

PROTO- TYPES & EXPERI- MENTS VIII

30.11.15 -
16.01.16

Mon-Sat 10-6pm
Thurs til 7pm, free entry

110 Drury Lane
London WC2B 5SG
0207 557 7526

**THE
ARAM
GALLERY**

FOR EXPERIMENTAL OR NEW DESIGN

Aberrant Architecture
Carl Turner Architects
Carlos Ortega
Carmody Groarke
with Joe Pipal
Custhom
Dafi Reis Doron
Daniel Schofield
Dean Brown
Felix de Pass
Jule Waibel
Mischer'Traxler
Pinch
Plaid
PostlerFerguson
Studio Vit
Studio Weave
Tomoko Azumi

The eighth edition of Prototypes and Experiments shows models, samples, tests and iterations picked fresh from the studio shelves of architects and designers. This exhibition series has been ongoing at The Aram Gallery since 2008, asking participants from a broad range of disciplines to show ideas in development and give us an understanding of their creative process.

In tune with the gallery's interest in how designers think, plan and communicate three-dimensionally, each exhibitor presents not just a finished project, but the development work involved. An accompanying commentary explains the purpose of each exercise, its meaning to the final work and how it assisted the designer with making decisions along the way.

Riya Patel, curator

Aberrant Architecture

Dark Communities

The notion of community is largely framed as positive, but what happens when a community nurtures the darker sides of life, society and design? Dark Communities was an installation that was part of the communities section of the 2011 Gwangju Design Biennale in South Korea curated by Beatrice Galilee & Helen Choi. This "dark side" of communities was explored through a structure that reinterpreted a typical Korean housing block. The windows allowed onlookers to view a variety of films, drawings and imagery which provided the visitor with a momentary glimpse at the lives of the inhabitants of the tower, much like a confessional booth or a peep-show. This sketch model and series of sketches are part of a study that we undertook, as part of the project's development process, investigating how we could translate the forms and scale of a typical Korean housing block into a more human scale structure and experience.

Carl Turner Architects

Home from Home

Home from Home was a temporary installation at MUDE in Lisbon. It draws upon (our) notions of "British" domestic language. Here the activities of reading, sleeping, eating, watching TV and playing have been organized so that the inhabitants are presented with an opportunity to experience the "British" house.

Composed of five individual parts that come together as one, each element is abstracted to a single domestic activity. These can be pushed together to form one single object or be pulled ajar to encourage interaction, then dispersed around the exhibition to form individual interventions.

We built a whole series of 3D computer models and small maquettes during the process. As the project developed the idea of an idealised house form, sliced into interlocking parts, modelling allowed us to see how the components would fit together like a Jenga puzzle.

Carlos Ortega

Corkigami

Everyone said a seat made entirely out of cork was impossible; it was then we realized we had a challenge. Cork is sustainable, natural, lightweight, quite strong, flexible and warm - all these attributes make it unique. Corkigami takes these properties to their limit, and refers to the making of 3D objects from 2D materials (origami).

Its strength relies on both flexibility of the shell structure and a special process of lamination using quality cork sheet. After lamination, we cut the shape out of the flat material to be able to bend it. Then we glue it again on a simple curved former. We had to research different lamination techniques to archive a proper balance between strength and flexibility.

Scale models gave us a lot of information about how the product looks and how it works structurally. These models allowed us to move forward to a full-size prototype where we could fully test and adjust the chair.

Carmody Groarke with Joe Pipal

Chair 182

Following restaurant projects Studio East Dining and The Filling Station, we produced a new bistro chair with designer Joe Pipal. The simple, comfortable and lightweight form has been generated through close examination of the qualities and economy achieved by some of the notable early 20th-century bentwood bistro chairs by Thonet, Mundus and JJ Kohn.

We chose wood for its strong associations with a legacy of simple, mutable and elegant bistro chair forms. The material choice affects the chair's form, how it performs and even the visual signals it offers as to how comfortable it is. By making the chair from wood, we were able to work in a way that was true to the tradition of furniture production, also allowing us to easily produce a series of prototypes within Carmody Groarke's studio workshop.

The elegant chair is constructed entirely from stained and waxed CNC-cut plywood and achieves its durability from robust, flexible cork-lined joints, which prevent the need for screw fixings.

Custhom

New Cross

We have been experimenting with embroidery on paper for the last ten years. New Cross wallpaper is stitched digitally through a non-woven heavy weight paper. We have a well-loved 1970s embroidery machine in the studio which we use for testing everything: thread weight; the number of times we can puncture the paper without it losing its function; and placing pens instead of needles for marking. This design started by looking at basket weaving and hand-sewn cross stitch techniques because we wanted to create curved lines on a grid structure. After experimenting on paper to find a continuous line throughout the designs we convert the drawing into vector points, then each vector into a stitch using software, before sending to a clothing factory in Leicester to be manufactured. The papers come back to our studio to be varnished for extra strength, the threads are trimmed and the backing paper is removed before it's complete.

Dafi Reis Doron

Lignes de Capiton

Lignes de Capiton presents an innovative and original use of the traditional upholstery technique of capitonnage. I worked with an expert upholsterer in order to realize this unusual version of capitonnage.

Wood beams function both as an alternative to the traditional buttons that pin-down the cushioned fabric, and as a means of creating a pattern on an otherwise blank surface. This project is an aesthetic and conceptual development of my Royal College of Art research to find new ways to create upholstery, and the subsequent “75% control” objects, in which soft polyurethane foam is cast onto an open wooden structure. The RCA research also led me to discover the wooden frame’s added value of comfort.

This new piece calls to attention the peculiar nature of wood beams as elements that transcend, throughout the history of furniture, the entire range between function and decoration.

Daniel Schofield

Tarnish

The Tarnish Collection is a range of solid brass functional objects, where simple surface treatment helps to create a narrative.

I originally came up with the idea when working with brass on another project and noticing how easily touching it left a mark. This led me to experiment with lots of different tests in copper and brass as a surface finish. Originally I was looking to make patterns, but the lacquering soon became too complicated and bumpy and didn’t feel nice to hold. I then reduced the lacquering to just half of each piece, which helps to highlight the difference between the finished and unfinished surfaces.

Dean Brown

Park Furniture: London Fields

This collection centres on London Fields as a resource and source of inspiration. A table, light, dresser and basket are made primarily from fallen branches of ash trees, retrieved from London Fields park. The hand carved wood is complemented by other materials and finishes – steel, glass, mirror and powder coating – made using manufacturers found close to the park.

The project examines the potential of “zero-kilometre production”, and considers a park in a city as a material resource that co-exists with neighbouring trades. The collection strives for an identity distinct from rural craft-work through the collision of natural wood with more recognisably urban materials.

Felix de Pass

Universal Bottle

London-based distillery Sweetdram commissioned my studio to develop the 3D language for their new company – including design of their first bottle which is shown in this exhibition. We worked with the client to create a contemporary yet understated bottle design geared towards longevity and the functionality/ergonomics of pouring.

A complete product design service was provided: from design and prototyping through to product development and production management. Design directions and the refinement of shapes and forms were achieved through 3D CAD modeling and 1:1 prototyping. Various precise models were produced in CNC-machined model board to study specific aspects including how it felt in the hand, base diameter vs. height proportions, taper of sides, edge radiuses and physical presence on the bar shelf.

During the production stage further refinements were made alongside the development of blow mould tooling by glass bottle and stopper-closure manufacturing partners in Italy. Vial sampling packaging was also designed as part of the 3D identity.

Jule Waibel

Unfolded Things

My work transforms sheet materials into three-dimensional objects. By using the same technique in different contexts and with different materials, I’m constantly creating new environments for my unfolded objects.

After the pleated paper dress made from Tyvek, I made a steam mould for pressing softer fabric garments that expand and contract as the wearer moves. With the same method I made a collection of seats in wool felt that are folded three-dimensionally under steam and heat to create flexible pleats.

I also make wooden moulds for vacuum-forming shapes in plastic, create plaster moulds to dip into liquid latex, and fold plastic moulds within which I place soft expanding foam – all these methods are for shaping and developing my range of unfolded three-dimensional objects.

Mischer’Traxler

Reversed Volumes

The Reversed Volumes project was all about trial and error. Our main goal was to make a “fruit-bowl” that used a fruit as the main ingredient. After several tests with organic fruit material that all failed for different reasons, we decided to cast the void between an existing bowl and a fruit/vegetable.

For the first self-produced batches, each piece was individually cast in ceramic-plaster. Two years later in 2012, we were asked by PCM Design if we would like to have the project in their collection. This was a great opportunity to develop the collection further for serial production. Tests in ceramic and other materials were not satisfying, but then PCM found a company in Madrid which was able to cast the bowls in food-safe resin. After one year of development with PCM, finally the problems were solved and since 2013 Reversed Volumes have been available as serial products.

Pinch

Nim

The Nim table is a gift to ourselves to mark 11 years of Pinch. We chose to celebrate by working with a new process and the result is a table that is at once familiar, yet also other worldly, with its rough and eroded textured sides flowing up to a perfectly formed and smooth top.

Jesmonite was selected as our base ingredient of choice due to its excellent casting properties, which means it can replicate very fine details.

We worked with our friend Rupert Lampard, by day a fine art fabricator, by night a creative inventor with a keen eye for detail and appetite for exploration. Whilst Nim is a cast piece, it is also heavily indebted to the human hand.

Its development and making is split roughly into 5 phases: identifying the shape through hand-whittled 1:5 balsa forms; making the master from a CAD model using a 5-axis CNC router; making the mould from an outer jacket of polyester resin with a platinum silicone inner; casting the editions in layers of Jesmonite, mica and glass fibre; and hand painting each numbered edition.

Plaid

Re-think Seat

These prototypes were created for the National Maritime Museum's RE•THINK gallery: a place for visitors to discuss, create and test museum content. The driving idea of this gallery was to create a participatory space responsive to and formed by its users. With this in mind, all the elements of the space – furniture, displays – were designed to function as a set of tools for visitors.

We made these three prototypes in our studio and with a specialist foam fabricator to test form, ergonomics, materiality, durability, scale and fabrication techniques. The seat's shape means it can also be used as a backrest when you're sitting on the floor. To reduce weight and increase portability the seat is made from laminated layers of Plastazote, an industrial foam used mainly for buoyancy applications.

PostlerFerguson

Staeckler

Staeckler is a shoe hook from our production company, Papafox Trot. The hooks hang your shoes off the wall at a gentle angle, freeing up floor space and letting you neatly display and organize your shoes. Each Staeckler clips onto the back of a shoe, holding them securely until released with a simple lift and twist. A small footprint means they can be installed in nearly any situation, whether a wall-sized grid to showcase a collection or a single pair slotted into the leftover space of a crowded apartment. Made from sturdy ABS plastic in white, grey, blue and orange colourways, each Staeckler is tough enough to hold even the heaviest of Jordans.

It is a product that feels very natural despite being entirely novel. Through making living prototypes that we used around our homes and office, we gradually whittled the form and details down until we had an archetypal product that was ready for mass production.

Studio Vit

Cast Lights

Cast lights was designed for Ready Made Go, a collaboration between Modern Design Review and Ace Hotel resulting in a series of commissioned objects for the hotel.

Our studio works delicately and subtly with archetypal and elementary shapes and volumes, creating tension in our products by juxtaposing forms and materials. For this commission we applied our signature sensitive approach and created a collection of table and pendant lights.

Cast lights combine two contrasting materials; heavy cast concrete and delicate hand-blown glass. The play between two basic geometric forms; the sphere and the half-sphere, and these two contrary materials provided us with the impetus for the designs.

On show here are the sketches that the design was born from. These illustrate how a project usually starts; by exploring combinations of geometric shapes and evaluating which materials can be applied to create an interesting whole.

Cast lights are now a permanent feature of the hotel.

Studio Weave

Weston Super Mare Tourist Information Centre

The model was made as part of the concept design for the Weston Super Mare 'Wendy House.' Fabricated out of perforated brass sheets, the outer skin is punctured with a variety of openings to function as a 'village of amenities' (which could include shelter, shading, seating, bins, display areas, a kiosk, security, cycle racks, a weathervane, perhaps a postbox and/or clock, signage and hooks and attachments for any number of additions).

The outer skin might also be physically lifted from the core of the model exposing the massing of the original Tourist Information Centre underneath. This allows the viewer to explore how a 'lacy' exterior might elegantly fold around the existing building.

Tomoko Azumi

Flow Chair

Flow is a stackable dining chair that combines Ercol's specialities of steam bending and modern jointing, which are all finished by hand.

This exhibit shows the development process. 1:5 scale models show initial design development, which was led by Ercol's brief for a dining chair to use with their existing dining table. Three variations were selected from about 12 initial models.

Steam bent test pieces were fabricated at Ercol's prototype workshop, to examine if the initial design could be successfully adopted for production.

The results are incorporated into 1:1 paper and blue foam models, where final adjustments were made to seek harmony in form and to check stacking ability.