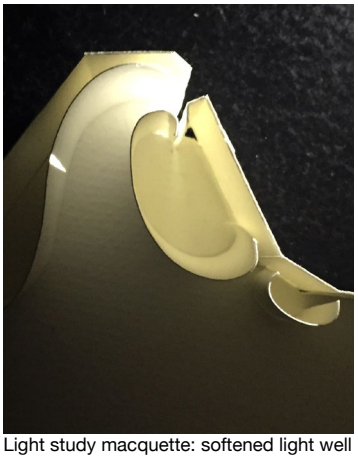
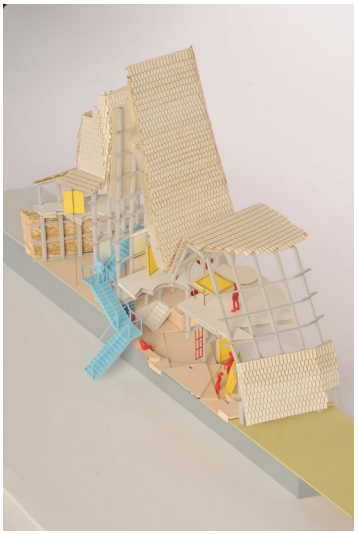
Restoration Atelier : Oxford Brookes BA (Hons) **(2015)**



Light study macquette: softened light well



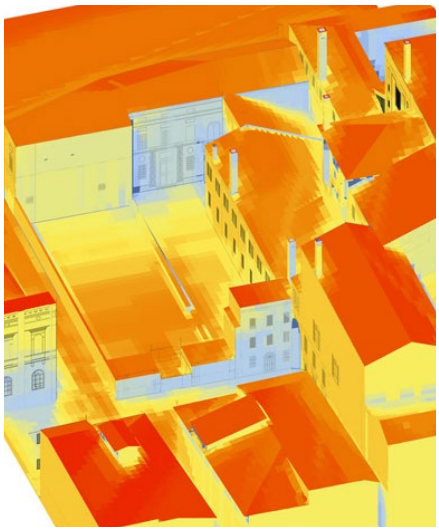
1:50 Sectional model

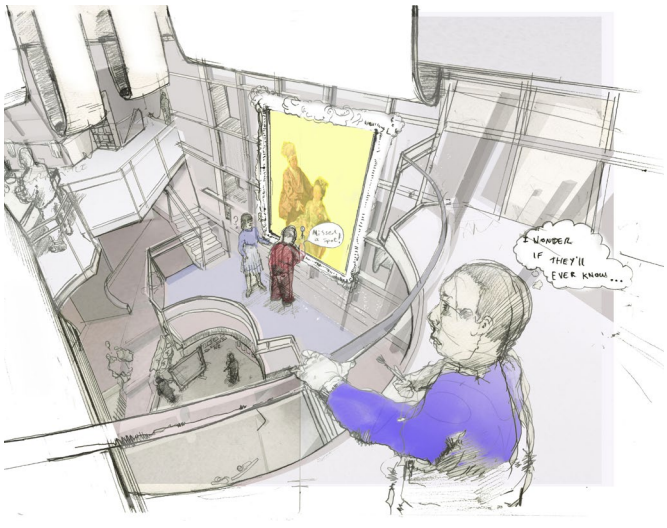
A restoration facility, school and black market for forged restored paintings. The building works by controlling views and information between the three groups to supply a different experience and story to each user. Roles are shown corresponding to colours/areas of privacy.

Restorers(red) are on show to the public, they are framed by public views.

Students(blue) are the forgers, hidden from the public, but closely working and learning from the restorers.

Public(green) are deceived by a series of viewpoints framing the apparent legitimacy of the institution.



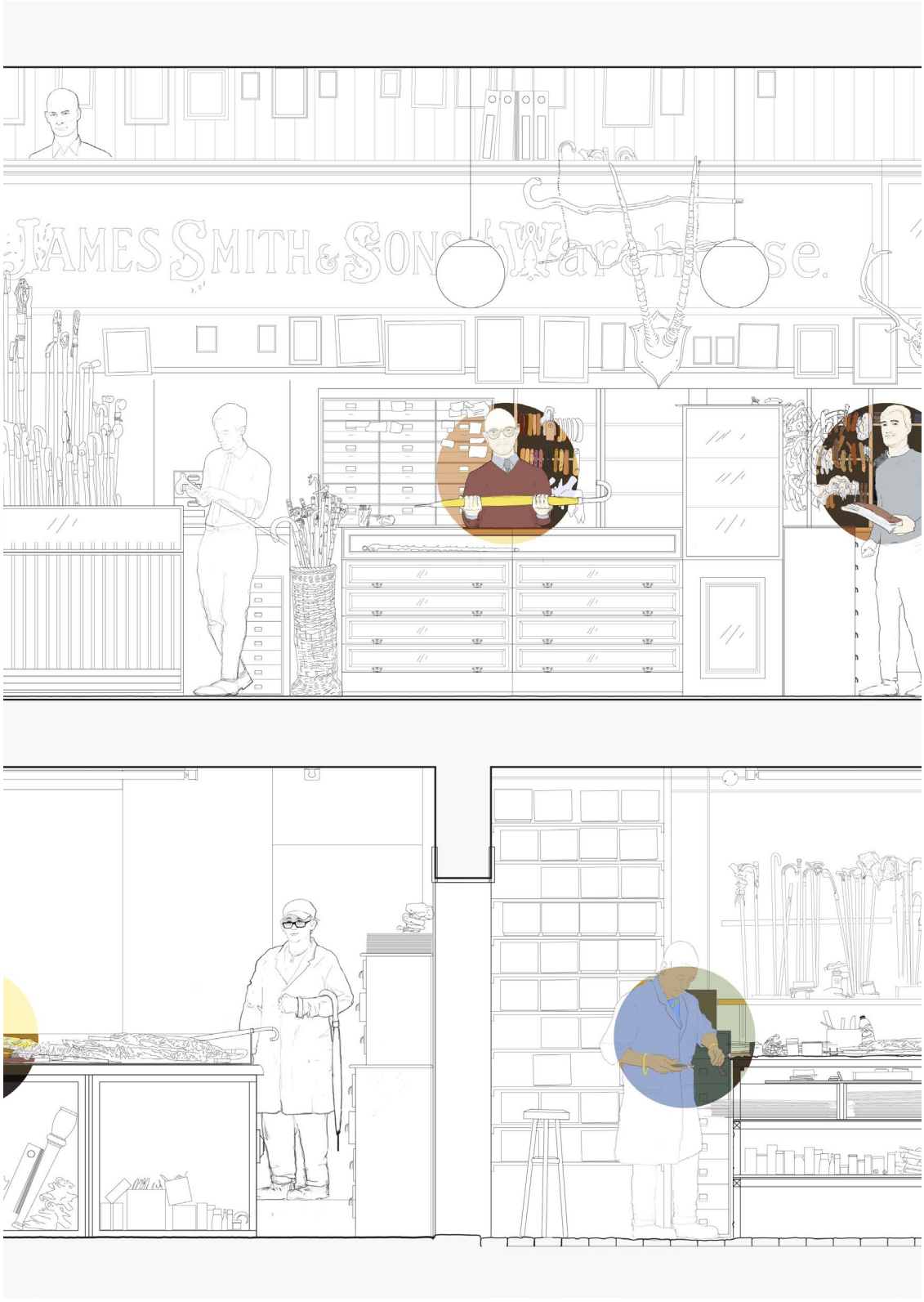


Left, above: 1:200 Site model, Palma Italy - The project was Selected for ***2015 Graduates: Blueprint's ones to watch***

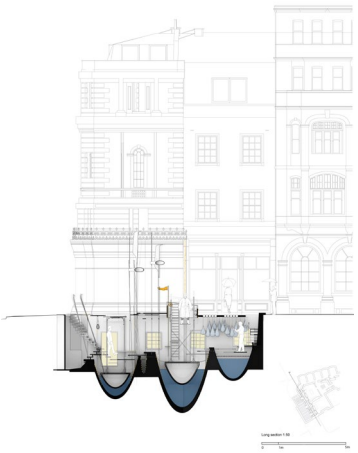
Left: Interior sketch - layered Photoshop / Clay render / Hand drawing

Far left: Ladybug Grasshopper; enviromental analysis used to develop the position of the building and its functions within the site.

Weather Station : Oxford Brookes BA (Hons) **(2014)**



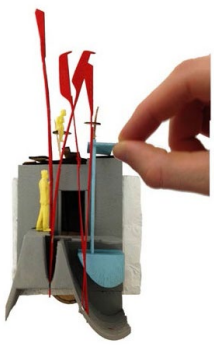
Above: Photomontage of the advertisment spectacle created by weather seen.



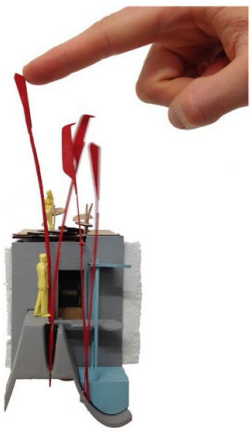
1:50 Section - Rain incoming!

Left: Coloured highlights detail the construction of an umbrella within the James Smith & Sons Umbrella Emporium in this 1:20 section

WATER



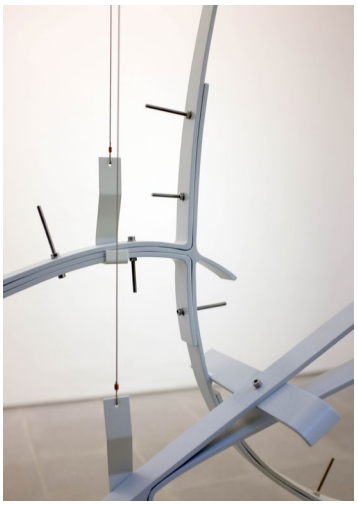
WIND

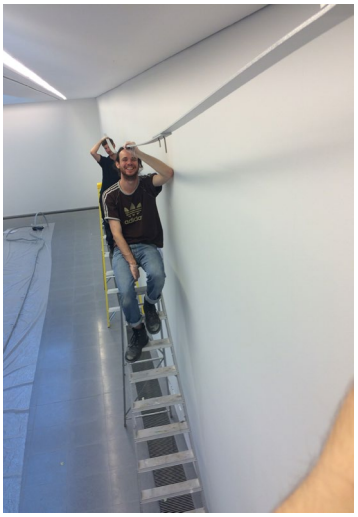


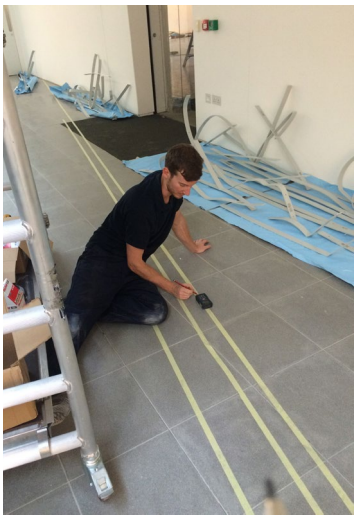
Left: 1:50 Sectional model

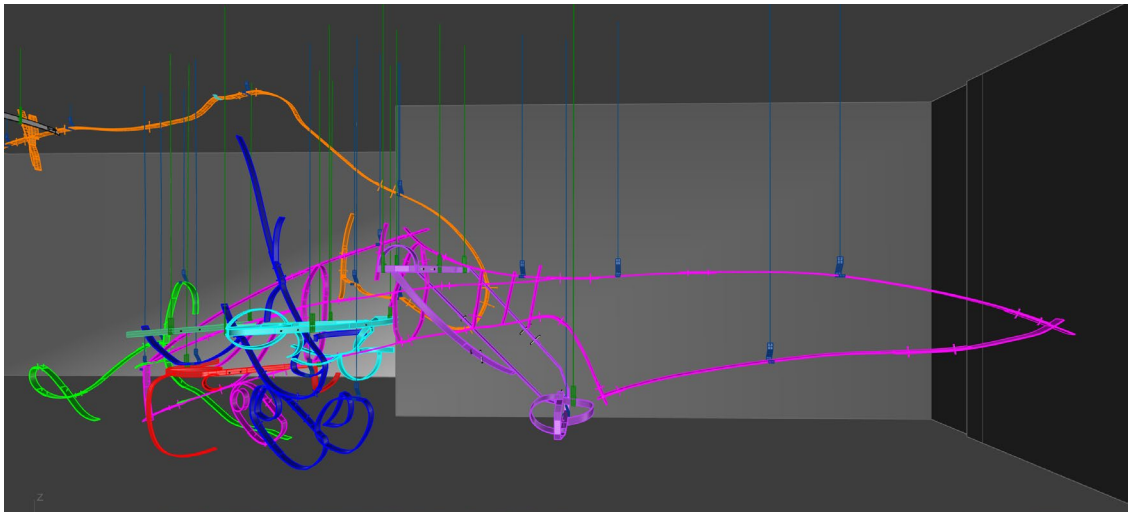
Right: 1:50 Site model
Having worked at James Smith & Sons I knew the ins and outs of the shop. A weather station was proposed to juxtapose the traditional shop and engage directly with the weather. The kinetic archive acts as an advertisement; it stores and reacts to the weather, signalling to potential customers when rain approaches.

Helen Marten : Serpentine Sackler Gallery **(2015-2018)**





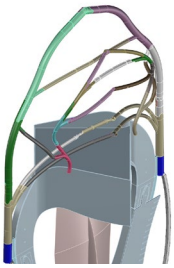




Above: Project leader and lead designer for the fabrication of Knifehand; Working from a 2d sketch imported from illustrator, AutoCAD and Rhino were used to create a site model and construct an iterative three dimensional model. Tests were carried out in the workshop, and flat bar was pre bent, rolled and welded to A0 drawings plotted with a pen on a CNC machine.

Left: Rhino screenshot of a segment of the sculpture piercing the wall.

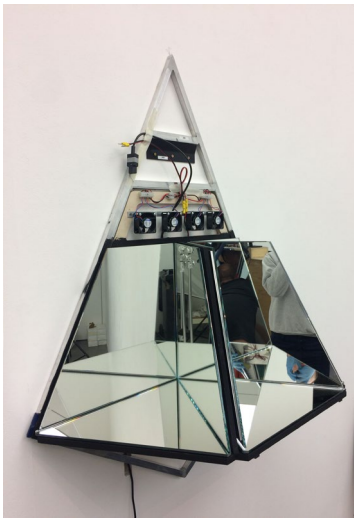
Helen Marten : Serpentine Sackler Gallery **(2015-2018)**

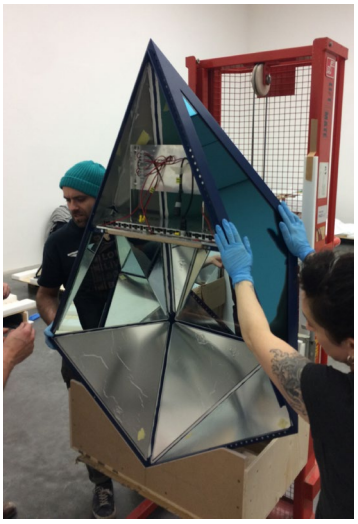


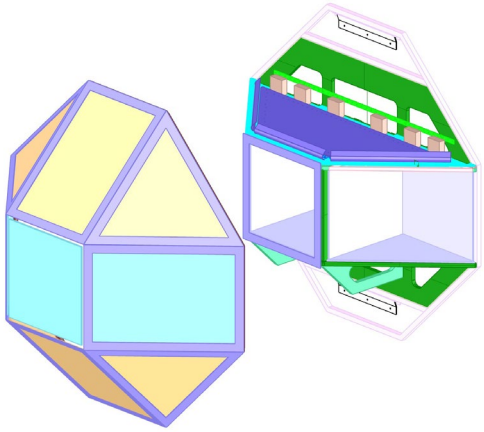
Above: An antler detail milled from multiple types of wood and polyeurethane board, joined with a sloping lap joint.

An array of materials were used on this exhbition, all were designed and built utilising Rhino, maquettes and hand drawings, a knowledge team, organisation and good communication was needed to ensure all the elements fit together.

Josiah McElheny : White Cube **(2015-2018)**

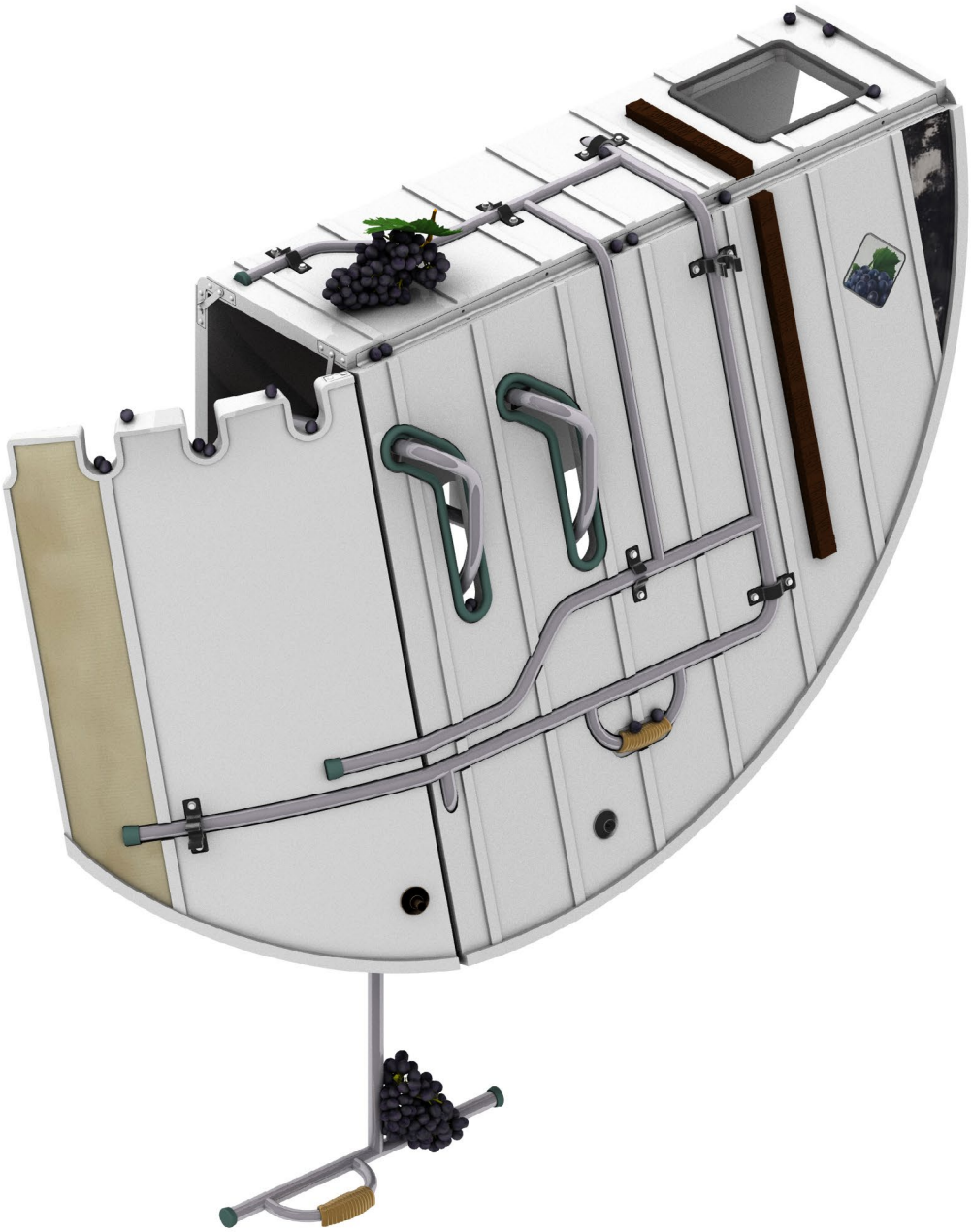


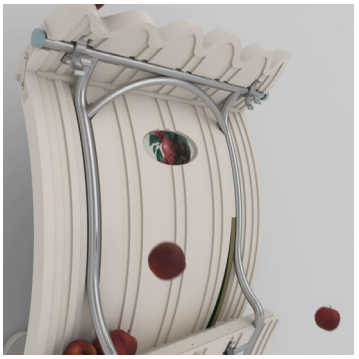


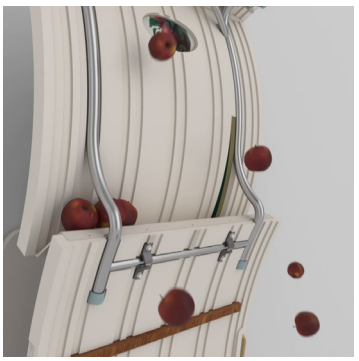


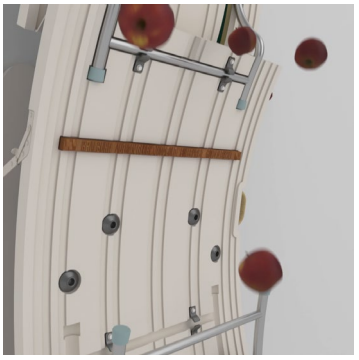
Left: Relationships between materials heat transfer, expansion and assemble order were worked out from hand sketches and finally a Rhino model.

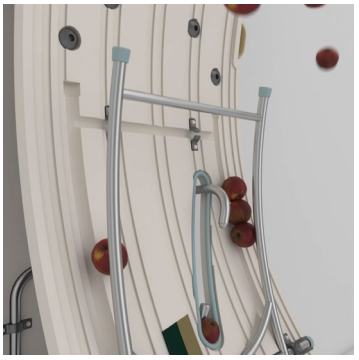
Above: Working with Glass manufacturers and talking to electricians to action their advice and create a puzzle of a sculpture.

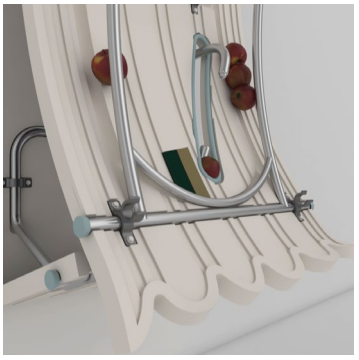










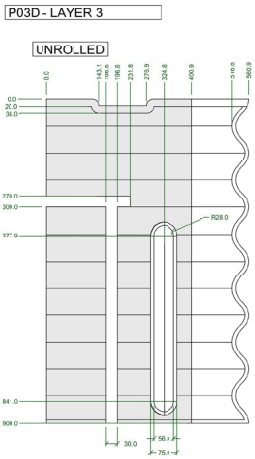


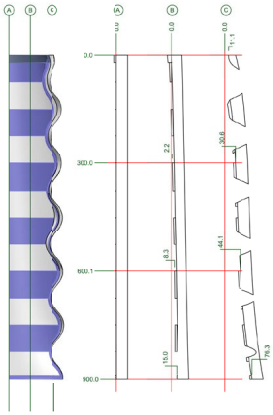
Left & Above: Renders created on Rhino with Vray to view proposed moments and test materiality.

Above: Working with 3DS Max as a team with Adam Sinclair to rig a series of fruit to bounce off the model created in Rhino.

Magali Reus : Nasher Sculpture Center, Dallas, USA **(2018-2022)**

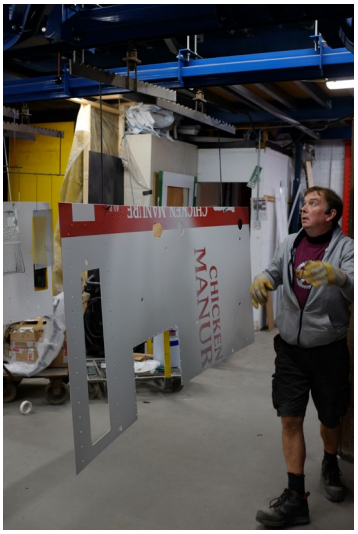
Above: Physical tests and samples exploring the way metal can be sliced and bent to create sharper bends without the need for heavier machinery. Fibre glass tests submerging found fabrics within the third layer of fibreglass.





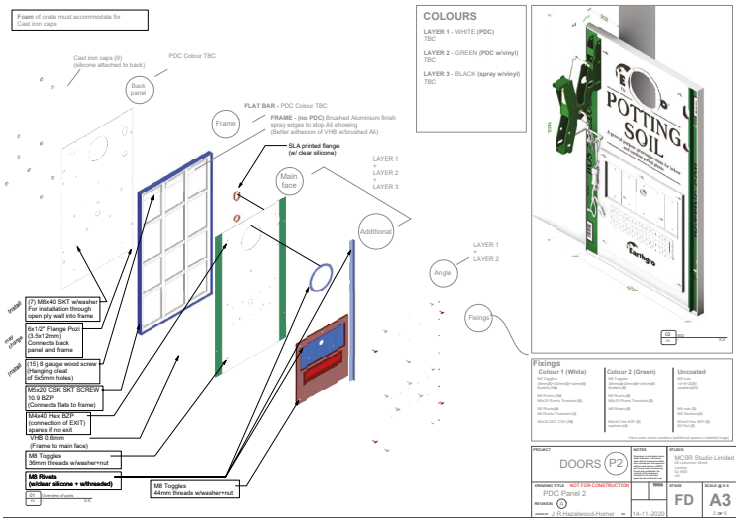
Left: The model having been designed on Rhino allowed for casting jigs and formwork to be extracted; here I created drawings for single use wooden moulds.

Magali Reus : Nasher Sculpture Center, Dallas, USA **(2018-2022)**

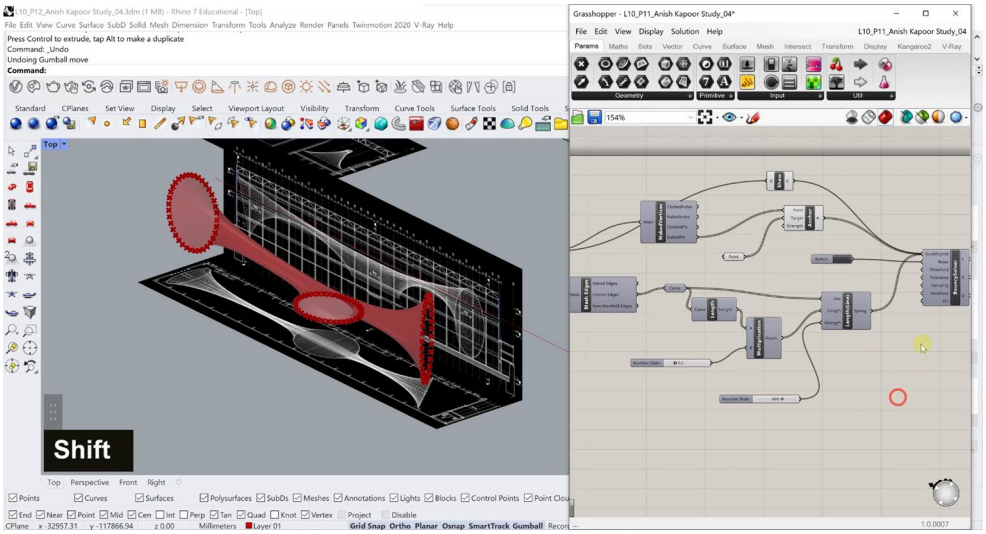


Above: Working closely with manufacturers has allowed for material experimentation here shows a dusting process we have been developing with our powdercoaters. Through a glue residue and manipulation of static we can create shadows of patterns.

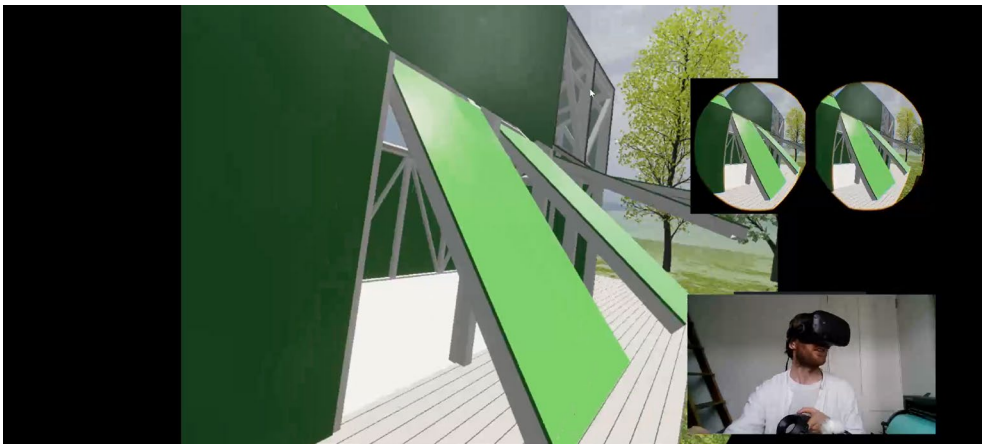
Below, right & middle: The rope here was designed on Grasshopper and printed with SLA resin to wrap and cling to the metalwork bar, one is a render, one is a photo.



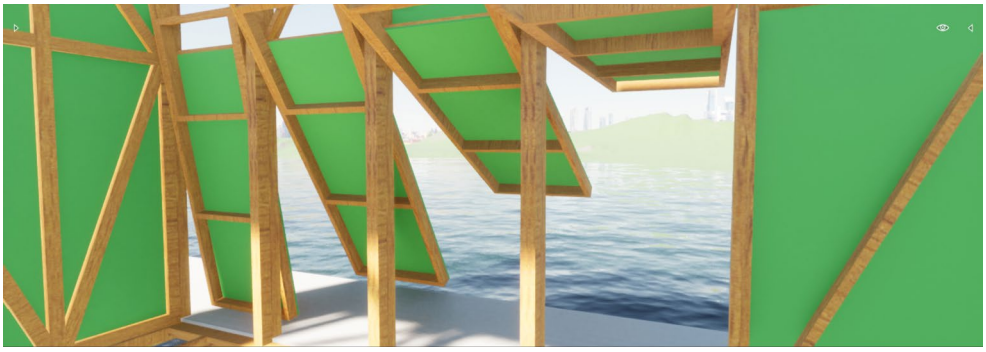
Associate lecturer; Digital Practises : Universtiy of the Arts London **(2021)**



Top, left: Here I changed a pre existing definition of mesh manipulation in Grasshoppers Kangaroo to re work Anish Kapoors Tate Turbine Hall installation made in collaboration with Arup's advanced geometries division. I then created a tutorial to show my process and how readily available simple definitions can be manipulated for individual projects - Learning through using.



Left: A series of screenshot from within the VR tutorial I created using Unreal engine.



Mentor : Matt + Fiona **(2017-2021)**

Top, left: Matt + Fiona team volunteer building an allotment ‘den’ for Oakfield school as part of the Hull City of Culture 2017; winner of the AJ Small projects People’s Choice award 2018.

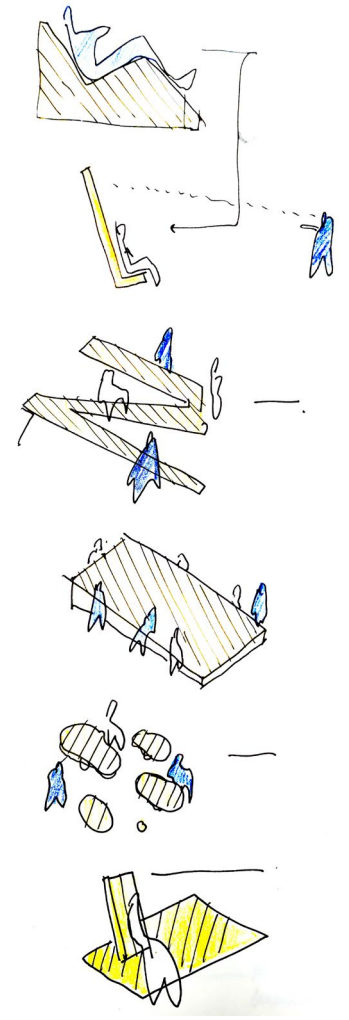
Matt + Fiona team volunteer building the ‘Room for art’ with the Whitechapel Gallery.

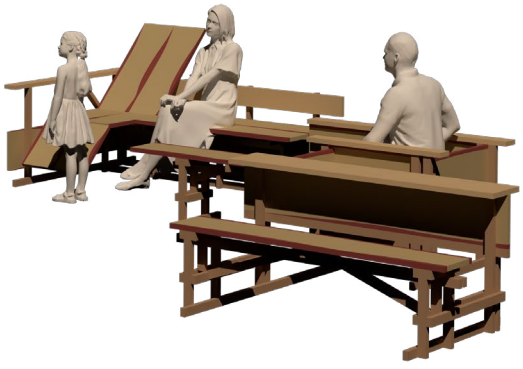
Matt + Fiona team volunteer construction of a sensory playground for the Phoenix state special school

Below: Matt + Fiona team volunteer for the mega maker-lab collaborating with the Institute of Imagination

Left : My experience of teaching is rooted within a volunteering, academic and professional setting. I’m a repeat contributor and volunteer for the educational practise Matt + Fiona, working with a wide range of ages that require different levels of involvement and pedagogy styles. Recently as a team leader on the Mallydams tree house project; I helped run a project with teens who had been deemed ‘at risk of expulsion’, nurturing new skills and an active engagement in the design process of an improvised wooden construction.

Grosvenor Square seating : Matt + Fiona **(2021)**





Top : With Matt + Fiona (Architectural Educators) we worked together with 30+ individuals from three separate groups (Tonkin liu architects + Grosvenor estate + Mayfair youth forum) to create a series of benches, it was important that everyone felt they had a design input and their ideas heard. So through workshops we developed a narrative and highlighted conversations and past ideas to show how and where these were being used and why.

Top, left: the 3 seats in situ for ongoing review. The project brief was to develop a pilot seating project through a series of workshops with Mayfair Youth forum (MYF); adults were tasked with designing a seat proposal to inform the subsequent development of Grosvenor square and thus have an impact on their built environment.

Left: Renders created on Rhino with Vray