SIMPSONHAUGH | B.15

MODELMAKING AWARDS 2018

Rewarding appropriate and well executed models from design development through to presentation.

Open to 3rd, 5th and 6th year MSA students.
Awards will be presented by SimpsonHaugh at this year's End of Year Show on June 8th.

More information available from:
manchester.ac.uk/b15workshop
simpsonhaugh.com

MANCHESTER SCHOOL OF ARCHITECTURE

Manchester Metropolitan University

MANCHESTER 1824
The University of Manchester

simpsonhaugh

B.15 MODELMAKING WORKSHOP

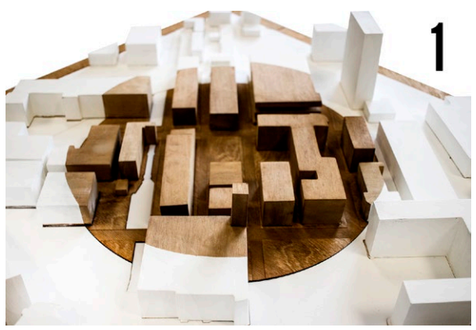
BA ARCHITECTURE
LONGLIST

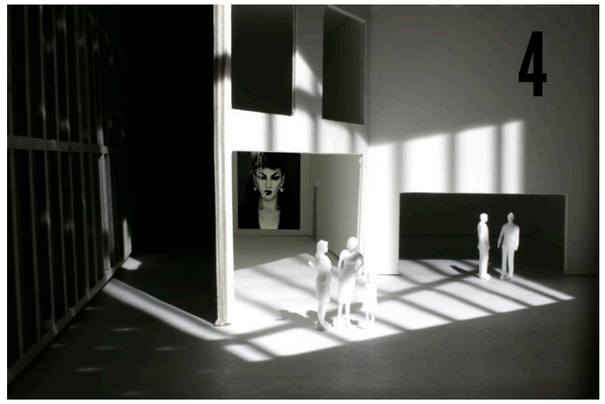
NAME: JULIE ALVÆR TEIGEN
ATELIER: COMMON GROUND
PROJECT TITLE: ALBERT KENNEDY ARTS CENTRE

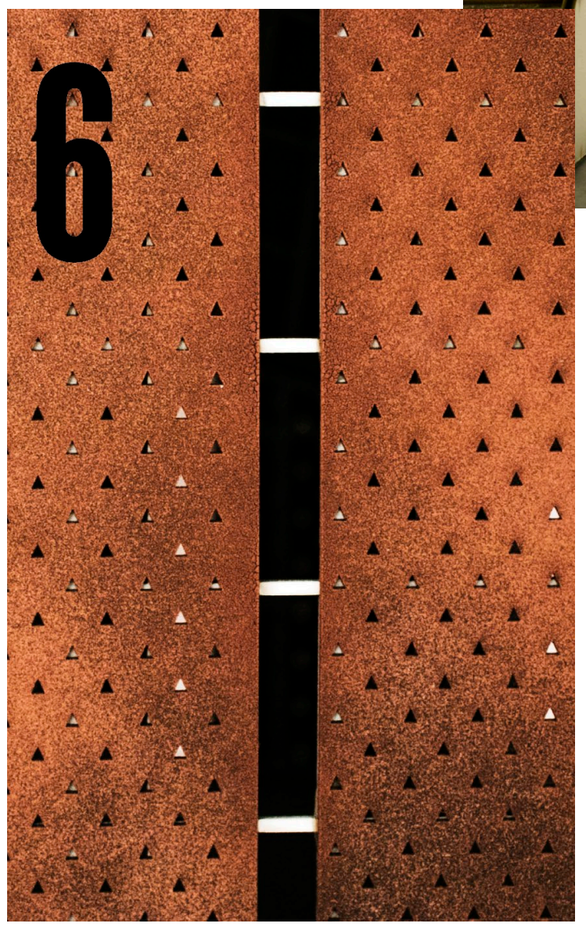
The Albert Kennedy Arts Centre is a response to the Common Ground Atelier brief to design a museological building that fits in the context of The Village, Central Manchester. Named after a victim of queerbashing, the Albert Kennedy Arts Centre is designed for LGBT artists, and its form opens up towards Canal Street, centre for the Gay Village. Model making played big part in the development of the project, from developing site models and getting to know the surrounding architecture in different scales, to form development, seeing problems and solving them in structural models, and finally, building physical models to test the facade mZaterials and how the interior models of the finished plans look and feel.

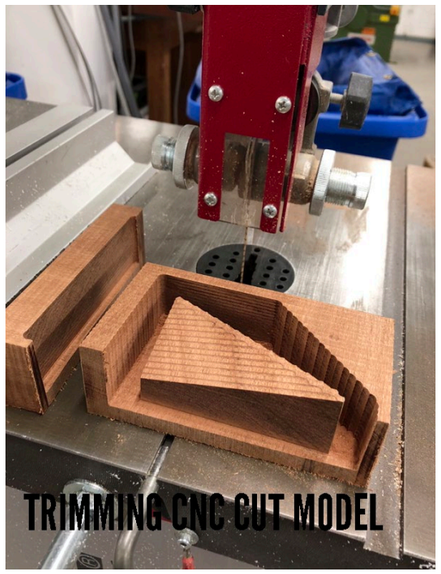
The site model (1) is at a scale 1:500, and was produced in collaboration with other students who worked on a matching 1:200 with different levels of detail. The 1:500 was used for form development, while 1:200 was used by the same group of people to test facades and more detailed corner models later in the year. For form, mass production of initial ideas were produced, while one series of six models landed me on the final form of the building (2). The idea was to cut away from the building to leave part of the site open towards Canal Street and so creating an urban space for the members of the community there, while at the same time allowing north light in spaces this might be preferable. Models were used to test the perforated facade (3), as well as the interior exhibition spaces (4 and 5).

Lastly, the corten facade was produced by testing different techniques of painting, where a mix of black and cracked rusty red landed me the desired result. (6) The last year of my BA let me explore model making through different techniques than I have tried earlier, from CNC cutting, laser cutting, using moulds and casting, hand cutting by scalpel and heavier machinery. It is a craft I have learned to love and definitely will continue using going into my architectural career.







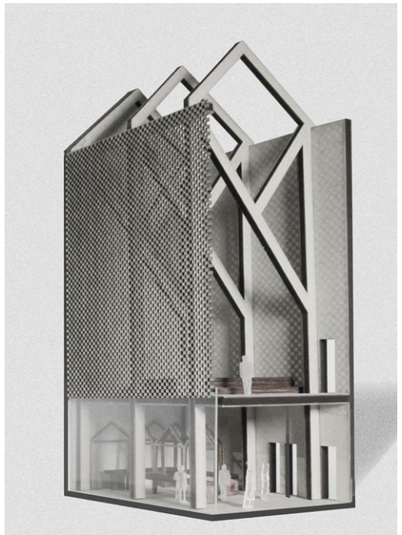


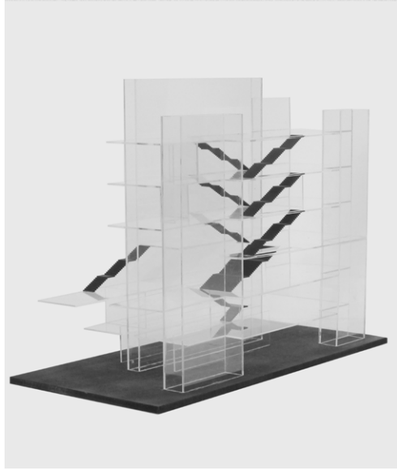
NAME: NOUR HAMADE
ATELIER: COMMON GROUND
PROJECT TITLE: THE HOUSE OF FOOD

Group site model: Nour Hamade, Simeon Taller, Eleanor Nurse, Zeena Ismail, Jobey Keene and Rodyba Akhtar.

The House of Food manifests the concept of two semi-detached houses, connected via a central chimney (poché). A place where pleasure, enjoyment, education and food overlap, it aims to educate the younger generation on the importance of food production and the modern exploitation of fast food and machine-made food. Circulation - both horizontal and vertical - was a vital mechanism of design, to create spaces that are not only enjoyable, but memorable. The two houses celebrate different eras and opposing designs, whilst simultaneously creating a cohesive front. The two houses, The House of Artefacts (HoA) and the House of Cultures (HoC), represent different eras and times of cooking and food production, which are also expressed materialistically and aesthetically. The Market (HoC) manifests and celebrates the notion of creation. The building is designed to function purely as a space for food, allowing the function to become the space. The structure is the space; left bare and skeletal to reminisce and celebrate the basis of architecture and evolution; a primitive cave. The Museum (HoA) is a clean, post-modern piece of architecture that resembles the modern clinical kitchen and the notion of a strict circulation.

During the final year of my undergraduate degree, modelmaking was my most vital mechanism of design process and outcomes. I aimed to test out various materials and processes of modelmaking. I experimented with various types of woods, plaster, concrete, acrylic, cards and 3D printing; all of which aided me to design and build models that demonstrated my thought process and my building scheme. Initially, a group of us from Common Ground began the year by creating a site model at 1:200 scale, understanding the surrounding heights and atmospheres around our site in central Manchester. I initiated my individual design process by making 1:500 massing models out of acrylic and wood, simply understanding form. During that process I created a number of iterative tests that reformed the site and essentially created my initial programme. I then moved from 1:200 through to 1:50, where I began to set the atmosphere of each space within the building; each of which required different materials to create different programmatic functions and experiential atmospheres.





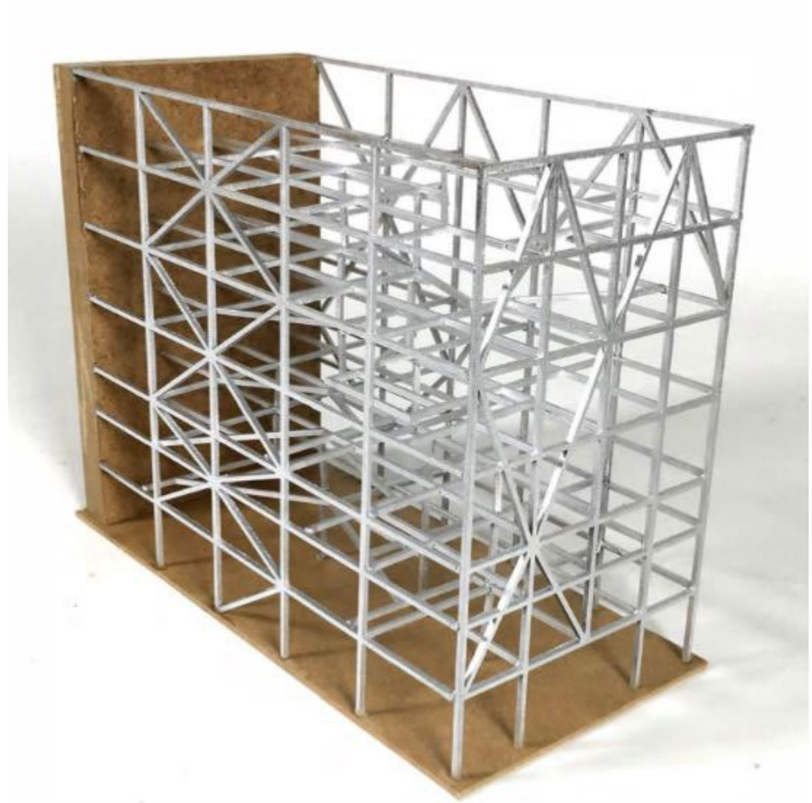
NAME: CALLUM BIRCHALL
ATELIER: COMMON GROUND
PROJECT TITLE: CYCLE VAULT

This project interprets the unique aesthetics and programme of ramped structures to house “Cycle Vault”, located on Chorlton Street, Manchester. It demonstrates ideas of what is technically possible and emotionally engaging for the brand/brief. The bicycle is a self-reliant, autonomic mode of transport. Therefore, its important to acknowledge this and design accordingly to create spaces needed for the growing culture of cycling.

This is what Cycle Vault seeks; a building to tell a story of fluidity, demonstrating structural and material capabilities, enriching the space and programme for the museological building, housing the history and future of the bicycle. Geometry and proportion are imperative to my design, following the narrative and materiality of the bicycle. I translated this concept by incorporating a steel frame structure, welded at each junction. I portrayed this within my 1:200 model by creating a steel plan, including the columns, beams, trusses and bracing elements using 2mm thick MDF.

These elements were laser-cut due to the intricacy of the structure, and were spray-painted metallic, resembling steel. The outcome of carefully assembling this frame was a delicate skeleton, exposing the bare bones of the building like the frame of a bicycle.

To emphasise the structural connections and layers, I created a 1:20 detail façade module as well as obtaining a 1:1 mock up of the column-to-beam weld connection, expressing design development. My 1:200 hybrid concept model displays the building in its entirety. This model uses laser-cut MDF due to its intricacy as well as acrylic, polypropylene and mesh for the façade. To best display the internal complexities and emphasise ‘movement’, I have designed the north-facing façade to slide on a track to expose the buildings section. I assembled each floor from base-to-rooftop to carefully align all of the elements. By casting a concrete block, I highlighted the solid nature of the buildings core. Fluidity is portrayed through ramps circulating a central atrium. The visible interior bracing column system has been spray painted yellow, highlighting the space and acting as a guide for occupants flowing up the ramps whilst mirroring the geometry and bright colours used on bicycle frames.



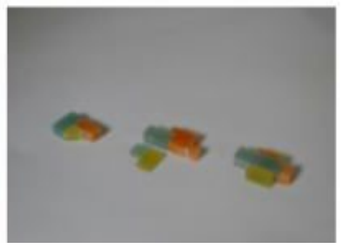
NAME: PATRICIA BELCIN
ATELIER: MSA PRAXIS
PROJECT TITLE: WELLBEING STRETFORD

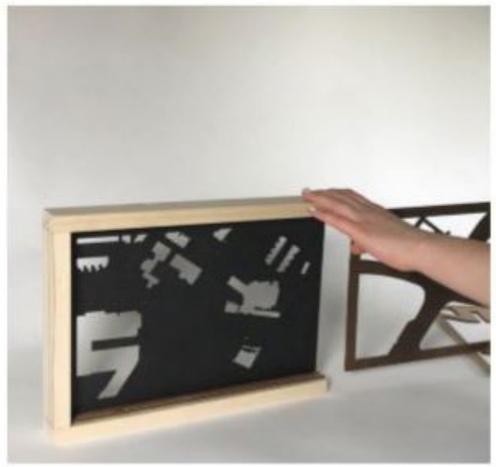
My project aims to raise the life quality in Stretford by improving each individual's physical and mental wellbeing through sports and cultural activities. Taking part in these activities as a group or meeting people from the local community will create tighter social bonds. The main features which define the project started to take shape after a walk around the Helgoland Bathing Resort, Copenhagen.

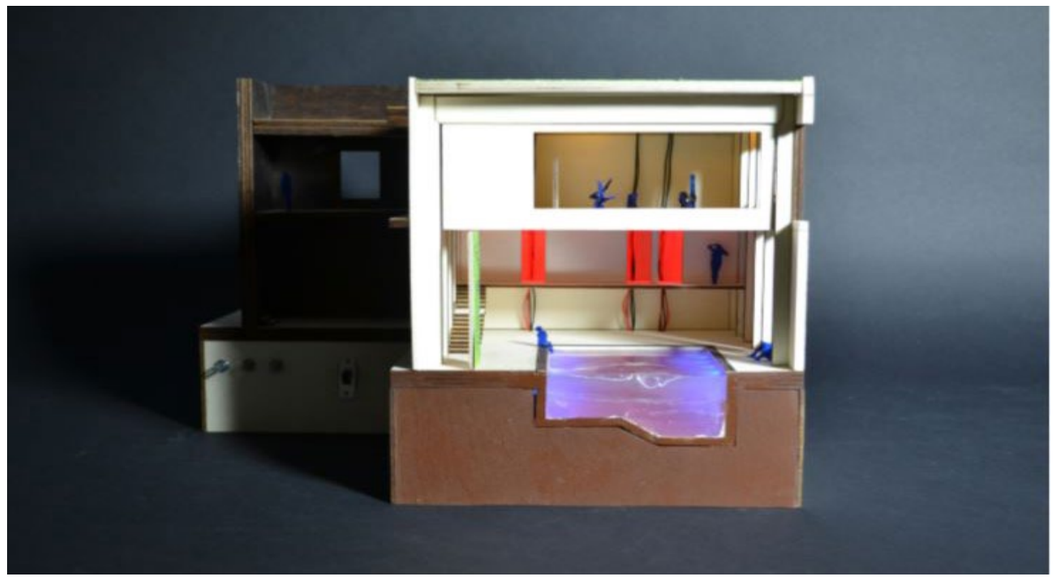
The models I created to explore this project are at different scales, the first one @1:1000 (site exploration stage of the project) and the second one @1:50, looking at the experiential qualities through a sectional model.

The first model showed the progress in the programme development and how each iteration relates to the wider context. The context of Stretford was detached into different layers – built environment, roads for cars, the space between these two, elements represented by the wooden box with sliding boards. The three iterations of the programme were stalked on top on a clear acetate support. The iterations were created from colour coded resin casts, the changes in the programme layout being easily observed.

The sectional model aims to transmit the experience of the main spaces from the buildings. Key features are lights of different colours, blue light in the swimming pool, red in the sauna spaces and warm yellow lights in the yoga studio. Each group of light can have its intensity adjusted manually.



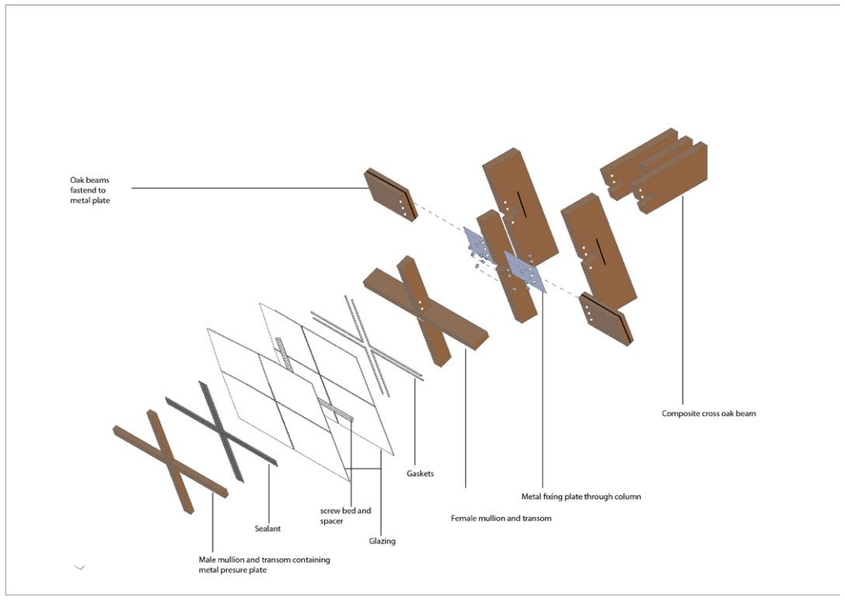




NAME: ELLIOT BOURNE
ATELIER: MSA PRAXIS
PROJECT TITLE: STRETFORD FUTURE LIVING CENTRE

The Stretford Future Living Centre is a restaurant and garden, community run coop. The project showcases sustainable living strategies, encouraging people to live within their own means, while also educating them on how to do so.
The building contains a 'greenhouse facade' (an occupy able double skin solar chimney where plants are grown).
As part of the design process I produced a 1:5 joint detail, illustrating the joinery of the timber structure throughout the building but also how this primary structure supported the curtain walling. The column is composite and consists of three separate pieces of timber, the curtain walling frame sits within this laminate and is secured by the beams spanning perpendicular to the laminate. A metal plate runs through the columns at joining points, which beams running parallel to the laminate are bolted to.

The model was produced using pieces of softwood cut to shape, a metal nail plate with holes drilled through, threaded rod, bolts. Pieces of timber in the framing illustrate various different components, acrylic acts as glazing and silicone filler is used as sealant on the exterior. Most materials are accurate to what the joint would be at full scale. Though at scale a CNC machine would manufacture the sockets I used a drill and saw for this model.
My site model is a 1:200 site model featuring balsa wood context buildings, CNC cut cork topography and translucent clear resin massing.



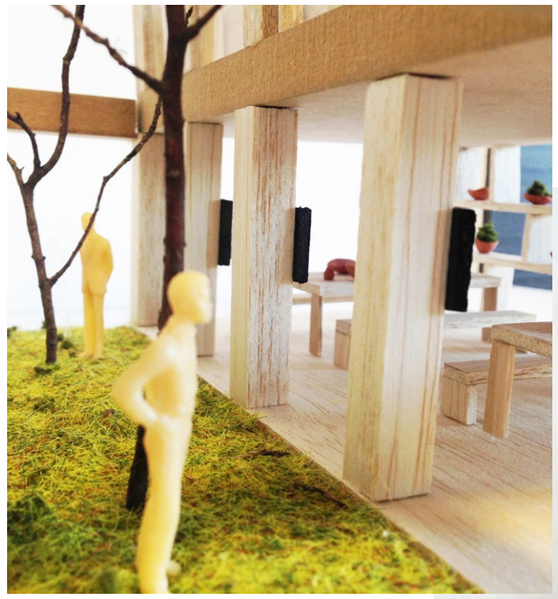
NAME: GOH KER JIA
ATELIER: MSA PRAXIS
PROJECT TITLE: THE COMMUNITY'S RESTAURANT

This project is located in Stretford and it is placed closely to the Public Hall. The programme of the building is about providing a new form of dining experience where the locals not only have more variety of quality food to enjoy but to also have spaces for the community to get involved in the whole process of food making. It is a space built for the locals to take part in solving the dining issues in Stretford and also an area to educate them to know more about how food are made and served. Ultimately, it is a space to allow people to question and appreciate the food they eat even more instead of just consuming them blindly.

As a whole, this building is split into two main spaces where the ground floor is made up of food workshops for the locals to learn how to grow and cook food, whereas the underground space is the restaurant. The housing like design is repeated throughout the site and it is inspired by the housing context of Stretford. Hence, I decided to only make a detailed model of one of the spaces to showcase the relationship between the garden workshop and underground dining space. Besides, the model emphasizes on the structure of the Glulam beams and how are they connected together.

This is a 1:50 scale model and its structure is made up of balsa wood. The interior finishing and objects uses balsa wood too but the plates, pots and cups are made from DAS Terracotta clay to give a more ceramic feel as one of the workshops in the space is pottery making. Finally, the plants used are mostly artificial with some real branches I got from my accommodation to represent trees.

The reason for the use of these materials is to give a crafty feel to it as I was very inspired by the doll houses due to how detailed they are on the furniture. Hopefully, this model managed to communicate the atmosphere of the workshop and the restaurant space clearly.

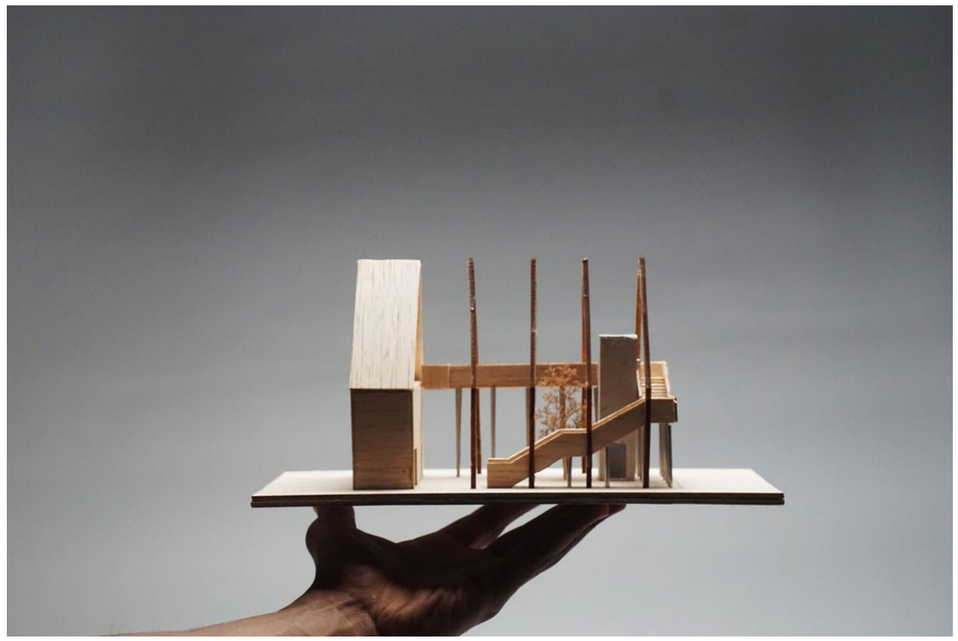


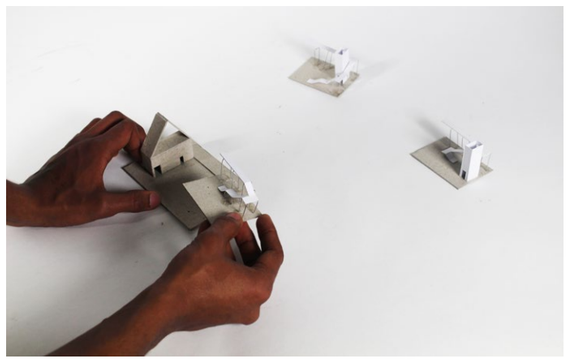
NAME: HANI SALIH
ATELIER: MSA PRAXIS
PROJECT TITLE: CORONA COURT

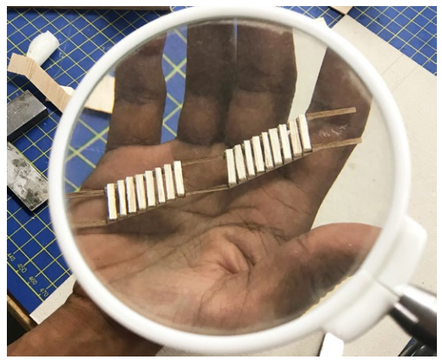
My project focuses on negotiating transport links and public realm in South Manchester, specifically Stretford. The approach in this project is directed by the idea of the built environment as a facilitator for positive social change. With bicycles playing a key role in the narrative programmatic development of the scheme's attempt to influence social policy in Stretford, it acts as a guide for future urban interventions from a township to a street level. The result was a collection of buildings situated on the Corona Court industrial estate.
The Office focuses on bridging the gap between cycling infrastructure and cycling culture. The Greenhouse focuses on providing a focal point for local activity and connecting the existing but isolated community assets. And The Workshop sets out to create a space for the exchange of skills, knowledge, and information for the community.

This model was part of a series of models testing circulation in the Greenhouse, attempting to fit the staircase and the lift shaft into the footprint of the Greenhouse. At first, I worked at a 1:100 scale and took a modular approach, swapping out the circulation into the base by slotting it into place.
The outcome shows the iterations resolved to full extent at 1:200. The decision to cut as much of the material by hand as possible was one reason for the choice of Balsa as a material. Alongside the strong grain of the wood, the subtle imperfections that come with cutting Balsa by hand gave the model a human touch, something that would be more difficult to achieve with the accuracy and precision of a laser cut model.

The restricted material palette helped emphasise the material contrast between the lift shaft and the rest of the greenhouse. Casting the lift shaft required two attempts to realise the hollow core and the two door openings. All in all, presenting a cleaner and simpler representation of the building.



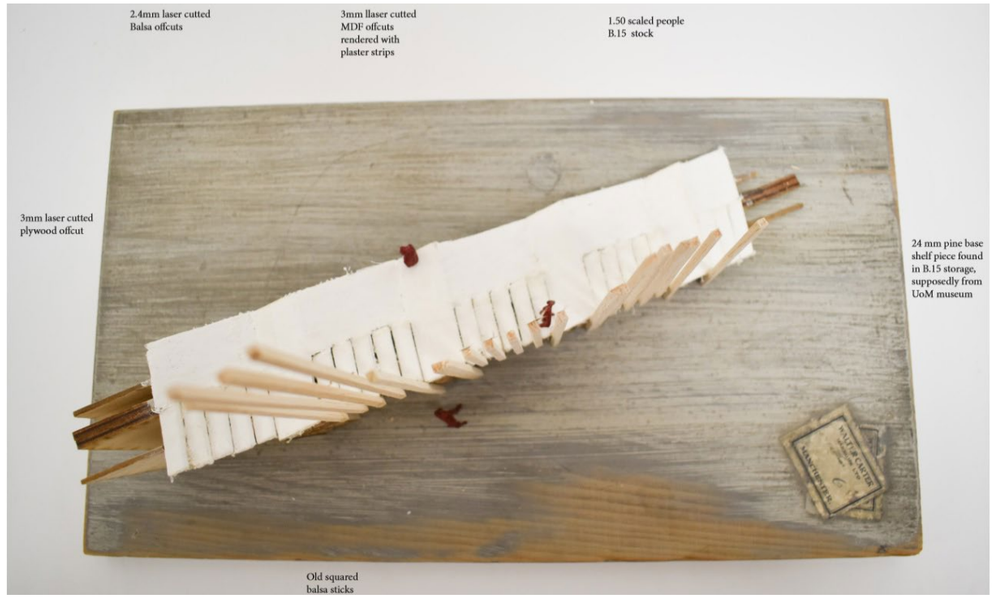


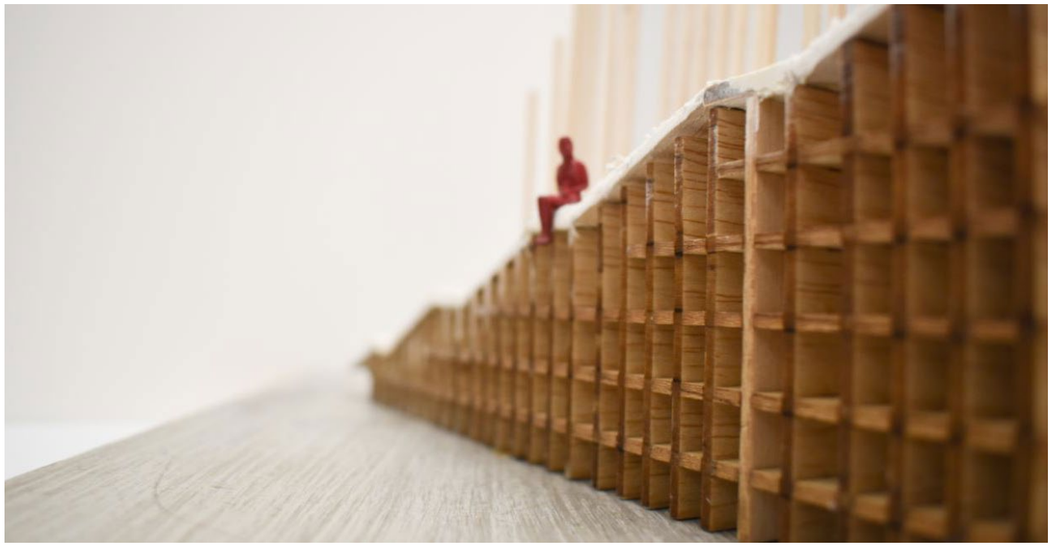


NAME: JHOWER EMANUEL SANCHEZ-PINELA
ATELIER: MSA PRAXIS
PROJECT TITLE: MATERIAL POLITICS

CIRCULATION MODEL WITHIN THE MADELAB

The term Material Politics is part of a larger research framework which seeks innovative ways for producing space. The method focuses on urban peripheries. The production of space is based on the existing skills on site and proposes a collaborative process to trigger change.
 The objective of Material Politics within this project is to create a Materials Library that supports spatial change.
The core of the project, its circulation, becomes the element that hosts a Materials Library. The physical model on the left was made out of offcuts and elements found in B.15 workshop. This as an small scale attempt to demonstrate the concept of Material Politics.
The staircase is the physical division between WORKSHOP and CAFE/EVENTS space within the MADELAB. It is a half steps, half accessible ramps that connect to the different levels of the building.
The physical model becomes usefull to understand the potential ways to habitate the structure. It also helps to understand the desired textures and levels of visual permeability





NAME: HAU HUI MIN
ATELIER: MSA PRAXIS
PROJECT TITLE: PUBLIC BATH HOUSE

This project reintroduces public baths in Stretford as a form of entertainment to improve healthcare and wellness. It reinterprets the role of public baths in the community from a necessity to a form of entertainment. Due to the site constraints, the public bath house is designed as an underground building with terracing form. This allows a visible connection between the public and the bath house, at the same time allowing certain areas to be private.

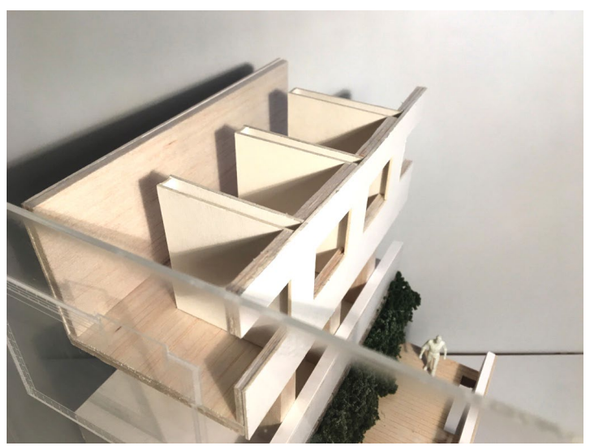
ABOUT THE MODELS

These models are a series of 1:50 part model used to focus a specific part of my building. They depict a cross section of the four different floors in my building, allowing me to explore the horizontally and vertically connected spaces.

The first model is a handmade model, made of greyboard, white mounting board and balsawood. As it is a process model, working with these materials allow me to change and explore the form easily during the process of making. I made this model to have a better visualization of the 3D spaces created and it serves as a prototype for the next model. During the process of making, I have considered the possible materials for each area and added more architectural features such as shelter for the ground floor and green wall.

The second model is a handmade model, made of greyboard, white mounting board and balsawood. After the first model was done, notes were made and different interior spaces were reflected on. This second model is an improved version of first model where openings are added to allow more lights into the basement and forms are fine tuned to fit into the concept of my bath house. This is more characteristic added to the overall design.

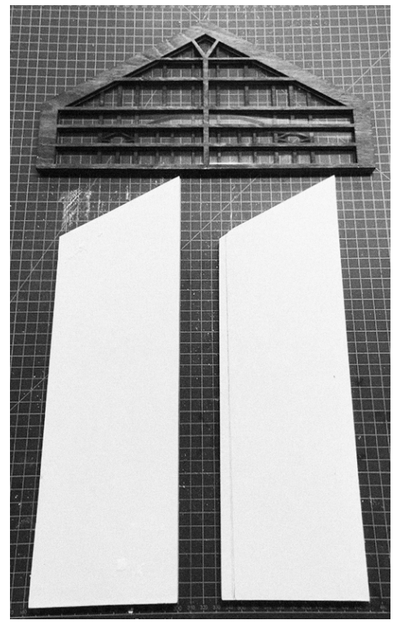
Final model is a handmade model, made of greyboard, white mounting board and balsawood. This model was made to study the detailing of the design. Through the model, I could work out the joint of CLT wood to concrete masonry foundation. The transition of white tiles to timber finishes is also explored through model making. Cross sectional drawing is scored onto the clear perspex and placed in front of the model to show the relationship of 2d drawing and 3d form.

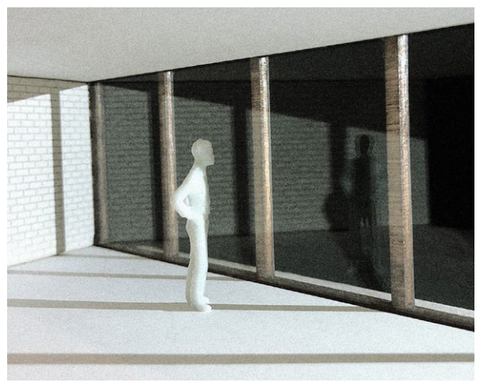


NAME: ELENI ROKA
ATELIER: CONTINUITY IN ARCHITECTURE
PROJECT TITLE: LIVE_READ_MAKE_REPEAT

“Live_ Read_ Make_ Repeat is an architectural ode to the art of literature, poetry and book-crafting. The project’s primary aim is to compensate for the absence of a cultural centre in Wilmslow. Bank Square’s location has been considered by the residents as an urban focal point, a meeting space. Yet the site has been currently ill-treated and disregarded by both the visitors and the residents themselves. LRMR creates the opportunity for interaction. The three elements, Live&Read (residencies), Read&Drink (library and café), Make&Shop (workshop and bookshop) all coexist harmonically on site, manifesting a spatial and structural connection both among themselves and among the adjacent structures. The proposed spatial arrangement allows the organising of multiple cultural events, such as Wilmslow’s Literature + Poetry Festival. Bank Square is now a place to interact, socialise and connect; a place where residents and visitors can fully experience and appreciate Wilmslow’s cultural background and dwell themselves in fictitious worlds made of paper and ink.

Modelmaking has been of great importance to me, especially for this project. It provided me with not only the tools of creating a physical representation of the designed space and witnessing the user’s experience on a smaller scale, but also allowed me through a trial-and-error process to question the things I so confidently designed on paper. It was an on-going test-fail-test experience that led me into deeply understanding the project’s weaknesses and potentials. This year I decided I wanted to focus on casting, not only because of its aesthetic value but also because the process of casting requires working with positive and negative space, re-thinking the geometries and experimenting with textures and materials. The 1:50 corner model I created was made purely of stone powder and plywood that was stained in order to look like mahogany. The model was the last of a series of models I created throughout the year and its materiality was a means of creating a physical three-dimensional continuous narrative but also re-creating the materials, their texture and properties that were meant to be used for the construction of the project in real life.”





NAME: BIZMAH ZAFAR
ATELIER: CONTINUITY IN ARCHITECTURE
PROJECT TITLE: WILMSLOW HERITAGE CENTRE AND RESIDENCY

This year Atelier: Continuity in Architecture were given the site Wilmslow Town Centre, Bank Square an ill-defined space. In the past this space was predominantly described as the “central hub” of Wilmslow. Taking into consideration the context, roads and routes surrounding we were asked to design a small piece of the town, that consisted homes, a plus element and public space located on Bank Square. The concept of my design proposal brings the community together. Research into the historical context of Wilmslow revealed it was used as the campsite for the Royal Air Force during WW2 and this allowed me to develop my programme of a Heritage Centre to reflect on the history of Wilmslow and its residents. The heritage centre includes an open plan library and café, events room and the main exhibition space. Located on the first and second floor are 8 residential apartments. The two different programmes have been designed in a unique way encouraging unity through the entire building.

For one of the tasks we were provided with a brief to model a corner of our building at a scale of 1:50 which communicates the programme, form and materiality. In order to do so, I chose the corner which showed the heritage centre, the residential apartments and the roofscape. Firstly, I modelled this corner through a sketchup model, the floor plans and elevation. Through various materiality tests I decided to pick materials which would represent the concrete base (heritage Centre) and the grey brick (residential apartments). These were similar in colour but different in texture to show how the building is made up of 3 components (the roof, residential floors and the heritage centre as the base). I decided it would be best to laser cut the components using MDF and the brick façade onto grey board. By painting the mdf using the method of stippling it gave the concrete texture. The roof of the building was tested using the VAC forming plastic as this was the best way to represent the standing seam zinc roof. I decided to layer the materials in order to get the wall and floor thickness which provided me with a firm base to work with. The model I created illustrated how the materiality of the residential apartments, heritage centre and the roofscape worked together to form one building.

NAME: BENJAMIN NORRIS
ATELIER: QED
PROJECT TITLE: THE ENIGMA CENTRE

This 1:50 model aims to describe the envelope system for ‘The Enigma Centre’ - a museum
that aims to explore the early development of computer science within Manchester and its present day application within the global evolution of AI systems.

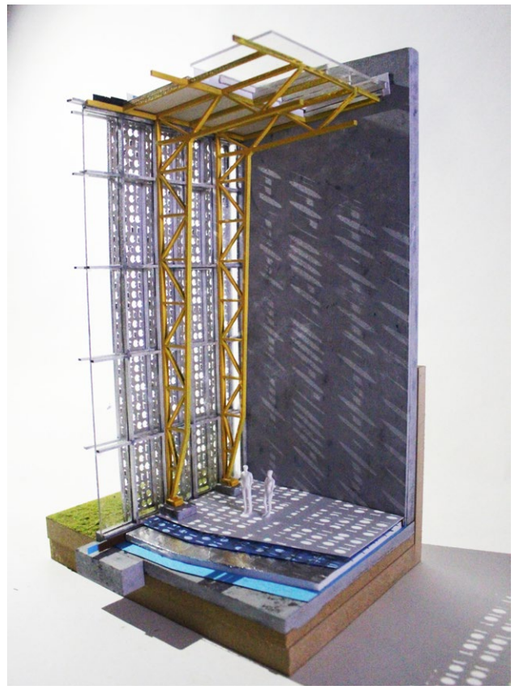
The aim was to create an atrium space that achieved a dramatic spatial effect, which clearly signifies the transition from the external environment into the museum. The perforated facade, the metallic palette and the use of exposed yellow steel work that supports the envelope system and roof aims to visually embody the mechanical complexities of the machines that the visitors are about to interact with. As if the building itself is a machine that the visitor is stepping within, layer by layer.

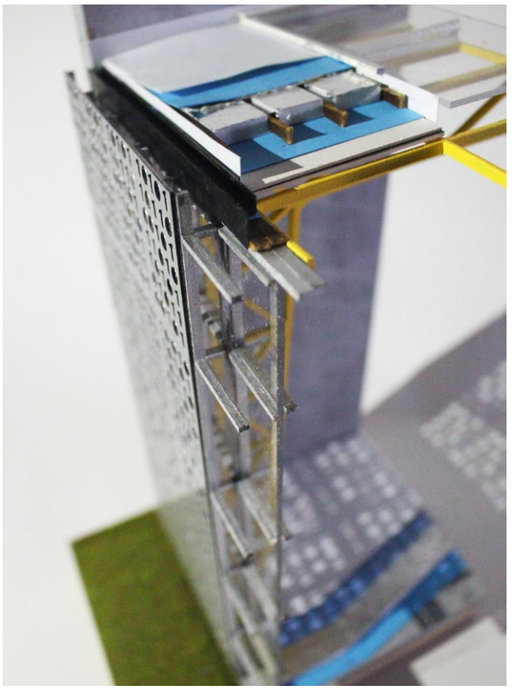
In the early development of an envelope system that could achieve this internal atmosphere, I carried out a 1:200 test of the spatial effect that might be achieved from perforations of binary code using a small laser cut panel in 2mm MDF (Images attached). I then developed the technological argument of the construction of the envelope and moved to a 1:50 scale, which allowed me to explore and describe the detail connections across the envelope in detail through ‘peel back’ techniques.

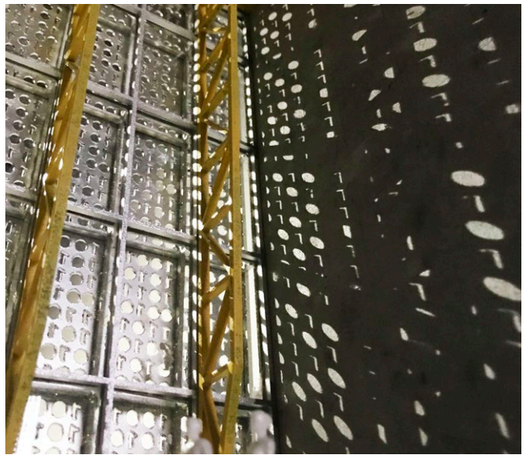
The accurate fabrication of different elements within the model including the vertical trusses and the mullion grids was made possible by a clear work flow from Revit computer model to DWG file in AutoCad and then onto fabrication with the laser cutter.

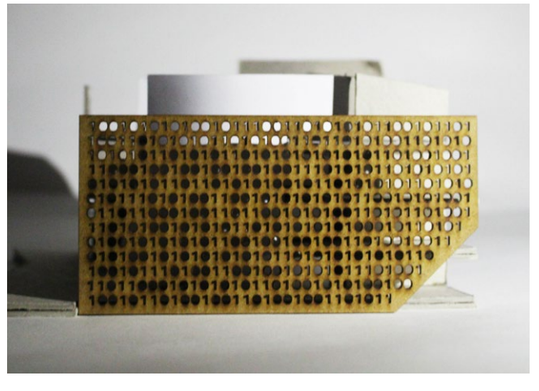
I decided to use silver styrene sheets to capture the metallic quality of the aluminium perforated panels as this allowed me to get an accurate perforation using the laser cutter, which has in turn resulted in the desired sharp projection of light and shadow.

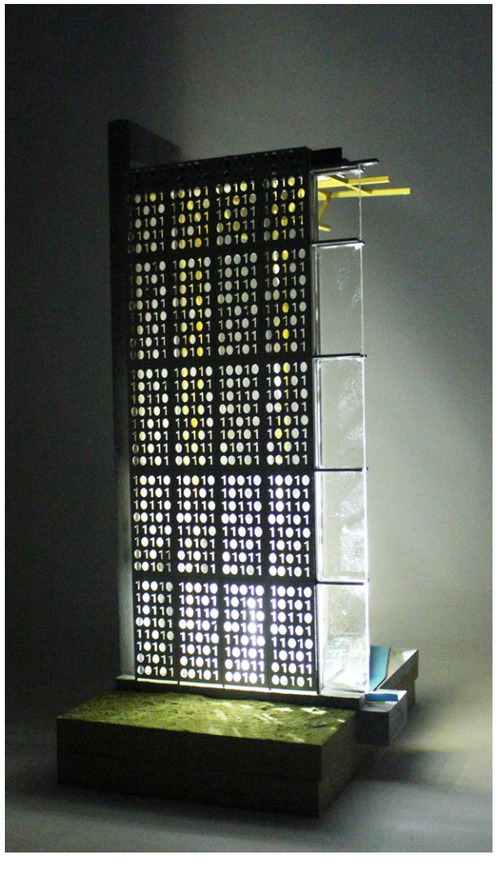
I was also able to capture the metallic quality of the trusses and mullions using metallic spray paints on top of the MDF cut outs. I was selective in my choice of materials for the floor and roof ‘peel backs’, using different cards and sheets of foam and plastic to try and capture the visual quality of the materials that include the membrane layers, insulation, standing seam sheet roof and white polished screed floor.











NAME: CAMILA FABARA VON LIPPKE
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: THE PERSISTENCE OF MEMORY

USE atelier aims to create diverse projects to increment wellbeing with an ecological approach. Sited on a semi- derelict land on the banks of a forgotten section of the Medlock near Piccadilly Station. The “Persistence of Memory” is an Intergenerational Gardening Project that promotes social integration at a community level and reinforces the relationship among the elderly, the city, nature and the society. It includes a Co-housing designed for elderly people and the Gardening Centre with environmental workshops managed by its residents. The design depicts the link between the human and nature through structures that emerge from the landscape and become part of the building. It also includes vertical green spaces that can be self-irrigated with rainwater. As the elderly have a low engagement with the environment, this sustainable project proposes an attractive and inclusive scheme that fosters independence and challenge loneliness and isolation issues.

Modelmaking was used to find the desired space by exploring with iterations of the buildings with cartridge cardboard and photographing them in the main site at a 1:200 scale. After having a massing, It was produced a topography model with stained plywood sheets, including cork and reused cork trees to represent nature. It was explored the irrigation system of the live walls with a 1:5 detail model that explained the drip irrigation system and tubes connected to planters. The previous processes were merged into a 1:50 sectional model that explains the programme of the Gardening communal centre that has a restaurant and a wood workshop on the GF and a gardening workshop. It was used plywood for the main structure, laser cut plywood sheets to represent the wood timber strips. It was used reclaimed balsa for the secondary walls and details. Various iterations were produced to represent the special external brick cladding like: balsa painted, clay and laser cut wood. Finally, I decided to use laser cut white Perspex pieces to make it neater. The lateral wall with planters was carefully cut with the cartridge cardboard and cork plants. The vertical green spaces were also represented with cork and the interior brick wall was made using small bricks and finally sanded

NAME: LOLA TARTAKOVA
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: THE ARDWICK GARDEN OF A COLLECTIVE PAST
- A BIO CEMETARY

The Ardwick Garden of a Collective Past A Bio-Cemetery The cemetery emerges from an abandoned part of Manchester, Ardwick, which has been relegated to the undergrowth. The building acts as a memorial for the collective community of Ardwick and its wider sphere, referring to our collective memory of the past in order to restore an individuals' present and future after experiencing a bereavement. A contemporary, eco-friendly funeral practice is employed to decompose the bodies which produces biogas to be collected for heating and powering the building. Through reintroducing the forgotten cemetery typology to Ardwick, a venue for community events is reinstated with a sacred green space that will be respected and honoured. Model making was key to my design development, producing models which appear robust and solid, but also tactile and imperfect in places, to highlight the craft that has gone into it. These themes reflect the concepts of the cemetery design, using sturdy materials to generate a place of security and safeness, and tactile qualities to immerse and focus people within a space.

One of the first models I made for the scheme was a wall to floor connection detail which established some key concepts for the design; the integration of the buildings water circulation with the river and outside environment, and the selection of materials with slight relief. The copper cladding within this model was developed through exposing copper sheets to ammonia. The testing of various parameters allowed me to achieve the desired effect, and helped me consider how this would be translated to a larger scale. I particularly made use of the plaster casting process which proved very useful especially for the site model. It forced me to consider the soil of the site as one solid entity and truly understand how the buildings fit into the complex topography and interact with the river which was impossible to observe through drawings alone.

Site Model - Cast Plaster, wood, 3d printing, copper sheet
Wall-to-floor connection detail - Cast plaster, foam, oxidised copper, wood, acrylic
Facade Model - Cast Plaster with fiberglass, oxidised copper
Floor Plane Arrangement Model - Cast Plaster, Wood, Perspex
Light, Facade Treatment and Interior Experience - Wood, grey board

NAME: JUMANA TARAZI
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: ARDWICK TEA HOUSE AND SPA

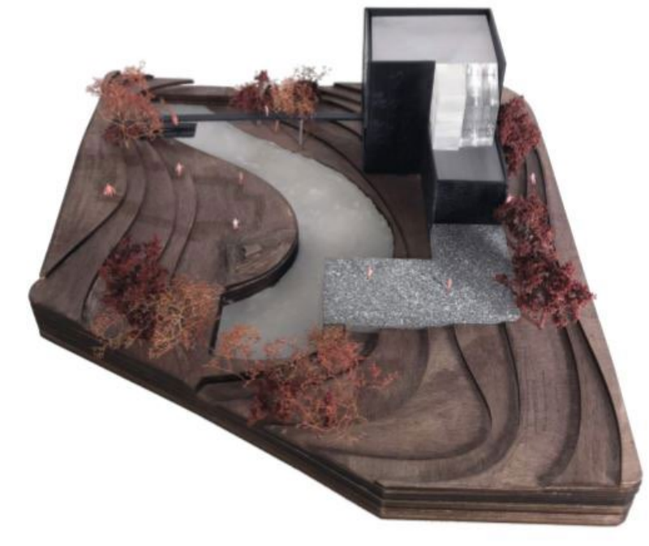
USE's studio brief aims to devise a place that creates a connection between the cultural and natural systems by proposing an ecological approach to the city to create habitats for people and animals, by blurring the boundaries between human and nature through design. The studio brief allowed opportunities for low-energy technologies and biodiversity within the site, all incorporated into the programme, which was a reflection of my own choice. Project Brief Location and Site Located in Manchester, our selected site is located in Ardwick, just off of Piccadilly, around Fairfield Street and Crane Street. Currently, the site is very run down with very little biodiversity and life around the site. The River Medlock runs through the site allowing the vegetation to continue although grow wildly along the banks. My project aims to regenerate the habitats and vegetation of the site whilst simultaneously creating a connection between human interactions and the river.

Designing Through Modelmaking

Throughout the process of developing the design, modelmaking was used as a tool to test light and form from materials varying in opacity. A variety of materials helped me develop the massing of the overall building and test different and final ideas in order to make decisions on the most successful aspect.

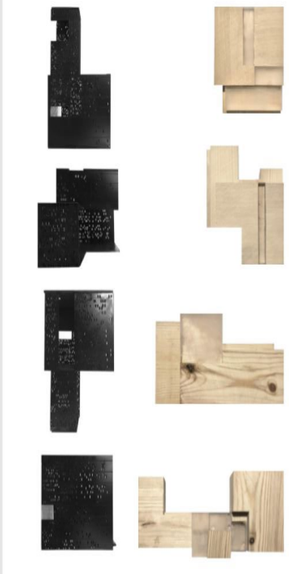
1:50 Sectional Model Sectional Model Representing the Connection of the Pool and River

This sectional model uses a range of materials such as wood, acrylic and wax to represent the different elements of the section. The acrylic, used as a clean cut finish, is used to represent the pool water, whilst the wax pour and gravel represents the more free flowing River Medlock



1:200 Site Model Site Model representing the Tea House and Spa and Topography Levels

This site model represents my final building on site with the surrounding vegetation, proposed and existing. The material pallet consists of plywood, acrylic, styrene sheets and wax.



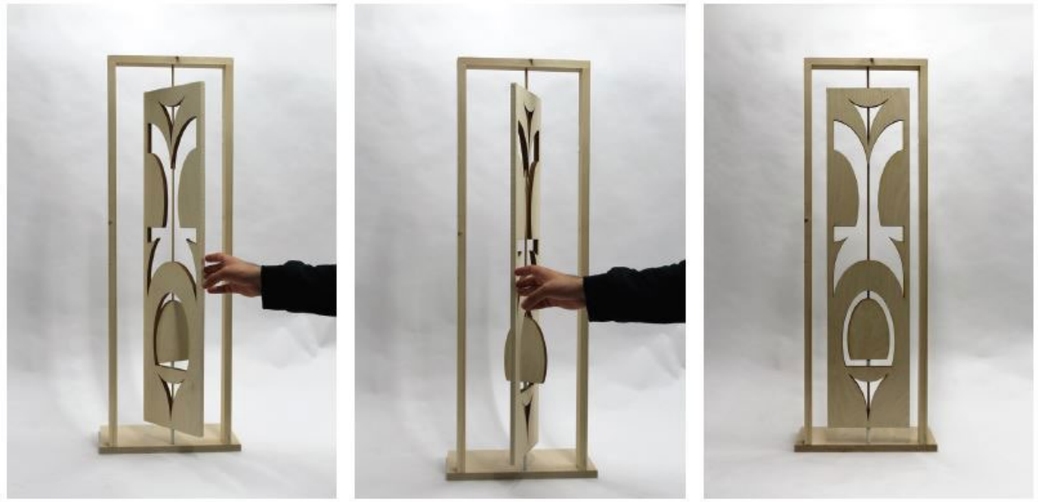
NAME: FRANKIE TAPLIN
ATELIER: FORMWORK
PROJECT TITLE: THE COMMUNITY THEATRE

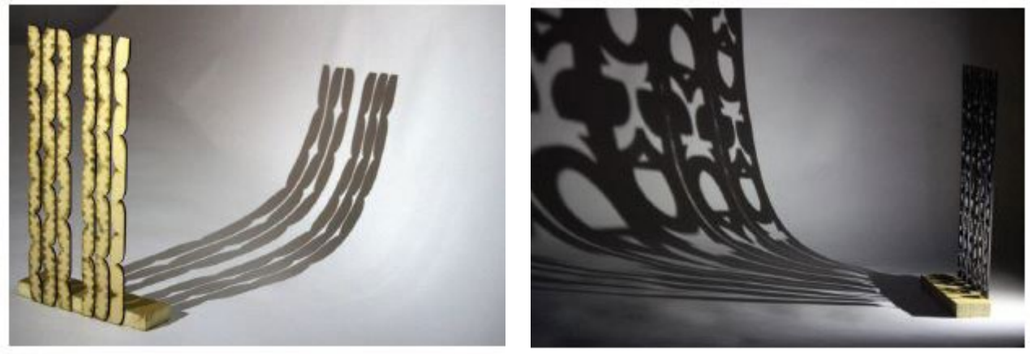
In Fallowfield, there is a disconnect between permanent residents and temporary students, with minimal meaningful interactions between the two. The Community Theatre aims to provide a platform for this connection, through a community focus, a wide range of programmatic events, a community build and sharing of knowledge and interests. The community is encouraged to lead, take over the theatre, the site and ask the question, what happens after the theatre leaves? A timber screen was developed to cover the theatre window to add an element of privacy to internal users whilst creating an experiential quality through the creation of shadows and an element of shading to the space.

The site is surrounded by Victorian terraces and a Gothic style church. Both examples consist largely of block or stone facades, with small applications of decoration. By reflecting this application of small amounts of decoration the facade responds to its context. I created different motifs by deriving different shapes from the patterns found in the context and abstracting them to create new and updated patterns. Test models were then created to test these different patterns. By creating test models I was able to see the experiential and light qualities of each motif and the shadows they created at different times of the day.

By placing the screen over the theatre window, a dynamic, intricate pattern and sense of movement is created by the shadows in the performance area. Furthermore, interest is created externally, inviting people to approach the building and interact, drawing them away from their usual route through the site and into the building.

The model was created at 1:1 scale, which allowed a realistic view of the experiential qualities and shadows and test the size and ease of rotating the screens by hand.





NAME: SHREYA KOCHATTA
ATELIER: FORMWORK
PROJECT TITLE: SKIN OF ABSOLUTE TEMPORALITY

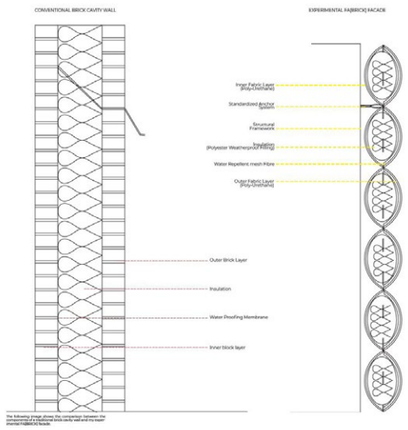
My project draws and studies parallels between Human and Architectural skin for the design of a Somato-sensory performance space. It studies the different aspects that make human skin responsive and reactive to external environment. I have tries to create an external skin that appropriates the qualities of human skin onto a structure.

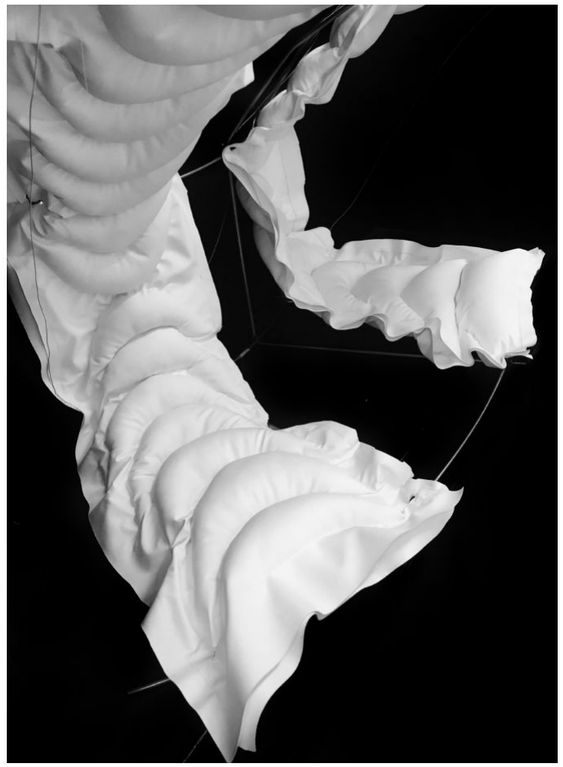
For this, I realized that a touch and feel friendly façade was required. Using various techniques of model making, I have tested this quality on a polystyrene filled fabric façade. I have also tested it for water resistance, fire resistance and its flexibility. To further make it practically feasible on large scale, I have tried to inculcate the thermal and moisture resistive properties of brick cavity wall into the system. Model making has helped me test the material synthesis for this idea on various scales.

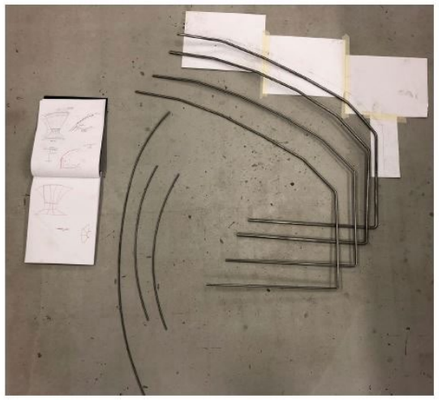
This finally resulted in 2.1 m long façade skin model that allows different visitors to feel and play with the fabric cladding system.
For this, I have used stitched façade modules of 900 mm height. The skeleton structure is made up of tubular steel for strength and stability. To show the possibility of strong but fast and easy connections of the façade system zip ties have been used.

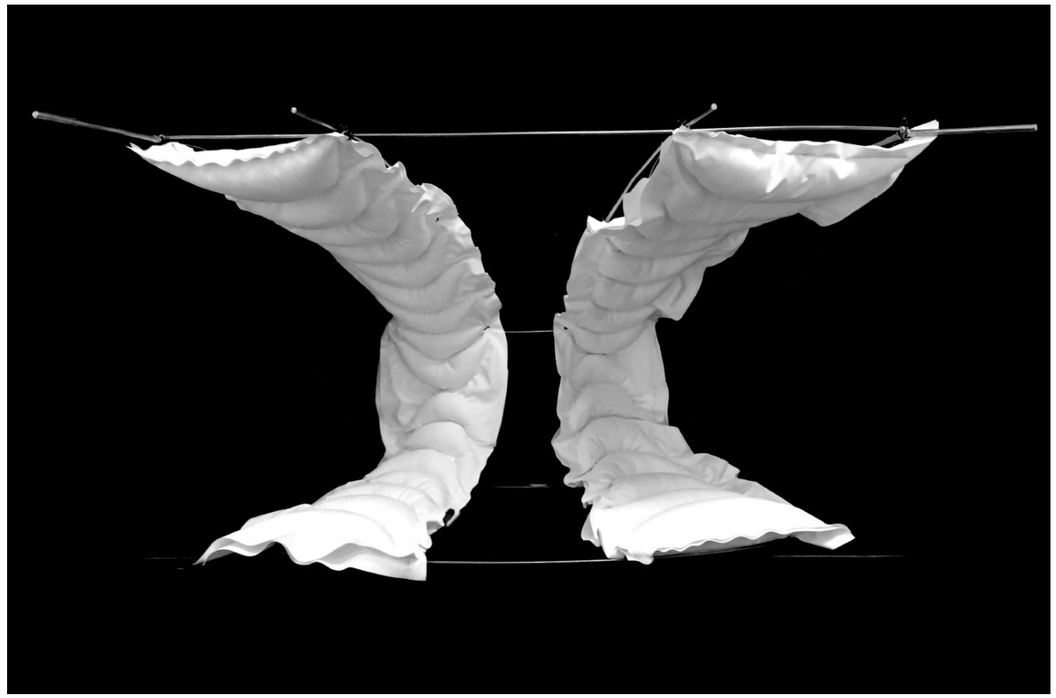
The development of this façade system is the result of a series of physical test done through appropriate use of model making. As a result, the final output should be seen as another step in this continuous developmental process. Through this process, I believe I have successfully created a strong prototype for a fabric cladding system. I intend to further develop this system in future through extensive model making and prototypical testing.

Final Modular piece









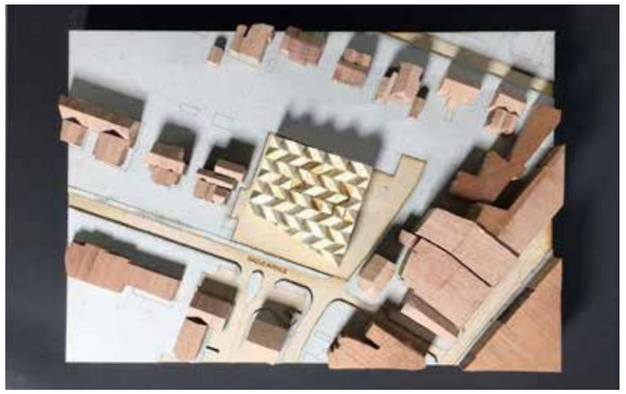
MArch
LONGLIST

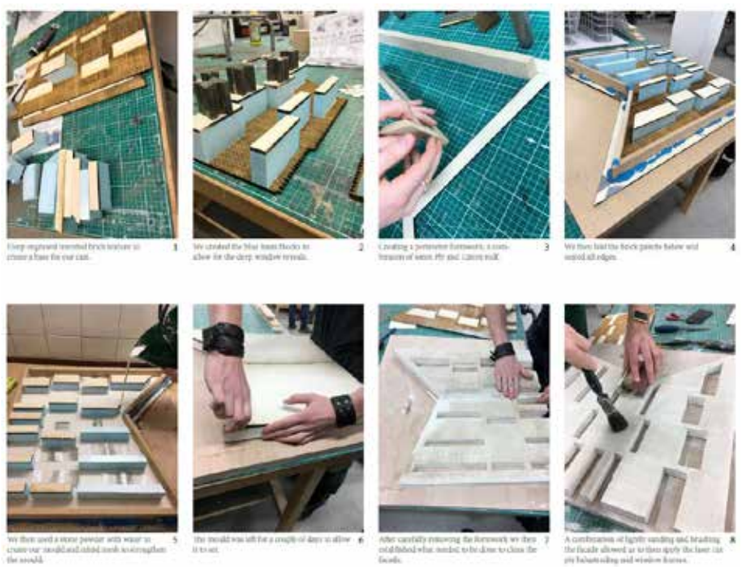
NAME: JAKE VOGTLANDER & LUKE ANDERSON
ATELIER: CONTINUITY IN ARCHITECTURE
PROJECT TITLE: BETWEEN A ROCK AND A HARD PLACE

In the context of the relatively affluent town, Wilmslow, we were asked to investigate the pressing topic of 'affordability' in relation to the home. The site sits at an important junction, with links to the town centre shops, institutions of the settlement, and the suburbs. Our aim was to provide a contextual response to the lack of affordable housing in Wilmslow.

From the very initial concept stage, we explored our scheme through modelmaking. The initial model was used delve into the spaces we could create though a courtyard; with removable pieces. We developed a chevron style roof which allowed us a gabled front facade with an interesting courtyard elevation. Secondly we wished to create an oppressive facade through the use of bricks that reduced in size the higher up the building they were; creating a false perspective and making our building appear taller. The simple laser-cut facade model allowed us to quickly visualise how this might appear without having to waste time drafting it out on a computer.

Our final model, cast from plaster, is a section of the front facade. We cast this into a laser-cut mould using foam for the window reveals and a base which we had previously engraved the bricks into. Our aim was to create a realistic texture and depth. The final model expresses the brick pattern and roof-line from the previous models as well as articulating the depth of our window reveals.





NAME:TREVOR STEPHENSON & CONNOR KING
ATELIER: CONTINUITY IN ARCHITECTURE
PROJECT TITLE: REX PLAYHOUSE

Located at one of the Key junctions that forms the un-defined ‘heart’ of Wilmslow, ‘Rex’, a 1935 Art Deco former theatre and cinema now exists as a muddled collection of retail outlets. The project focused on defining the towns centre through the creation of public space while resolving the unorthodox network of ill planned roads surrounding the site and town centre. The revival of the Rex also creates a vibrant cultural heart within Wilmslow through formal and informal performance spaces, community studios, a cinema and a new nightlife hub of food and drink markets opening in to the newly planned public space.

Modelling initially at 1:500, the impact of the buildings form and stature within its immediate context could be identified, helping to mass initial insertions for the fly tower and cinema extension. Moving up to 1:200, our second model aids our understanding of compartmentalising the buildings programme and distributing it amongst its existing spatial volumes. Materiality and material quality such as density, opacity and texture can all be physically manipulated in a physical model which aided choice of materiality.

Both of these site models were constructed to visualise the serial vision and ‘reveal’ of the Rex at the key junctions. Furthermore, Facade studies of the existing building at 1:50 became key in re- interpreting the qualities of the existing building. We produced a series of façade proposals for the new insertions, tweaking and amending the proposals to develop form and materiality taking various approaches to re-interpretation.

We wanted our final model to represent how both new and old components work interdependently to convey the grandeur of the existing facade alongside a careful technical consideration of the new theatre elements. The final model is a 1:20 section of the food market and fly tower component, with layers peeled back to reveal how the insertion of the new is technically achieved in relation to the existing. To show the difference between the old and new, the existing components are stained red in a red mahogany finish, in a cross between a realisation and diagrammatical representation

NAME: AFSHIN KHALIFE
ATELIER: CONTINUITY IN ARCHITECTURE
PROJECT TITLE: ALBERGO LA GRANDE ROCCIA

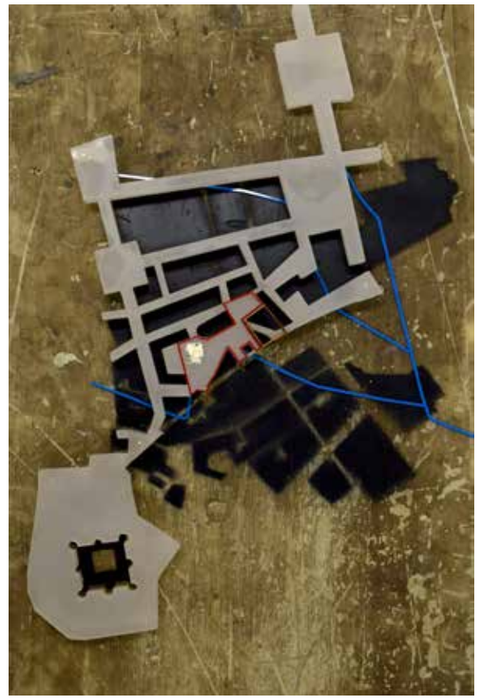
Albergo la Grande Roccia project aims to improve the quality of public space (small piazzas) in Catania, Sicily, by applying the theory of Urban Acupuncture to the proposed project.
The building consists of a restaurant and bars on the ground floor with a big open space that connects Piazza Indirizzo to Piazza Curro. The ground floor belongs to people, though access to the roof garden is controlled in that it is possible to reach it only by using the hotel's lift or stairs. On the first, second and third floors of the hotel there are six prestigious suites and two premium suites. The whole concept of the design is influenced by two factors: the first is to maintain a constant view of the Roman Bath from all floors of the building, and the second is to control and emphasise the rotation and movement of masses of the proposed building.

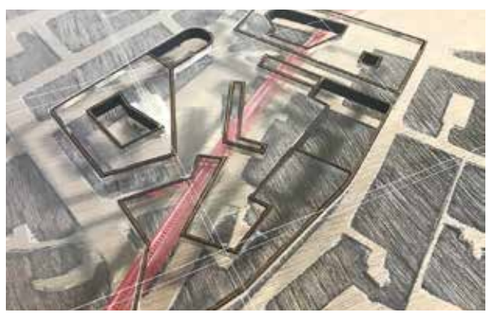
The public can also access the roof garden; indeed, the roof garden in the proposed project is a big terrace that affords people different views of the city and, more importantly, a controlled view of the Roman Bath.

A series of physical models are made through the academic year to explore and realise Catania, the proposed site and the thesis project. As Catania is built on top of layers of lava from Mount Etna, all of the physical models are built in multiple layers to emphasise on the character of Catania.
MDF, plywood and acrylics are the main materials in which models are maid; however, the final models are more sophisticates in which making moulds, casting jesmonite and 3D printing are also used.

The first physical model tries to show the urban form of Catania and highlighting the landmark within the historic part of the city. Layers of MDF and clear acrylics are put together with brass roads in four corners of the 200x200mm model. The scale of this model is 1:200,000 and shows the historic part of Catania.

The second physical model is a study of void (open public spaces) in which connection of streets and spaces between major piazzas and buildings in historic part of Catania is analysed. Two layers of acrylics were lasercut and glued together, then they were sandblasted manually to give them a distinctive look.





NAME: KRISHNA PATEL
ATELIER: CONTINUITY IN ARCHITECTURE
PROJECT TITLE: THE GIN DISTILLERY & BOTANICAL GARDEN

Set in Catania, the gin distillery and botanical garden looks to bring the mystical character of Mount Etna to the centre of the city. The scheme disperses five key botanicals; juniper, almond, coriander, angelica and the native lemon throughout the site. Visitors weave through a courtyard and are greeted by an array of aromas and sights. These botanicals are harvested, dried and then vapourised with an alcohol solution. The final product; gin, is served in the bar area - a space with a roof terrace, overlooking the copper still, almond tree and neighbouring thermal bath ruins.

Model making in this project has been a key component to the process of my design. From concept ideas to site massing and detail studies, I have explored the scheme on many scales and refined my design through making these models throughout the year. The concept model enabled me to explore different ways in which I could arrange and grow the botanicals on site. The site model at 1:500, made sure I had a massing and form that fit into it's context, whereas the detail model at 1:20 let me design the building's threshold and with the floor finishes and brick bond.

The three models have been crafted through various techniques, such as casting, cnc machining, laser cutting and powder printing, all new techniques of model making for me this year. This has been accompanied by hand model making and traditional woodworking. Two main materials have been used; mahogany and plaster. The raw solidity of mahogany and it's dark tone, made it a perfect companion to the versatility of stone plaster. These have been used to create trio of models, showing my thought process from start to finish.

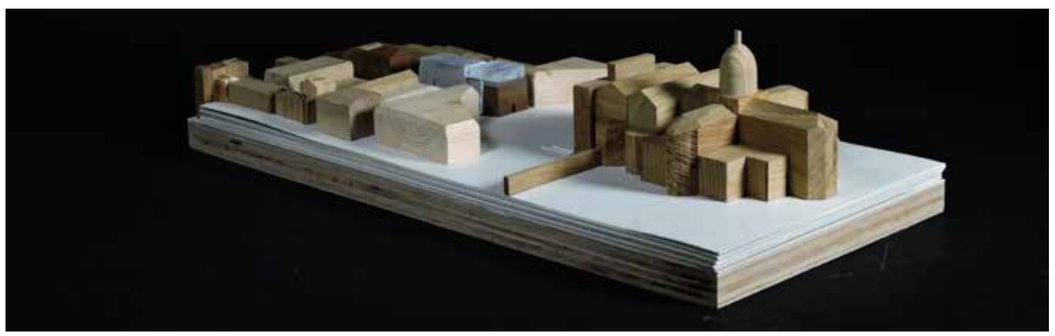
NAME: REBEKAH PARKINSON & KARISSA TYSKLIND
ATELIER: CONTINUITY IN ARCHITECTURE
PROJECT TITLE: FONDAZIONE VITO MARIA AMICO

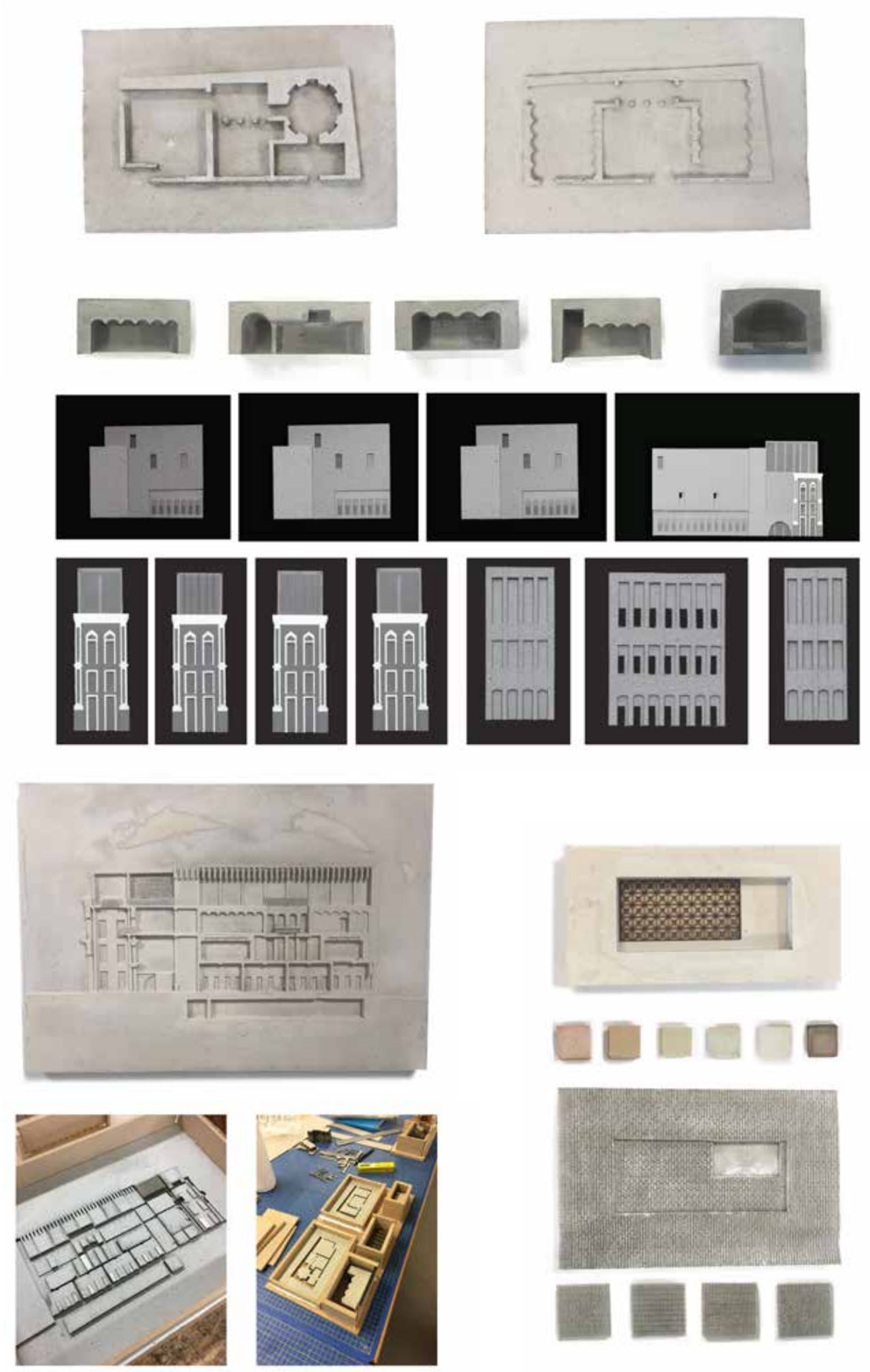
Fondazione Vito Maria Amico is an archaeology museum and research institute based in the historic centre of Catania, Sicily. The project reuses an existing 18th Century Belvedere, previously occupied by the foundation's namesake, as a permanent exhibition space overlooking the piazza. The museum portion of the building is designed as a processional route, taking the visitor on a journey from Catania's origin to the present day through a series of themed rooms.

Models have helped to inform almost every aspect of the design, from facade details to spatial volumes. We have tried to reflect the nature of the building in our modelmaking methods, creating a lot of cast pieces, some of which have a 'ruin' quality to them. This is particularly evident in the stone powder plan casts which act as keyplans for the sectional rooms. These volumetric studies informed the design of the exhibition rooms, looking at light and form in each one.

Having tested the overall facade details in card, facade tests were also cast to reflect the true material of the proposed building (brick and concrete). We created swatches to test brick patterns and material colour palettes before creating 1:20 window reveal models. These were then used to test details such as the soldier brick coursing and the mesh screen materials and patterns.

The site model is made up of several off cut pieces of wood to form the site context and a cast piece with frosted acrylic and mahogany veneer to make up the proposed building. Casting was new to us this year but after doing several models using stone powder we developed a technique of layering laser cut greyboard, sometimes with laser etched detail, to create the formwork for each cast. This allowed us to achieve a high level of detail in the cast and remove the formwork easily with a scalpel afterwards. This process was key to the cast section we produced as there is a lot of tiny details which we could not otherwise achieve.





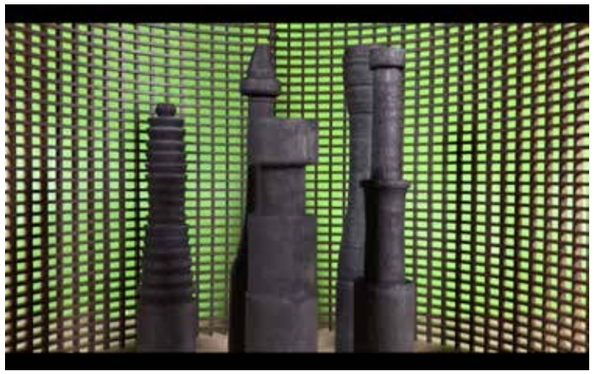
NAME: DAN RENOSO-URMSTON
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: HETEROTROPIA PROJECT

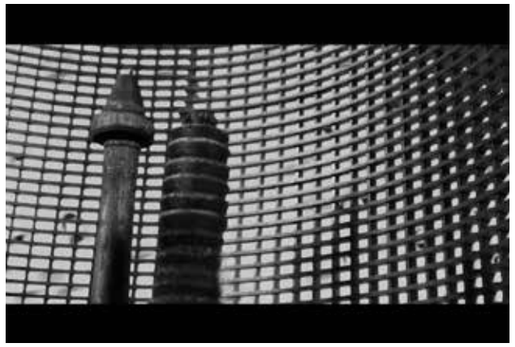
An experimental study into the effects of ‘Heterotopia’ on the metropolis through philosophy, art and architecture.
The project was an exploration into the concept of Heterotopia, a term coined by philosopher Michel Foucault used to describe ‘other’ spaces in our towns and cities. My work wanted to question the nature and importance of this concept through rigorous philosophical and artistic experimentation.

The result is a deeply theoretical project that culminated in an experimental film which applies a narrative to an undeveloped island in central Manchester. The models I designed and made are the focus of the film whilst the video itself goes someway to explaining exactly what a Heterotopia is.

I used models throughout my project as I always do but this year it was different in that my final output was this experimental film. All the models I produced were used in the film and made to look like actual built structures, with sound and imagery overlaid. The models became central to the success of my work.
My process and approach to design has always been through iteration, which made the model making process even more important. Through experimenting with methods like woodturning, resin pouring, hand carving and clay-making the project benefited from a rich variety of styles and perspectives.

The resulting 7 minute film can be found at: https://vimeo.com/269520817











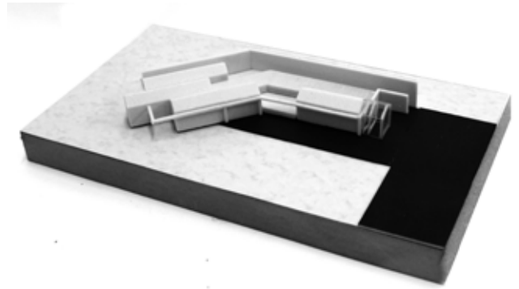


NAME: JENNY BEDFORD
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: SAVE A PENNY FOR THE FERRYMAN

The USE Atelier was presented with the task to investigate the current renaissance in Manchester and respond to the poor quality, cheap construction occurring as a bi-product. This project began through research surrounding existing problems within the city which are limiting Manchester's potential to grow and prosper. The lack of burial space, and the negative environmental impact of common funeral practice, is a spatial, cultural and legislative problem affecting Manchester and many other urban situations world-wide. The proposed solution to this problem was Resomation; an environmentally friendly funeral practice currently illegal in the UK. The proposal therefore challenges legislation and tradition through the provision of a resomation facility, spaces for reflection and accommodation suitable for holding a wake.

The project is proposed on Pomona Island, a vast wasteland currently threatened by the epidemic of cheap, poor quality construction. The site is currently a haven for endangered flora and fauna and is popular with city dwellers escaping the city in search of green outdoor space. This environment provides an appropriate back-drop for a funeral whilst the nature of the island offers physical separation from the city, a chance for visitors to reflect, remember and think whilst detached from present anxieties.

Throughout the project, models have been used to explore, test and communicate ideas through scales 1:2500 to 1:100. My personal ethos towards model making led me to develop models through primarily traditional methods, hand cutting where possible and choosing materials which could easily be worked by hand including card, wood, clay and modroc. I developed a series of site models as the masterplan was crucial to the project. I experimented with combining modelling techniques with film production to communicate the development of the land and made iterative tests of how the built forms sit within the topography. Models were critical in the development of the architecture of the Wake facility and a series of quick massing models led to the realisation of a final form. I believe the passion I have for modelmaking manifests itself both in my use of quick sketch models developed to explore ideas and beautiful presentation models produced to communicate the final proposal.



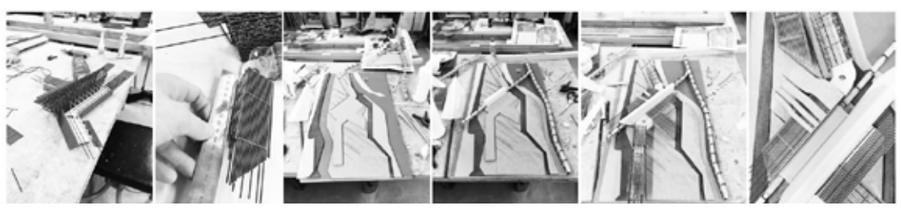
NAME: JONATHAN SOUTHGATE
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: POMONA POWER

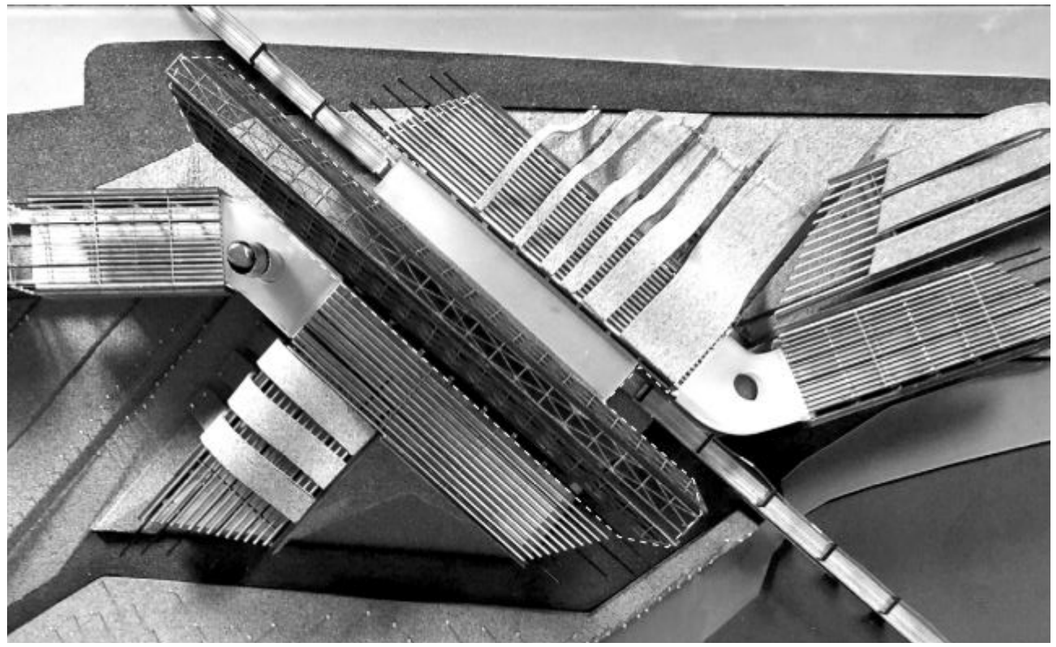
The waste to energy centre the thesis began as a response to the northern powerhouse initiative, investigating the notion of the energy devolution and decentralised energy systems. The government has invested £3.4 billion in growth deals with the intention of providing targeted financial support to locally determined projects in order to unlock growth – supposedly giving local people the powers and tools they need to drive forward growth for their areas.
Yet despite such large scale investment, at present much of the promises are yet unfilled and ultimately the project lacks any tangible outcome. With this in mind this thesis begun to investigate ways in which energy could be generated locally and renewably using a bottom up methodology to benefit communities on a neighbourhood scale.

The thesis identifies with the prevalent issue of fuel poverty and correlating food poverty in a destitute area of Manchester and focuses on creating a circular economy which not only contributes to the discourse of energy devolution but also proposes a solution to tackle fuel and food poverty in parallel through community initiatives of upskilling and economic creation.

Modelling has been used extensively throughout this project to develop the scheme. Using model making from the beginning of the project enabled the concept to flourish through sketch concept models whilst later physical modelling complimented the development of the metropolitan framework at 1:2500, right the way through to detailing the building at 1:20. Physical modelling has allowed for experimentation and development of the scheme ultimately resulting in a more cohesive and resolved end product. A range of techniques have been explored from traditional wood working through to laser cutting, cnc machining and 3d printing where appropriate to maximise efficiency, quality and variety in modelling.

MODEL 1: CONCEPT MODEL - TURNING WASTE INTO ENERGY
MODEL2: SITE DISTRICT MODEL 1:2500
MODEL 3: PRESENTATION MODEL 1:500
MODEL 4: PRESENTATION SECTION MODEL 1:200





NAME: MIKE ELLIS & JACK POULTON
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: St PETER'S SQUARE UNVEILED

The brief received was to investigate the nature and the spirit of Manchester, a city undergoing a renaissance. The aim was to maintain the rich tradition of building culture in Manchester and transform it into a contemporary one that responds to the current culture and needs.

The project was located largely under St Peter's Square in the center of Manchester, utilizing existing infrastructure and architecture, most notably Manchester Art Gallery, the Central Library, and the Guardian Underground Telephone Exchange (GUTE) network, a repurposed nuclear bomb shelter 31m below ground level.

The purpose of the scheme was to reconnect forgotten infrastructure with the prominent architecture above. This was done through the exhibition of the cultural heritage of Manchester; connecting the old with the new.

A thorough use of modelmaking has been hugely influential in the approach of this project. Starting with explorative infrastructure and location models, later progressing onwards through explanatory concept models and analytical light-use models during intermediate stages, the project then concluded with a series of explanatory models focusing on key areas of the scheme¬.

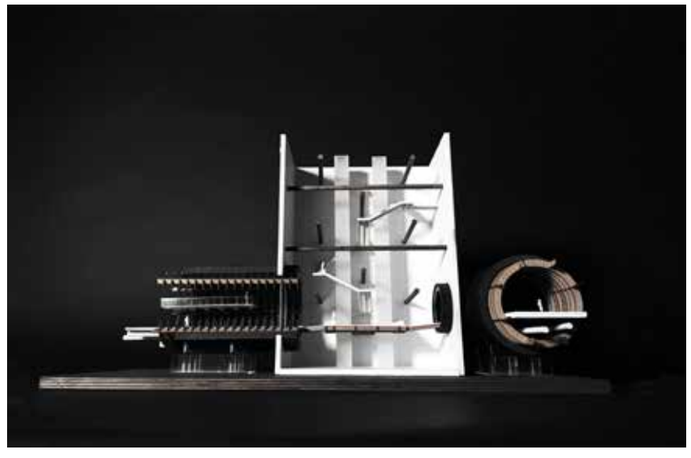
The models built throughout the project ranged between 1:10000 and 1:100, the spectrum of larger and smaller scales used to explore form, concept, detail, and aesthetic.

Effort was made during the project to maintain similar aesthetics throughout, to achieve a clear colour pallet. This was most effective in the series of four models concluding the project. 3D printing was used minimally, and only when deemed crucial for elements too complex to be achieved to a high standard by hand. Instead, a pallet focused around stained wood and paper was used throughout to keep a more organic and craft-centric aesthetic where possible.

In investigating structural opportunities, mortice and tenon joinery systems were a typical method of structural fixing throughout the sets of models produced during the project. This helped to minimize amount of glue used and improved the overall structural integrity of the models. The final series of four models were considered a singular entity, each integral to explaining the scheme as a whole.






NAME: TOM SMITH & JACOB GRAVES
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: MANCHESTER BY THE SEA

Project Location: Manchester (and North of England...)

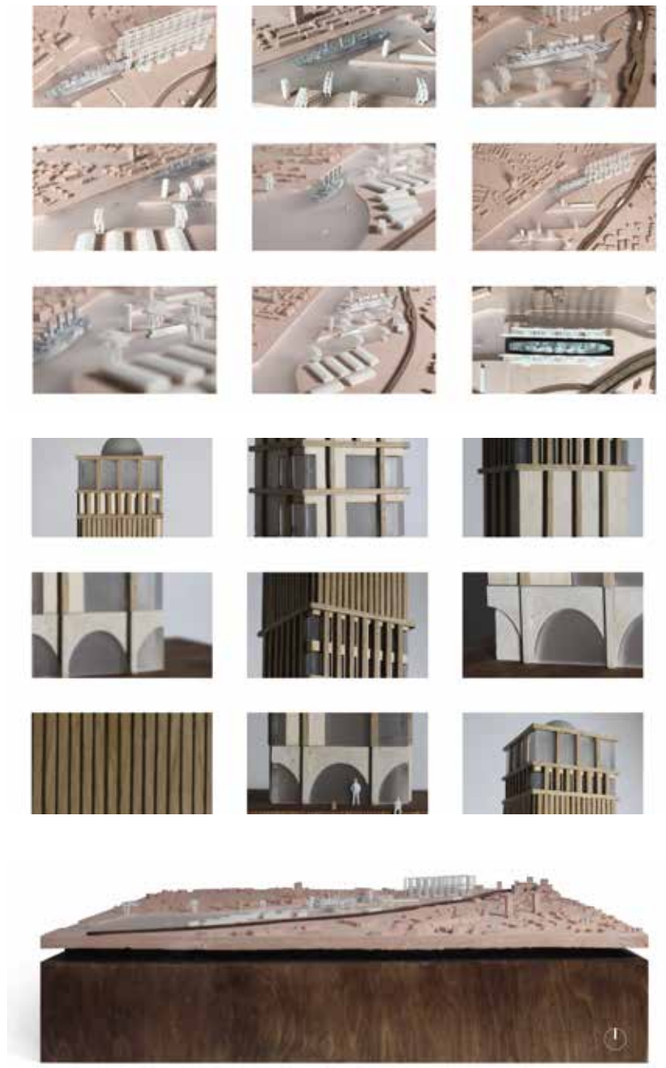
Our proposal is to extend and widen the existing Manchester ship canal, revitalizing the forgotten waterway. “The Great Britain Navigation”, with a much wider channel, would run from the Irish Sea to the North Sea, cutting across the UK, linking together the main cities of the Northern Powerhouse, encouraging domestic and global trade connections to grow, by releasing land-locked cities.

Furthermore, the more versatile, wider canal, would also allow for a variety of activities, in designated lanes and would encourage the growth of the tourism industry in the North of England, again relieving pressure from London, and making the North a destination in itself.

In Manchester, two new ports either side of the city centre allow trade and leisure to be brought into the city, while also creating important nodes where ship lifts lower vessels into a tunnel that runs under the city centre, allowing ships to continue their journey. These ship lifts, will also act as a tourist destination, encouraging habitation of the mechanism and structure, while also providing an experience for pedestrian visitors to ride on the counterweights to the ship tunnel below.

Model making has been an essential part of our project this year. It has allowed us to explore and represent initial concepts at a country-wide scale, while also allowing us to further refine our overall designs.

Scale is very important to us and has been considered throughout our project, as we aimed to address functional and experiential qualities for both ships and humans. Therefore, this year we have created models and objects at a variety of scales, using a number of different techniques. Some of these include: CNC milling, 3D printing, jesmonite casting and low temperature metal casting.



NAME: MORGAN WILD & ALEX GAUL
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: WHAT IF GOOGLE BOUGHT THE NORTH?

This project explores a speculative scenario in which Google acquires the North and takes over the governance of the Northern Powerhouse district.

The project attempts to contribute to the growing discourse around the power and influence of technology companies, their increasingly manipulative products and how society and culture have responded to them. It can be understood as both a polemic and an architectural fantasy.

The design is a Google Campus masterplan situated in Castlefield, Manchester, and includes several different primary building elements as well as multiple smaller designs. The buildings that have been modelled are: The Exchange Tower (an open plan office that has been twisted up into a tower and is based on mobius strip geometry), The Temple of Googology (a waste to energy power station and the temple of the religion of Google, situated in the Gardens of Googology within a geodesic dome) and GoogleBubbles (high density housing where the house-shaped micro-apartments surround a social media virtual arena).

Modelmaking:

The decision to 3D print was driven by the complex forms of the designs and the irregularity of the shapes. The Exchange Tower is a single floor plate that is twisted around an atrium in a series of unbalanced knots; consequently, the building looks different from every angle and a 3D model was vital to be able to appreciate this.

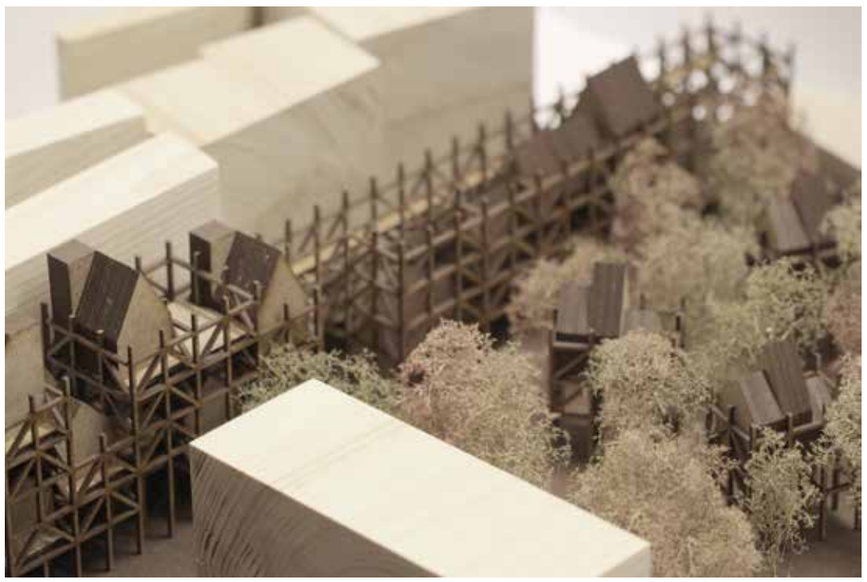
The decision to put them in specimen bell jars, without context, was to translate the idea that technology companies like Google have little respect for context and existing systems, and the designs represent new systems and social environments that can be continued to be rolled out as the campus expands.

NAME: BEN BOLTON & AARON PERRY
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: CONNECTED ISOLATION

The scheme established a scale, based on the user's dependence on Connectivity to the internet. From this, creating a series of spaces that would: increase in isolation, the more people were dependent upon computer devices, and increase in social interactions the less people required internet connection. Providing live-work spaces for a variety of types of artists. Solo artists were more dependent on computer aids, and group artists required more space for collaboration with others.

Located in Berlin, Germany. The site posed great limitations, with sensitive historic aspects running along it, leading to the entire scheme to be raised above the ground floor plan and suspend the architecture in order to preserve the cobbled paving below. As the site sits adjacent to a green area with a dense tree line, it provided an opportunity to spread out into, facilitating the scale of spaces further. Creating a series of pods that would remain completely isolated.

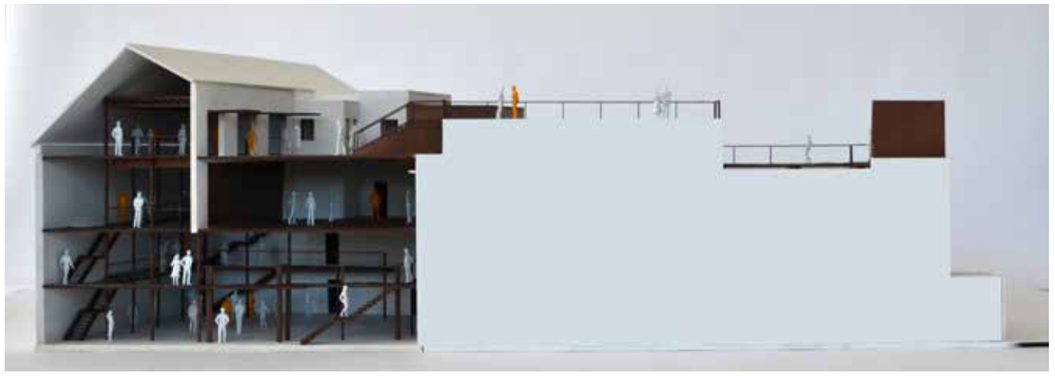
In order to create this model, it required laser cutting for intricate parts, and larger parts were sawn and sanded by hand. Using recycled wood for the surrounding building, allowed us to provide a differentiation between the existing and proposed elements of the project. The entire scheme was then varnished, differentiating between aspects through the different shades of varnish. This model was built at 1:200 scale, enabling us to achieve a substantial amount of detail that the project required. To complete the model, trees were added to populate it and provide reference to the scheme.



NAME: SAM WALTERS & MATTHEW WREGLESWORTH
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: THE LIVING THEATRE

The Living Theatre is an immersive theatre project based in Newman Passage in London. Due to the project revolving around building re-use, the contemporary interventions to the site were kept to a minimum and this was something that we wanted to reflect in the model. The immersive theatre rewards visitor's curiosity, the more a guest explores the more backstory they uncover. In many cases it wouldn't be possible to distinguish between actor and audience member, however for the purposes of the model the actors have been highlighted in yellow.

The 1:50 model is made from varying thicknesses of MDF to represent the different thicknesses of materials. The model was designed to display three aspects of the project: the view of the approach, the roof interventions and through a cut away – the "fly tower" installation within the building. The existing and new parts of the building are distinguished by the different colours. White represents the existing and the brown-metallic represents the new patinated steel structures which act as a common thread throughout the site. The metallic effect was achieved by applying a brown spray paint base followed by a misting of copper and grey spray paint. The perforated metal walkways were achieved by applying this painting technique to mesh and then super gluing the mesh on to MDF structures.



NAME: VICTORIA AXIOTI
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: EUPHORIA

A big number of people in big cities suffer from stress, anxiety, depression, isolation and serious medical health issues. Euphoria project presents an idea of how people can escape from their stressful routine and enter into a dreamy world in which they can treat their body and mind. Mandrake hotel and the KHBT Studio in London have been selected to be renovated and used for the ''Euphoria'' ceremony. The project is inspired by the steps of the hospitality in Ancient Greece, which have been spatially translated through the buildings' renovation.

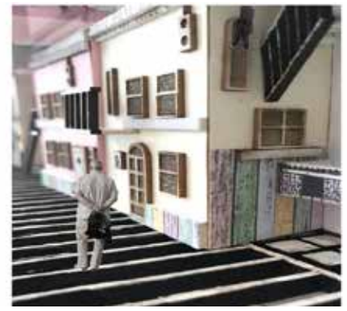
The physical model (scale 1:50), represents a part of the renovated hotel and shows some important spaces where the ''Euphoria'' ceremony takes place. In the ground floor are located the hot rooms, including the steam room and the Turkish bath room and emphasis has been shown to the box in box strategy to avoid the heat transfer to the rest of the building. Tiles made from carton represent the Turkish traditional patterns, and the walls have been sprayed with marble-texture effect to show the importance of the materiality in the hot rooms (to avoid the over-heating of the surfaces). Trees and stones have been added to the open space, functioning as a waterfall external shower. The walls have been made from wood (MDF) to create a feeling of an exotic environment. In the first floor the pool is made from PVA glue and blue acrylic colour and there is a second shower with a waterfall coming from the second floor. The chimneys are made from plastic rods and cable and have been covered with plaster. Their use is important for the gentle lighting that create in the Turkish Bath Room. From the Second Floor people enjoy a stunning view of the open space with the waterfalls and the greenery. Finally the door and the clouds represent the start and the end of the ''Euphoria'' ceremony respectively. By opening the door, people forget the chaos, depression and stress of their daily routine and enter a place made to help them find themselves and appreciate their life. Finally, the clouds represent the peacefulness, serenity and rebirth.

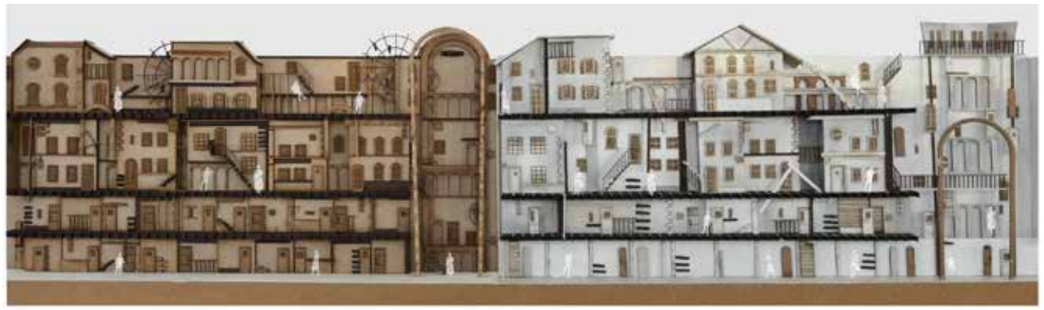
NAME: EMILY DAYE
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: THE HALF WAY HOME

Berlins Crime and Punishment system exceeds the rest of the world, the integrated prison rehabilitation program allows prisoners to learn basic craft skills. However, leaving prison the system is failing. By the words of the Berlin Senate Department for Justice, ‘the transition between imprisonment and society is failing and needs to be addressed’ (2015). The site, Perleberger Strasse, Moabit, Berlin is very restrictive of building opportunities. The site comprised 6.5m x 96m resulting in a unique methodology to housing. This approach is an underlying principle of Urban Space Experimentation. Our atelier attempts to push the boundaries of what architecture can be, through concept, design and building methodologies. The outline Atelier brief is ‘work live’, comprising an alternate approach to housing.

As an approach to ‘work live’ my proposal explores a physical journey through a prisoner’s mental state, leaving prison. My design attempts to resolve the transition between prison and society through pushing the boundaries of what’s considered to be an institution.

To challenge how prisons should be built, the construction sequence consisted of cross laminated timber, therefore the models we built to represent this utilising a mixture of MDF and Plywood. The models were built at 1:100 to capture enough detail within the models, but also represent the prison as a whole. The process of building the models began with a MDF base, then laser cut details and coloured paper were applied using PVA.





NAME: VICTORIA AXIOTI & TAMSYN SYDONIA
ATELIER: URBAN SPATIAL EXPERIMENTATION
PROJECT TITLE: THE MUSEUM OF HAND CRAFTED ARCHITECTURE

Living in a culture of mass produced architecture, we are losing the value and individuality of the hand made. The pressures of our lost architectural crafts are fluctuating under the weight of a modern city. In the words of Walter Benjamin (1936) the mass produced is “destroying our creativity and genius, eternal value and mystery”....

The site, Newman Passage, London comprises and old passage predominately used as a cut through. The site is full of challenges, being neglected, unused and extremely narrow. These challenges embody our atelier ethos, which demands and alternative approach to re-use, through concept materiality and detailed design. Within the site, we discovered various architectural artefacts which have been lost over time, making us consider, where do buildings go to die...

As an approach to ‘re-use’, our design explores the life of architecture from the making, selling, educating and exhibiting the hand made. The building comprises a museum, designed to celebrate a buildings life, death and rebirth. The programme is designed to re-establish Newman Passage, restoring its history, and whereby honouring the process of hand crafted architecture. Our proposal challenges a new construction method reverting back to a lost hand making culture.

To capture the hand-made essence of the project, the models were hand made using MDF, Clay and recycled paper. The models were built at 1:100 as the scale of the project was vast, and we wished to capture the different spaces together. The process of making the models began with cutting MDF, priming and painting the base then using wet clay we sculped the clay elements and hand scored then to get a brick/stone effect. Further details were then added with acrylic paint and hand cutting recycled materials such as paper, card and cardboard.

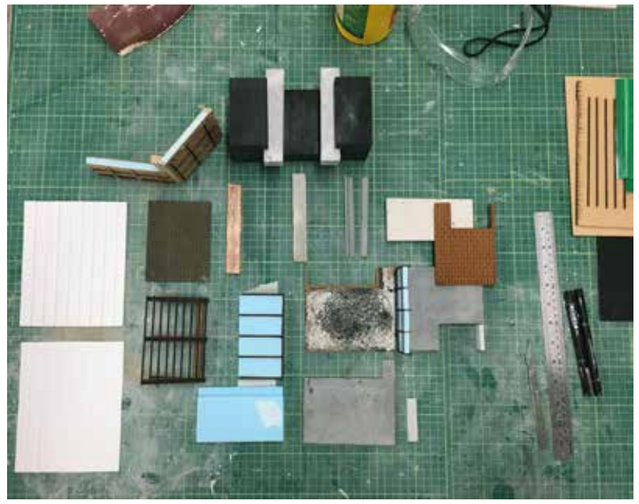
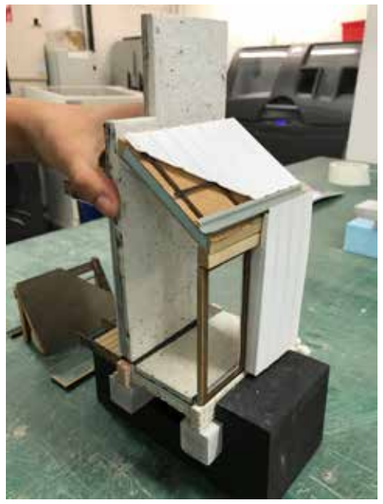
NAME: MEERA LAD, ABI PATEL, SEAN MARTIN, DANNY MCBRIDE, JOE STANCER, JACK WILLIAMSON
ATELIER: MSAP
PROJECT TITLE: BUILDING RE-USE / COLLABORATIVE NEIGHBOURHOODS

Our design-research methodology set out to work with registered housing association Southway, utilising their existing housing stock to densify and diversify their offer within the South Manchester region. We worked as a simulated multidisciplinary practice team to increase household capacity and address current issues such as under-occupation, alongside an over-arching goal to help make the neighbourhood more age-friendly. Our approach involved re-configuring and converting existing semi-detached and pseudo-terrace properties to flats with communal living configurations, thus increasing opportunity for collaboration, supporting neighbourly kinship. A catalogue of modular additions equip with prospective client with a fast and pre-approved solution to annexes, with stand-alone studios, communal units and accessories providing lifetime flexibility for residents.

Our approach was to let our BIM model and drawings give a general overview of our project and use the physical model to illustrate a detailed, tectonic strategy. The 1:20 sectional model slices through the scheme at a key junction showing where the existing nontraditional ‘diatomite’ construction of an interwar semi-detached meets the proposed accessible entrance annex, utilising Structurally-Insulated Panels (SIPs) for fabric-first efficiency.

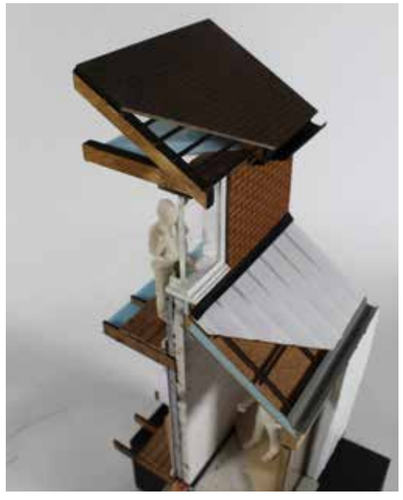
The model aimed to show depth of materiality, colour and texture to help communicate the component parts of our proposal, representing a realistic depiction of its construction. We used it to describe our detailed, tectonic strategy but our aim was to allow it’s extended form to depict the spatial qualities of a domestic setting, allowing the client to envisage the proposals in context. In order to achieve a greater level of detail, we created a ‘strategic planning matrix’ to help consider and plan the materials that would be used as representations. This matrix determined where materials would be sourced, and these were collected in advance of assembly in the workshop. We sought the most cost-effective solution, sourcing re-useable offcuts wherever possible.

During development, we approached the build in two parts: fabricating individual components and overall assembly. This gave us time to resolve and refine areas of the construction detail as we progressed through the schedule. The model is an informative sectional detail, presented with elements striped back to see the materiality unfold.







NAME: PETER BELL
ATELIER: INFRASTRUCTURE SPACE
PROJECT TITLE: LIZARD SPACEPORT

In recent years there has been a growing interest in space travel, both for the colonization of planets within our solar system and for space tourism. This project explores the vertical connection between the ground and space and how it can be used as a resource. My thesis explores the potential opportunities of a spaceport located on the Lizard Peninsula in Cornwall to mine asteroids of precious metal and recycle space junk. The spaceport has 3 primary programs; manufacture, launch and categorising, processing and recycling of items from space. These items are processed through a series of facilities including a large processing plant, medium processing plant, metal shop, radioactive waste store, waste facility and a space junk archive. Each of these processes are communicated throughout my portfolio using a series a logo's.

In the initial stages of this project I mapped and diagrammed the relationships between the ground and space as well as the multiple layers of airspace with the intention to produce a model to demonstrate these concepts. After some research, I found the best method to achieve the desired aesthetic and communicate these concepts was to etch into glass. This was used as a method to communicate spatial processes as it allows objects to be suspended in 3 dimensions. The glass portion of the model shows the interactions between the ground and space. The base of the model illustrates the sites processes once the materials have been returned to earth.

Within my masterplan, I designed in detail a manufacture facility. I am also working on a second model which shows a section through this facility. The model is at 1:200 scale and shows process within the facility and the structure of the building. I have used a combination of laser cutting, 3d printing and hand crafting to model this structure. The design of the structure required a large amount of planning and experimentation before construction of the model. For example, a test truss was handmade and revealed potential problems with my methods and how to proceed to a full scaled model. I have currently made the frame and the roof structure and am in the process of finishing the spaceframe structure. It is due to be completed for the final show and should be seen in combination with the glass model. Between these two models I demonstrate a variety of process at vastly different scales which is a core theme of exploration for my thesis project.