

Wear, repair and remake: the evolution of fashion practice by design

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Abstract

Through my postgraduate, fashion practice-based research project, *The Living Wardrobe*, I have become increasingly interested in garment design that specifically facilitates future alteration and modification. There is potential for such a simple design approach to encourage habits of reduced consumption when garments are kept in use by adapting to wearers' changing needs.

Once a common provision in garments, the capacity for alteration is largely missing from contemporary women's wear. The economies of mass production reduce seam allowances to the minimum required for assembly, while complex industrial construction methods deter intervention. At the same time, the practical skills of repair and alteration are rarely learnt anymore. So passive has fashion consumption become and so disposable are the products that a dropped hem, ripped seam or missing button usually consigns a garment to the (charity) bin and justifies another trip to the boutiques.

In an attempt to disrupt this cycle, my research looks at design strategies with the potential to re-engage the wearer in habits of wear, repair and remake. Designing garments with the adaptability required for prolonged, active use enables garments to better keep up with the times, changing style (not merely fit) over time. This approach to product longevity considers the use of the garment across multiple lifetimes, acknowledging that a garment may have several sequential owners.

Through a discussion of recently developed garment prototypes, this paper will outline the challenges I have encountered in designing garments to actively engage consumers in this cycle of wear, repair and remake. These challenges range from the practical, technical and the aesthetic to considerations of participatory design

strategies, consumer education, design authorship, and alternative models of fashion production and consumption.

This discussion further considers the impact of this research on my fashion practice. *The Living Wardrobe* aims to be a fashion practice that accepts responsibility for the design agency of the garments it creates. Remaking my practice to this end has fundamentally shifted how I approach design development, fashion production and communication, suggesting a new model of fashion design practice for sustainability.

Keywords: modification, alteration, sustainability, consumption

Introduction

Drawing on the design futuring philosophies of Tony Fry, *The Living Wardrobe* research project is an attempt at a “scenario of design”, an “exploration of how design could be other than it is” (Fry, 2009, p. 152), proposing the shape a fashion practice might take when redirected for sustain-ability.¹ It is a speculative project, situated within the context of practice-based research. As such, it is free of the constraints of an existing commercial framework with established ways of doing and thinking fashion. My background, working for independent fashion labels in Melbourne (including my own) as a fashion events manager and as a fashion academic, informs the research, as does my experience as a fashion consumer.

The imperative to take on this project came about as the synthesis of these perspectives. As a fashion consumer I was overwhelmed by the sheer volume of clothing available to me and yet constantly disappointed by the experience of wearing it (twisting, splitting seams, fading fabrics going to holes despite gentle hand washing). I grappled with the guilt that a growing environmental and ethical awareness attached to every (carefully considered) purchase I made and wondered, as I still do, what our future will be like if we continue to consume as we do currently.

¹ In my research I am using Fry’s term “Sustain-ability”, which he defines as “A means to secure and maintain a qualitative condition of being over time. It is a process (rather than an end point) where in all that supports and extends being exceeds everything that negates it.”

Working for local fashion labels to produce original, innovative designer fashion amongst talented and enthusiastic practitioners, I became exhausted and demoralized by the hectic seasonal production cycle that required so much effort to get product to store, only to have its value slashed by a red pen on a price tag a few weeks later, for no greater crime than being those few weeks old. The experience of producing large-scale fashion shows added to my disillusionment with the commercial fashion system. Who's in the front row really does matter more than what's on the catwalk.

My subsequent position as a fashion academic released me from the fashion industry treadmill and I now find myself in the fairly unique position of being able to draw on these experiences and ponder what a fashion practice might be, if its values were shifted away from the hectic pursuit of quantity in favour of the slower goal of quality. I became aware of the wealth of research being conducted by theorists and researchers like Tony Fry, as well as Jonathan Chapman, Tim Cooper, Kate Fletcher and Doug McKenzie-Mohr, within which I found the kernel of an idea for a redirected fashion practice.

A fashion practice redirected

In asking of each object designed, "what is the likely future impact of this design in the world?" (Fry, 2009, p. 34), a design practice is redirected to effectively design "from the future to the present" (Fry, 2009, p. 147). This perspective acknowledges that all design is unfinished and goes on designing, whether intended to or not. A beaded silk dress might be designed for a night out dancing, but the delicate nature of the fabric will necessitate dry cleaning and thus the dress also has the unintended, but not unpredictable consequence of contributing to environmental pollution.

If the *likely* future impact of a design can be predicted, then it is within the remit of the designer to *design* that likely future impact. The likely defuturing² potential of the designed object can be eliminated or mitigated and its likely futuring potential amplified. Thus understood, the design agency of the designed object becomes a

² Fry defines defuturing as "the essence of any material condition of unsustainability as it acts to take futures away from ourselves and other living species."

powerful tool of social change, through which the subject/object relationship can be transformed and in doing so, affect transformation of the production/consumption system of which it is part.

Consumption patterns across the industrialised world are unsustainable, demanding an excessively fast throughput of materials and energy. Sustainability will only be achieved if the prevailing throwaway culture in industrial countries is transformed and there is a shift towards longer lasting products. (Cooper, 2010, p. 28)

The Living Wardrobe research project is my attempt to establish fashion design practice that designs from the future to the present. I am designing for a future in which garments have multiple lifetimes that see them kept in use well beyond their current average lifespan³. Increasing product longevity has the potential to reduce waste and to slow the rate of the consumption and production of material goods when instead of being discarded, products are repaired, updated, remodelled, shared, gifted or sold on to new owner(s) who will in turn perform their own modifications and alterations. I am exploring how this might be achieved through a participatory system that encourages the wearer to interact with the garment over time to repair, modify and update it and, in doing so, acquiring simple sewing skills appropriate to further applications. The outcomes of the research to date comprise a suite of garments linked to a website via a Quick Response (QR) code. When scanned, the QR code links directly to a webpage that provides specific information about ways in which that style can be adapted, repaired and remade. It is a system modelled on a classroom experience, suggesting a number of garment interactions (lessons) that not only update the garment but also empower the user with new skills and knowledge.

³ For a table of average garment life expectancy, see:
http://www.drycleanersweb.com.au/sites/default/files/user-content/resources/file/clothing_life_expectancy.pdf Retrieved May 10, 2014.

Fashion design for longevity

In principle, sustainable consumption through extended product lifespan is sound. However in practice it is fraught with challenges, given the complex relationship users have with objects that routinely sees functional products discarded in favour of newer, if little different models. Such “psychological obsolescence” may be driven by aesthetic, social, economic or technological factors which dull the experience of the product owned perhaps because of a worn surface, a change in fashion, or the release of a more feature-laden model (Cooper, 2010, pp. 16-18). Today’s highly sophisticated product development and marketing industries prey on the motivators of psychological obsolescence, fuelling the desire for replacement that drives the perpetual growth underpinning the capitalist economy. As Chapman states, “surely more lucrative commercial models exist than the blind nurturing of endless sequences of desire and destruction” (Chapman, 2005, p. 170).

In *Emotionally Durable Design: objects, experiences and empathy*, Jonathan Chapman discusses the emotional relationships users have with objects, and cites waste as being the result of a failed subject/object relationship (Chapman, 2005, p. 51). He explains that while users’ needs constantly change, most objects offer only static experiences of which we grow quickly tired. Therefore Chapman argues that any design for sustainability agenda predicated on extended product lifespan, must consider emotional durability alongside physical durability, to circumvent the unintended consequence of creating more durable waste (Chapman, 2005, p. 53).

Fashion clothing is especially susceptible to psychological obsolescence, as each new (increasingly loosely) seasonal collection replaces the “old” every few weeks.⁴ In *Sustainable Fashion: Design Journeys*, Kate Fletcher points out that our relationship with clothing is largely passive; to buy and to have (Fletcher, 2008, pp. 186-187), whereas lasting relationships are more likely if that relationship is active, when the wearer is engaged with the garment in some way. This suggests a change in how fashion is consumed, not merely how it is produced (Fletcher, 2008, p. 194).

⁴ Here too is evidence of design’s capacity to destroy even as it creates, by rendering the previous obsolete.

Cooper, Chapman and Fletcher each cite examples of successful durable user/product relationships⁵, but also suggest that designing for emotional durability is largely impossible.

Issues of design and meaning are highly complex and it can be argued that product meaning or personal motivation (though deeply influential in terms of user experience) is not easily affected by design. Designers can elicit emotional response, but explicit nature of the response is beyond the designer's control ... Designers cannot craft an experience but only the conditions or levers that might lead to an intended experience. What those required levers are, is unclear to design. Largely because we attach diverse personal meanings onto objects. (Chapman in Cooper, 2010, pp. 64-65)

Open Design

Fletcher has suggested that it is through methods of open design (co-design, participatory design) that richer, more meaningful product experiences might be generated (Fletcher, 2008, p. 187). By inviting the user into the design process in some capacity, the user can shape the product to suit their preferences. It follows that this results in a product more suited to their individual needs and thus it is likely it will be used more frequently and for longer. In fashion, this could be as simple as having a garment made to personal measurements instead of buying a “standard” size off the peg.

I have written previously about the various open design strategies existent in fashion and their potential to more meaningfully engage the wearer with garments (Cramer, 2011). These diverse strategies range from simple point and click mass-customization systems⁶ to guided DIY home sewing projects⁷.

⁵ See especially Fletcher's *Craft of Use* Project <http://craftofuse.org> Retrieved May 3, 2014.

⁶ See for example Modern Tailor <http://www.moderntailor.com/> Retrieved May 6, 2014.

⁷ See for example DIY Couture. <http://www.diy-couture.co.uk/> Retrieved May 6, 2014.

Through *The Living Wardrobe* I am considering how such a range of open design strategies might be employed in the use phase of the garment rather than the product development phase, to bring about changes in consumer behaviour that promote the prolonged, active wear of garments. This essentially involves strategies of product redevelopment and co-redesign through repair and remaking that enables the consumer with a range of simple skills.

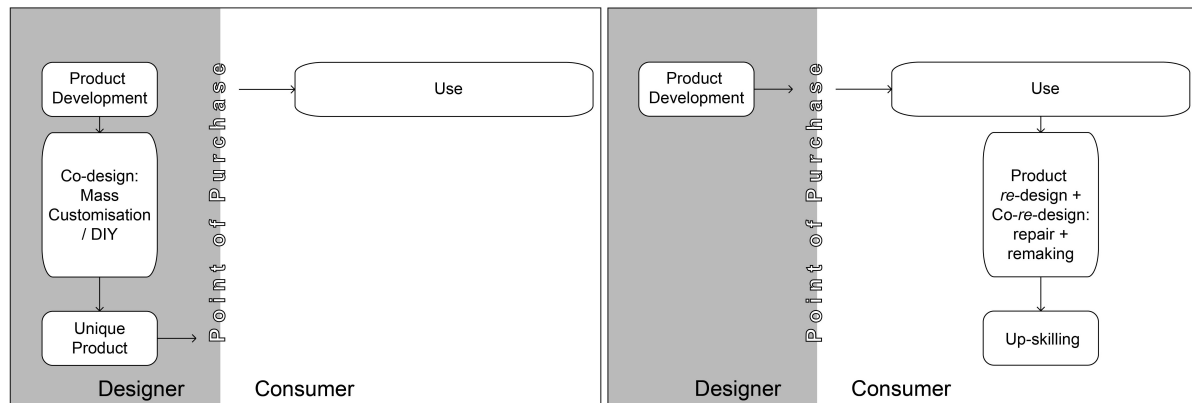


Figure 1. Left: open design as usually employed in product development. Right: in *The Living Wardrobe*, open design strategies are applied to the use phase of the garment.

In this, the principle challenge encountered is how to encourage consumers so used to buying, having and discarding clothing, to actively participate in mending and remaking their clothing? Few people today can sew with any confidence and contemporary garments discourage tinkering with complex construction methods that prioritize efficient production over repairability.

In *Fostering Sustainable Behaviour Change*, Doug McKenzie-Mohr argues convincingly that achieving a sustainable future necessitates changing individual behaviour and that to bring about behaviour change the desired behaviours need to be presented in ways that are easy to adopt (McKenzie-Mohr, 2011, pp. 7-8). He makes this assertion to counter the common belief that if educated about the need to change their behaviour, people will. Through his research, McKenzie-Mohr has demonstrated that such information campaigns, so often used to promote sustainability (as well as healthy eating, exercise and so on), in fact have very little

effect on changing behaviours. It follows then that engaging people in the repair and remaking of their garments is more likely achieved if doing so is perceived as easy.

Lessons learnt

In thinking about how I might do this, I realized I could draw on my teaching practice. For the past few years I have taught introductory sewing classes to first year undergraduate fashion students who have plenty of enthusiasm but little if any existing skill. A series of simple exercises in the first class demystifies the craft and provides an immediate return for effort, be it simply the achievement of neat rows of parallel lines or a patch pocket secured to a square of calico. Competent practice comes quickly and after two more classes they have each produced a skirt (complete with zip!). By the end of the year my role in the class has shifted from teacher to mentor as the students each advance their mastery of the craft in pursuit of their individual interests.

In carefully balancing challenge against their skill level, the students are engaged in a cycle of attempt and reward in which each achievement advances their capabilities and builds their confidence. Maintaining this balance is critical to the students' enjoyment of the experience; when the tasks are too difficult anxiety sets in, when they are too simple, students become quickly bored.⁸ When their skills are matched by the challenge of the lesson, sewing becomes an enjoyable task in itself, not merely a skill one learns to achieve an end.

A new model of fashion practice

The Living Wardrobe is an adaptation of this classroom experience in which the teacher is replaced by a series of self-directed design interventions of increasing challenge centred on the modification and remaking of an existing garment. The underlying principle is the same: from the initial safety of prescribed lessons, experimentation is encouraged until the teacher is no longer required. A novice is first encouraged to tinker with a complete garment within the safe confines of alterations and modifications suggested by the designer. Then, as confidence grows

⁸ I am borrowing language here from "flow" theory. See Csikszentmihalyi, M., & Csikszentmihalyi, I. S. (1988). *Optimal experience : psychological studies of flow in consciousness*. Cambridge, NY: Cambridge University Press. (p. 30).

and skills develop, greater experimentation is encouraged, again from a safe starting point of a digital pattern for download that affords both predetermined and improvised design variation. A blog style forum is being developed for wearers to share their experiences of wearing and modifying the garments. The blog encourages discourse amongst the consumer community and dialogue between consumers and the brand. This replaces the teacher's guidance and provides peer support.

In this environment, everyone learns from each other: design and product development are improved through customer feedback and consumers inspire each other by sharing original design interventions; modifications and alternate garment components other than those proposed by the originating designer. In this scenario, "brand loyalty" is measured not in repeat sales, but in the enduring relationship that comes of the shared experience of the evolving garment. It is a tiered framework of increasing challenge that affords self-paced learning. The consumer engages with the garment to the degree he or she feels able and comfortable. Skills acquired are transferrable to further sewing projects, thus the consumer is enabled beyond the immediate application of *The Living Wardrobe* garment.

A prototype



Figure 2. Knit top designed to be transformed over time.

The most recent garment produced is a knit top with detachable sleeves that offers layers of potential engagement in how it may be worn, maintained and transformed over time. The body of the garment is a singlet to which optional sleeves are attached at the shoulder with press studs. The singlet has underarm dress shields to protect the garment from perspiration and deodorant stains. It is trimmed with a collar, cuffs and hem band of a contrasting fabric, which may be removed and replaced when worn out. Intended as an everyday wardrobe staple, this simple modular design has the capacity to evolve over time in response to the changing needs of the wearer.

While previous garment prototypes have explored a similar approach in different garment shapes (skirt, dress and coat), this garment is the first from the research to consider modular design, recognized as a valid approach in design for sustainability because it potentially extends the active use of a garment by providing versatility in appearance and/or function.⁹ The challenge with modular design is that it needs to be a successful design in all configurations; successful in function, fit and form, howsoever assembled. It should be easy to manipulate and invite interaction, not intimidate the wearer with lengthy styling instructions. In this garment, the modularity is very simple; sleeves on or off. Wearing the garment with or without sleeves suits changing weather conditions but also presents the opportunity to wear entirely different sleeves. This capacity will be discussed in more detail below.



Figure 3. The top features modular sleeve design and underarm reinforcement.

⁹ For further discussion of modular design as a fashion design for sustainable consumption strategy see Fletcher, K. (2008). *Sustainable fashion and textiles: design journeys*. London; Sterling, VA: Earthscan. (p.132).

The need for greater physical durability is addressed by design, in the choice of fabric, the reinforcement of areas of likely wear and in the capacity to replace parts that perish. The armhole has been cut low to increase ventilation and the underarm is reinforced with a dress shield. The fabric is 100% wool; a durable, hardwearing fibre, knitted in a rib construction that provides ample, comfortable stretch. The body is trimmed with a collar, cuffs and a hem band of contrasting fabric. These contrast components are designed to add aesthetic and tactile interest but also to facilitate repair. It is the collar, cuffs and hem of such a garment that rub against the body, against the bag we carry, or the desk at which we work, catching the marks and stains of our daily life. As they perish, they can be replaced with a different knit fabric without dramatically changing the look of the garment. A new contrast fabric, even a very different one, is appropriate to the style.

Design agency

The garment's capacity for evolution is its design agency; that it can foster habits of sustainable consumption in the wearer by encouraging engagement in the mending and remaking of their own clothing. The garment has been designed to be easy to repair and to modify so that as components wear out or tastes change, elements can be replaced relatively simply, either by the wearer themselves or by an alterations service. The garment offers various levels of engagement for wearers who may have some, little or no sewing skills. For those with no sewing skills, an alternate sleeve style might be purchased readymade. For those with some sewing skills, alternative sleeve styles can be produced at home from purchased patterns or by trial and error improvisation.

The underarm dress shields can be removed or replaced with relative ease. Personal experience has taught me that with repeated wear, garments constructed from inherently durable fabrics like woollen rib tend to perish first at the underarm, which becomes thin and stained. While underarm shields might be constructed from special anti-bacterial fabrics or coated with anti-stain and anti-odour finishes¹⁰, at the most basic level, they can be cut from the same cloth as the garment to provide

¹⁰ See Gwilt, A., & Rissanen, T. (2011). *Shaping sustainable fashion changing the way we make and use clothes*. London ; Washington, DC: Earthscan. (pp.111-112).

physical reinforcement. In this garment, the dress shields are cut from a single layer of the same woollen knit fabric, the edges are overlocked, and the armhole binding joins them to the garment. When permanently soiled, they may be neatly cut out and the garment is worn without shields. This extends the physical life of the garment a little longer without the wearer needing any sewing skills at all. However, the shields can also be replaced if the armhole binding is undone and restitched, with new shields cut from any absorbent fabric that is a close colour match.

Replacing the contrast components of the garment is similarly straightforward, although it requires more sewing skill. Where an overlocked seam needs to be undone to replace the hem, collar or cuffs, two options are available: unpick the seam or just cut it off. The overlock stitch used to construct the garment comprises three interlocked threads resulting in a seam no more than four millimetres wide. The individual threads can be removed quickly if snipped and pulled in the right order. A video posted on YouTube demonstrates a successful technique¹¹. Unpicking the seams results in no loss to the width or length of the garment pieces. However if the wearer finds this too tricky or time consuming, the narrow seams can instead be carefully cut off. In this case, the knit construction of the fabric compensates for the slight reduction in girth by giving a little more and the potential change in fit is negligible.¹²

It was technically challenging to construct the garment in a way that facilitates the replacement of components, primarily because of the stretch in the fabric, which dictates particular flexible stitch types not readily available to the home sewer with a domestic sewing machine (overlock and single needle chain stitch). Importantly, that the home sewer cannot recreate the stitches used to make the garment in the first instance is in fact not as significant as the garment's facility for intervention. Provided the garment can be readily disassembled, the various stretch stitches on a domestic sewing machine may be used to make alterations. If and how the domestic

¹¹ Dickerson, C. April 2012. *Removing Serger Stitches The Easy Way!!*
<http://www.youtube.com/pxn6wERSODA> Retrieved May 8, 2014.

¹² It should be noted that although the overlocked seams used to construct the singlet and the sleeves cannot be let out, the knit construction of the fabric accommodates moderate fluctuations in girth, therefore the provision for size alterations has not been given as much attention in this prototype as with previous woven samples.

(re)construction affects the form and function of the garment is at the maker's discretion and may just as well add to the aesthetic appeal of the garment as detract from it.



Figure 4. Domestic sewing machine stretch stitches (shown in red) are adequate for alterations.

Inviting engagement

Aside from the gap in the underarm, on the hanger the garment does not immediately exhibit its futuring potential and assimilates well into a rack of conventional contemporary designer fashion. Only on closer inspection does it become apparent that the sleeves are detachable and on closer inspection still, that the garment has dress shields. That the dress shields and contrast panels can be replaced is not obvious in the garment at point of purchase and risks being overlooked if not somehow communicated to the wearer, be they the first, second or third owner of the garment. An explanatory swing ticket may be sufficient at the initial point of sale but it would likely be discarded before repair was required and would certainly not travel with the garment through the second hand market. Access to the information about how to repair and remake this garment needs to be provided

by the garment itself, so that wherever and whenever an owner of the garment wishes to change it, the information on how to do so is easily accessed.

QR code labelling

I am exploring the potential of a QR code stitched into the garment to provide an instant link to a website populated with an evolving pool of resources relevant to the garment.¹³ To stimulate curiosity, the code is located in a prominent position in the garment (for example, back neck facing), suggesting there is more to the garment than is first apparent. At the moment, while the research project is still in development, only one QR code is being used in the few garments produced. It links to a webpage that lists the collection of garments, from which the wearer (or curious shopper) selects the style of interest. The available content for each style will vary with development, but will essentially contain information on the garment's characteristics, including how it can be worn, altered, instructions on how to alter it, information about available alternative garment components and how to access them. This may include a range of readymade components for online sale supplemented by digital patterns for download. The downloads might include patterns for the collar, cuffs and hem band to help with cutting replacement parts and patterns for alternative sleeve styles.

Establishing this link directly from the garment to the website enables the garment to remain dynamic and current through the continual trickle of new content available around it. This content might be generated by the designer (new components periodically made available, rather like software updates) but also by wearers documenting their purchase (whether new or second hand) and the transformations they make. This will create a broader knowledge base than the designer could ever hope to achieve independently. Into the future, the scope of the project will extend to each garment produced having a unique QR code and a unique webpage that can chronicle its transformations as it moves through its lives, giving the garment a

¹³ The decision was made to use a QR technology rather than the more advanced radio-frequency identification device (RFID) to keep the technology simple for both the brand to implement and the consumer to access. QR codes are familiar to consumers and easily read using free smart phone software. They are similarly easy to generate with one of the many free QR code generators available online.

documented provenance, like an artwork or antique.¹⁴ This aspect of the research project is the most speculative at present and requires further development but it serves to demonstrate the communication link that can be established between a garment and a website using readily available Internet technologies.¹⁵

Making over

Like the garments produced in the research, *The Living Wardrobe* website offers layers of engagement. To the web surfer or curious shopper, it provides product information that explains the values and enduring capacities of each garment. To the owner of a garment, it offers suggestions, instructions and patterns for alterations and transformations.

For some consumers it will likely be achievement enough to learn the skills required to successfully repair or update a garment they may have owned a long time or recently acquired second hand. For others though, it is hoped that the enjoyment that comes with this achievement will inspire more ambitious, increasingly independent projects, particularly making clothing from scratch. To this end, I have considered the capacity for simple home manufacture in each of the garments produced in this research. As well as being available as readymade garments, each style is being made available as a digital download. A Portable Document File (PDF) garment pattern can be downloaded and printed on A4 paper that, when taped together, makes up a grid from which the pattern pieces are cut. Construction instructions are provided and references to existing online resources are suggested where additional tutorials are available.¹⁶ As with the instructions for alterations, the downloadable patterns are proposed as a starting point for the novice designer who

¹⁴ It will be interesting to see what value such a provenance gives the garment. While I am intensely curious about a second hand garment's previous life, others may not be and knowing they are the third owner of a garment that is 10 years old could be off-putting. But then, it could be argued such an attitude must change.

¹⁵ Future proofing the QR codes is of most concern, but should be relatively simple. If QR codes are eventually phased out, the designer website could potentially offer QR code reader smart phone software for download, allowing vintage garments to continue their evolving narrative.

is encouraged to vary and develop the design as they like and then to share it back with the online community.

The skill level of the sewer is anticipated to be rudimentary. If they are attempting to make one of these downloaded garment designs following some successful alterations and modifications of readymade garments, it is likely they will have little if any experience of making clothing (much like my first year students). Therefore particular attention has been paid to balancing challenge and skill in how each garment is cut and constructed, to ensure that the experience is enjoyable. This in turn has affected all aspects of design and posed significant challenges in the translation of complex industrial construction processes to simplified domestic equivalents. The knit top prototype, for example, may be entirely seamed together on an overlocker. The only straight stitching required secures the armhole binding. I have made the assumption that an established amateur will likely have an overlocker, but that a novice sewer will most likely only own (or perhaps have borrowed) a sewing machine. Using an overlocker is the simplest and quickest way to make the garment, however a sewing machine alone is adequate by substituting a zigzag stitch for the overlocking.

While the omission of specialized knit machinery construction methods in this garment is predominantly to facilitate home assembly, it has another more “designerly” purpose; to escape the connotation of mass manufacture that such specialized machinery suggests. That it has almost no visible stitching lends the garment a look that is distinct from the typical visual vocabulary of a knit garment: the twin needle cover stitched hem, flat locked seams, rib neck binding and so on. These finishes are synonymous with the t-shirt, surely the most ubiquitous garment on the planet. It is a vocabulary that alludes to tens, hundreds or even thousands of duplicates when instead this garment is to be produced in tiny runs and many individual interpretations.

¹⁶ Into the future it may be worthwhile producing video tutorials on how to make these garments. In the short term, there is a wealth of existing amateur video online to explain the simple construction techniques used. Referencing these instead of creating new tutorials may in fact be the best approach since it serves to connect the novice sewer with the existing global community of home sewers and encourages participation by example.

Future Research

With the framework of the project now firmly in place, it remains to flesh out the website, produce market-ready garments and invite people to interact with the project more fully. Testing the individual garment designs as well as the overall project concept will prompt reflection and improvements on the processes here described. Anyone interested in participating is encouraged to contact the author.

Conclusion

It can be hard to picture what the future would look like, and so to be making things, as examples of future creative diversity, in the here and now, offers a powerful and tangible form of inspiration to others - and challenges the apparent inevitability of the present. (Gauntlett, 2011, p. 219)

The Living Wardrobe research project pre-empts the future use of a garment, wherein future use sees the garment evolve by adapting to the changing needs of sequential owners as it moves through multiple lifetimes. Rather than being a function of changing consumption practices through consumer education, shaping future garment use is considered from the perspective of design, exploring how the very design of the garment can influence how it is used. Adaptable garment components encourage prolonged use by facilitating the repair of worn parts, adjustments to the garment's fit and substitution of alternative garment components to provide stylistic variations. These capacities are made evident through a QR code, labelling the garment with a perennial link to a supporting website.

While it is beyond the remit of the designer to definitively determine how an object is used, it is proposed here that the cumulative actions of repair and remaking performed over time have the potential to instil in the garment meaningfulness and value. Each change to the garment documents a moment of change in the wearer too; the moment when their taste or figure changed or a memorable event left its mark on the garment, a cuff torn on a wire fence at a picnic perhaps. As each garment endures, as it transforms, as it moves between owners and its story is shared online, it gains an increasingly unique provenance, quite unlike its wardrobe companions.

The potential here is for fashion to break free from the constraints of the fast fashion seasonal cycle of being “in” and then quickly “out” if garments are able instead to keep pace with us. While the research project is still underway and much remains to be further developed, it is hoped that the outcomes of *The Living Wardrobe* will suggest to the fashion industry and the public alike, a more engaging way of being with clothing that can contribute to a reduction in overall clothing consumption

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