INTRODUCTION

Resolved: Journeys in Australian Design brings to life the stories that a completed product does not reveal—the false starts, re-starts, and triumphs big and small that designers encounter when they decide to design a product and bring it to market.

Getting from a quick sketch or a concept, partially rendered on a computer screen to a ‘resolved’ product takes more than design talent—it takes determination, ingenuity and a willingness to experiment with the possibility of failure.

The story of each design in Resolved encompasses a variety of ideas and processes, ranging from unique forms of cultural expression to sustainable solutions, experimental use of materials and manufacture and innovative technology. Every design, however, is created for longevity and to enhance the personal experience and interaction of the user.

The stories are also about vital collaborators—the people behind the scenes who form a community that is essential in bringing a design vision to life: craftspeople, contractors, manufacturers and retailers. Each of the designers in Resolved are united by their involvement in ‘Workshopped’ exhibitions, and while their practices are diverse and the visions of their studios vary they all agree on one thing—it is an exciting time for Australian design.

For more information on:
Object: Australian Design Centre
www.object.com.au

Design and Technology Outcomes
4.1/2, 4.2.1, 4.1.1.4.1.1; 5.1.1/2, 5.3.1, 5.4.1
P1.1/2, P2.1/2, H1.1/2, H2.1/2, H3.1/2/3

Visual Design Outcomes
LS.3/4/5/6/7/8
DM.2/3 CH.1/2/3/4

Watch our series of micro documentaries about the designers featured in Resolved and the themes that cover the important aspects of design

Education Kit developed and written by Annette Mauer & Madeleine Hinchy.
Designed by Paula Perugini & Tessa Curran
When you say you are influenced by nature, it doesn’t mean the product is always going to look like nature, it means reflecting on how nature evolves.”

Adam Cornish’s design takes its cues from nature. Cornish observes forms found in nature, and is particularly interested in how animals and plants evolve and adapt to their environment. He believes that design should respond to advances in materials, technologies, and changes in user needs.

Foliar is a wall surface system inviting user interaction. Inspired by the movements of plants and flowers, these flexible plastic modules allow the surface to be shaped by the user. Each piece is formed without adhesives, enabling easy disassembly and recycling at the end of the product’s life.

Trinity Bowl mirrors the internal structure of the Nautilus shell, repeating a simple geometric shape to create a complex, self-intersecting form. Each bowl is laser-cut from one piece of flat steel, then pressed and hand-formed to become an elegant vessel.

In 2010 Cornish was chosen to take his Trinity bowl to the Salon Internazionale del Mobile in Milan by the Melbourne Movement, a group that fosters young designers. Rather than waiting for a manufacturer to spot the piece’s potential in the show he sat on Alessi’s doorstep until someone would look at his design. Persistence paid off with the company putting the piece into development while working closely with Cornish to bring it to market.
Visit Cornish’s website and look at his other designs. In what ways do they relate to the natural world? www.adamcornish.com

Cornish creates products from a variety of materials. Why did he select the materials for each of his products? What would he need to research?

Alessi sees itself as a research lab. What do they mean by this? How important are companies like Alessi?

What other Australian designers have their work manufactured by Alessi? http://www.alessi.com/en/

Draw the Trinity Bowl by concentrating on the negative shapes.

Where could you imagine Cornish’s Foliar being installed?

How does Foliar invite user interaction?

Look at the exhibit and make a diagram of Adam Cornish’s process.

Look up the term biomimicry. What does it mean and give some examples of design that uses biomimicry.

Look at the Palazzetto delo Sport (Little Palace of Sport) by Pier Luigi Nervi and The Eden Project by Nicholas Grimshaw. How have these architectural structures been inspired by nature? https://realestatearts.wordpress.com/tag/nature/

Design a range of homewares or a shelter inspired by shell structures.

Design your own wall or ceiling tiles. Place them in an environment.
“I like the idea of simplifying things and solving problems. Finding solutions to make things a little cleaner. There is a beauty in simplicity.”

After graduating and working with Tom Dixon in London, Ben McCarthy was invited to Hong Kong to take up a senior role in the studio of British designer Michael Young. Inspired by Hong Kong’s status as the watch capital of the world, he decided to create his own time-piece. “I wanted to design something that I liked and that I would wear, rather than designing something for a particular market.”

His aim was to make a watch that was honest in its use of materials, robust and utilitarian in its form, but that could have some expressiveness in the details. Pi’s watch face became the main form of expression—a three dimensional dial of stamped stainless steel indicating the hours with creases in its surface.

Achieving this was more complicated than McCarthy had ever envisioned. Taking more than thirty prototypes to achieve the desired effect, the design evolved throughout the production process.

Looking back, he says he is glad he designed the watch without prior knowledge of watchmaking and engineering. “It opens up all these complexities and possibilities that people who work in the industry every day wouldn’t think about... I was kind of blessed with ignorance!”

Pi Watch.
designed: 2007-08
Exhibited at Workshopped: 2009
Manufacturer: Workshopped
Materials: Stainless steel, moulded rubber, Japanese quartz movement.

WATCH
McCarthy has worked and continues to work with some leading designers – Tom Dixon and Michael Young. Visit their websites and create a gallery of images of your favourite designs.

Dixon designs some bespoke pieces. What is meant by the term ‘bespoke’?

http://www.michael-young.com
http://www.tomdixon.net/about/

Describe McCarthy’s process. What tools and techniques does he use to test his ideas?

What are the most innovative and unique features of the Pi watch?

What materials is the watch made from?

Why could the saying ‘The devil is in the detail’ apply to the Pi watch?

Read the interview with McCarthy in designdroplets. Why does he live and work in Hong Kong? How is he inspired?

http://designdroplets.com/designer-qa/ben-mccarthy/

How is Workshopped trying to raise funds to help manufacture the watch?

ALEX GILMOUR/ EVIE GROUP

“We want more of a user attachment to our design; that’s why we give some of them ‘people’ names like Emily and Frederick; we want them to be a bit more personalised.”

When Alex Gilmour established Evie Group, her design studio with her husband and fellow industrial designer Dominic Chong, she decided the first pieces she wanted to create for their collection would be designed on her own. “It was a personal project really, I wanted to work to create homewares with the same form but in different materials”

The idea was to create vessels that were small enough that they could be grasped in one hand and that would allow Gilmour to explore her interest in ceramics and glass – two materials that she hadn’t worked with before. The Emily Tea Set and Frederick Glassware reflect her design aesthetic — intuitive and organic — with a bit of geometry.

The Spun lamp began as a playful and relatively simple idea – a wood and plastic giant floor light that could be spun like a child’s spinning top – however, the path to manufacture was anything but simple. When Chong and Gilmour met with wood turners, they were advised that the design would run into problems. Rather than throw the project in the too - hard basket, the duo looked at other options. “I guess limitations make us push more for innovation,” says Chong.

The design eventually evolved using metal and frosted glass.

Frederick Glassware
Glassware set, designed: 2010
Exhibited at Workshopped: 2010
Manufacturer: Evie Group
Materials: Mouth-blown and hand-finished glass

Emily Tea Set
Tea set, designed: 2010
Exhibited at Workshopped: 2010
Manufacturer: Evie Group
Materials: Glazed white ceramic

Evie Group
Spun
Table/floor lamp, designed: 2011
Manufacturer: Evie Group
Materials: Frosted glass shade, chromed steel, mirror finish

WATCH
Visit the Evie Group website eviegrou.com

Evie Group’s aesthetic could be described as ‘timeless,’ what is meant by this term?

Why do you think Gilmour and Chong give their designs human names?

Evie Group is a collaboration between husband and wife team Gilmour and Chong. How might a collaboration impact on the design process?

What was the inspiration for the Spun light?

Look closely at all the works and list or draw the subtle design features that give these products their unique quality?

Describe the process that Gilmour went through to make the Emily Tea Set.

How does her tea set differ from a traditional western style tea set?

Where might her inspiration have come from?

Research Scandinavian design. What qualities do the Evie Group products have with many designs from Scandinavia?

Research teaware from other cultures such as Japan.

Design your own set of glassware or crockery. Keep your shapes simple and concentrate on refined details rather than decoration.

Design an environment to house the Spun lights. They either hung or placed on the floor.
FUKUTOSHI UENO

“I want people to engage with the piece, drawing on their own creativity in deciding how to use it.”

A piece of multi-functional furniture, Code takes its name and form from Japanese incense ceremonies and romantic folklore. Fukutoshi Ueno drew inspiration from the tales of the “Shining Prince” Hikaru Genji, the Japanese nobleman famous for his many romantic adventures. Genji identified each of his mistresses by devising a series of distinct symbols or codes. These he had embossed on incense boxes designating each mistress. Intrigued by this romantic story, Ueno devised a version of the two-dimensional code to create a three-dimensional form.

The Code series reflects Fukutoshi’s love of art and fashion. The architectural Code structure is at times wrapped in a series of patterns that are digitally printed onto the timber. The prints are created either by Fukutoshi or by artists and fashion designers he invites to collaborate with him. Currently he is working with Brisbane’s Easton Pearson and Japanese artists Paramodel. He has also produced collections with acclaimed fashion designer Akira Isogawa.

To ensure his Code pieces have longevity, Fukutoshi has designed them as multi-functional pieces that can be used as stools, tables, shelving or in other ways.

**FUKUTOSHI UENO**

Exhibitor at Workshopped: 2009
Manufacturer: Marxcraft
Materials: Solid Silver ash

**Code**
Stool, designed: 2009
Exhibited at Workshopped: 2009
Manufacturer: Marxcraft
Materials: Solid Silver ash

**Paramodel - Code**
Stool, designed: 2014
Manufacturer: Marxcraft
Materials: Solid silver ash with digital print by Paramodel

**Café Dress - Code**
Side table, designed: 2013
Manufacturer: Marxcraft

**Café Paramodel - Code**
Side table designed: 2014
Manufacturer: GL Creations
Materials: AA grade marine plywood with digital print by Paramodel.


WATCH
Look closely at the joinery Ueno uses in Code. What do you notice? Speculate on the process of making these pieces of multi-functional furniture. Comment on the relationship between the structure of Café Code and the applied pattern. How does the pattern mimic the way pattern is used on a kimono?

Ueno creates applied designs for his Café Code series based on kimono patterns. Visit the Victoria and Albert Museum website and research the Kimono designs and patterns; their meanings and symbols.

http://www.vam.ac.uk/page/k/kimono/  
http://www.eastonpearson.com/collection

Ueno collaborates with ‘art unit’ Paramodel, two artists based in Osaka. Look at their work.

http://www.azito-art.com/paramodel/

Research the work of Akira Isogawa. How is his work similar to Ueno’s designs?

Design your own piece of multi-functional furniture. Give it a name and create a marketing strategy.

Find a piece of furniture created from simple shapes and apply pattern to it.
“Designer’s brains are very messy but I think that’s a lovely thing because out of that mess will come the germ of an idea that you can turn into something.”

Chris Hardy considers the Pleat Stool and Paper Pendant as experiments in ideas. “Neither product was about creating something of volume, they are almost little design research pieces about possibilities.” Paper Pendant began as a series of unconscious and playful experiments with paper. Hardy was then introduced to the Japanese folding technique Miura Fold, developed to create solar panels for space satellites. He introduced this technique into his design, translating the fold into a three-dimensional surface using computer-aided design (CAD).

Originally the pendant was to be slip cast in ceramic, however its complexity led Hardy to produce it using Direct Digital Manufacturing. This is a process in which the form is built layer by layer in nylon powder and sintered using a laser to fuse the particles together. Hardy describes the Pleat Stool as ‘a bit of a spectacle, like a little bit of art.’ Made using Computer Numerical Controlled (CNC) routing from a single piece of plywood, the boomerang shaped layers are joined together using dowels to create a single unit.
What are some of the processes that Hardy uses.

What are the benefits of creating a stool from a single piece of ply?

What does a name tell us about his pieces?

Hardy says that the works in the show are ‘experiments in ideas’
Why is it important for designers to experiment with particular products?

Visit Chris Hardy’s website and look at his products.

What Hardy currently researching? Why is his field of research so important?

Explore the process of Selective Laser Sintering and how it is used in manufacturing.

There are many tutorials on Miura folding. Have a go and create your own lampshade in paper.

Repetition is a good way to create an interesting design. Find a shape; repeat it to create a table base, textile print or lamp base.

Visit Tinkercad and create your own design ready for 3D printing.

https://tinkercad.com
BIC TIEU

“I am really interested in assimilating the two worlds—digital media and handicrafts. I want there to be a point where the viewer can’t decide—is it machine made or is it handmade?”

Bic Tieu’s contemporary objects and jewellery are informed by the sensibility of Asian art. Each work blends ancient traditional art methods with contemporary digital technology, forging a unique melding of ideas and aesthetics.

Tieu developed a passion for Asian lacquer work while studying at university. Unable to undertake the necessary instruction in Australia, she set off to the birthplaces of Asian lacquer tradition—Vietnam and Japan—to learn more about this craft.

In 2007, Tieu trained under a renowned Japanese lacquer master Unryuan Kitamura Tatsuo, spending two years learning the painstaking technique of maki-e. Often mistaken for metal work, the finished lacquered object gives little hint of the months of painstaking refining, application, painting and polishing that occurs layer after layer as the final object takes shape.

Tieu continues to apply Japanese lacquer in many of her designs; combining this with silversmithing techniques and computer-aided design(CAD) with a hands on approach.

Each ring in her Flowery series is made by these diverse processes. Her ‘Two in One’ earring boxes and ‘Blossom’ ring box demonstrate her continued interest in Asian motifs and her love of integrating objects and vessels.

Two in One
Earring Boxes, designed: 2008
Exhibited at Workshopped: 2008
Materials: Sterling silver, black diamonds and Akoya pearls

Flowery Series
Rings, designed: 2012
Exhibited at Workshopped: 2012
Materials: Sterling silver, gold, maki-e and Japanese lacquer

Blossom
Ring box, designed: 2010
Exhibited at Workshopped: 2010
Materials: Sterling silver with internal gold plating

WATCH
How would you describe Tieu’s work?

How does Tieu incorporate contemporary technology in her work? How does this assist her craft process?

How does Tieu integrate jewellery with vessels?

Visit Tieu’s website and find out more about her research and processes.
http://www.bictieu.com/

Over the centuries Japanese painters and artisans have responded to seasonal themes often using floral motifs? Research the use of flowers to represent seasons and find examples.

Where did laquer technique originate and where is it practised and what is it used for?

Find out more about maki-e
https://www.youtube.com/watch?v=QPKvbp4Ucpg

Design a series of vessels based on the seasons or jewellery using Australian floral motifs.

Design a series of vessels based on the seasons using a CAD program.
As a designer you are telling a story, and an object is a record of a moment in time and space.”

**Husque** is a truly Australian story of innovation and ingenuity. After designer Marc Harrison was awarded an Arts Queensland grant in 2000, he set about experimenting with new materials and locally inspired design. After reading a case study of some Spanish designers who created a material from ground almond shells, Harrison thought he could do the same with an Australian native – the macadamia. He called the project **Husque**.

**Husque** bowls are made from a composite of milled macadamia shells and resin. After the macadamias are harvested the kernels are removed, the shells are discarded and become waste. Harrison gives the discarded shells new life, milling them into fine particles, and blending them with a polymer before forming the material into objects.

It took three years of development for Harrison to achieve a composition that would be durable and suitable to use in homewares. He is still experimenting with the potential of the material.

The first **Husque** bowl design was inspired by the macadamia nut shell’s original state and features a dark exterior shell contrasted with a bright interior. The outside is hand-rubbed with macadamia oil to achieve a smooth satin finish.

**Husque bowl**
Bowl, designed: 2003
Exhibited at Workshopped 2003
Materials: Recycled macadamia shell combined with polymer.

**Frag**
Bowl, designed: 2007
Materials: Recycled macadamia shell combined with polymer.

**Bauple**
Bowl, designed 2011
Materials: Recycled macadamia shell combined with polymer.

Watch
“A lot of the time, I think being a designer is about the research, you continue to look until you find the right person or the right thing.”

An interest in how different materials interact and define each other inspired Kate Stokes to create a light that combined wood with spun aluminium. She developed a distinctive, curvaceous shape, in which the contrasting materials appear to meld into each other: the result was the Coco Pendant. Handcrafted in Melbourne, the light is a study in contrasts; its visual simplicity conceals the complexity it takes to manufacture.

Stokes describes the process of putting the Coco Pendant into production as “a bit like a treasure hunt.” The discoveries of a local maker with expertise in timber turning and a metal-spinner who works predominantly in the industrial sphere, has allowed Stokes to produce her light close to home.

Puku takes an oppositional stance to other ottomans on the market. I wanted to produce a design that had a bit of character.” Puku is an affectionate term in Maori for chubby tummy. With its plump shape and striking use of colour, Puku is anything but boring.

**Coco Pendant**
- Light, designed and released: 2010
- Exhibited at Workshopped: 2010
- Manufacturer: Coco Flip
- Materials: Victorian ash timber and powder-coated spun aluminium

**Puku**
- Ottoman, designed and released: 2013
- Manufacturer: Coco Flip

“There is so much that goes into designing a piece, there is the designing before you actually start making something. You design ways to make things.”

Gary Galego trained in both traditional woodworking and industrial design. The Leve Chair was developed during his studies, originating as part of a project exploring steam-bending processes and experimenting with timber from regrowth spotted gum trees. More than a decade on, he continues to use the technique alongside other furniture manufacturing processes in his Sydney workshop.

Initially produced in-house, he licensed the chair and its production to off shore manufacturers. He became unhappy, however, after losing control of the process and quality. Since then he has focused on establishing his workshop and studio where he can engage in small batch production.

Leve Chair demonstrates Galego’s approach to design where functional requirements also become aesthetic elements. The slits in the back of the seat were initially introduced to relieve stress in the plywood during the bending process. “I try and have a transparent aesthetic where the structure isn’t concealed but is exposed. I think that in the Leve Chair, the process and structure stand out.”
I have never really set out to make things that are to be mass-produced... the user can create a relationship with an object, and it becomes a bit more personal to them.”

The Bale Chair is as Australian as it gets—a design that reflects the history and practices of the Australian wool industry. Each chair is made to look like a wool bale and is constructed using the same agricultural bags used to store and transport wool. Designer Matthew Conway has replicated the form of the original wool-stuffed, metal-bound bag by creating an upholstered wooden structure bound with a fabric band.

The Bale Chair was inspired by a trip to a friend’s sheep station near Armidale. The designer’s eye was caught by the graphic markings of the wool grading stencils in his friend’s shearing shed. Then he saw the wool being transformed into bales using a hydraulic press. “I just thought—I have got to make a chair out of that!”

The challenge with this piece was how to achieve the same fullness and plumpness of the original bale while creating a functional piece of furniture.
I am interested in how the physical landscape can mirror and affect the personal landscape. In this sense I examine the relationship that we have to our environment.

Zoë MacDonell is a Sydney-based artist and designer whose work incorporates elements of drawing, painting and textiles, often crossing the boundaries of art and design. She is interested in the relationship that humans have with their environment. Her works evoke ambiguous and evocative textures and forms from the natural world, reinterpreting physical landscapes as abstracted personal expressions.

MacDonell had her original artwork *Liquidland* translated into a digitally printed textile. This fabric has then been upholstered onto a *Tony Parker Chair*. The original artwork is inspired by small and intimate landscape details, mapping, and aerial topography. It was made by fusing layers of transparent silks and paper, the surface then becoming a canvas on which MacDonell draws and paints, gradually building up textures, tones and subtle colours to create a sense of energy and movement.
ADAM GOODRUM

“Objects need to have a bit of spirit... utilitarian in some form... some enjoyment and beauty, you know that tricky thing when we are trying to design something.”

The Stitch Chair epitomises Adam Goodrum’s playful yet functional approach to design. The prominent design feature—visible seams or hinges ‘stitching’ the chair together—are highlighted by intersecting panels of bold contrasting colour. When collapsed, Stitch folds to 20mm wide, creating a folding chair like no other on the market.

First designed in his kitchen in 1996, it took 12 long years, and a 10-year stint under the designer’s bed, for Stitch to go from concept to showroom floor. After exhibiting at the 2005 Workshopped exhibition, the chair gained attention both locally and internationally. It was eventually produced by Italian manufacturer Cappellini and launched with much acclaim in 2008. From this, Goodrum has become widely recognised as one of Australia’s most successful designers.

He now says that he is excited to be investing most of his time and energy working with Australian-based design studios and manufacturers.

“I am working with people who live down the street and are friends. There are opportunities here and I think people are doing things in a different way in Australia”

Stitch Chair
Chair, designed: 1996 - 2005
Exhibited at Workshopped: 2005
Released: 2008
Manufacturer: Cappellini, Italy
Materials: Laser-cut aluminium plate, polished and lacquered.
Feet in anthracite grey polypropylene.

WATCH