Gabby Shawcross

Output 1:
Portfolio of Interactive Installations:

- Lucy in Disguise, 2010 (built)
- Bike Line, 2011 (un-built)
- East West House, 2011 (built)
- Showtime, W Hotel, London, 2011 (built)
- London Dresser, 2012 (built)
- Fast, Faster, Fastest, Olympic Park Bridge, 2011 (un-built)
- Locomotion, 2012 (un-built)
- Bloomberg Visitor Experience Installations, 2012 (built).

Abstract

Gabby Shawcross is one of a new generation of architects exploring time-based approaches to place-making and investigating how time-based media might be incorporated into architectural design and experience. The earlier projects in this portfolio were produced while Shawcross was lead designer at Jason Bruges Studio, the later ones independently as a partner of Studio of Cinematic Architecture (SOCA). All are playful experiments at the intersection of architecture, interactive design and the moving image that explore the following research questions: How can architectural environments convey an embodied experience of time? How can cinematic concepts be used in architectural design and place-making? What technologies are appropriate to building performative spatial experiences into everyday life and urban space? While embracing new technological possibilities, Shawcross questions the dominance of high technology in time-based architecture, instead looking for appropriate technological solutions to build interactive spatial experiences into urban spaces. Two of the projects in the portfolio were commissioned for the London 2012 Olympic Games, 'London Dresser' as one of the Mayor of London's Olympic Wonder Installations. It had high visibility and impact during the summer of 2012 and was shortlisted for the 2013 AJ Small projects Award in the temporary installation category. 'Bike Line' was placed second in the 2011 Architecture Foundation Better Bankside Bike Shed competition. The most recently completed project, for the Bloomberg Corporation 's New York office, saw Shawcross extend his practice into a corporate, high-end US context.

Key Words

Interactive design, cinematography, time-based media, urban space

Context

Gabby Shawcross is a prizewinning architect and interactive installation artist with a background in set design and production. He is one of a new generation of architects exploring time-based approaches to place making and investigating how time-based media might be incorporated into architectural design and experience. Shawcross worked as a lead designer for Jason Bruges Studio for seven years before he and his partner co-founded Studio of Cinematic Architecture (SOCA) in 2010. Using architectural design, filmmaking, lighting and other cutting edge technologies, SOCA creates visually rich environments that respond to natural cycles, history, memory and movement. These transform everyday environments into cinematic experiences and people and buildings into performers and spectators. To these ends, Shawcross deploys a range of technologies in his work, from traditional modes of architectural production to the digital and cinematic. All use cinematic techniques to capture the ephemeral qualities of place and the movement of people in their environment. His work is indebted to the early work of Diller and Scorfidio (such as 'Overheard' or 'Slow House') and extends questions addressed by Howeler + Yoon Architecture or Future Cities Lab in the USA and by Jason Bruges Studio and United Visual Artists in this country. Like these practices, but more versatile in terms of technology, Shawcross operates at the intersection of architecture, interactive design and the moving image, and sees the media and its effects as palpable elements of architectural speculation. This acknowledges the legacy of Robert Venturi and Denise Scott Brown's advocacy of the media, the image and surface as primary elements of architectural meaning and experience, but interprets these ideas for a digital age. This output comprises a portfolio of work undertaken by Shawcross since 2008, either as lead designer during his time at Jason Bruges Studio or independently as a partner at SOCA, all of which explore questions of the embodied experience of time in architecture and urban space.

General Description

his portfolio comprises eight projects, all of which use interactive cinematic techniques to capture the ephemeral qualities of place and the movement of people. The first four use traditional non-digital material technologies to do this, the second four use digital technology and feedback loops.

'Lucy in Disguise,' was commissioned and installed for the launch of a pop-up vintage store in Covent Garden in 2010 (fig.01). It comprises a black concertina steel sheet (fig.02d) installed in a shop window. This was laser cut with two halftone images, which, from one side appeared as an open eye (fig.02b), from the other as a closed one (fig.02c). Walking past caused the screen to appear to wink, responding flirtatiously the movement of passers by and inviting their interest (v.01). 'Bike Line,' 2011 (fig.03), was a concept for a bicycle shelter for a competition that aimed to respond to the increasing desire-ability of cycling in London. While remaining un-built, it came second in the Architecture Foundation's Better Bankside Bike Shed Competition. The proposal combined an iconic line drawing of a bicycle and a shed to create a hybrid bicycle stand and roof structure (fig.04). A painted pink line on the ground led cyclists to secure their bikes on stands that were formed as extensions of this line. The figure of the bicycle was only partially present in any single bicycle stand (fig.06), but from one point of view at each end, this line combined to form an identifiable bicycle/shed icon (fig.08). This manipulated conventional construction materials through the cinematographic devices of framing and perspective. 'East West House,' also 2011, was a staircase linking the studio and living space of artist Shezad Dawood in Bow, East London (fig.09). Encapsulating his work, which explores relationships between Eastern and Western culture, the balustrade of the staircase morphs from being an eastern perforated screen below to a conventional western balustrade above (v.02). This is achieved through the simple device of the sizes and spacings of digital cut-outs in the vertical balustrade surface. As one moves up and down the staircase, one's movement creates a smooth visual transition between east and west, expressed in the balustrade motif (fig.10). The final project that makes use of conventional fabrication techniques is 'London Dresser,' a large-scale cabinet installed in the Shell Centre forecourt on Belvedere Rd in London during the 2012 Olympic Games (fig.19). It was commissioned by the Mayor of London as one of the 'Olympic Wonder Installations,' to transform London's public spaces during the games. The cabinet housed a coffee shop and displayed miniatures of the buildings that dominate London's skyline, fabricated as hand-crafted, red, wooden seats (fig.11). By day, the cabinet opened and the seats were arranged to create a social gathering space and a skyline view (fig.12b). The cabinet became a belvedere that framed the real skyline that the seats miniatured, and captured it changing over the course of the day. By night, the buildings were placed inside the cabinet to create an interactive backdrop to the street (fig.12a), where they were momentarily illuminated as people passed by, got close and peered in. This was captured on film throughout the Olympic Games, the film serving as a form of

post-occupancy research to inform subsequent projects (v.04). London Dresser was designed in collaboration with University of Westminster students in Shawcross' diploma unit. It is planned that the seats and structure will be relocated to a Hackney state school.

The next four projects all rely far more directly on digital technology. The first, 'Showtime,' was a façade installation on W Hotel, Leicester Square, London, completed in 2011 during Shawcross' time at Jason Bruges Studio (fig.24a). The project refers to a long history, translating 19th Century panoramas (Burford's Panorama and Wyld's Globe) into a contemporary idiom (fig.23a-c). It works by capturing the panorama of the ever-changing lights and colours of the buildings around Leicester Square via eight cameras mounted on its roof. This captured content is streamed during the hours of darkness in short performances across 600 vertically mounted LED's on the building's façade, diffused through specially designed fritted glass. The resulting lighting performances are unique, responding to seasonal change and special events around the building such as film festivals, premiers or cultural events, such as the Chinese New Year or World Aids Day (fig.24b.c.d). This reflects and celebrates the unique character of the location, which changes dramatically from day to night and season to season and in response to cultural events. Showtime was London's first permanent, responsive, illuminated façade and public artwork.
'Fast, Faster, Fastest,' also commissioned in 2011 following a competition and as part of the legacy of the Olympic Games, was led by Shawcross from concept through to detail design and prototyping during his time at Jason Bruges Studio. It is an interactive light-based artwork that challenges locals to race against the speed of their sporting heroes on the main pedestrian bridge to the Olympic Stadium (v.06). After pressing a button, participants will take their marks before they race against a sequence of lights that runs across the handrail of the bridge at the speed of the 100m record holder.
In similar vein, Shawcross, now as SOCA, was commissioned by the Wigan Council to design 'Locomotion,' a public artwork on the entrance plaza to the Leigh Sports Village stadium. Two sculptural benches flank the entrance plaza, forming a transverse stage and providing a place to sit and watch others moving past (fig.29a). It was the first of the projects in this portfolio to make use of film as a design tool. Students from the local college took part in the creation of a short film that tracked their movement as they ran towards the stadium (fig.28a,b, v.07). The trajectory of their feet and knees informed the size, shape and animation of the benches (fig.29a,b). These will be dynamically illuminated to recreate the running motion toward the stadium recorded on film when visitors pass through, triggering embedded infrared sensors (fig.30a,b).
Finally, the 'Bloomberg Visitor Experience Installations,' built in 2012 are interactive light sculptures and pieces of digital furniture commissioned by Bloomberg for the entrance to their central New York Office (fig.32). Two unique experiences create an engaging first impression and invite visitors to tap into the world of Bloomberg's living network. The first, 'The Hub' is an interactive information table dispensing a continual flow of information

about the company (v.09). An innovative and intuitive multi-touch table top invites visitors to explore the culture and infrastructure behind the scenes of Bloomberg and its delivery of real time data, news and analytics (fig.34a). An array of illuminated legs support the table top and change colour in response to the interactive display above (fig.34b). Bright, diffuse and coloured light illuminates the space with an ever-changing glow. 'The Scroll' is a digital information display that creates a captivating first impression (fig.33d). Data appears to emerge from the fabric of the building itself and shine through an array of colour-changing rods into a vertical surface of dynamic Bloomberg information. A patchwork of insights and colourful images rise up the surface, as the synchronised glowing rods illuminate their surroundings (fig.33f).

Research Questions

The projects in this output explore four primary interrelated questions:

1) How can architectural environments convey an embodied experience of time?
2) How can cinematic concepts be used in architectural design and place-making?
3) What technologies are appropriate to building performative spatial experiences into everyday life and urban space?
4) How can time-based information be conveyed interactively?

Aims and Objectives

1) To construct architectural environments which convey embodied experiences of time

One of Shawcross' primary design objectives is to convey embodied experiences of time in his architecture; in other words, to make environments that register, visualise or responded to changes in the position of the body or bodies over time. His aim is to create environments where meaning arises through reciprocities between movement, image and experience. This is evident in a number of the projects included in this output. In 'Lucy in Disguise' for instance, two different images of an eye, one open and one closed, are incised into the parallel sides of a concertina steel plate in a shop window (fig.012d). As people move past it, it captures their attention by cheekily appearing to blink (fig.02a, v.01). In 'Bike Line', movement assembles a coherent image of a bicycle from one point of view, only to dissemble and fragment it from others (fig.05-08). Movement up or down the 'East West House' staircase transforms a handrail from one associated with western architectural traditions to one associated with eastern traditions, re-enacting the cultural problematic of the artist in whose live/work space it is built (v.02). In 'London Dresser', spotlights installed inside the dresser are activated as people move close to them, lighting up the red miniatures of iconic London buildings (v.04). During the day, these miniatures are moved, assembled and reassembled in real time in response to social dynamics (fig.21). In the 'Fast, Faster, Fastest,' on the other hand, digital technology activates a laser moving at the speed of a 2012 Olympic runner along the bridge that crosses the canal to the Olympic site (v.06). People are given the opportunity to pit their running speed against their favourite Olympic hero/in. In this way the memory of the Olympic Games is corporeally performed and re-enacted. In 'Locomotion,' running movements, recorded on film as part of the design process, informed the size and shape of benches and are re-enacted as stadium visitors walk past them, triggering embedded infrared sensors (fig.30a,b). These playful, funny, light-hearted insertions into everyday, leisure or festival spaces, all create experientially rich visual environments and embodied experiences of time by setting up reciprocity and feedback between movement, image and environment. While utilising vastly different technologies, they are all designed to interact with moving bodies over time, thereby embedding temporally accessible information into spatial experience.

2) To investigate time based approaches to place making

Shawcross' projects not only aim to produce time-embodied experiences, but also to investigate time based approaches to design and place making. He explores ways of embedding temporal change, history, memory and story telling into place. He does this through use of time-based media and cinematic techniques and technologies that transform everyday environments into narrative, cinematic experiences. In 'Locomotion', as has been mentioned, film is used as a research tool; running bodies were filmed and their movement calibrated and translated into the shapes of benches, retaining their memory, albeit in abstract lines (fig.28a,b). The location

of the viewer or viewpoint, a key cinematic device, is used in 'Lucy in Disguise', 'Bike Line' and 'East West House', where the moving body acts like a camera, unravelling spatial narratives in real time (fig.08). In 'Showtime' on the other hand, the Leicester Square building itself is transformed into a camera, filming the panorama of the London skyline during the day and streaming it across the façade of the building at night (fig.24a-d). This transforms the façade into a screen spliced with images of the ever-changing meteorological conditions of the building's environs. Similar ideas animate 'London Dresser', except here the belvedere cinematically contains the skyline as a framed view, animated by passing clouds, rain, sun, night and day etc. Frame, viewpoint, splicing, narrative - these are all cinematic concepts drawn from his experience in film based media that Shawcross deploys to explore time as integral to the making and experience of place.

3) To use appropriate technologies to build performative spatial experiences into everyday life and urban space.

Shawcross works in a field easily dominated by technological fetishism. His work is ideas driven rather than technology driven. This is what sets him part from his contemporaries. His approach to design and place making requires that he stay constantly in touch with lighting and product designers, creative programmers, electronic engineers and specialist fabricators, in order to know what is possible in an ever-changing field. However, given the centrality of embodied experience in his work, Shawcross is as comfortable working with traditional analogue technology (fig.13-15, v03) as he is with high-end electronics and digital technologies (fig.33a,b; fig.30a,b). This is seen in the range of technologies employed in this portfolio, which make use of everything from cutting edge digital technology ('Showtime,' 'Fast, Faster, Fastest,' 'Bloomberg Visitors Experience Installations,') to digital fabrication techniques ('Lucy in Disguise,' 'East West House,) to hand crafted techniques ('London Dresser'). He searches for technologically appropriate solutions to build performative spatial experiences into everyday life and urban space within real constraints of budget, client and context.

4) To convey time-based information interactively

A key concern of Shawcross' work is how interactions between peoples' bodies and their environments can convey time-based information. The two 'Bloomberg Visitors Experience installations' are the most technologically sophisticated examples of this, in that through touch a continuous flow of information about the Bloomberg company is activated, triggering further performative lighting displays (v.09). But both 'Locomotion' and 'Fast, Faster, Fastest' convey information about movement and speed through triggers activated by further bodily movements (v.06 fig.30a,b) and the stair of 'East West House' conveys cultural information that would be otherwise inaccessible, through movement.

Research Methods

In this work, Shawcross draws on his experience in set design and production and in film based media to capture the ephemeral qualities of places and the movement of people in their environments. He operates at the intersection of architecture, interactive design and the moving image and draws on cinematic concepts, methods and techniques as well as modes of fabrication common to production design to investigate his key research questions. Design processes usually begin with story-boarding scenarios for interaction and experience (fig.25, fig27), followed by making films to explore the time-based qualities of spaces and their use (v.06, v.07). He uses this to test interaction scenarios and to present ideas to clients and collaborators throughout the design process. From concept through to detail design, videographic surveys of sites are digitally composited with 3D design proposals to test ideas. Design development usually includes the building of prototypes (fig.31a,b) and installations are often built and installed by Shawcross himself or in close consultation or collaboration with lighting and product designers, creative programmers, electronic engineers and specialist fabricators (v.03). His work integrates innovative sensing and display technologies meaning staying on constant touch with specialists in order to know what is possible in an ever changing field. Once a project completed, Shawcross always observes how people interact with or occupy it, to feed back into the installation itself, or into future work (v.04). One last point about research method is that Shawcross frequently makes use of competitions and teaching studios as research tools and ways of testing ideas.

Dissemination / Impact

Two of the projects in this portfolio ('London Dresser' and 'Fast, Faster, Fastest') were commissioned for the London 2012 Olympic Games. 'London Dresser' was one of the Mayor of London's Olympic Wonder Installations and had high visibility and impact during the summer of 2012. 'Bike Line' was placed second in the 2011 Architecture Foundation's Better Bankside Bike Shed competition. 'The London Dresser' was shortlisted for the 2013 AJ Small projects Award in the temporary installation category.

The projects are widely disseminated on websites, including those of SOCA's collaborators and been widely disseminated in the popular and architectural media including:

Bike Line

'Bankside Bikeshed competition winner announced.' *Footprint* 24 March 2011
<http://blog.emap.com/footprint/2011/03/24/bankside-bikeshed-competition-winner-announced/<

Showtime, W Hotel

'London Lights.' *wejetset*
<http://www.wejetset.com/magazine/2011/3/2/1101/london's_lights>

'Showtime installation at W London.' *Wallpaper*
< http://www.wallpaper.com/video/travel/showtime-installation-at-w-london/807220546001>

'W London Leicester Square / Jestico + Whiles.' *ArchDaily* 05 June 2011
< http://www.archdaily.com/138600/w-london-leicester-square-jestico-whiles/>

The London Dresser

'The London Dresser.' *millimetre*
<http://www.millimetre.uk.net/selected-work/art-installations/the-london-dresser/>

'The London Dresser.' *Coussens of Bexhill*
< http://www.coussenscranes.co.uk/londondresser.html>

'Video: A day in the life of the London Dresser.' *Architects Journal* 22 January 2013
<http://www.architectsjournal.co.uk/news/daily-news/video-a-day-in-the-life-of-the-london-dresser/8641551.article>

Evidence

Please note that the bulk of the evidence in this portfolio is video based. Screen shots and images have been extracted from the videos, but the reader is kindly requested to refer to the video material for evidence of the arguments put forward in the text.

Images, Screenshots and Drawings

Fig. 01 Lucy in Disguise, streetscape
Fig. 02 a - e Lucy in Disguise, in motion
Fig. 03 Bike Line, unifed 1
Fig. 04 Bike Line Detail 1
Fig. 05 Bike Line Detail 2
Fig. 06 Bike Line Detail 3
Fig. 07 Bike Line Detail 4
Fig. 08 Bike Line, unifed 2
Fig. 09 East West House stair, from below
Fig. 10 East West House stair, ground floor
Fig. 11 London Dresser in context
Fig. 12 a, b London Dresser closed and open, sketches
Fig. 13 Design Drawing, Battersea Power Station
Fig. 14 Design Drawing, City Hall
Fig. 15 Design Drawing, St Pauls Cathedral
Fig. 16 a - c Battersea power Station, City Hall and St Pauls Cathedral under construction
Fig. 17 a - d Buildings under construction
Fig. 18 a - c Dresser under construction
Fig. 19 London Dresser by day
Fig. 20 Buildings being moved out of dresser
Fig. 22 London dresser inhabited
Fig. 23 a - c Showtime Precedent Studies
Fig. 24 a - d Showtime under different lighting conditions
Fig. 25 Fast, Faster, Fastest Storyboard
Fig. 26 Locomotion Bench Rendering
Fig. 27 Locomotion design development film storyboard
Fig. 28 a,b Locomotion Screen shots, design development film
Fig. 29 a,b Locomotion Bench renders
Fig. 30 a,b Locomotion Renders of bench illumination in response to movement
Fig. 31 a,b Locomotion Bench prototype
Fig. 32 Bloomberg Corporation, New York Office
Fig. 33 a - f The Scroll
Fig. 34 a - f The Hub

Installation Videos

V.01 Lucy in Disguise
V.02 East West House Stair
V.03 The Making of the London Dresser
V.04 A Day in the Life of the London Dresser
V.05 Showtime
V.06 Fast, Faster, Fastest, Concept
V.07 Locomotion Design Development
V.08 The Scroll, Bloomberg Visitor Experience Installation
V.09 The Hub, Bloomberg Visitor Experience Installation

Please note that the bulk of the evidence in this portfolio is video based. Screen shots and images have been extracted from the videos, but the reader is kindly requested to refer to the video material for evidence of the arguments put forward in the text.

Lucy in Disguise

Fig.01 Lucy in Disguise, streetscape

Fig.02a- Lucy in Disguise, in motion

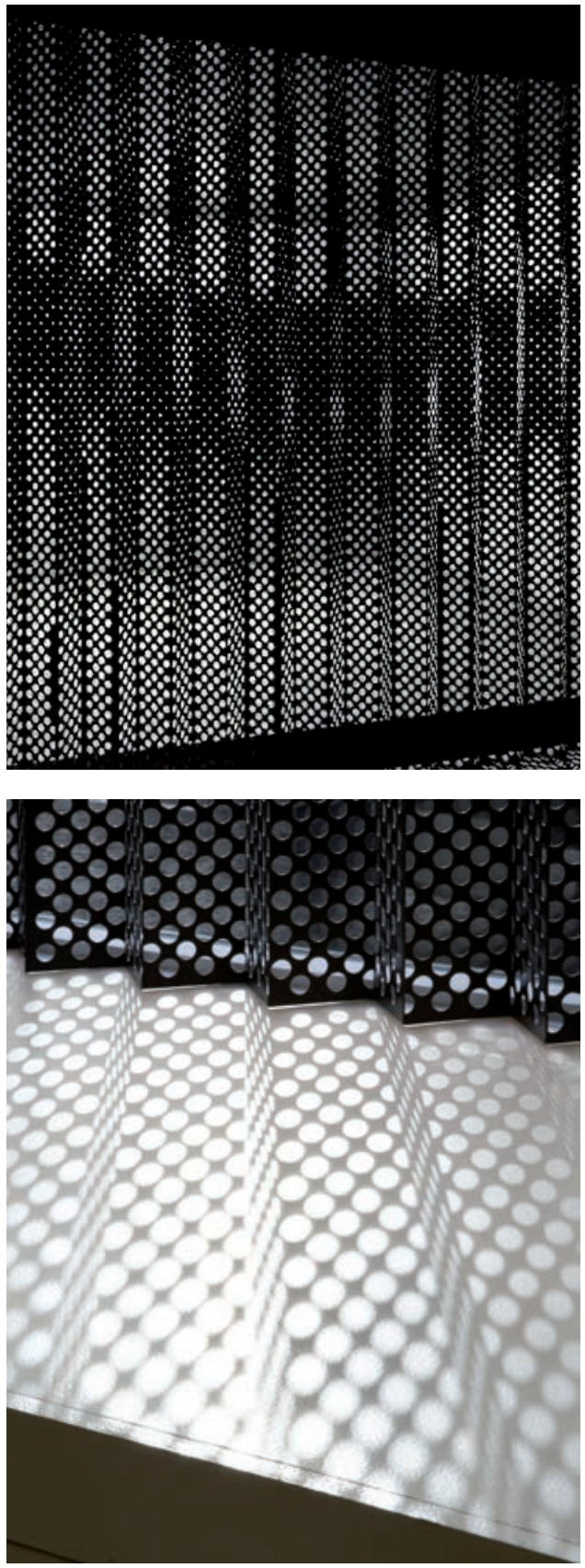
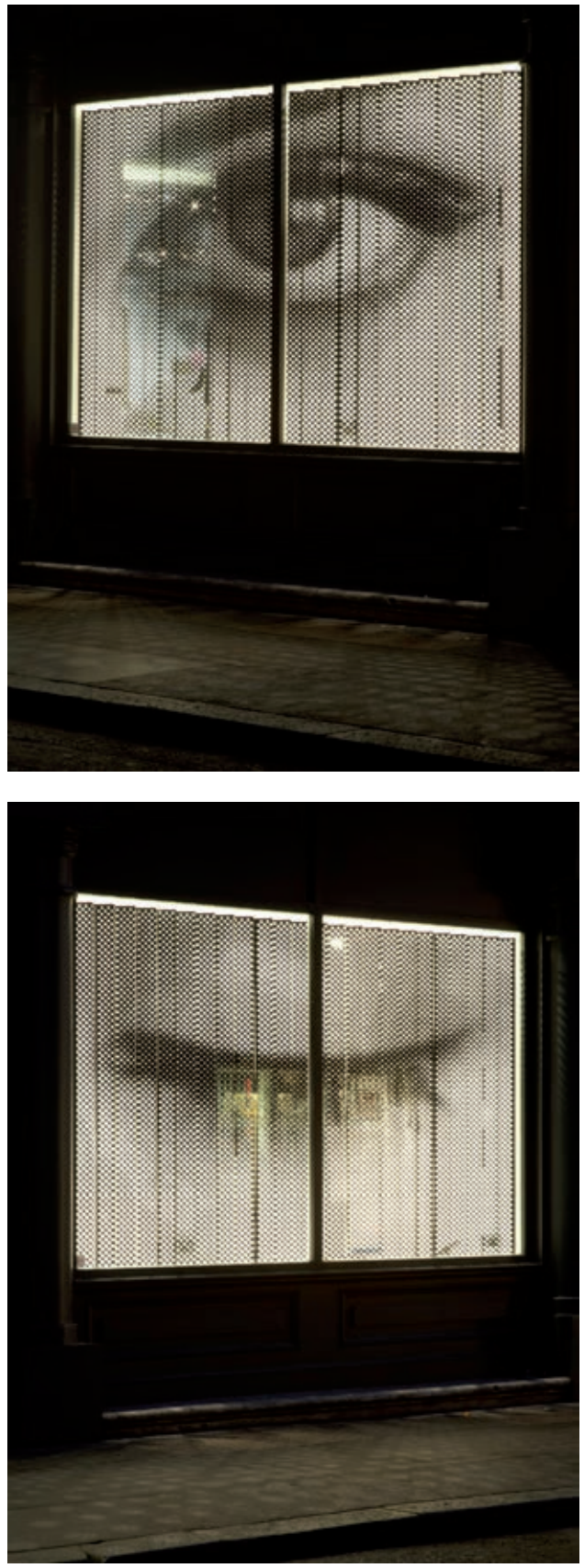



Fig.02b-02e Lucy in Disguise, in motion

Bike Line

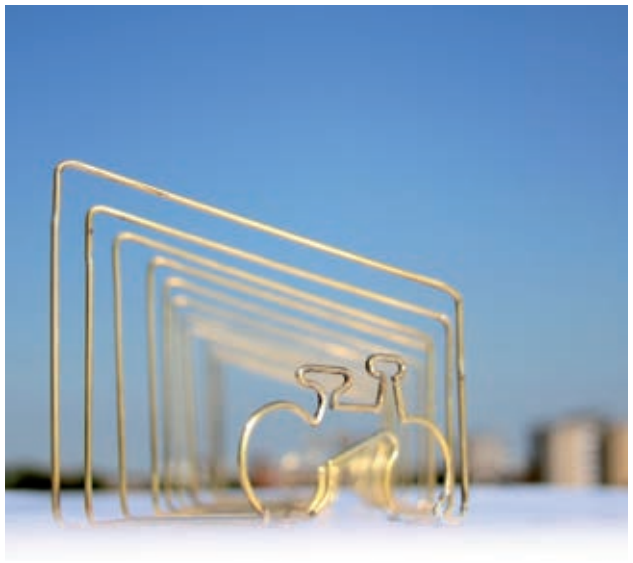


Fig.03 Bike Line, unifed 1

Fig.05 Bike Line Detail 1

Fig.04 Bike Line Detail 1

Fig.07 Bike Line Detail 1

Fig.08 Bike Line Detail 1

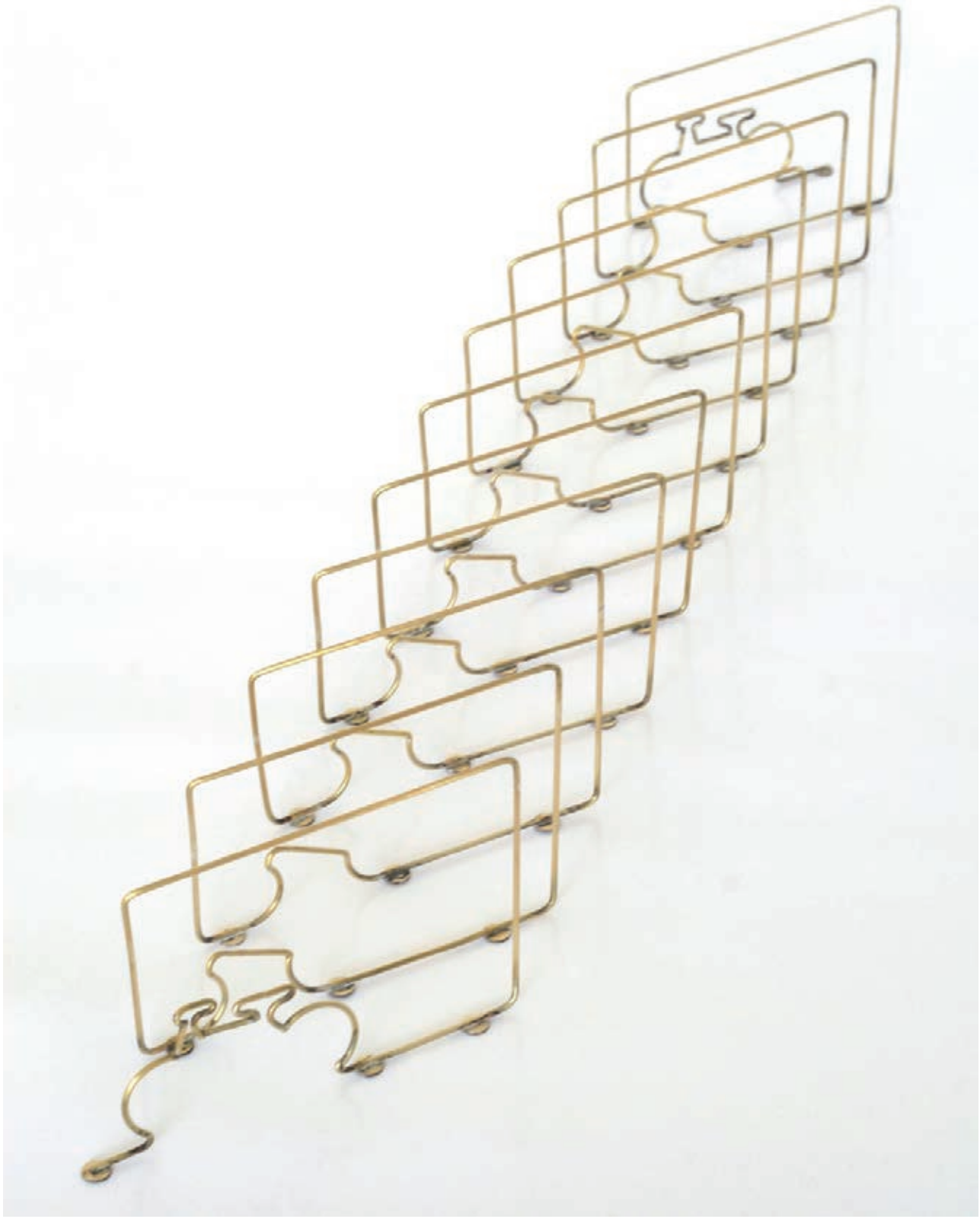


Fig.06 Bike Line Detail 1

East West House Stair

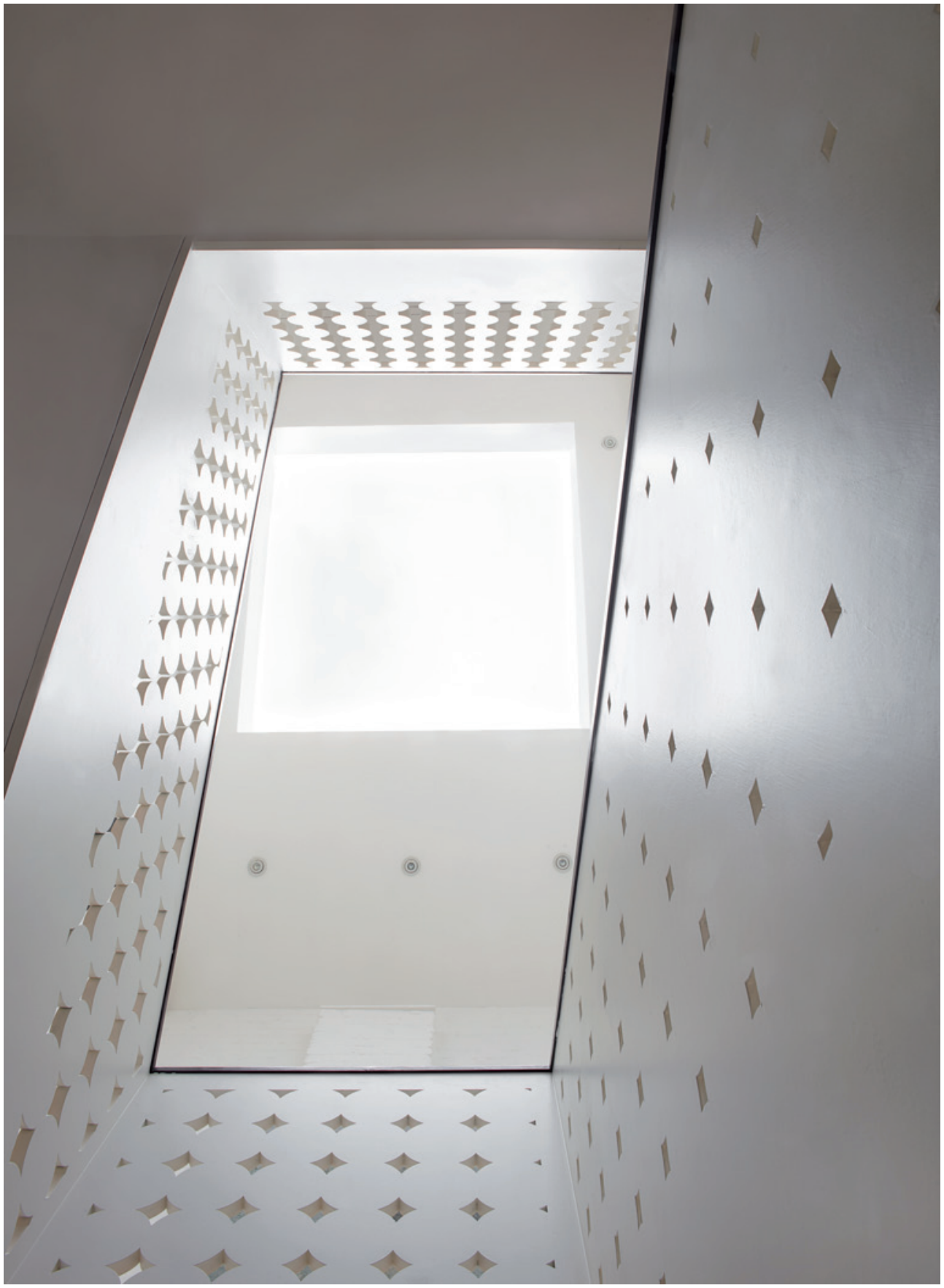


Fig.09 East West House stair, from below

Fig.10 East West House stair, ground floor

Fig.11 London Dresser in context

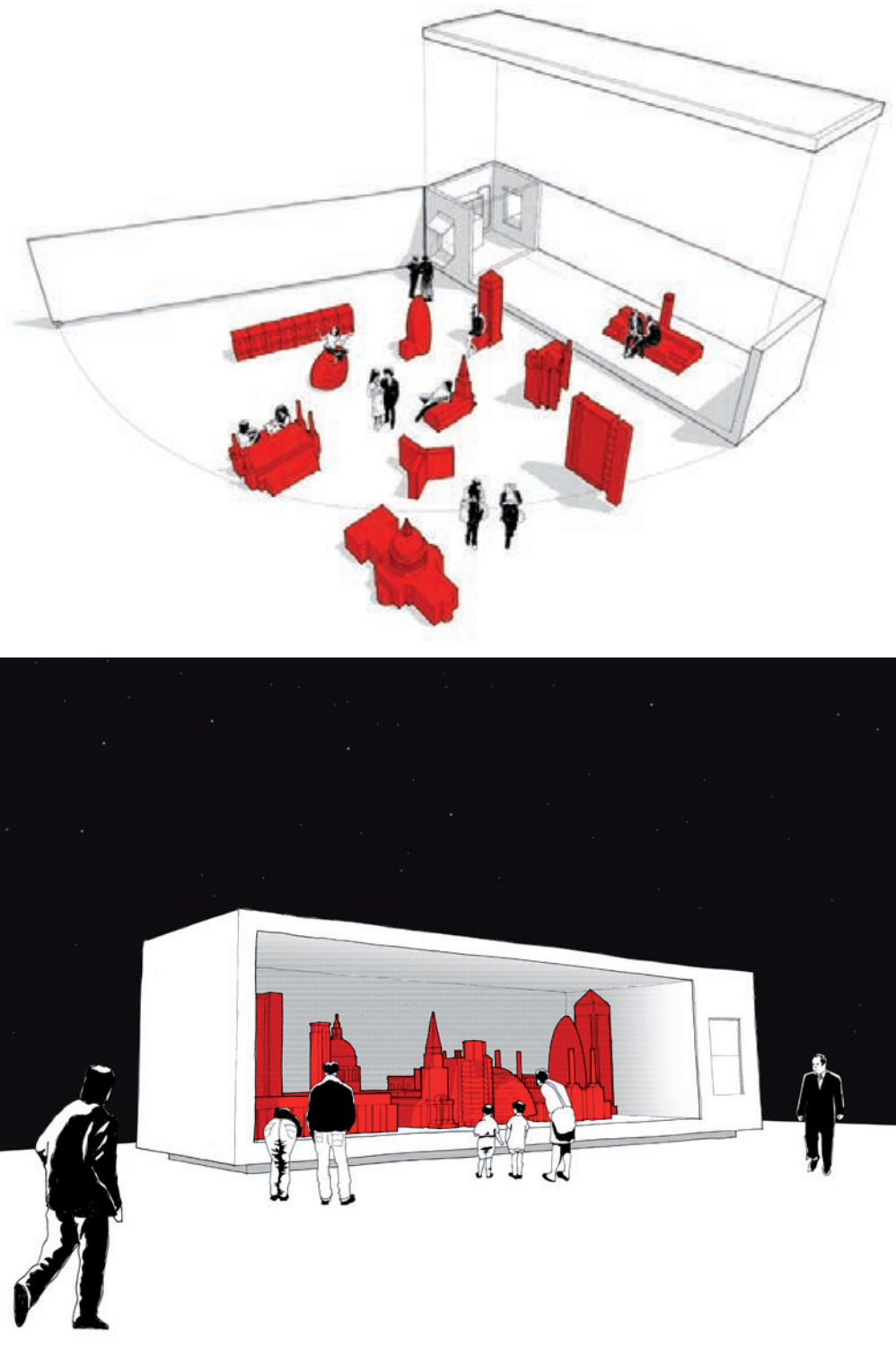


Fig.12a, 012b London Dresser closed and open, sketches

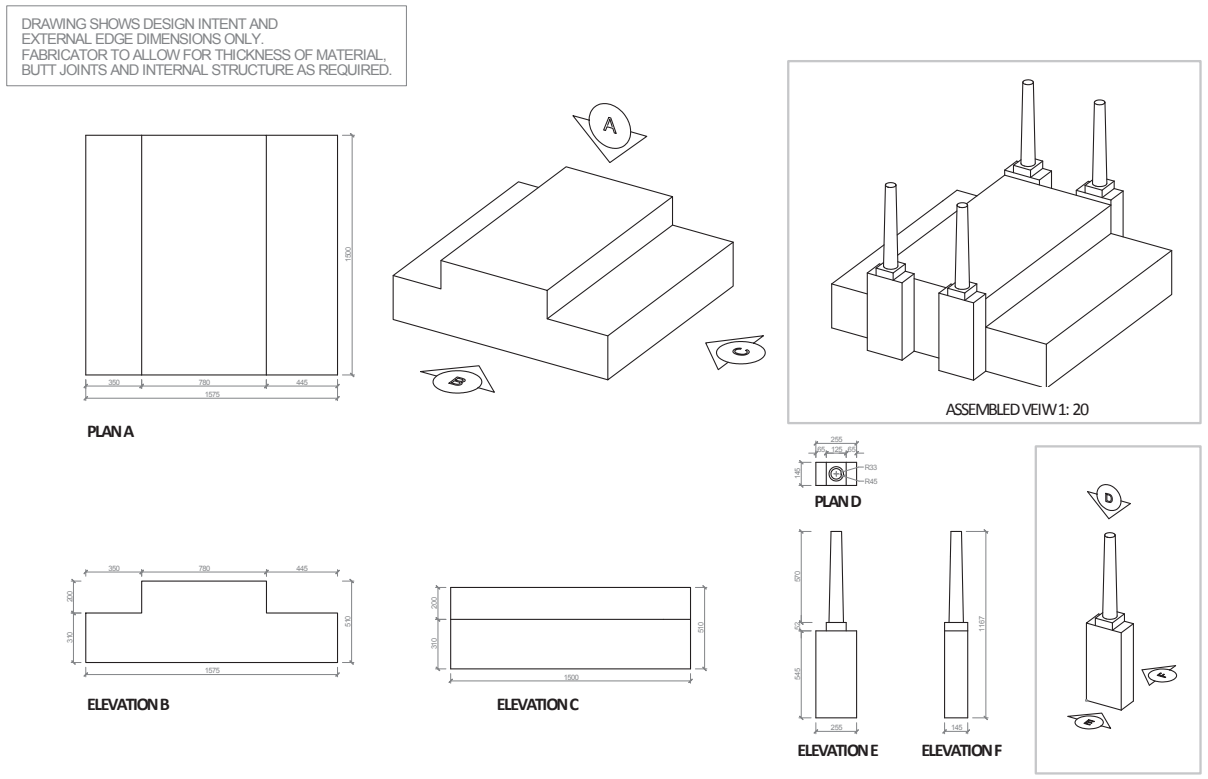


Fig.13 Design Drawing, Battersea Power Station

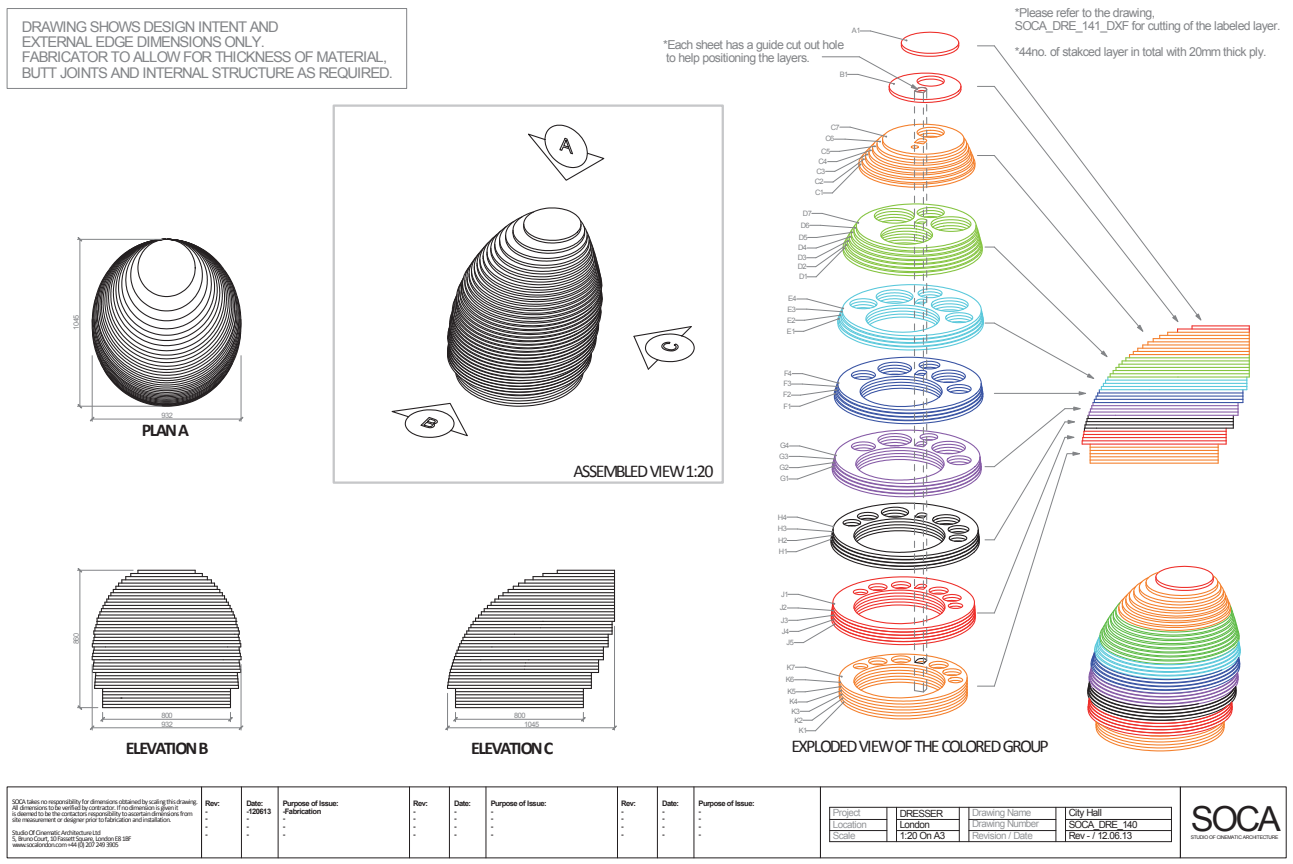


Fig.14 Design Drawing, City Hall

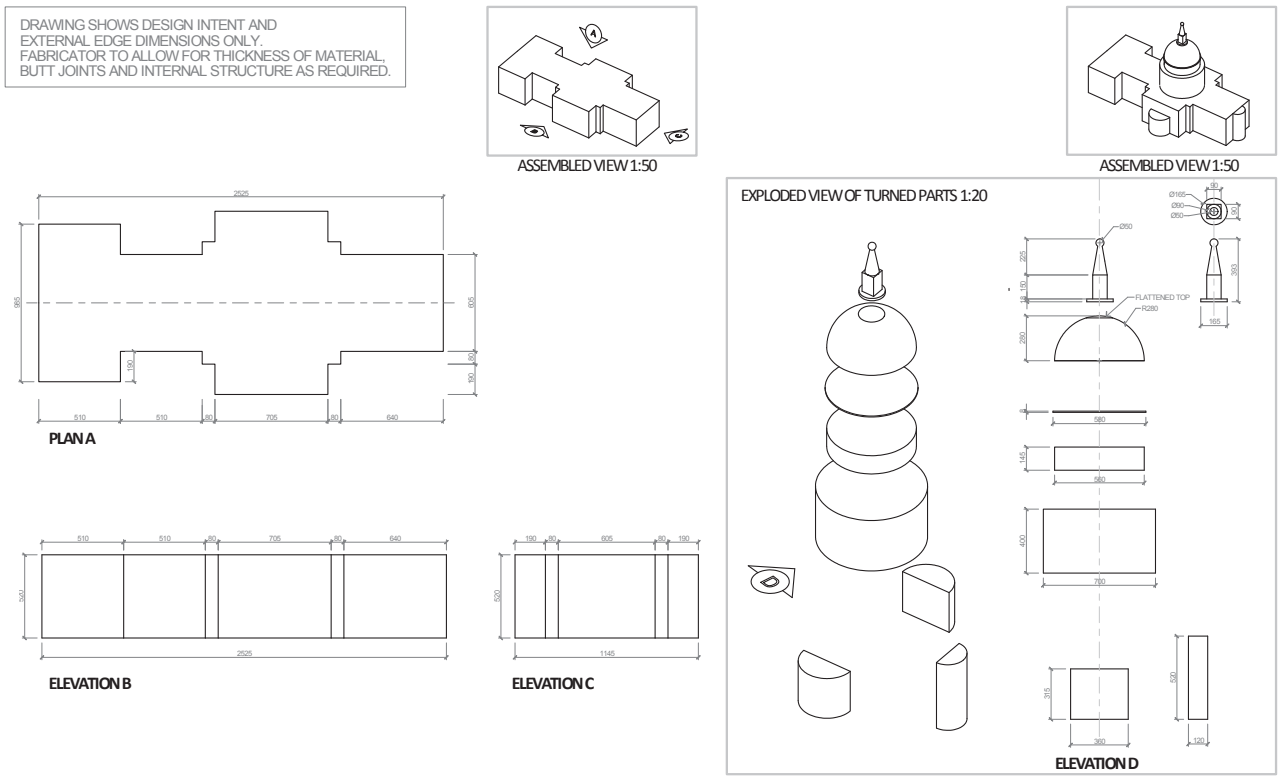


Fig.15 Design Drawing, St Pauls Cathedral

Fig.16a-c Battersea power Station, City Hall and St Pauls Cathedral under construction

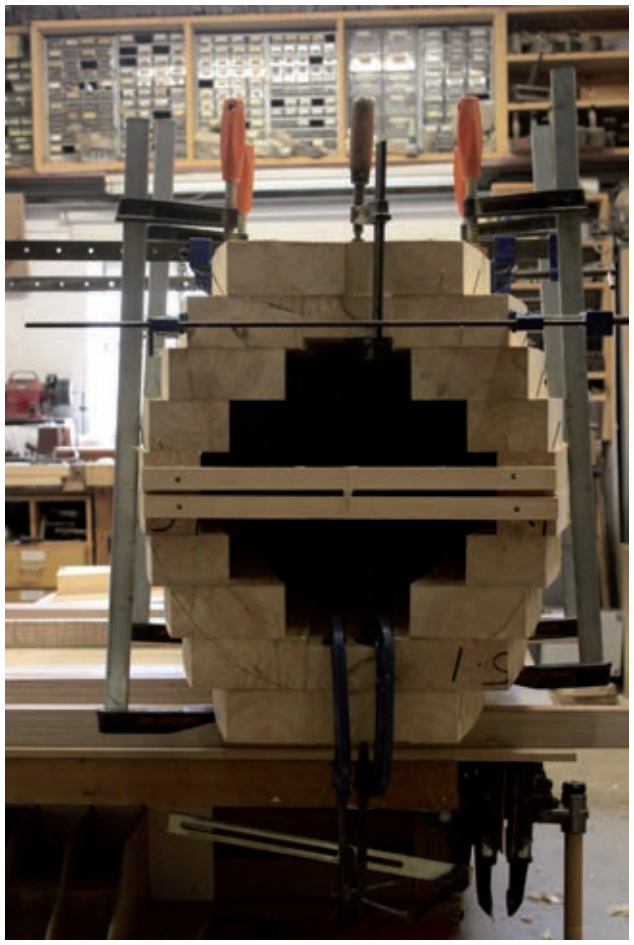


Fig.17a-d Buildings under construction

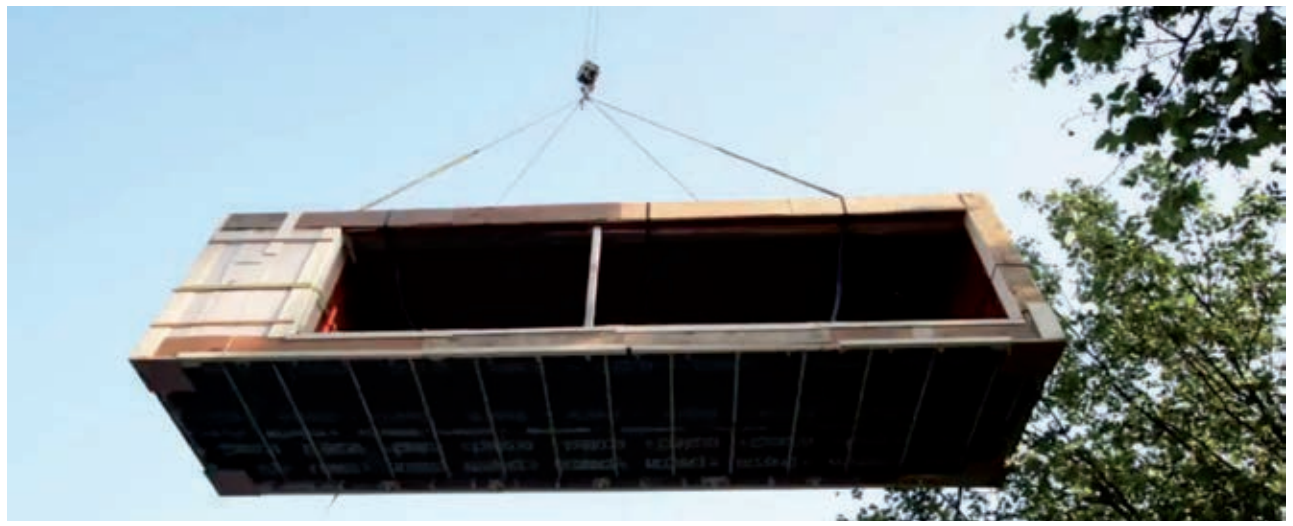


Fig.18a-c Dresser under construction

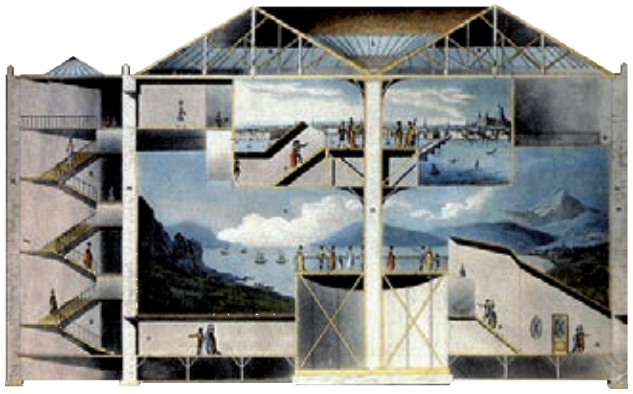
Fig.19 London Dresser by day

Fig.20 London Dresser by night

Fig.21 Buildings being moved out of dresser

Fig.22 London dresser inhabited

Showtime



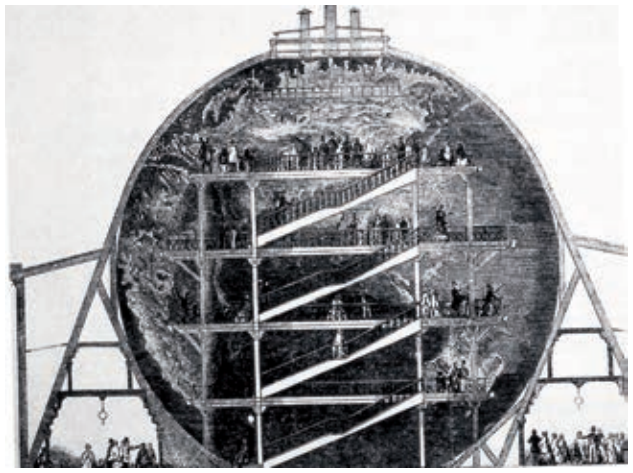


Fig.23a-c Showtime Precedent Studies

Fig. 24b-d Showtime under different lighting conditions

Fig.24a Showtime under different lighting conditions

Fig.25 Storyboard

Locomotion

Fig.26 Locomotion Bench Rendering

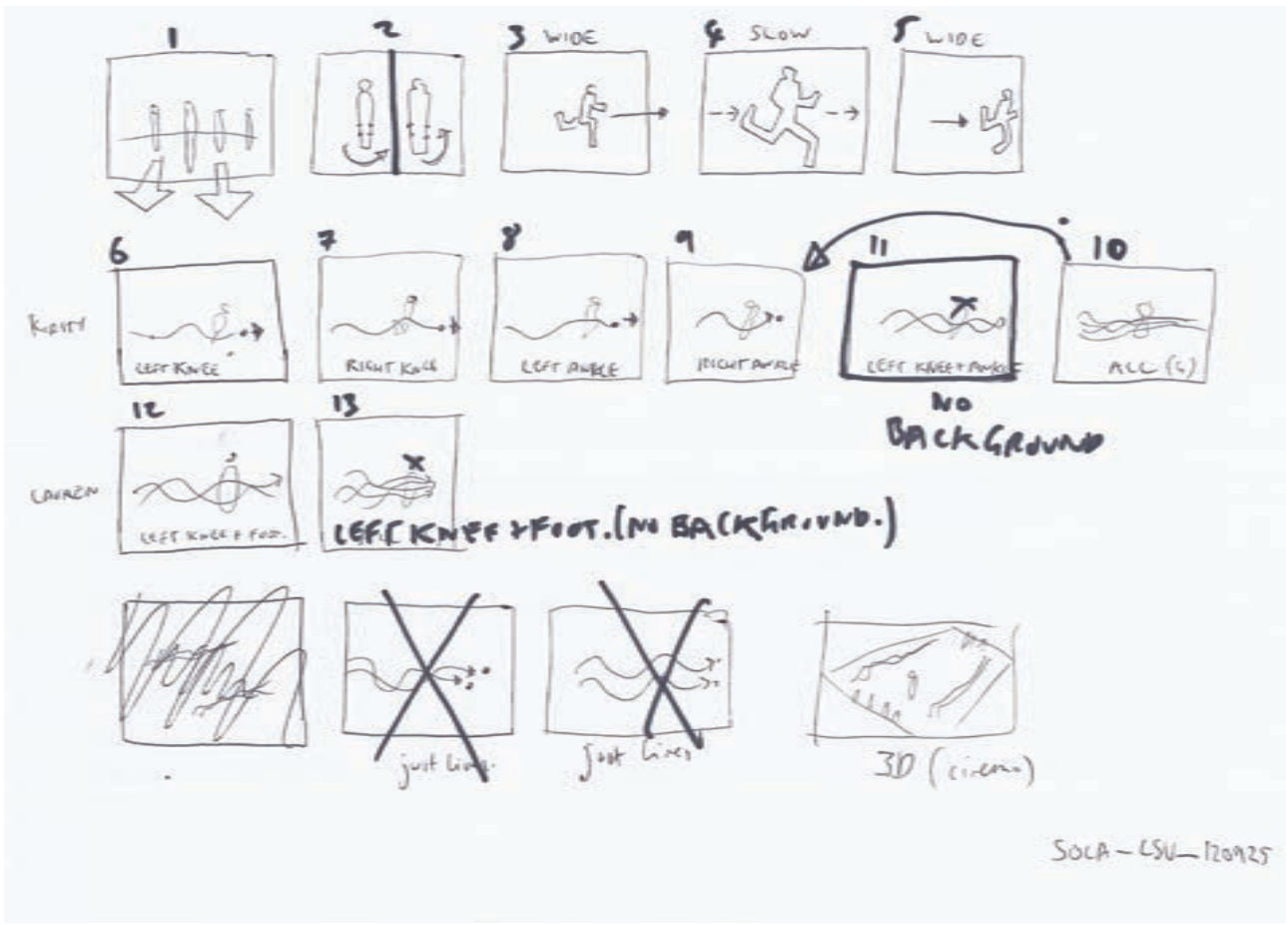


Fig.27 Locomotion design development film storyboard

Fig.28a,b Screen shots, design development film

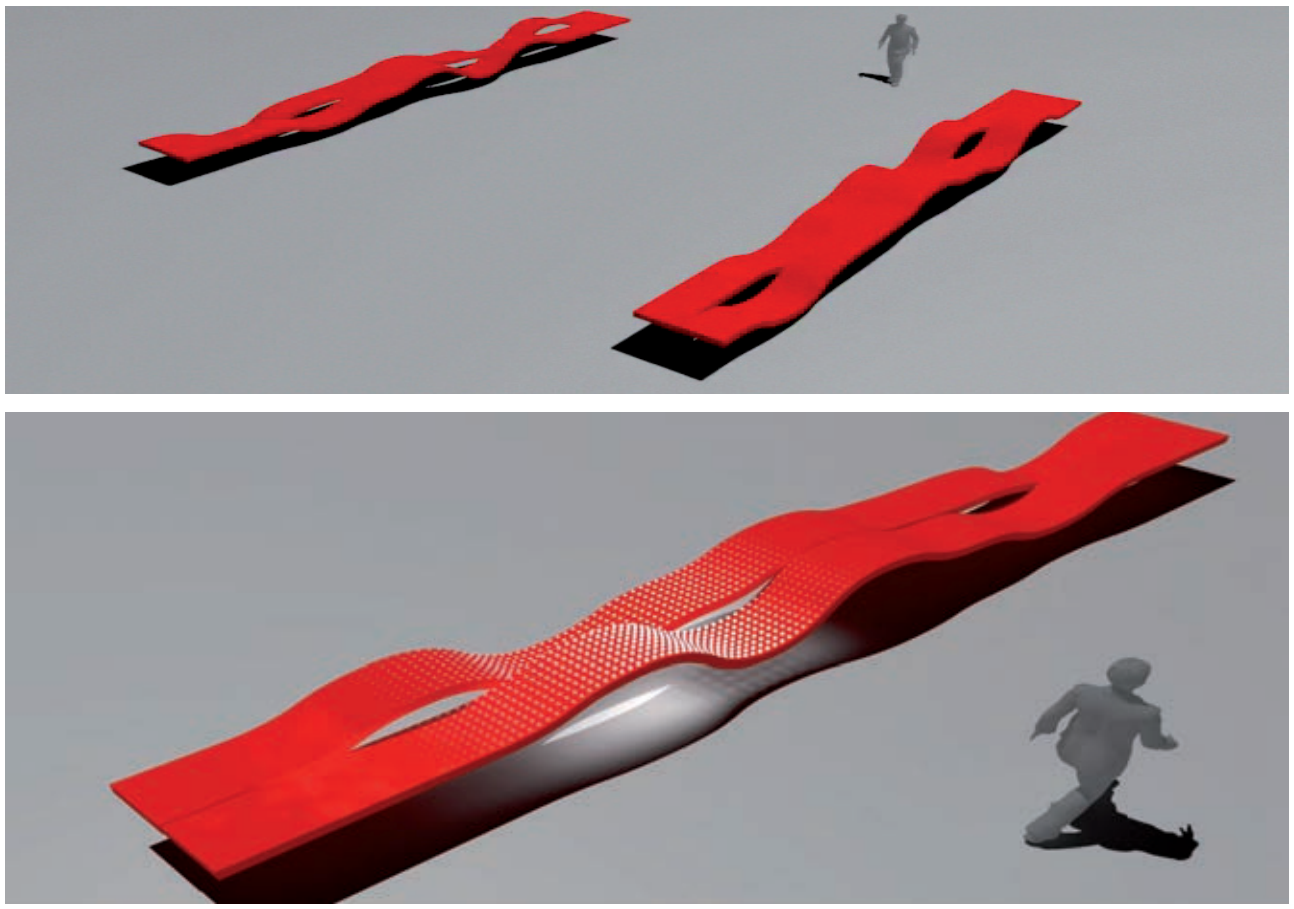


Fig.29a,b Bench renders

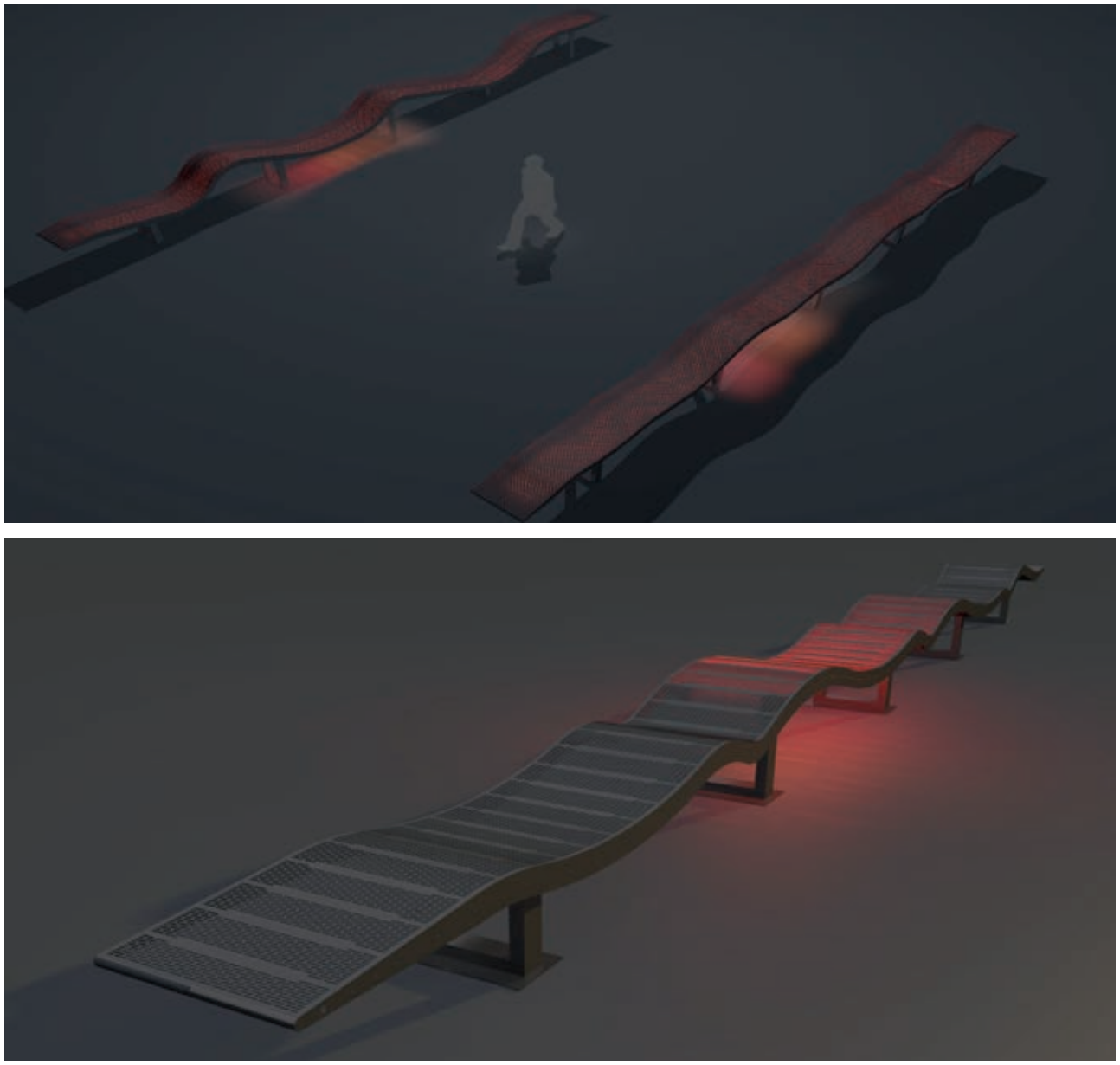


Fig.30a,b Renders of bench illumination in response to movement

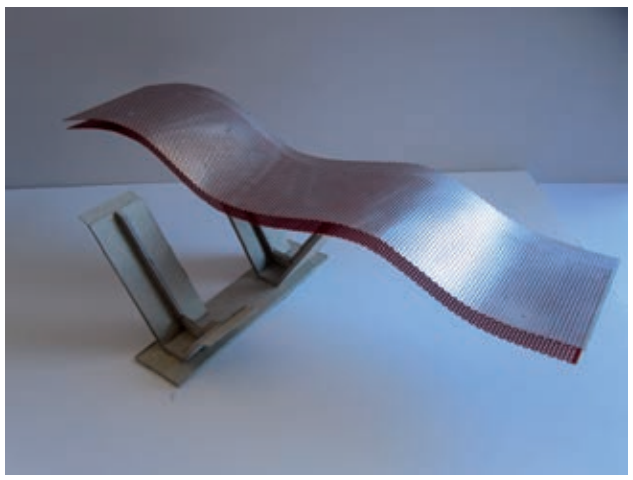
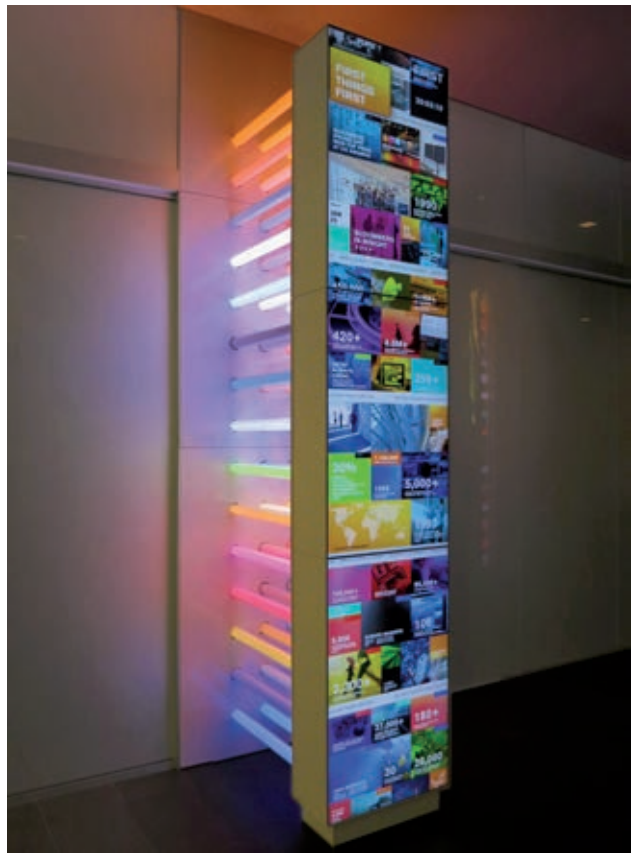


Fig.31a,b Bench prototype

Fig. 32 Bloomberg Corporation, New York Office

Fig. 33a-c The Scroll under construction



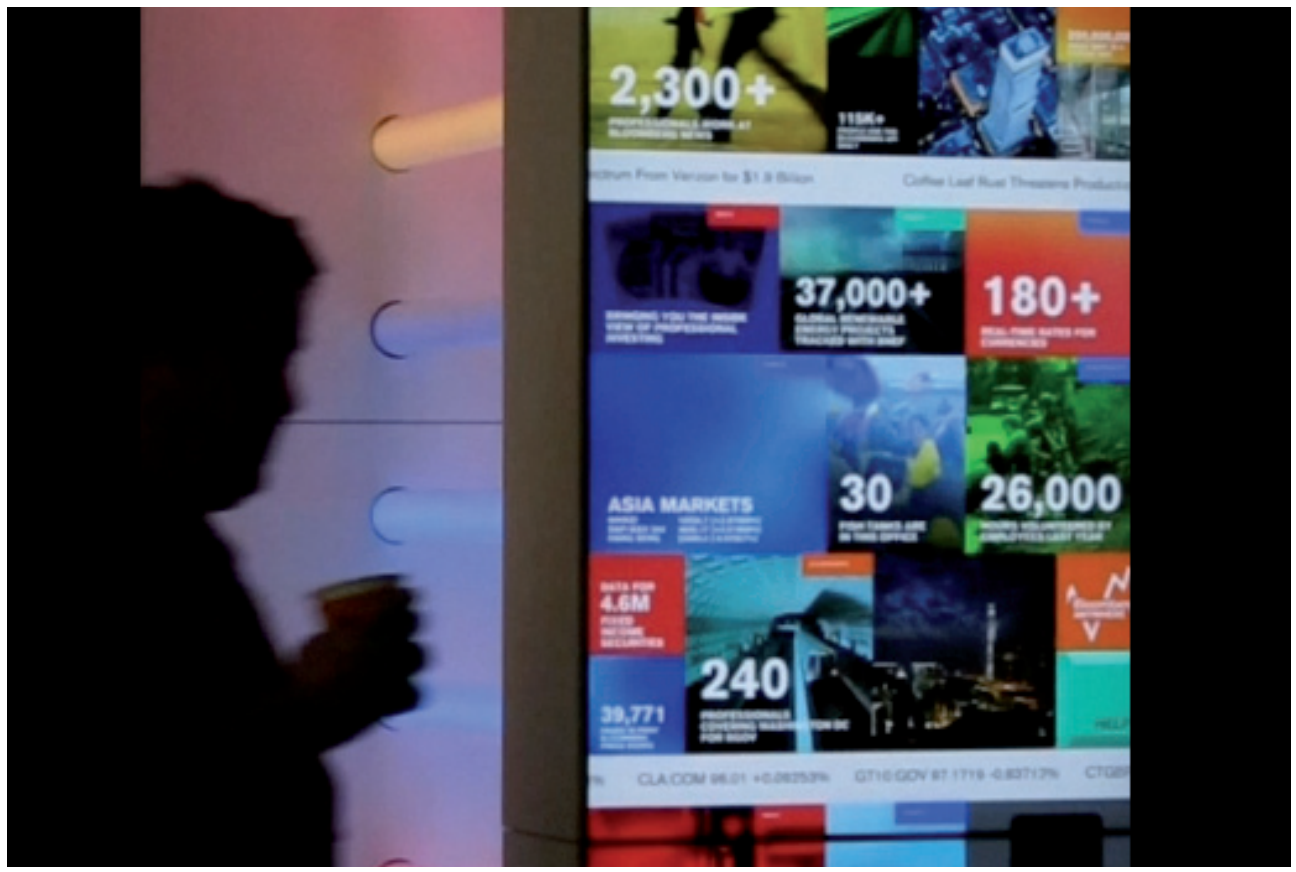
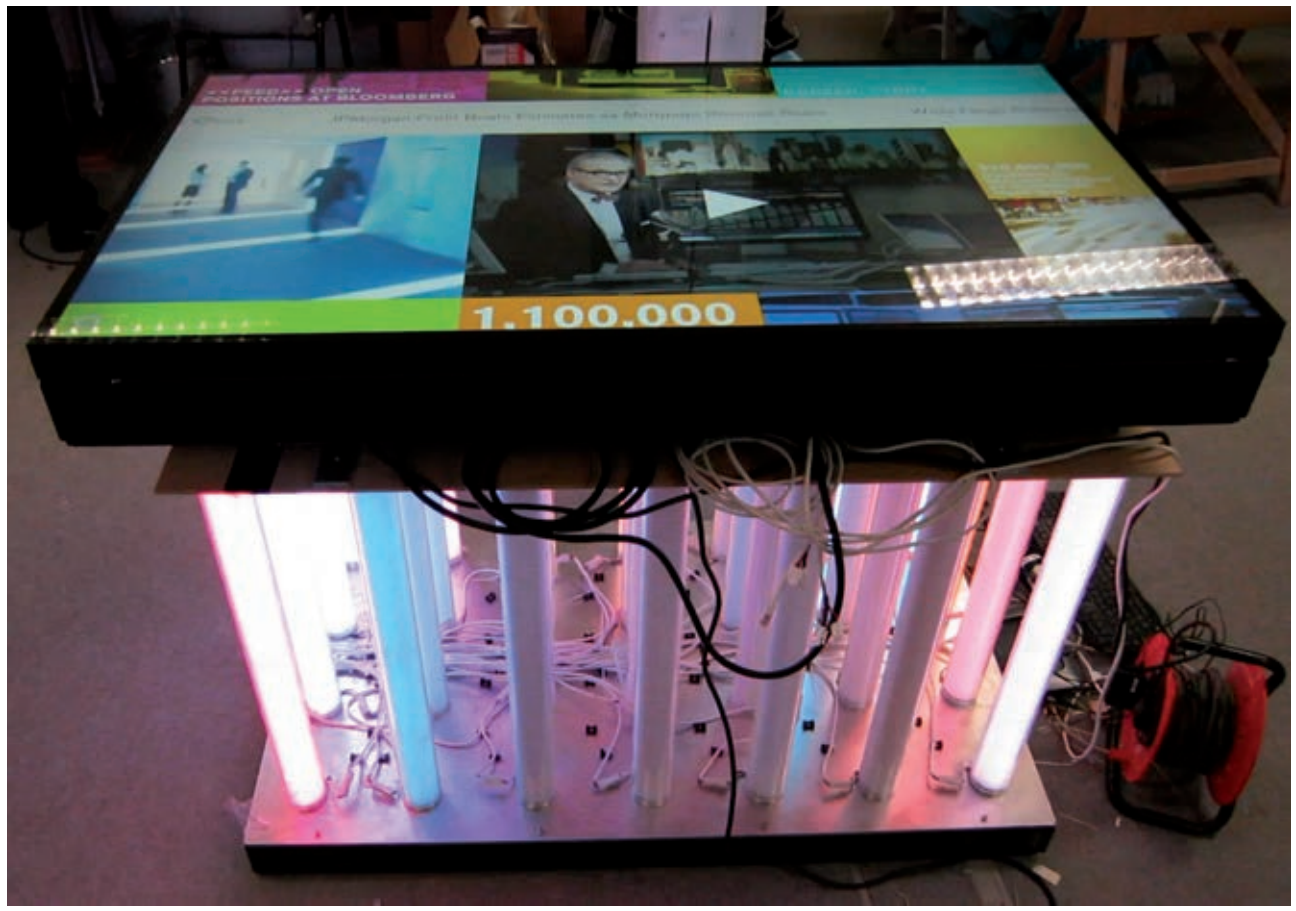


Fig. 33d-f The Scroll in use

Fig. 34a The Hub under construction



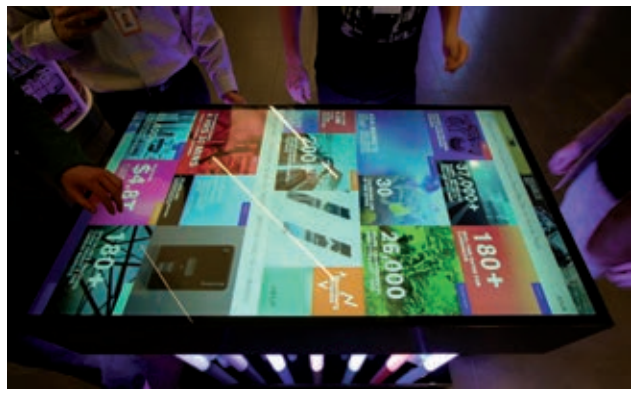
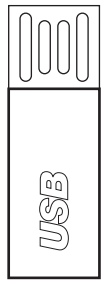


Fig. 34b-f The Hub in use

USB Evidence



Video

V.01 Lucy in Disguise

V.02 East West House Stair

V.03 The Making of the London Dresser

V.04 A Day in the Life of the London Dresser

V.05 Showtime

V.06 Fast, Faster, Fastest, Concept

V.07 Locomotion Design Development

V.08 The Scroll, Bloomberg Visitor Experience Installation

V.09 The Hub, Bloomberg Visitor Experience Installation

Interactive PDF