination, documentation
Client:	Fischer-Appelt Kommunikation
Contract value:	€7.5m

Photographs: Klaus Frahm/artur

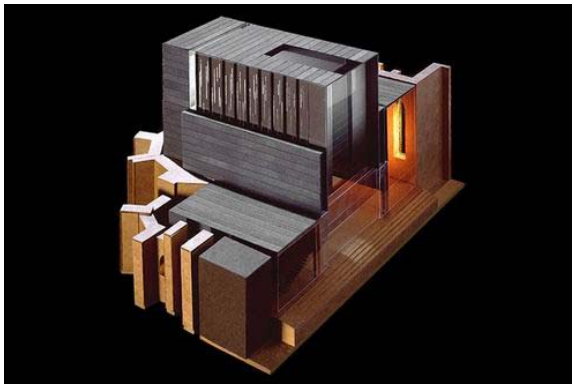
W5 - Office Building, Hamburg, Germany
Extension and conversion of a 1950s industrial building

Architect:	Carsten Roth Architekt, Hamburg
Job description:	Part Project Manager
Job duration:	1999 - 2001
Project phases:	Masterplan, concept, design, planning application, construction documents, tender, site visits
Client:	Fischer-Appelt Kommunikation
Contract value:	€7.5m

Photographs: Klaus Frahm/artur

Logistics and Fulfillment Centre, Röbel, Germany
Two storey industrial building with high bay racking

Architect:	Carsten Roth Architekt, Hamburg
Job description:	Part Project Manager
Job duration:	1999 - 2001
Project phases:	Concept, design, planning application, construction documents, tender advice, site visits
Client:	Optimal Media Production
Contract value:	€14m



Photographs: Christoph Gebler

St Nikolai Memorial, Hamburg, Germany
International meeting centre

Architect:	Carsten Roth Architekt, Hamburg
Job description:	Project Architect
Job duration:	1997
Project phases:	Competition
Client:	Gemeinde St Nikolai

Photographs: Klaus Frahm/artur

Printing Factory and Service Centre, Röbel, Germany
Mixed-use industrial building

Architect:	Carsten Roth Architekt, Hamburg
Job description:	Architectural Designer
Job duration:	1997
Project phases:	Concept, design
Client:	Optimal Media Production
Contract value:	€7m