Curated by Rebecca Earley & Kate Goldsworthy

MAKING CIRCLES

Part of the Circular Transitions Conference
23 – 24 November 2016,
Tate Britain & Chelsea College of Arts,
London
Introduction

It is only when we see examples of circular design approaches in their physical forms that we really begin to understand their true potential. The work of these 45 individuals, companies and organisations provides a wealth of tactile, aesthetic, functional and sensory ideas that cannot be captured through writing. We have to make, enact and experience circular fashion textile design concepts in order to appreciate the complexity, the strategic decision-making, and the practical considerations of transitioning to a more circular industry and culture. The three conference themes – materials, models and mindsets – are here explored through 25 exhibits which all offer the viewer a different perspective on designing for a more efficient and thoughtful use of resources.

In the Materials section we ask ourselves to think about the stuff we are going to put into the system in the first place – can we avoid ‘monstrous hybrids’ and make products as ‘pure’ as they can possibly be? (Eccomi, Muto); could we make futuristic mono-material forms ourselves at home? (Material Activism); can we create ultra-fast materials that enable fashion users to be conscious consumers yet still responsive to trends? (A.S.A.P.)

As our modern lives demand so much more from textiles, the range of blended materials in use continues to grow, and creates some of the biggest challenges for the circularity of the industry. But how blended is our wardrobe in reality? (112) The Material Handling Collection allows visitors to have a feel of new materials created by emerging and leading researchers.

In the Models section we switch our fashion brains into furniture mode as we consider how reupholstery – essentially replacing an old fabric with a ‘new’ one – can inform and influence circular behaviours and practices (ReThread / Mutton chairs). One model for creating transparency and connectivity via QR codes (DfC) for brands and users; and another model for design activist approaches to upcycling, offered via open source platforms (Space Between), demonstrate that the next generation of designers are radical thinkers and effective communicators and strategists. The Models Handling Collection encourages play and interaction with a range of new design tools.

Our changing Mindsets are going to be key for our circular futures. So, appropriately, the work here is softer and more subtle. How can we design to change mindsets? We don’t know yet, is the answer. But we do know that we can design with different questions and intention and that is where change can begin. We consider how designers can use great literature to valorise waste (Shakespeare Scarf); we connect silent meditation and prolonged eye contact, with co-creation and bridge-building for interdisciplinary research (Silence Shirt); we seek to be our whole selves as designers, so that we can connect with others and work towards authentic change (Transitionary Textiles); and we look at moth hole and damage and see not the end of the lifecycle but the beginning of something exquisite and unique – and a place for us to interact and enjoy our own clothes in new ways (Reknitting Sampler Jumper). The Mindsets Handling Collection present garments and tools that explore where the artist and the industry meet to lead the change.

The Posters section of the exhibition gives space to some of the most formative and influential projects and organisations of our time – from the UK, Europe and Asia. They are here to represent the importance of making – not just things – but making things happen – they make circles with people and communities. In a similar vein, the film trailer (Reverse Forward) celebrates 20 years of the now iconic Chelsea College of Arts research group, TED Textiles.

Last – but very far from least – the Student and Graduate Showcase demonstrates to us all what this research work is ultimately all about. The teaching and curriculum development that is already evident in the field leaves us with the knowledge that the next generation of designers are well able to deliver a circular future. This work celebrates the passion, energy, diversity and courage that emerging circular designers and entrepreneurs are rapidly gaining a reputation for.

Professor Rebecca Earley
UAL Chair of Sustainable Fashion/Textile Design
Materials

1 Eccomi Dress, AO Textiles (UK)

The core concept of the eccomi project was to create a scalable and repeatable fabric, suitable for haute couture. This is the first time that such a fabric has been created for commercial use. The key area of research addressed by this project is to take sustainable production methods, especially natural dyeing, into the 21st century. The project forms a case study, with the aim of displaying the innovative fabric and design techniques. AO wanted to use the dress as a vehicle to demonstrate the sustainable practices at the core of their business. This dress puts their naturally dyed fabric front and centre, while also allowing them to showcase the diverse aspects of AO's work: embroidery, hand dyeing and printing. After rigorous research, they developed a pioneering naturally dyed silk fabric, suitable for haute couture. This is the first of a series of collections made from a wearable, non-woven material developed with Invenire, a world-leading Swedish research institute innovating new materials derived from forest ingredients. In a revolutionary approach to fashion sustainability, innovation in fabrics and finishes are proposed for desirable fashion products with both convincing aesthetics and performance. The premise for the project acknowledges the consumer’s many reasons for buying clothes and addresses the damage caused by fast fashion by creating materials appropriate for this market. It enables the prevailing ‘disposable’ culture in fashion to be transformed by the development of inexpensive, bio-based ‘recoverable’ garments with sustainable credentials. We also aim to eliminate the ‘consumer washing’ phase and therefore remove its large carbon footprint. Through the collaboration of designers and scientists, this collection relies on the mass production of various blends of wood fibres and PLA fibres, which can be separately recovered to break new ground in cyclability, including the molecular recycling of thermoplastics. Our aim is to connect competing strategies for economic growth with sustainable, fast track business models. Raw materials are developed to offer alternative, renewable qualities as a complement to the resilience and durability of an existing, classic, wardrobe. 

A S.A.P., Kay Politozicz

A.S.A.P. is the first of a series of collections made from a wearable, non-woven material developed with Invenire, a world-leading Swedish research institute innovating new materials derived from forest ingredients. In a revolutionary approach to fashion sustainability, innovation in fabrics and finishes are proposed for desirable fashion products with both convincing aesthetics and performance. The premise for the project acknowledges the consumer’s many reasons for buying clothes and addresses the damage caused by fast fashion by creating materials appropriate for this market. It enables the prevailing ‘disposable’ culture in fashion to be transformed by the development of inexpensive, bio-based ‘recoverable’ garments with sustainable credentials. We also aim to eliminate the ‘consumer washing’ phase and therefore remove its large carbon footprint. Through the collaboration of designers and scientists, this collection relies on the mass production of various blends of wood fibres and PLA fibres, which can be separately recovered to break new ground in cyclability, including the molecular recycling of thermoplastics. Our aim is to connect competing strategies for economic growth with sustainable, fast track business models. Raw materials are developed to offer alternative, renewable qualities as a complement to the resilience and durability of an existing, classic, wardrobe.

5 77, Trash-2-Cash (EU H2020)

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6 Handling Collection / Materials: LaserLine, Kate Goldsworthy (UK)
Models

7 ReThread Chair, Ella Doran (UK)
Ella Doran collaborated with Avantika Agarwal’s Reeweave technique with her iconic Icelandic photographic design ‘Rekk of Reyjavik’ to produce a piece of woven furnishing silk that transforms into an abstract expression of the design through the ‘Reweave’ process. Reeweave was born on the back of India’s rich history of resist dyed ikat fabrics; traditionally it involved resist dyeing the yarns by hand prior to weaving and then woven, this produced intricate fabrics with multi-layered abstracted patterns. Due to the time-consuming nature of the craft, the modern (machine woven) ikat has evolved as a means to preserve its aesthetics, but the role of the craftsman has diminished. Through collaborating with craftsmen and introducing digital techniques into their process the project now creates new and unexpected textile patterns, using digital printers to print photographs onto the yarn as a means of dying the thread. The printed warps are then unravelled and hand-woven, creating new abstracted textiles. Ella runs live re-upholstery events that the collaborators have ‘posed’ as a means to strip and re-upholster secondhand chair with questionable design issues around bulky waste and textiles. Ella runs live re-upholstery events and hand-woven, creating new abstracted textiles. Ella runs live re-upholstery events and hand-woven, creating new abstracted textiles.

8 Mutton Chair, Rosie Hornbuckle and Vicky Cable (UK)
Posing circular materials questions through collaborative (re)making. ‘The mutton chair’ is an ongoing exploratory collaboration between design researcher Dr Rosie Hornbuckle and furniture upholsterer Vicky Cable. The aim is to investigate sustainable design practice and circular materials through an experimental collaborative research methodology, based on collaborative ‘peer’ learning and ‘mobile methods’.

On face-value re-upholstery is a sustainable activity; repairing and updating undervalued furniture so that artefacts endure and materials aren’t wasted. However, the need to keep costs down and the practice accessible has meant that traditional materials and methods have largely been replaced with quick-fixes and modern materials that are less durable, sometimes dangerous and not compatible with circular systems for material recovery.

The work is being conducted through a series of (re)making workshops focusing on The Mutton Chair, a co-selected secondhand chair with questionable material integrity, where guided conversations are recorded during the physical act of stripping and upholstering in Vicky’s workshop. This exhibit will focus on the circular materials questions that the collaborators have ‘posed’ as a result of the (re)making process, showing both the old materials and the possible new alternatives that are currently being considered. Messages to our future selves are hidden within the upholstered seat, stating the intended next step for each material used.

9 Design for Circularity, Ina Budde (Germany)
Design for Circularity is a sustainable design agency co-creating product and system innovation for a circular future of fashion. The founder and designer Ina Budde invented an industry connecting system to realise a ‘cradle-to-cradle’ inspired circular economy: The EXTENDED CLOSED LOOP platform. The tool supports the creation of products with recyclable materials and modular pattern constructions, specifically designed for both reuse and valuable closed-loop recycling, it aims to extend the product lifespan in circular retail models and to enable material-specific recovery for fibre-to-fibre recycling.

The platform will establish a traceable closed-loop material flow for textiles by creating a coherent interconnection between material innovators, designers, retailers, customers, textile sorters and recyclers. The key is an individual QR-Code in each garment, that leads to a specific product website. This provides transparency about the sustainability and traceability of the whole product reuse history; and enables recyclability through providing reliable material identification.

10 The Fundamentals / Space Between, Jen Whitty (New Zealand)
This exhibition of the Fundamentals range from the Space Between project makes manifest new ways to reframe problems of the current system through design activism, design thinking and reuse. This work unlocks the latent qualities of undervalued resources, cast aside from a linear system as it aims to address how design can, and needs to, evolve in response to changes in our social, technical and ecological contexts. The range demonstrates solutions for the industry’s waste stream. In this case, post-consumer corporate uniforms form a capsule limited edition collection, designed by fashion researchers from Massey University and made by EarthLink – a not-for-profit organisation that opens the door to employment for many people with health and social barriers. All work created in the Fundamentals range is wholly transparent and open to access, adapt, remix, share (Creative Commons) by all fashion users through the online networked community via multimedia practices of fashion practice to emerge. Operating outside of the linear commercial system, it aims to provide the tools and ability to reconnect and re-value our clothing, fostering the potential for a more dynamic and less passive relationship with our clothing and an increased understanding of the link between the environmental, social and cultural impact of clothing production.

11 Handling Collection / Models: The Textile Toolbox, Rebecca Earley (UK)

The Great Recovery Period
Table Cards, The Great Recovery (UK)

Unmade (UK)
Upscaling Upcycling Venn, Emmeline Child (UK)

Sweaver, Josefina Landalv (UK & Sweden)
Mindsets

12 Shakespeare Scarf, Nigel Graham Cheney (Republic of Ireland)

As more artists and designers turn to waste materials as their starting point, cultural referencing can draw the audience in and engage them on many more levels than the often off-putting facts about the unsustainability of the industry. Here, a €4 scarf from TKMaxx is upcycled to a £20 textile artwork, in a collection of work that celebrates William Shakespeare’s death 400 years ago this year.

A fascination with Shakespeare and the adaptation and reinterpretation of his text led me to produce a number of clothing forms that responded to existing garments. Embellishment is a wonderful act of dominance over a surface, whilst simultaneously being an act of repair. The threads have a life outside of their integration into the object, just as Shakespeare’s text has a place in society outside of the play itself. This scarf represents 36 hours of hand stitching on an item rescued from the high street store TK Maxx. With a tiny hole in the scarf, it had been reduced down to the bargain price of £4, become effectively worthless, and no doubt destined for landfill.

13 Silence Shirt, Rebecca Earley, Trash-2-Cash (EU H2020)

Practising collaboration through making, Trash-2-Cash partners were invited to co-create an upcycled shirt during workshop 6, 21 – 22nd November 2016. For many years now Rebecca has been using the remanufacturing shirt project, Top 100 (1999 –), to explore ideas about sustainable textile design strategy, education and innovation. The current focus is on building bridges between science, industry and academic researchers towards new models for the circular fashion textile industry. In the article ‘A New “I” for Textiles’ (The Design Journal 2016) Rebecca proposes that textile designers need to begin to develop new, mindful approaches to design practice. Shavasana Shirt (2015/6) explored yoga practice and co-creation; this new work extends the question to silent meditation. Referring to research that argues that strangers can fall in love within four minutes by staring into each other’s eyes – (Kellerman, Lewis and Laird, 1989; Aron et al, 1997) – this exhibit was co-created by Trash-2-Cash researchers who gathered together at work after lunch, silently meditated, stared at each other in pairs, and then quietly drew each other’s portraits. The drawings were then transferred onto a second-hand shirt. Reflections on the effect of the exercise on the co-creators and the collaboration will be reported on T2C project blog trash2cashproject.eu.

14 Transitional Textiles / Inner Outer Jacket, Clara Vuletic (Australia)

A hand-quilted and patchwork jacket and collection of swatches, created as the final outcome of a PhD project titled Transitional Textiles, funded by MISTRA Future Fashion. The jacket was inspired by the Hundred Family Jacket in a textile/costume museum in China. Using hand-quilting to create a layered effect for warmth, comfort and emotional durability, the jacket offers ‘psychic protection’ to designers in the transition to sustainability. Transitions in the textile/fashion system will occur across multiple levels of the material: technical; social/cultural; and individual. At the individual level, there are inner and outer dimensions of transitional change. Designers will need to be aware of their own and others’ inner dimensions, in order to support positive change across the textile supply chain and in local communities. On a material level, the jacket offers possible solutions for the combined use of recycled and virgin materials, using a modular/patchwork design and quilting techniques to make upcycling more efficient and scalable. On a symbolic level, the jacket is a metaphor for these psychological change processes. Just as the Hundred Family Jacket in China was traditionally made of patchwork pieces to offer psychic protection to orphans by their extended family, this jacket represents the protection and support needed for transformation of textile/fashion designers and the design community. Sustainability requires us to become ‘whole selves’ and this jacket can be a comforting and protective companion on that transitional journey.

15 Reknitting Sampler Jumper, Amy Twigger Holroyd (UK)

Reknitting Sampler Jumper is a garment produced as part of Amy’s doctoral research which demonstrates five reknitting treatments: replace edge section, integral embellish, stitch-hack, afterthought pocket and cardiganise. The original item is a mass-produced fine gauge cashmere jumper, with Amy’s alterations highlighted through the use of red yarn. The treatments shown can be used to alter any existing item of knitwear, whether hand-knitted or mass-produced, by independent makers in the domestic sphere, using knitting knowledge and skills. Therefore, it embodies the research discussed in her paper ‘Shifting Perceptions’. The Reknit Revolution’, presented at the Circular Transitions conference.

16 Handling Collection / Mindsets: Frontrunners, Filipps K (Sweden)

Frontrunners, Amy Twigger Holroyd (UK)

Latch Tools, Amy Twigger Holroyd (UK)

Library Jumper, Bridget Harvey (UK)

Film Installation

17 Circle Economy (Netherlands)
Clothes in Motion (UK)
DAF/ECAP (EU Life Project)
Design World of Cellulose (DWOC)
Aalto Arts (Finland)
Fashion Revolution (Global)
Green Strategy (Sweden)
Mistra Future Fashion (Sweden)
Plan C (Belgium)
Smart Works, (UK)
ReDress (Asia)
Top 100 Project (UK)
Trash-2-Cash (T2C) (EU H2020)

18 Reverse Forward: 20 Years of TED Research, a film by Sophie Politowicz (UK)

This short film marks the 2016 anniversary of 20 years of Textiles Environment Design Research. A creative montage of illustrative archive footage and interviews, Reverse Forward highlights key developments in TED’s history and sets out its aims, challenges and achievements along the way. Looking outwards from the nucleus of design roles concerning sustainability, the film focuses on circular models and mindsets, using ‘the circle’ as a visual trope to represent the group’s conceptual processes. Contributors include those practitioners, academics and teachers who have been involved with TED. Reverse Forward describes the impact of environmental issues relating to textile production, use and disposal. It outlines TED’s identity and position within the current framework of academic research, looks back to its origins within the context of UAL and then swings forward to identify future possibilities for its networks with education and industry. Promoting sustainable practice, TED highlights its commitment to circular thinking and ever-evolving design strategies for change.
Student & Graduate Showcase

19 ReDress Asia, Patrycja Guzik (Poland)
The EcoChic Design Award 2015/16 Winner

“To me sustainable fashion means living in balance. We need to slow down consumption and stop creating new, new. We need to change our thinking around clothes and more designers need to show consumers that we are able to make beautiful clothes using old clothes and damaged textiles.”

For her 2015/16 collection, Patrycja was inspired by the saying ‘Heaven is a place on earth’ and she wanted to make clothes that were a shelter for a heaven-like space. She combined the upcycling and reconstruction design techniques to create a surplus with zero commercial value. A colour recycling approach was employed (navy and grey) and subsequently blending the recycled outcome with small percentages of virgin fibre to produce the final materials. Anette Textiles is the first in the UK, and one of the few in the world, that is producing this form of sustainable mixed fibre material; closing the loop for the future textile industry.

20 ReDress Asia, Esther Lui (Hong Kong), The EcoChic Design Award 2015/16 Finalist

‘As a designer witnessing our earth’s resources diminishing and the increasing amount of textile waste discarded day-by-day, I’ve become very motivated to utilise every piece of textile waste into my creations. It gives me a great sense of satisfaction to give a new life to previously discarded textiles.’

For her 2015/16 collection, Esther was inspired by the Chinese heroine Mulan, who was known for being strong on the outside but with a gentle heart. She used the upcycling design technique with surplus textiles and clothing labels, which she sourced from factories in Hong Kong.

21–23 University of Applied Sciences & Arts Hannover (Germany)

SALE, Julia Schaal

The collection is challenging fashion as a linear process of renewal. Garments can be transformed into various collection pieces, avoiding pre-consumer waste. Single styles are made to fit different body types to give the wearer room to perform their own form of identity, beyond pre-defined constructs such as age or gender. By making the garments easily adaptable, this collection also challenges the traditional hierarchy between producer and consumer. The clothes themselves become circular, without seams is challenging the designer in a sustainable manner? How can we work as a commercial textile designer in a sustainable manner?

24 Giving Surplus a Purpose, Shirley McAulchan (Scotland)

How can we work as a commercial textile designer in a sustainable manner? Shirley researches using a creative philosophy of designing pieces that are a product of family heirlooms – passed from one generation to another - using only materials that have already had a first life (namely Ayrshire wool blankets). In July 2015 Shirley had the opportunity to explore the possibility of transferring some ‘left over’ textile material from the IKEA store in Edinburgh into commercial products. The project is a practical case study of ‘how to give surplus a purpose’.

During the project Shirley and her students explored the circular economy and the traditional and industrial symbiosis. The surplus had come to the end of its commercial life, so without the Edinburgh Textile Collective’s intervention it would remain a surplus with zero commercial value.

25 Unexpected Loop, Cathryn Hall (UK)

Ten thousand items of clothing go to landfill every minute. The fast fashion industry’s current practice of shortening lead times, increasing volumes, and cutting costs creates the inevitable consequence of ravenous resource consumption and a vast accumulation of waste. This project looks at the current mechanical recycling (or shoddy) industry and proposes an improved system to upcycle the abundance of garments we throw away. Looking at knitted items – problematic due to the mixed fibre blends used consistently in high-street fashion – this project demonstrates multiple blends can be fully recycled back to fibre, re-spun or felted to make high-value products for a Western market. Studying the current shoddy industries worldwide,
Credits

Curators  Rebecca Earley & Kate Goldsworthy
Curatorial Assistant  Gabrielle Miller
Creative Collaboration  Ella Doran
Exhibition Design Consultant  Phil Dolman
Graphic Design  Polimekanos
Project Manager  Susan Hamilton
Research Assistant  Josefin Landalv


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