
MANCHESTER
1824
The University of Manchester
B.15
:45

ARCHITECTURAL MODELMAKING EXHIBITION

B.15
:45

Fig.01

MODELMAKING FOR ARCHITECTURE AND PLANNING

The Architecture and Planning building was designed by Professor Roy Kantorowich and Norman Hanson in 1970. The radical design included the B:15 modelmaking workshop, providing a vital service for the new school.

The brutalist style building was seen as very progressive. Indeed, at the time there were rumours that Kantorowich had based his ideas for the school on an earlier work he had been involved in for a prison in Johannesburg although there are doubts about this.

Ken Peacock was appointed the first Modelmaking Workshop Technician at the University of Manchester School of Architecture. He had been working as a highly skilled pattern maker for the engineering company Vickers in Trafford Park for many years. Along with Kantorowich he set about creating a workshop environment with the best possible tools and equipment.

Through the 1970's and the mid 1980's the workshop proved very popular with undergraduate and post graduate students who, under the guidance of Ken, were able to create development models and more highly finished presentation models.

Ken remained at the school until 1994 having made countless models with students and commissions for numerous architectural companies including Hodder Associates and Buttress Fuller Alsop. In fact, Steven Hodder and Donald Buttress became regular employers of Ken's modelmaking skills over the years; one notable project being the extension to Saint Catherine's College Oxford built for Steven Hodder Associates.

In 1995 Jim Backhouse took over the antiquated and much neglected facility. Time had taken its toll. Years of activity and constant use meant that a re-vamp and some major reorganisation of the equipment were vital if the workshop was to keep pace with the evolving demands of the school.

Over time, a large proportion of the older traditional wood working equipment was replaced with digital equipment and processes.

The high demand for modelmaking in the architecture school continued into the mid 90's; expanding further when the University of Manchester School of Architecture and the Manchester Metropolitan University merged in 1996 to create the Manchester School of Architecture (MSA).

Fig.02

B.15 :45

Fig.03

Fig.04

Fig.05

Fig.06

Fig.07

During the last ten years, the workshop has seen an incredible amount of change. Digital technology is now standard practice for creating models. In the early 1990's however, everything was shifting towards CAD and highly polished 3D visuals. However, this digital revolution was to wain very quickly as students and staff started to realise the real potential and value of making physical models again. Rather than seeing computer driven making as an answer to all modelmaking, the collective attitude has begun to recognise its place as a tool alongside all other forms of making.

Coupled with the long established tradition of advice and insight from staff, this continued appreciation of making has helped the workshops role endure all manner of change in the institution. The school continues to equip students with the necessary skills and understanding of the craft of modelmaking, and will do so for many more years to come.

Fig.08

B:15:45 LESSONS FROM THE PAST

Scott Miller joined SEED in 2013 and one of his first tasks was to document, and archive the model collection which had been gathering dust in a storeroom. As a trained modelmaker Scott quickly realised the value of the contents to the institution. Here was a unique narrative of the history of the school and an insight into how modelmaking techniques have changed over the years.

Most of the work had not seen the light of day in years; it would be tragic if the countless hours of labour that has gone into producing these highly detailed models should be lost or become dilapidated.

Another motivation for hosting this exhibition, is that over the course of an academic year, hundreds of sketch models, section models, presentation models, and all in between, pass through the B:15 doors with little recognition of their creation. Therefore, we felt that these projects needed to be shown along with the many unseen works, as a snapshot of the extensive portfolio which B:15 has brought forth. Every year the B:15 workshop and its student cohort produce some fascinating design work and this is a showcase of some of our remarkable outcomes.

This exhibition provides a valuable insight into how the school has used models as a teaching and design tool through the years. Without doubt it will put the work into historical context and demonstrate various model types and techniques for making. As you look around the exhibition you will see examples of work displayed under a numbered category. These categories are typical of the types of model produced. This said, these groups must be seen as a guide with many hybrid styles also making their way into the process. In placing these works into audiences' consciousness we hope to stimulate and revive interest in both traditional and contemporary models alike.

Jim Backhouse & Scott Miller,
August 2014

msa Manchester School of Architecture

MANCHESTER 1824
The University of Manchester

Manchester Metropolitan University

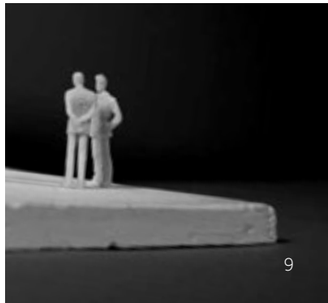


Fig.09

Fig.10

HISTORY MODELS

:1

In order to understand how contemporary attitudes to architectural design have evolved, it is important to look at past works. An effective and valuable part of this process is the study of exemplar projects which have become notable in the field, with their varied approaches to solving the issue of space. Rather than focussing on the written and two dimensional drawn aspects of these designs, students producing models will get a greater understanding of the shapes and voids which create these spaces. Creating models provides tangible experience of a subject that would otherwise be on the page of a textbook, or a group of images.

In creating these studies each student demonstrates their understanding of the site as well as their accuracy and skills in making. Each year group creates a vast array of precedent models which are then used to introduce the subsequent years to the projects.

Recalling the period in the late 80's and early 90's, tutor Eamonn Canniffe remembered around 40 models being produced each year, with each successive year using the previous years' examples as inspiration for styling and presentation techniques. Frequently, models featured full interior representations, which had the ability to disassemble and allow the study of internal details. Such models were often passed around during lectures.

As with any field of study there is a great deal of importance placed on the past successes and indeed the failures. With this in mind the role of the history model has to be considered essential in the foundation education of any up and coming student of architecture.

'LA PARC DE LA VILLETTE' STUDY

Unknown, circa 1992-98

Architect: Bernard Tschumi

Made from gauze, card, paper, card base.

:1.1

'MODENA CEMETERY OSERY' STUDY

Jim Backhouse, Andrew Banford, 1994

Architect: Aldo Rossi

Made from mahogany, acrylic, card, gauze, styrene strips.

:1.2

'PALAIS DE L'ASSEMBLEE' STUDY

Fahmi Noor, Joel Wildgoose, Dave Hall, circa 1992-98

Architect: Le Corbusier

Made from chip board, balsa wood sheet and strip.

:1.3

'TATLIN TOWER' STUDY

J.E. Beresford, G.M. Perring, A. Simpson, circa 1992-98

Architect: Vladimir Tatlin

Made from mild steel strips, solder, cardboard, plywood base.

:1.4

'FALLINGWATER' STUDY

Bee Hai Chun, Daniel Dominguez, Eric Olojugba, Stuart Wighton, circa 1992-98

Architect: Frank Lloyd Wright.

Made from polystyrene foam, cardboard, paper, clear styrene.

:1.5

'RONCHAMP' STUDY

Conan Ball, Kam Leung Cheung, Suzi Heape, David Loga, circa 1992-98

Architect: Le Corbusier

Made from polystyrene foam, cardboard, paper, Modrock.

:1.6

'CASA DEL FASCIO' STUDY

Denis Balent, Alex Ellenberger, Ove Grung, circa 1992-98

Architect: Giuseppe Terragni.

Made from timber strip, Letraset, wire, cardboard.

:1.7

'CARPENTER CENTRE' STUDY

T.C.Hon. C.F.Yeung, V.L.LEE, S.K.Li, Circa 1992-98

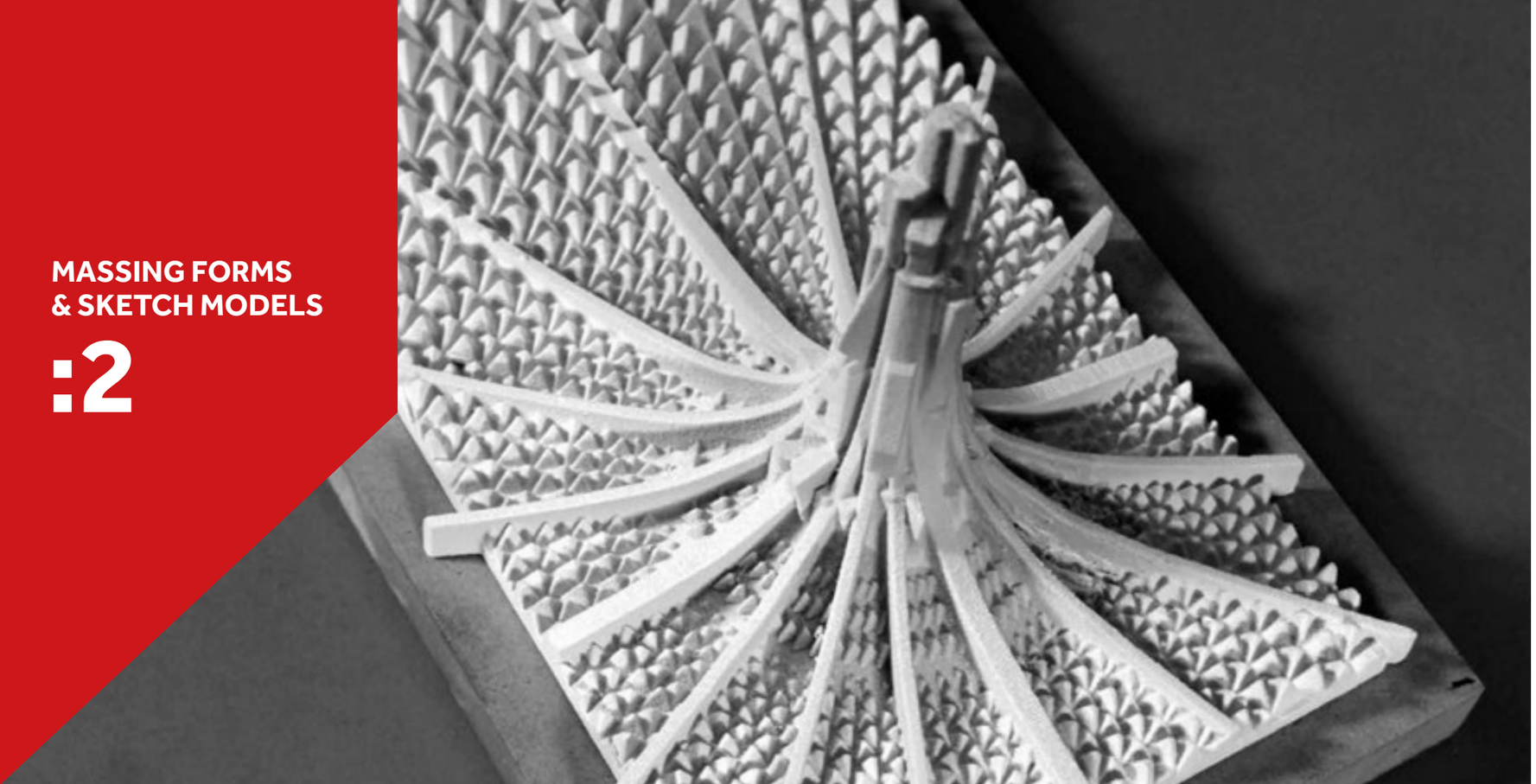
Architect: Le Corbusier

Made from cardboard, paper, clear styrene.

:1.8

MASSING FORMS & SKETCH MODELS

:2



It is important to remember that the tool of modelmaking within architecture doesn't always have to appear 'complete'. If a model has performed a role in directing the outcome of an idea then it, as a tool, can be complete even in rough form. In the creation of massing and sketch models students will often produce rough and seemingly unfinished pieces to communicate the overall form of an idea. This means a study of a particular form or structure that is yet to be refined. As ideas are improved upon and discussed through presentation perhaps more of these models will be produced to take an idea forward. The level of detail at this stage is often minimal with entire façades or buildings represented by simple block forms. This is because the area being focussed on, is that of the overall form rather than the 1:1 'how does it actually stay together?' questioning that follows later.

In bigger projects the process can continue to a point of closure, whereby a design is settled on and presented at a clear and high level of finish as a presentation model.

Whilst presentation models serve vital purpose in both education and commercial architecture it is often these sketch and development stages that are greatly appreciated by marking academics. This is because they clearly show the evolution of a concept as well as demonstrating an individual's skill in identifying problems and devising the most appropriate means of correcting them.

HURVA SYNAGOGUE BY LOUIS KAHN STUDY

Ciara Tobin, Lustina Nicolae, Pui Mun, Manasvi Jhavhi, 2014

This project was a massing study of the never-built Louis Kahn design for a synagogue in Jerusalem. The model uses minimal material variation to create the block shapes of the design to convey the form. Made using pine and MDF.

:2.1

PHILLIPS EXETER LIBRARY STUDY PROJECT

Tom Brownill, 2013

This model shows the interplay between planes, volumes and voids in this piece of Louis Kahn architecture. Used to convey similar features in Tom's own design. Block form and inserts were 3D powder printed with the outside walls being made from laser cut then painted MDF.

:2.2

'GOTHIC MODEL' MASSING STUDY

Alessandro Gabriele Columbano, 2008

Produced using the 3D Powder printing process from a CAD Model, Alessandro looked at traditional gothic forms and architectural detail with a view to creating something in a traditional gothic style using modern digital methods.

:2.3

'BRADFORD CITY OF FILM' SITE MODEL

Lisa Kinch, 2013

Taking the ageing facade element of her scheme Lisa decided to create a basic massing model of her site by using Laser cut acrylic sat on a rusted steel base.

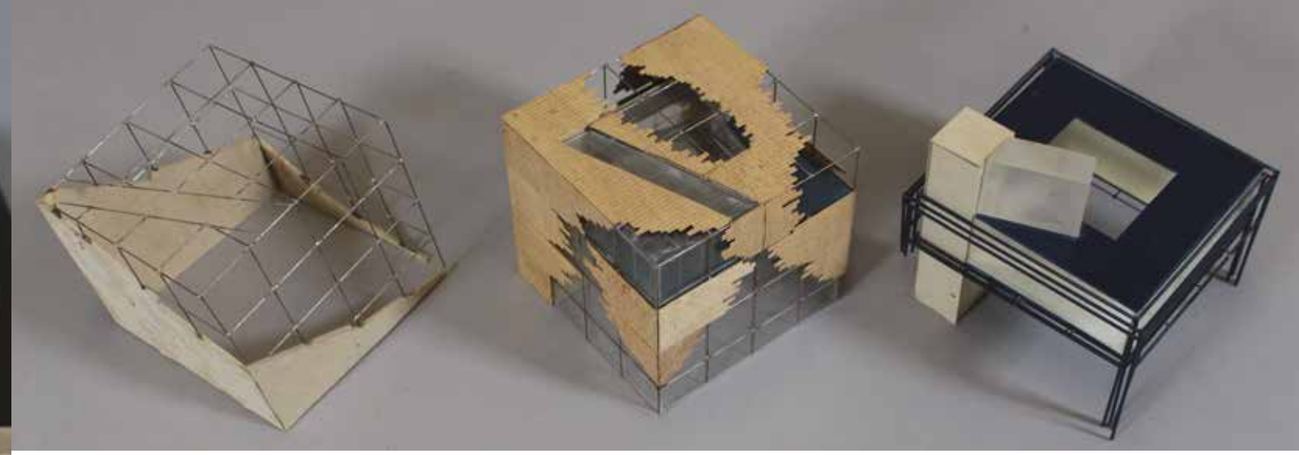
:2.4

UNKNOWN MASSING PROJECT

Unknown, thought to be early 1990's

Massing study made from steel. These were most likely made using a milling machine.

:2.5



CONCEPTUAL MASTER PLAN

Claire Louise Moore, 2005

The different roles of buildings within this area of study are represented with a different material across the model. Made using a selection of timber and acrylic blocks with some laser cut elements.

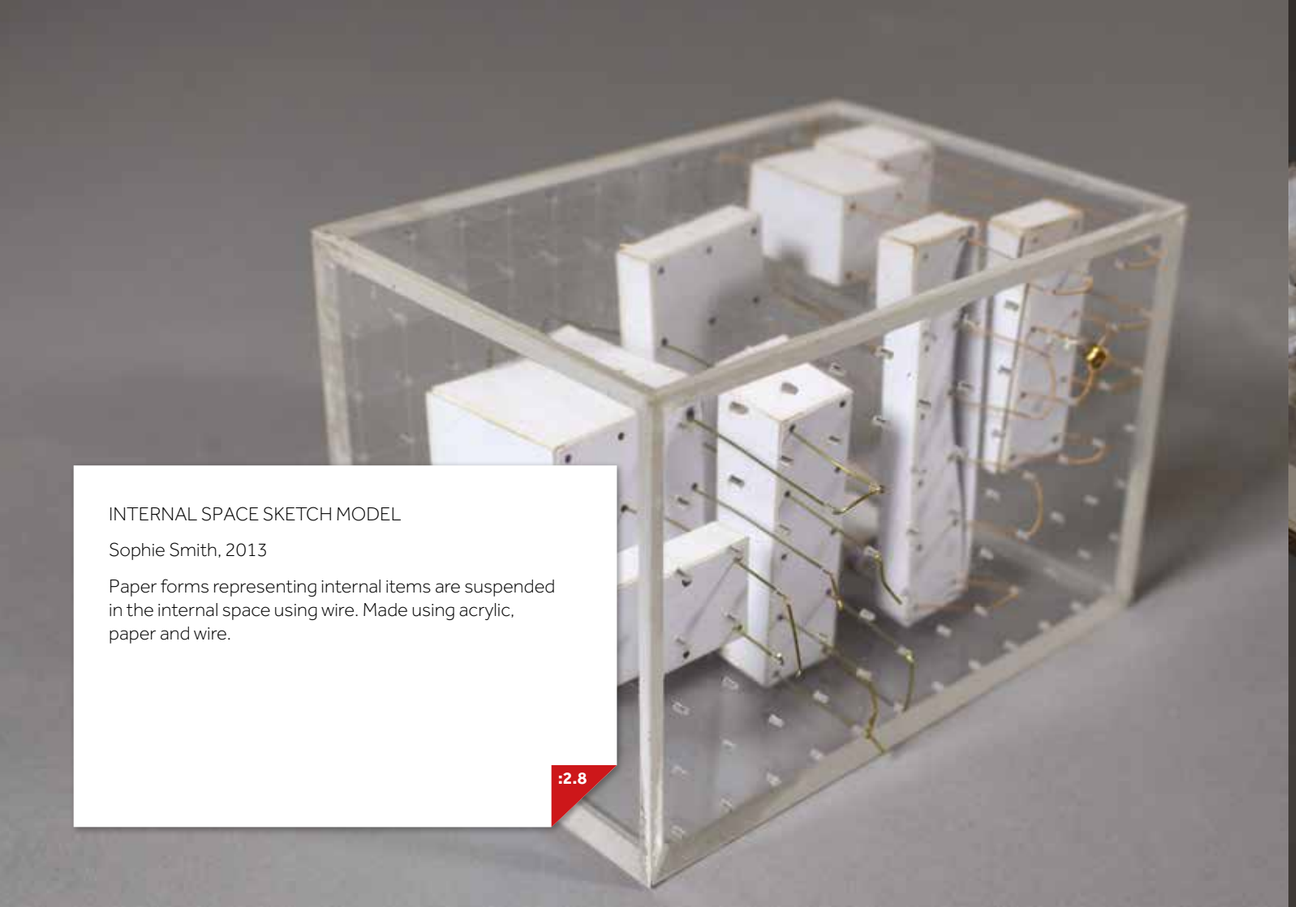
:2.6

'THE OBJECT OF DESIRE' FRAME AND SPACE STUDIES

Nicholas Fung, 1999

Nicholas' focus for this project was looking at how the placement of a subject, in his case a new car, within a building could improve its appeal to a potential buyer. These are some of his early studies made to better grasp the use of space in a given cubic area. Constructed from a mix of steel wire, paper, wood and acrylic.

:2.7



INTERNAL SPACE SKETCH MODEL

Sophie Smith, 2013

Paper forms representing internal items are suspended in the internal space using wire. Made using acrylic, paper and wire.

:2.8

'MODEL STUDIES'

Vun Loong Lee, 1992

A set of 3 model studies made using paper and wooden sticks glued and folded to create and explore forms.

:2.9

LARGE SCALE & PROTOTYPE STUDIES

:3

Large scale studies for architectural projects are an essential step in the refinement of a design.

Whilst small scale models can help to demonstrate an idea of space they are less effective at conveying the actual conjuncture and material relationship between components.

This is where large scale or 1:1 modelling comes into its own. Whether it is in the form of an original design or studying a relationship to an existing piece, matching and pairing elements of construction together is an essential part of detailing in a successful scheme.

In addition to aesthetic requirements, there is the crucial question of whether or not a design will physically stay up! Testing this at smaller scales helps to clarify any issues and building up to a 1:1 detail will allow a more definitive understanding of a designs' validity in terms of its function within a building.

In commercial architecture completed details may be repeatedly modelled and finalised before mass production for use on site but not without rigorous testing.

This process has become increasingly computer driven but even in major practice, details still begin life as a model.

STEELWORK MASTER PATTERN

Ken Peacock, circa 1990

This 1:1 pattern of a steelwork detail was made to be used as the master for casting replacement steelwork details at a listed Liverpool warehouse. The master is made using Jelutong and car body filler which is sanded to a smooth finish before painting. The component was used several times as the signs of wear and tear show.

:3.1

'ORNAMENT: EMBELLISHING UTILITY' PLASTER WINDOW SECTION

Becky Prince, 2014

This brief took an existing detail and tested Becky's idea for a new lighting function in her theatre. By casting the existing element of the building in plaster the contrast and therefore importance of the relationship between new and old is clearly demonstrated.

Cast from stone plaster with laser cut MDF and acrylic components.

:3.2

'MARCO OLD TO NEW' STEEL I-BEAM DETAIL

Sima Oklah, 2013

This detail study looked at the existence of both new and old in architecture and how you might combine the two alongside each other. Made using nuts and bolts, MDF and pine with painted finish.

:3.3

'LIGHT CONSTRUCTION' STUDY

Andra Calin, 2013

This 1:2 scale model was made to test loading baring techniques and was inspired by post and beam structures of Kengo Kuma in Japan. Specifically these studies aimed to be glue-less in construction as the 1:1 structures are in reality. Made using strips of pine.

:3.4

ERGONOMIC FAÇADE SHADE PROTOTYPE

Henry Faulkner, 2014

This project was a 1:1 study of how a proposed shading system could work if fixed into a building façade.
The fan-like design allows shade to be cast when required by opening or closing in response to the elements.

Made using laser cut fabric and acrylic components.

:3.5

STRUCTURAL DETAIL STUDY

Kotryna Dapsyte, 2013

Post and beam inspired study detail for a site in Levenshulme. Students were encouraged to incorporate elements of architecture they had studied into a new proposal. Made using pine, MDF and coach screw bolts.

:3.6

STRUCTURAL & CROSS SECTION STUDIES

:4

In a similar way to large scale modelling the use of structural and cross section models allows the layers and fabric of a construction to be broken down and thus, better understood when presented. In taking the time to correctly demonstrate the inner framework of a building or its structural form, students can learn a deeper understanding of their subject as well as effectively conveying the various layers that make up the construction to others.

By producing models of this nature, details that require repetition can be made and placed to clearly show their role without requiring the extensive detailing of a large scale model, or having the difficulty of assembling miniscule pieces of a smaller scale massing or site model.

PAVILION CONCEPT MODEL

Alexandr Valakh, 2013

Made entirely from laser cut paper which was pre-designed using CAD and then hand assembled. The project was part of a 'live brief' which required students to submit ideas for a pavilion marking the centenary of the beginning of World War One at Dunham Massey Country Park.

:4.1

STEAM ROOM AND CHANGING FACILITIES CROSS SECTION

Unknown, thought to be early 1990's

This detailed model demonstrates a dodge or cut through section across a building. By showing layers of construction as varied levels of completion we are able to understand the overall form whilst getting an insight into the construction below. The model uses timber strips, card, paper and foam board.

:4.2

PAVILION CONCEPT SECTION MODEL

Alexandr Valakh, 2013

Along with his paper study for this submission, this section detail was produced to demonstrate how each component would fit in relation to the next. Made using laser cut plywood, nuts, bolts and laser cut polypropylene.

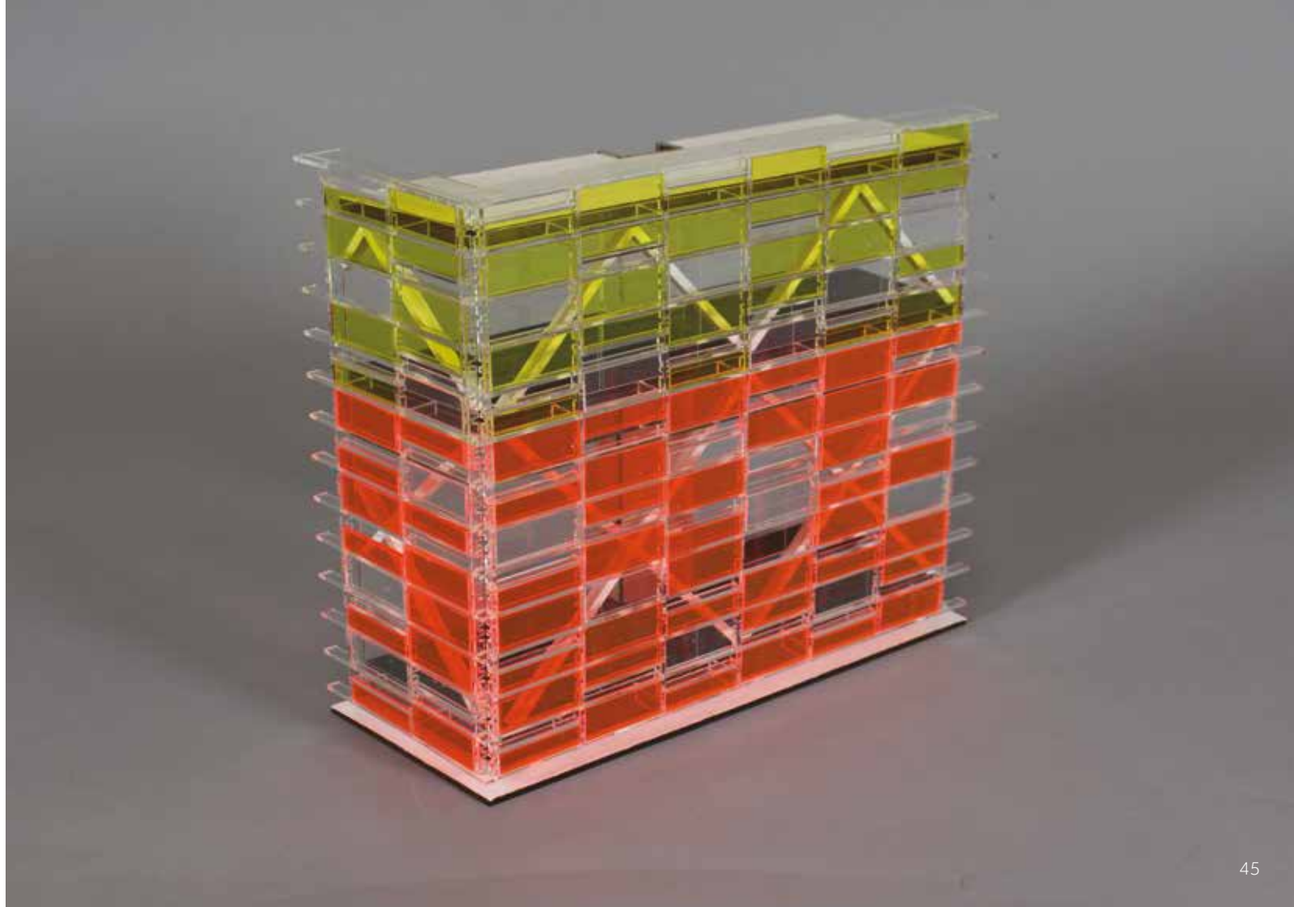
:4.3

'THE SOCIAL CONDENSER' PROJECT FAÇADE SECTION MODEL

Matthew Javis, 2014

Matt used this detail section to demonstrate how the framework of his design related to the outer glazing façade. Components were created using laser cut acrylic in a variety of colours to match the patchwork glazing scheme of matt's design.

:4.4



MODULAR CONSTRUCTION DETAIL SECTION

Bryn Lee, 2013

Built at the appropriate scale of 1:50, Bryn's detail model uses a variety of different media to illustrate how different types of component would join up through his design. Whilst the detail model only represents a small portion of his building, it is clear that the construction and component assembly would remain consistent across site and therefore a more extensive model at this level of detail is unnecessary. Made using ABS 3D printed components, hand-made timber components, timber strips, acrylic and a CNC cut teak base section.

:4.5

FRAMEWORK STUDY FOR UNKNOWN PROJECT

Anna Woodeson, thought to be early 1990's

This sketch model used wire and mesh to create the structural forms for Anna's design. Floor and stair masses are simply represented using paper with thin timber for other room details.

:4.6

'INTIMATE ECONOMIES' PROJECT CROSS SECTION

Aayu Malhotra, 2014

Aayu's 1:50 model is made using traditional hand cut methods with card, paper and thin timber. Only elements which are repeated regularly across the model are produced, appropriately, using a laser cutter. Everything else was hand cut to suit. This model was made ahead of his completed site model.

:4.7

'IDENTITY INSTITUTE' PROJECT, CASTLEFIELD MANCHESTER

Polys Christofi, 2014

An unusual take on studying through a building section. Polys used a slide method to allow part of his section to be elevated to reveal the design behind. Made using laser cut MDF, wooden dowels and fishing line.

:4.8

PRESENTATION MODELS

:5

These models are show pieces, made to deliver a well-rounded representation of an idea with a high level of finish. Whilst the journey before display can include, or focus on certain aspects of a design there is no more effective way of demonstrating a completed scheme than a presentation model.

What is perhaps worth noting here is that ANY model type can be a presentation model. For example, if the role of a project is to prove a concept for better structural jointing, then a large scale detail model would perhaps be best suited. This could be finished to a high calibre, just like a completed usable component in a 1:1 building. Hence, it is important to remember that the appropriate use of particular models depends on the job they are required for.

In practice, more often than not, the finishes chosen for presentation models are in keeping with the overall branding or style of a project. Accuracy and cleanliness of presentation are paramount for the reputation of the practice because models are frequently used as sales tools, approval for projects, or to win competition bids. Whatever their use, presentation models play an enduring and fascinating role for people unable to resist the temptation to gaze and imagine the concept they see in front of them.

The presentation models shown in this collection are finished in a variety of styles with deciding factors being; the nature of their role, message, or aesthetic expression.

In many cases, having a well thought out presentation model is equal evidence of an idea, as crisp renders or drawings may be.

STUDY SITE ADJACENT TO BASILLICA PALLADIANA, VICENZA

Eamonn O'Hara, 2009

This model is a good example of mixed media in making. The idea of designing a building to sit alongside one of the most famous buildings in Italy presents a challenge to any designer due to the extensive list of views to consider. Eamonn's attempt puts across a convincing proposal in a modern style. Made using foam board, 3D powder print, cardboard, MDF, acrylic, styrene strips and copper foil.

:5.1

CASTELLO DISTRICT, VENICE

Lauren Green & Becky Prince, 2014

This model was made as a joint site plan between two students carrying out studies of the same site in Venice. Their individual efforts could then be placed within the context of the site as required for demonstration. The two decided to 3D powder print their model – an unusual approach for something with so much massing but successful none the less. The model sits on a layer of plywood and black polypropylene to represent water.

:5.2

'ARSENALE DI VENEZIA'

Lauren Green, 2014

As its name suggests, this project looked at developing a hotel in the Castello district of Venice. The site aimed to redefine a mixed use public and private space. Lauren used 3D powder printing to print her finished design in keeping with the integration theme across the chosen sites in Venice.

:5.3

'TEATRO DEL POPOLO: REAPPROPRIATING THE RUIN'

Becky Prince, 2014

This project looked at redeveloping the chosen Castello Venice site as a theatre within exiting ruins. As with the accompanying site plan, Becky used 3D powder printing to produce her proposed site as a mass form combined with a cut acrylic block to create the proposed main auditorium space.

:5.4

'IN LIMBO' PROJECT

Laura Minca, 2014

Made from laser cut acrylic, vac formed plastic, jelutong block, plywood sheet, brass etchings.

This presentation model was produced to demonstrate the final site outcome for Laura's study of a stalled building site in Manchester. The prospective size of the proposal was made clear using scaled brass etched figures and trees as context.

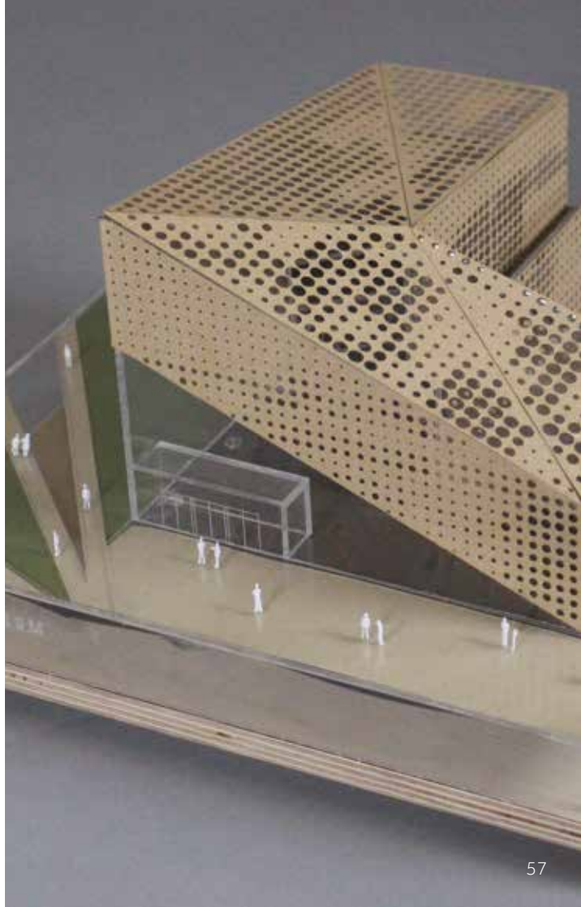
:5.5

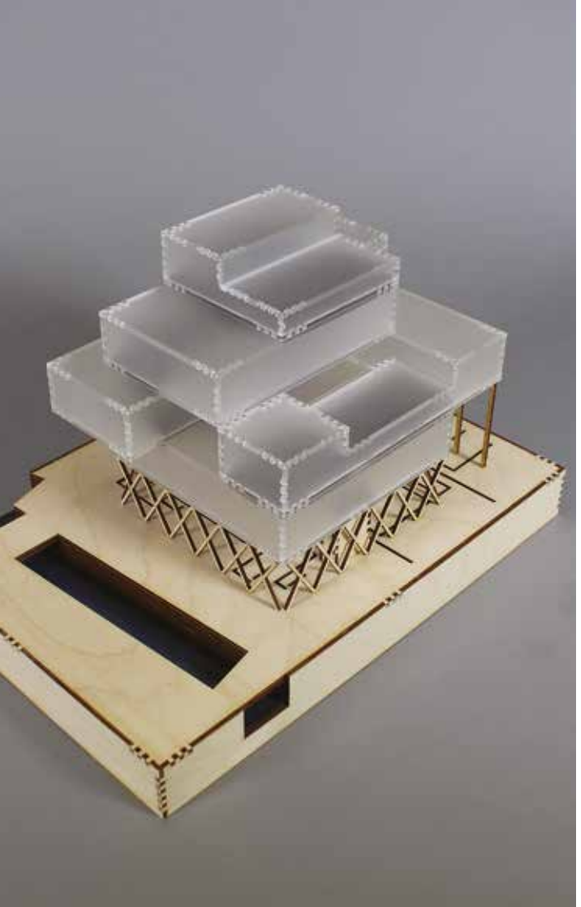
'BRADFORD CITY OF FILM' PROJECT

Lisa Kinch, 2013

The City of Film project explored the idea of developing international film studios in the heart of Bradford. This final presentation model used lights with perforated paper as proof of her concept that perforations could be used on the facade to create images.

:5.6





'THE SOCIAL CONDENSER' PROJECT

Matthew Javis, 2014

This model uses pre-designed interlocking joints for the laser cut components that make up the mass of the design. Matt used frosted acrylic and colour filters to indicate different functions of the site when light is shined through.

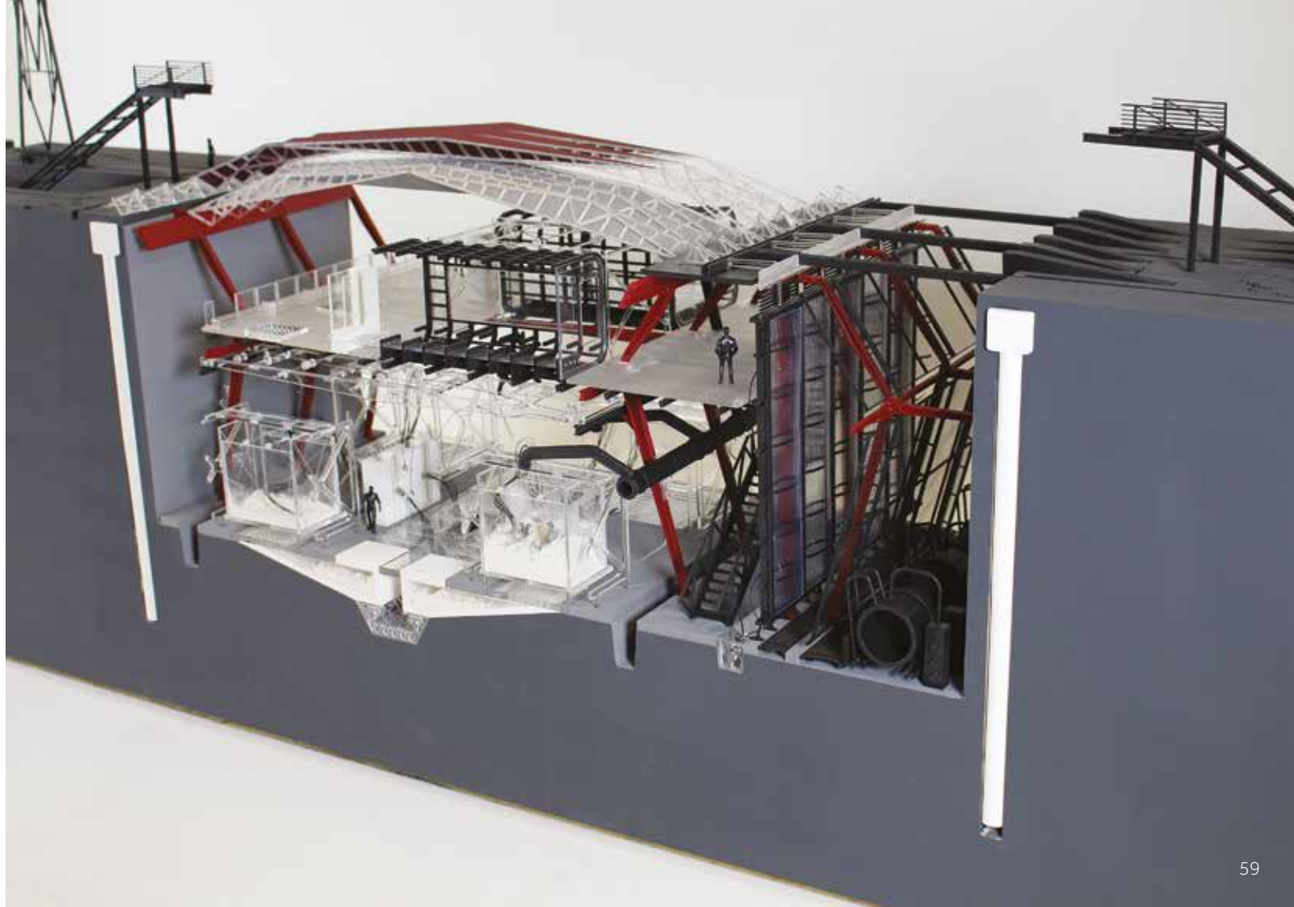
:5.7

'TESTING THE MACHINES OF A THIRD INDUSTRIAL REVOLUTION'

Abhi Chauhan, 2014

Abhi's project looked at the very current idea of the future of housing which concerns rapid production through 3D printing technology. His model shows a cross section of a large scale 3D printing facility of the not so distant future. The model was made using a range of CAD driven processes in keeping with the theme of his studies.

:5.8



'INTIMATE ECONOMIES' PROJECT SITE MODEL

Aayu Malhotra, 2014

Aayu's 1:100 site model is made using tradition hand cut methods with card, paper and thin timber. Only elements which are repeated regularly across the model are produced, appropriately, using a laser cutter. Everything else was hand cut to suit.

:5.9

LINEAR 'MICRO-LANDSCAPE' EUROPEAN COMPETITION WINNING MODEL

Ken Peacock and Peter Howcroft, 1994

Made as a competition entry from white foam, jelutong, balsa and, oddly, sugar cubes!

This project was designed by current head of MSA Tom Jefferies who commissioned the then Head Technician Ken Peacock to produce the supporting model.

:5.10

BUXTON ROMAN BATHS

Ken Peacock, 1985

The model illustrates the proposed design for The National Spa Water Centre, by architect and then tutor at the school, John Bishop. The design combines the structure and circulation of two earlier baths built on the site and used the model to demonstrate this.

Made from jelutong, plywood, MDF base.

:5.11

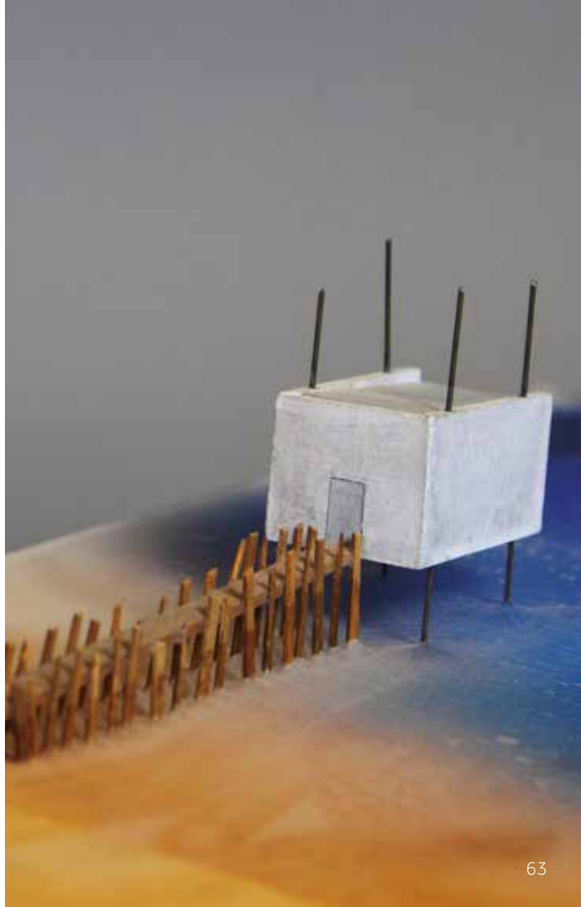
FORMBY BEACH BIRD OBSERVATORY

Nickolas Lui, 1995

This presentation model shows the full extent of this proposed site and the suggested 'journey' to be made through the building spaces.

Made from MDF with acrylic and timber detailing. Water represented using melted wax and pigment.

:5.12



PRISON PLATFORM CONCEPT

Richard Owst, 2013

This striking piece shows Richards design for an ocean prison rig design. The model was displayed in an acrylic tank to be filled with liquid simulating the surrounding ocean. The base of the design was creating by using a modified traffic cone to support the upper floor plates and glazing façade that houses the individual prison cells.

:5.13

'PIMP COLNE', FAÇADE STUDY PRESENTATION MODEL

Will Stewart, 2008

This model was used to demonstrate an unusual façade concept made up from old car bonnets. The car 'recycling and pimping factory' would use the car headlights to double as a scrolling sign advertising the site. Made using vac formed plastic, laser cut plastic, LED wiring loom and MDF.

:5.14

MASTER PLAN MODELS

:6

Master plan modelling involves the representation of an area much bigger than an individual site. For example, a complete town or village would convey the existing structures that make up an area, whilst a smaller scale city master plan could be used to highlight key buildings over a larger area.

Whatever the scale or coverage of a master plan model, its purpose is to present context. By demonstrating the physical arrangement of a proposal in context, we are able to get an indication of its possible impact on an area. This is primarily a construction of massing, rather than a more in depth urban-fabric study. A larger detailed model might look at materiality and the finer aspects of a design. For ongoing projects master plan models can be useful in providing a rigid context to demonstrate new proposals for a chosen site on the model therefore, when used at a design stage, these models tend to have a long and varied life.

COLNE TOWN MASTERPLAN

Denny Jones, 2006

Made using the first workshop laser cutter this was one of the biggest jobs to date with hundreds of separate components drawn out. Backlighting in the base adds a level of intrigue and attraction to any display model and is often used in sales pitches.

:6.1

'A PLAN FOR THE FUTURE' BLACKBURN TOWN CENTRE MASTERPLAN

Jim Backhouse, 2004

1:1000 scale model showing the proposed changes to Blackburn town centre as part of a major regeneration scheme. Made using laser cut acrylic and MDF.

:6.2

'ARCHITECTURE OF THE PROCESSIONAL CITY', MANCHESTER MASTERPLAN

Alex Cook, Amelia Hunt, Brodie Kane, Dip Wan Cheung, Georgina Mitchell, James Taylor Foster, Linxin Li, Olivia Paine, Peter Chinnock, Phillipa Seagrave, Raphae Memon, Tom Brownill, 2013. This master plan was made as a group project for the currently unused Odeon Cinema site near St. Peters Square in Manchester. The model formed the centre piece of their final exhibition with individuals proposals displayed on the walls around the model. The group used jelutong block, laser cut ply and plywood to make up their base.

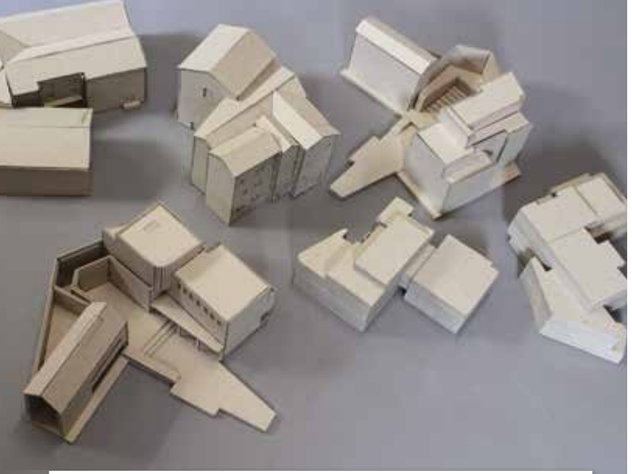
:6.3

VENICE, CAMPO SAN MARTINO SITE MASTERPLAN

Charlotte Rosier, George Yallop, Harry Brown, Jenna Kinsey, Tom Bend, 2013

Made using jelutong block this 1:200 massing master plan is centred on the Venice Arsenale. The greyboard focus of the site allowed different sketch models to be displayed and discussed in context.

:6.4



VENICE CARD SKETCH MODELS

Tom Bend, Charlotte Rosier, 2013-14

This series of greyboard models was developed and refined with the use of the accompanying masterplan model which provides the site context for presentation. Greyboard is used to quickly manipulate design ideas and in this case be displayed in a defined context space represented by jelutong massing of the site.

:6.5

VENICE, RIO DE SAN GEROLAMO SITE MASTERPLAN

Katy Hickson, Abdullahi Umar, Claudia Caneva, 2013

As with 6.4, the grey board focus of the site allowed different sketch models to be displayed and discussed in the context or one of the few derelict sites in Venice.

Jelutong massing masterplan used as the context piece for development models from the group.

:6.6

'ARTEFACTS OF ANDALUS' RUE GUERNIS, FEZ, BLOCK MASTERPLAN

Bryn Lee, Ben Hale, Sam Westbrook, 2011

Massing masterplan showing the recurring atrium feature that is widespread throughout the architecture across Fez. The model allowed the exploration of topography and the interaction between the traditional homes and narrow streets. Made from jelutong and plywood.

:6.7

CAIRO/EL-HASSAIN BLOCK MASTERPLAN

Unknown, thought to be eary 1980's

This model uses well finished jelutong block combined with several lathe turned components.

Cork is used for both the base layer and representation of trees and vegetation across the site.

:6.8

'SHOP TIL' YOU DROP' MASTER PLAN

Rowland Blanch, 2012

1:2500 Scale model of Burnley town centre showing the introduction of retail outlets to increase footfall and activity amongst housing. Made using laser cut acrylic and 3D printed ABS.

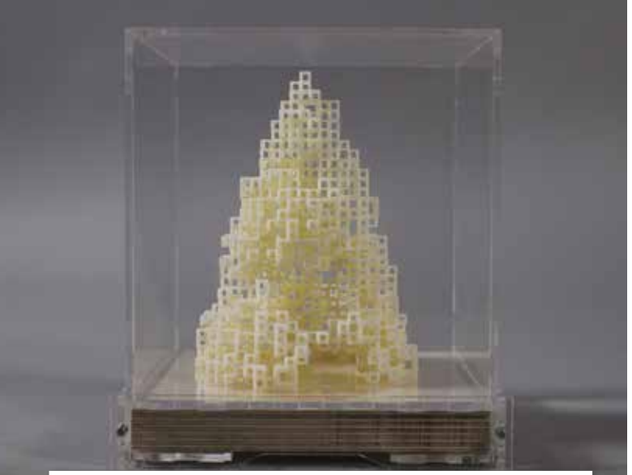
:6.9

‘STACKED CITY’ MODEL SET – ALEXANDR VALAKH

:7

As any project that uses models to develop and enhance ideas, there are several key stages to be documented as part of a student submission. This model set, made by Alexandr Valakh uses a consistent style throughout that clearly links his models together making them easily identifiable as his work. This is a very effective way of showing a good level of understanding in a project because it encompasses a range of scale models to explain elements of his design. Many of Alex’s ideas originated as CAD driven forms which gave the option of many variations through parametric scripting. To progress these ideas into a conceivable building meant a lot of refinement through modelmaking that informed changes to his script and design details.

In addition to his submitted models, the actual making of them became a project in their own right, with his model studies being recorded as part of his thesis submission. Alex considered this making aspect so integral to his overall design conclusions that it was treated as a key tool for development.



'STACKED CITY' PROJECT

Alexandr Valakh, 2014

This model shows the block unit assembly that could form the inner arrangement of the proposal. As Alex's design is fluid depending on use this is just an example of one possible arrangement of the structure. The entire model is printed in ABS plastic but sits on a base designed to be consistent in style to the accompanying models in this set.

:7.1

'STACKED CITY' PROJECT

Alexandr Valakh, 2014

This section model is made up using laser cut ply components with a skin of paper which was computer generated and broke down into shapes before being cut and assembled. Again this model is displayed on a base in the same style as the others in the set.

:7.2

'STACKED CITY' PROJECT

Alexandr Valakh, 2014

This is the largest scale model in the set demonstrating the individual unit size in relation to scaled figures. Without this tangible link it is difficult to grasp the scale of this proposal making this model crucial in the series. This model is made up using laser cut acrylic and ply wood components that have been extensively refined in AutoCAD and through earlier model tests.

:7.3

THE USE OF MODELS ON CAMPUS

:8

Models can play a crucial role in communicating changes to urban space. In Manchester, with its huge student contingent, models are often used to convey evolutions in architecture across campus. The use of models for this purpose has always gone hand in hand with infrastructure development here, and continues to do so.

Models used for this purpose are, more often than not, produced by independent companies commissioned by the architects or University to be produced at a professional standard.

UNIVERSITY OF MANCHESTER MEDICAL SCHOOL REDEVELOPMENT

Unknown, Date Unknown

This master plan model shows us proposed changes to the medical school buildings of the University of Manchester. Proposed buildings are clearly represented in white as additions to the immediate existing buildings shown in grey. The further from the site of focus we go the simpler the building representation gets. The model is made from painted timber, acrylic, paper and card with scale cars added as detail finishing.

:8.1

STOPFORD BUILDING PRESENTATION MODEL

Richard Powell Associates, 1969

This model shows a completed building proposal for the medical school, known as the Stopford Building on Oxford Road in Manchester. Interestingly, in comparison to the master plan of the area (model 8.1), this model shows the building with a different layout at the back of the site. The model is hand made using acrylic, timber, paper and cardboard with greenery represented using wire and sponge.

:8.2

MAIN UNIVERSITY QUAD AND OXFORD ROAD SITE MODEL

Jim Backhouse & Sheppard Robson, 2001

Made as part of a masterplan for the proposed buildings for the Upper Brook Street part of the University of Manchester campus. The model was modified with this section being removed but fortunately retained in the B.15 store. Made using ureol model board, styrene and MDF.

:8.3

Fig.11

B.15
:45

EXHIBITION MODEL IMAGE CREDITS

2.1 Ciara Tobin, Lustina Nicolae, Pui Mun, Manasvi Jhavhi

3.5 Henry Faulkner

4.4 Matthew Javis

4.7 Aayu Malhotra

5.5 Laura Minca

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5.8 Abhi Chauhan

5.9 Aayu Malhotra

6.2 Derek Trillo

7.1 Alexandr Valakh

7.2 Alexandr Valakh

7.3 Alexandr Valakh

IMAGE CAPTIONS

Fig.01: 1:50 scale plaster model of the Kantorowich Architecture and Planning Building.

Fig.02: A student and tutor discussion in the early 1970's. The SEED B.15 Workshop Collection, UoM.

Fig.03: The Kantorowich Architecture and Planning Building shortly after completion in 1970. The SEED B.15 Workshop Collection, UoM.

Fig.04: 3rd year BA Architecture students planning and making a masterplan model in 2014.

Fig.05: Technician Ken Peacock and a student in the model store in the late 1980's. The SEED B.15 Workshop Collection, UoM.

Fig.06: Student notes and modelmaking – a busy desk space in 2014.

Fig.07: Digital software having a direct influence on design in 2014.

Fig.08: The courtyard garden space of the Architecture and Planning Building shortly after completion in 1970. The SEED B.15 Workshop Collection, UoM.

Fig.09: The B.15 Workshop as it was in 2001. The SEED B.15 Workshop Collection, UoM.

Fig.10: 3rd year BA Architecture student James Taylor-Foster puts the finishing touches to his presentation model, May 2014.

Fig.11: The B.15 Modemaking Workshop in 2014.

Cover Image: Coventry Master Plan made by David Euinton, Olivia Taylor, Tom Sydney, Weronika Grybos, Yinghua Luo in 2013.

B.15:45 ARCHITECTURAL MODELMAKING EXHIBITION 2014/2015 CREDITS

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