

Triangles in silk: Piecing together a practice of upcycling

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Abstract

Sustainable fashion design is typically approached through the deployment of a combination of design strategies. One such strategy that enjoys popular use in the sustainable fashion lexicon is “upcycling”. Upcycling, an evolution of the term recycling, means to increase the value of something through creative intervention and enable it to re-enter the product life cycle. This term is placed in opposition to down-cycling, which implies a transformation to something of lesser value. Locating upcycling as a value term is contentious as there is no universal measure by which greater worth than the original can be assessed. Upcycling within fashion design is accomplished by various methods depending on context. Bespoke creation of one-off pieces is one method that is appropriate to collections of quality fabrics of non-uniform size and quantity. Such materials must be individually crafted into one-off garments by the designer/maker in the manner of a bespoke craftsman. In doing this, designers draw on a unique combination of qualities including aesthetic taste, exploratory problem solving and hand making techniques. They also derive pleasure from immersion in the laborious toil of executing painstaking work.

This paper seeks to tease out practices of upcycling within the bespoke designer/ maker context through reflection on a creative research practice titled “The Red Carpet Project”. This practice is focused on the design of special occasion dresses informed by principles of design for sustainability. Projects involve engaging stakeholders in the processes of designing, making and wearing special occasion dresses for significant events referred to as “red carpet” situations. These projects each use a strategy of upcycling of fabric remnants sourced from local Melbourne bridal couture businesses. The approach to upcycling, with which this practice is aligned, treats the textile source as laden with information that guides the form of the new garment; the bridal couturier uses large pattern pieces to form garment components. This results in

substantial remnants that are generally triangular in shape. On observation, patterns emerge; piecing together the shapes in such a way that utilizes the drape of the fabric, and creating an end product that is aesthetically distinct from the dresses the fabric was initially intended for, are two factors that lead the design process. In sustainability terms, the justification is made that, because the textile remnants have been diverted from landfill, their use to create new garments constitutes upcycling. This paper will discuss the strategic deployment of upcycling within the context of this fashion practice, and will emphasize the value of the bespoke design system as a crucial enabler in sustainable fashion practice.

Keywords: design, occasionwear, bespoke, sustainability, upcycling, silk

Introduction

The Red Carpet Project is a design exploration at the intersection of sustainable fashion practice and special occasionwear. The projects within this creative practice research involve engaging stakeholders in the processes of designing, making and wearing special occasion dresses for significant events referred to as “red carpet” situations. These red carpet situations are regarded as a stage for fashion, where there is an opportunity to use the occasion dress as a billboard to project an idea. The idea being explored in this research is the practising of sustainability by designers. Fashion designers typically approach sustainability through the application of design strategies to their garments and projects. My projects deploy a unique configuration of a number of strategies of design for sustainability that are both materially and socially based.

This paper delves into my practice and seeks to tease out relationships between the context for and the approach to just one strategy, that of “upcycling”. Each dress created uses a strategy of upcycling of fabric remnants sourced from local Melbourne bridal couture businesses. Creating from these non-uniform, oddly shaped remnants requires that bespoke techniques be employed, and in doing this my immersion into the bespoke fashion context leads to an insight into one way that fashion designers deploy

sustainable design strategies. This approach, of fashioning individual garments from leftover triangles of silk, is situated as other to the high tech and automated future potential envisaged for industrial scale upcycling within the mass production context.

Upcycling as a sustainable design strategy

When approaching sustainable fashion practice, the deployment of one or a combination of strategies is currently the chief bridge between theory and practice. A good explanation of this approach is given by Textiles Environment Design (TED) at Chelsea College in London, which has developed TED's Ten, a useful resource for designers articulating the strategies designers can use, encouraging them to apply as many as possible when designing. The website says:

These strategies have emerged out of a need for a toolbox for designers to help them navigate the complexity of sustainability issues and to offer real ways for designing 'better'. While the environmental impacts of our production and consumption system have become increasingly discussed and brought to the fore, and textile/fashion designers have begun to consider their responsibilities as creators of unsustainable products and systems, there have been few tools or frameworks for designers to be pro-active. (Textiles Environment Design, n.d.)

Sustainable design strategies can be considered to be in a rapid state of evolution, in line with current scholarship and practice in sustainable fashion. In recent years Fletcher (2008), Gwilt and Rissanen (2010), Fletcher and Grose (2012) and Black (2012) have published practical guides, aimed at students and practitioners alike. This body of recent literature starts to build a comprehensive and interesting picture of opportunities for sustainable interventions within the various sectors of fashion practice.

As a sustainable design strategy, upcycling sits under the umbrella of recycling, aiming to address the disposal stage of the product life cycle. Thomas defines upcycling as

“when discarded garments have their value increased through altering or customizing” (2008, p. 534). This distinguishes upcycling as a form of recycling from secondhand or vintage where clothing remains in more or less the same state, and also places it as the opposite to down-cycling, which implies a transformation to something of lesser value and an exit from the product lifecycle. In the space between straight re-use and complete breakdown are a wealth of practices requiring creative designerly intervention, so despite its technocratic name, upcycling can be interpreted in a variety of ways.

How upcycling is interpreted and deployed by designers is dependent on the context within which the designer practices. Mass production and bespoke are two examples of contexts within which the designer is situated in vastly different proximity to the means of production, and access to materials, among many other differences. These differences determine the approach the designer can take to upcycling; in the mass production context, designers have access to upcycling of a technologically advanced nature, facilitated by a multidisciplinary team, while in the bespoke context, designers practice upcycling at an intimate, handcrafted level.

As a term, upcycling is frequently credited to McDonough and Braungart’s “Cradle to Cradle” concept (2002), which advises a complete overhaul of the way things are made and a re-evaluation of what is actually made, but promises that if this is achieved, we can continue with the abundance currently enjoyed. The cradle-to-cradle vision sees waste recuperated and transformed in perpetuity through “nutrient flows” that are either biological or technical in nature. Upcycling is a strategy suggested for technical nutrients, which in fashion terms would mean synthetic fibres, and proposes that material quality be sustained indefinitely while the products made from them need only last as long as they are required before being returned to raw material and made into new products.

Whilst the outdoor activewear brand *Patagonia* doesn’t specifically refer to cradle to

cradle as a design strategy, it is an example from a fashion perspective of how a cradle-to-cradle vision of upcycling can be achieved. It has the corporate motivation with a well-documented commitment to Corporate Social Responsibility, and it operates on a scale that can realize such textile transformations through the manufacturing and garment recovery processes. Cradle to cradle upcycling is often cited by many fashion designers, yet most fail to grasp that it can only be practised by initiatives such as those employed by *Patagonia* with the scale and means to invest in the necessary technology. Scaturro, in her discussion of the concept she has dubbed “eco-tech fashion” says, “The creation of fibers that enhance the sustainability of the fashion system is currently primarily dependent upon the actions of the established technocratic structures that have larger R&D capabilities” (2008, p. 482).

If the cradle to cradle approach to upcycling rests on material flows through successive products as a solution to waste, an alternative perspective on upcycling entails a privileging of what I call “narrative flows”, whereby the aesthetic qualities in the source garment or textile inform and inspire the next thing it is made into. Avant-garde fashion is one such context where old garments are instrumental as tools of inspiration. Indeed, the deployment of recycling or upcycling as a creative strategy and aesthetic within this genre of fashion practice predates its adoption within contemporary sustainable fashion practice. Martin Margiela is perhaps the most frequently referred to designer in this regard. The house’s *Artisanal* collections incorporate an array of second hand garments, textiles and other materials in an “appropriation from haute couture of its labour-intensive handwork and its creation of unique items” (Debo, 2008, p. 73). Other collections by the designer might be considered upcycling in a very abstract sense; for example, the *Replicas* produced since 2003, which are direct reproductions of secondhand garments for which the designer does not claim authorship.

Gill says so poetically of Margiela:

Ultimately Margiela reproduces the seamlessness of fashion, the idealized form, by the literal production of seams: seamlessness through seams. In doing so he admits that to be formed through garments involves a process of being formed or

an analytics of construction. As such, these seams, by being “traces” of both history and innovation, are the condition of the impossibility of seamlessness as a fixed, objectified ideal. (1998, p. 43)

This approach is typical of designers aligned with avant-garde or deconstructionist approaches, but Gill points out it is inadequate in terms of sustainable practice as it lacks a thorough life cycle thinking approach. It is important to understand this type of fashion practice as a poetic endeavour that draws on information, be it construction, craft based or aesthetic, in second hand clothing as source material for new designs. In my practice I find it important to understand both the poetic and sustainable motivations with which designers approach upcycling in order to develop work that is accomplished from both these perspectives.

Other designers take a didactic approach to upcycling, using waste materials as a billboard that deliberately draws attention to such waste. In 2007, Gary Harvey, a freelance creative director and former brand director of Levi's, created a series of elaborate occasion gowns from secondhand clothing, successful as pieces for editorial (Black, 2008). Each is designed to communicate and comment on a message about waste and consumption. Harvey also designed a dress for Livia Firth to wear to the Oscars in 2011, made from eleven dresses from the era of *The King's Speech* for which her husband won an Oscar (Firth, 2011). Work such as Harvey's sets out to use fashion practice as a staging for an explicit proposition about sustainability, rather than to propose a pragmatic solution to all textile waste.

Bespoke fashion practice

Upcycling as a sustainable design strategy therefore has a highly context dependent definition. It is this context that now requires attention. Upcycling of old secondhand garments or discarded fabrics where the garment requires hands on attention by the designer throughout manufacture can be considered a bespoke practice. Whilst the term bespoke originates in tailoring, its prolific usage in contemporary fashion practice

means there is now certainly haziness associated with defining it. This paper makes no attempt to rectify this; rather it sets out a definition that informs my design practice.

Adamson (2013) argues that the industrial craft system we know today developed at the same time as mass production. His definition of craft is associated with design and applied art, not fine art, as is more often the case and, for this reason, his discussion of craft practice can be used interchangeably with the term bespoke adopted throughout this paper. Adamson views craft and mass production as two sides of the same coin, emerging as a product of industrialization. This places the system of creation of individually crafted items as other to that of mass production, but debunks the idea of one as hierarchically superior to the other, or the idea of the craftsman or bespoke practitioner as a sentimental representation of better times. This sentimentality is unhelpful and potentially misleading in a discussion of the ways and potentials for sustainable practice.

A traditionally crafted bespoke suit will be touched by many hands throughout its creation; through cutting, sewing, and fitting. Whilst bespoke is currently enjoying a renaissance of sorts, increasingly it is the designer/maker, through necessity or inclination, who adopts the many roles in the bespoke or made to measure atelier as a “micro-practice”. This places the practitioner as a designer/maker with a resulting skill set covering the creative to the practical. In this micro-practice, designing and making become inextricably linked in “an intensely personal act whereby the mind’s vision is expressed through the hand” (Dormer, 1988). In addition, the manufacturing features of bespoke practice, such as hand stitching and draping, are referenced as the aesthetic hallmarks of the garment. This may be considered as a “poetic” practice (McCorkill & Varadarajan, 2013).

Bespoke, if considered a sustainable strategy in itself, could be considered to sit under the umbrella of co-design. Fletcher and Grose (2012) note the opportunities for fashion designers to move beyond a technical, material focus of design for sustainability to

projects that operate at a systems change level afforded by adopting co-design methodologies. Fuad-Luke (2009) points to co-design methodologies as a key strategy by which designers can be activists, (where activism is defined as engagement and facilitation rather than direct protest). Co-design examines and documents the stakeholders in each scenario and incorporates these perspectives into design outcomes. Wu (2010) charts an evolution of co-design strategies within fashion practice; whereby face-to-face contact constitutes an early phase, then online and eventually user generated content represent further evolutions of the concept. In this, personalization and customization can intersect with a mass-production context, in order to engender a more personal experience. There are various initiatives such as “Threadless”, the t-shirt website which uses user generated content and blurs traditional designer hierarchies.

However, a key attribute of bespoke practice is that it retains a face-to-face interaction. If we considered bespoke practice through a co-design lens then it could look something like made to measure bridal couture. This is a sector of the fashion industry noteworthy both for its elaborate, hand worked creations and the relationships fostered between designer and client. In a Melbourne weekend newspaper feature, Wells (2010) discussed the important trusting and intimate relationship between woman and designer in preparation for The Brownlow Medal Australian Rules football red carpet event. Wells pointed out that behind the dress itself is a series of relationships. The application of a co-design framework to bespoke practice sees these relationships and stories come to the fore and be seen on equal footing with the dress or artefact, and this offers opportunities to identify points of intervention for the activist minded sustainable fashion designer.

Bespoke can therefore be seen as a context in which a certain type of fashion design activity takes place, but also a situation that of itself has potential for the staging of a sustainability proposition. Exploring sustainability in fashion practice through customized, one off approaches represents just one proposition in the sustainable

fashion project, not a universal solution. In envisaging where these explorations might be placed in terms of future fashion scenarios, such as those proposed in the Fashion Futures 2025 tool (Bennie, Gazibara & Murray, 2010), they are aligned with the approaches that view fashion along slow lines. These practices assume slower rates of consumption and flows of capital. Resource crises mean that activation of locally available materials as envisaged in the “community couture” scenario (p. 27) becomes paramount.

Triangles in silk: The spaces in between

In my practice I upcycle silk fibre remnants of exceptional quality sourced from local Melbourne bridal couture designers. The bridal couturier uses large pattern pieces to form garment components, such as full-length A-line skirts, which result in correspondingly large spaces in between, generally triangular in shape. What is left is thrown away in periodic clean outs. I sort the remnants by fabric type. Although all from silk fibre, the various weaves create different effects of drape, stiffness and opacity. There is slippery satin charmeuse in heavy and light weights, double sided satin charmeuse, traditional duchess satin, slubbed dupion, smooth and crisp Thai silk, the subtly lustrous duchess satin and sheer chiffon, organza and georgette. The colours are a subtle palette of ivory, white and variations on pastel shades with names such as blush, coffee and mushroom. In addition matt and satin sides of the same fabric can produce different colour effects. Nothing is very white; that glaring bleached white can only be achieved in synthetic fibre. I started to use the pinboard along the length of one wall where I worked to pin up the shapes I had collected. On observation, patterns emerge.



Figure 1. Many remnants pinned to the wall

The silk is made into special occasion dresses guided also by an accumulation of strategies of natural plant dyes, sharing and handstitching. These represent an array of strategies. This practice evolved as one in special occasionwear, then upcycling emerged as one way of doing sustainability within that genre. Titled The Red Carpet Project, this project was conceived with the goal of using special occasion dresses as a billboard of sorts to draw attention to sustainable fashion design. The creation of each dress is orchestrated as a complete event, entailing design, consultation with a client and other intermediaries, making to measure, wearing to an event by a client, and associated publicity.

The Logies Dress

In 2011 I made a dress for a television actress, Zoe, to wear to the TV Week Logies Awards, which is a famous Australian television awards ceremony that includes a red carpet arrival television special. Remnants of silk were used in the sequinned georgette sections and for the silk satin underlay.

Logies 2011

Zoe Tuckwell-Smith



Figure 2. Design sketch for actress Zoe Tuckwell-Smith for the TV Week Logies Awards 2011

Zoe was interviewed on the red carpet TV special and she said when asked about her outfit:

I'm actually wearing an incredible dress. It's hand made from silk remnants and it's all upcycled fabric and it's made by a woman called Georgia McCorkill for The Red Carpet Project, which is to promote sustainable fashion design. (Channel Nine Australia, 2011)

The clear articulation of the strategy of upcycling became the manner by which the sustainable credentials of the garment could be communicated and understood.



Figure 3. Handstitching the remnants in place

The Logies dress followed a custom made to measure process, beginning with a series of sketches, and followed by four fittings at various stages of construction. The design chosen used a selection of small pieces of heavily sequined silk georgette, applied as graduated triangles and diamonds throughout the bodice and at the sleeve hem. The sequined embroidery made this fabric immeasurably precious and, in contrast to the expansive remnants of other fabric constructions, I had only a small amount in slightly different neutral shades. The beaded pieces of different shades were dyed in eucalyptus leaves creating a degree of uniformity with subtle variances in shade between each. Making the most economic use possible of each piece, I moulded the

fabric over the bodice and sleeves, cutting and trimming as I went. The edges were folded back and fixed in place with an invisible hand stitch. With very little left over at the end from this assortment of offcuts, there was no room for error. This precise and geometric approach to the remnants was necessary because a drawing had been agreed on. I worked with this sketch pinned to the wall and returned to it periodically to confirm that the finished piece was a good approximation. At the fittings, discussion occurred over the interpretation of the sketch. Were the triangular points at the neckline equidistant or offset? Do they sit level or are some higher than others? Is the sleeve full and flowing or slimmer?

In reflecting on this project I sought to unpack the red carpet bespoke fashion system through a co-design lens, in particular illuminating the effects created when engaging stakeholders or actors within this system. The stakeholders involved include the celebrity, but also many cultural intermediaries who support the red carpet fashion system, alongside non-human actors. Key actors in the Logies project included the actress, the dress, the designer, the network publicist and the wardrobe stylist. Engagement of and cooperation between all the stakeholders in this system was key to the successful promotion of my message. We all had different objectives; they weren't conflicting objectives, just a constellation of completely different concerns, and by bringing and arranging our concerns together, we managed to accomplish them all. For example, my objective was to talk about sustainability, while the stylist's was to ensure no breasts went astray and the publicist's was to cultivate the celebrity image of the actress. From a communication perspective, the skills required in the design process are very different to designing for mass-production. Qualities of explanation, empathy, consideration, listening; all these have to be finely tuned to put the client at ease.

The Front Row



Image 4. The front row “pop-up” atelier and collection

Those occupying the front row of the fashion parade frequently generate greater media and public interest than the clothes presented on the catwalk itself. A second project, “The Front Row”, was presented in March 2012 as part of the L’Oreal Melbourne Fashion Festival Cultural Program inspired by the “red carpet” style status afforded to, and created by, journalists, publicists and bloggers. Comprising a pop-up studio, a blog and a public relations campaign, fashion festival guests were invited to borrow from a collection of ten dresses I designed and made from remnants and wear them to a festival event. The dresses were subsequently altered and re-lent to other attendees. This project was an experimental application of a product service system (Manzini, Vezzoli & Clark, 2001; Mont, 2002) to the special occasion fashion genre, proposing a model of fashion design based on shared consumption (Botsman & Rogers, 2010) with

the designer acting as moderator.

The garments for this project were pre-made rather than created to an agreed sketch, which permitted me to be a different type of designer to the Logies dress; to react to the remnants in an intuitive manner, and to create an aesthetic based on a more personal sense of expression. Some of the dresses are designed to be multi-fit, drawing inspiration from classical antiquity to create tunic inspired shapes, or single length pieces of cloth. These simple shapes are an excellent match for the high quality pieces of silk, as they drape and fall around the body. The triangular shapes mean certain things must be done, joins become important. Although there are many joins, they are more akin to the decorative joins of patchwork than the functional joins implied by a shaped armhole or dart. Many joins create textured fabric lengths, which can be draped and fitted as would an unbroken length. The hand stitch evolved into a decorative element in the dress, executed in metallic thread, used to highlight and draw attention to the angular shapes of the remnants, creating an abstract pattern over the surface of the fabric. In other garments, each triangle forms a pattern piece in itself. A group of four is a left and right side, front and back, one point is the shoulder, another an angular hem. The four identical wedges are arranged in a gored camisole, two sides facing up and two sides facing down, creating contrasts of satin and matt. Sometimes the arrangements reveal themselves early on, and they are sewn up first into dresses. The difficult end pieces of the puzzle remain, at once exasperating in their complexity, while a reassuring reminder that the design process is yet to be guided to its most creative solutions.



Figure 5. A group of four is a left and a right side, front and back

In contrast to the high stakes and traditionally executed made to measure process for the Logies Dress, this project allowed for a playful appropriation of bespoke and co-design methodologies. Dresses were created with the intention that they would be semi-customized for each client after creation; it was also the goal for the dresses to be shared. Here, client involvement and fitting was still crucial but it took on a different style. The clients attended a studio where they selected pieces they liked, and tried them on. What does a practice look like when the designer performs dual roles of service designer and fashion designer/maker? A little more like a tailor who sells a suit with ongoing maintenance and repair. The suit is designed in such a way that its seams remain accessible. In this case, though, the designer would retain ownership of the dress. What are the possibilities when the designer takes responsibility for ongoing

maintenance and ownership of the dress?

Conclusion

In seeking to isolate upcycling from other elements of my practice in this paper, it became apparent just how overlapped it had become with the other strategies in use, such as hand stitching and sharing, and crucially how dependent it was on the context of the practice; that of the bespoke designer-maker. What emerged was an account of one way that upcycling is practised by a designer-maker creating bespoke dresses. This way could resonate with others employing similar sustainable fashion design strategies within this context.

Normally cloth is rectangular, but here it is triangular. This poses a conundrum, and new ways of approaching the cloth must be developed. It can be shaped and quilted into a length of sorts; it can be made into certain garments, but not others. It is a curious blend of breaking with established garment-making rules to create unique seams, grain lines and fitting methods, while working within tight parameters of possibility. The garment starts out almost formed, yet remains totally unknown to me until it is made. This problem solving employing tacit knowledge is a bespoke practice. Bespoke practice is the context in which poetic upcycling occurs, but it also has much potential as a sustainable design strategy in itself.

The pieces of this practice in special occasionwear are sewn together in constructions, with delicate lines of stitching, inviting literal unpicking on the part of the wearer and metaphorical unpicking on the part of the reader. The act of upcycling remnant cloth is a noble one in which waste material is transformed into something of use. Whether or not the thing is of use though depends not only on the act of its being used, but on the approach the designer takes in fashioning it into an object of desire for someone, be they wearer or audience. These poetic and creative traits are of equal value alongside the technical virtue of material reused. In the context of bespoke and one-off creation, in technically measurable terms, little is wasted but little is created, however much value is made in the staging of these pieces in social situations, where such messages of waste, creativity, saving and value can be amplified.

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