

**What prevents people repairing clothes? : an investigation into community-based approaches to sustainable product service systems for clothing repair**

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**Published version**

GWILT, Alison (2014). What prevents people repairing clothes? : an investigation into community-based approaches to sustainable product service systems for clothing repair. *Making Futures Journal*, 3.

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# Alison Gwilt

## What Prevents People Repairing Clothes? An investigation into community-based approaches to sustainable product service systems for clothing repair

### Abstract

This paper explores how we might reinvigorate community-based approaches to the repair of clothing and garments and examines the potential roles for online and offline activities to facilitate knowledge exchange, build communities and revisit repair processes and strategies.

Until the mid-twentieth century in Western society cloth was considered to be a valuable commodity, and clothes were regularly maintained and repaired to prolong garment use. Today the cultural and economic value attributed to clothing has on the whole dramatically changed and the practice of repairing or altering clothing has largely disappeared. While there is renewed interest in the creative potential of mending or altering garments in some quarters, in particular amongst the online and offline craft communities, within mainstream society damaged clothing is typically discarded to landfill rather than repaired. Based on empirical studies conducted by an interdisciplinary team of researchers at Sheffield Hallam University, this paper discusses the preliminary project findings and suggests what needs to be done to encourage and support people to engage in clothing repair.

It is useful to consider that the repair and alteration of clothing had been practised for generations, both in an industry context and in the home. However, within the last two to three generations the culture of repairing and altering clothes has largely disappeared, while at the same time the fashion industry has increased the availability of inexpensive, mass-produced ready-to-wear clothing. The fast fashion garments that are readily available in every UK high street are often rarely worn and quickly discarded. This has important implications for the environment and society, since it is estimated that each year a consumer will contribute as much as 30 kg of clothing and textile waste to UK landfills (Allwood et al. 2006). While the amount of textile waste could be reduced if users engaged with repair activities, the attraction of new and relatively cheap clothing is a major concern. However, as will be discussed, engagement with clothing repair has other social, cultural and personal benefits.

Fisher et al. (2008) argue that another possible reason for a general disengagement with clothing repair is a lack of technical ability and skill. Aside from sewing on buttons or stitching up hems there is little evidence of repair work being undertaken as a normal, regular activity within a household. The research study 'Make, Do and Mend', discussed in this paper, tests this proposition by looking for the variances in knowledge and abilities amongst different users, and in particular between novice and amateur menders. Moreover, through a mixed methods approach, including a practice-led inquiry, the study has explored current patterns of use and behaviour to reveal some of the barriers to engagement. It is hoped these findings will highlight potential strategies for attitudinal change and identify motivators for future engagement. Moreover, this is with the intention of encouraging producers and consumers to re-evaluate the way that they perceive fashion products – replacing the notion of fashion as disposable, and instead seeing fashion as a valued object to be cared for and maintained.

### The link between textile waste and practices of use

According to WRAP (2012), approximately 350,000 tonnes of used clothing is sent to UK landfills annually. However, if each garment was used for approximately three years then in addition to the benefits to the environment there would be a reduction of almost £5 billion a year in the costs of resources needed to supply, launder and dispose of clothing (WRAP 2012). While the statistics reveal the high level of material waste that is produced as a consequence of garment manufacture and use, it is equally alarming that so much waste is still going to landfill when there are benefits to employing garment extension strategies to reduce this problem. Although textile waste is typically perceived as a consequence of the rise of inexpensive products in a saturated market, the archetypal practices applied during consumer use further contribute to this problem.

Controversially, it is often cited that in the life-cycle of a fashion garment it is during consumer use that most of the environmental impacts occur (Fletcher 2008; Black 2012). These impacts arise as a consequence of a series of activities in the use phase that typically include wearing, washing, drying and storing, and may extend to repairing, adaption and alteration and then disposal (Bras-Klapwijk and Knot 2001). Each person will develop a clothing care and maintenance routine that is based on personal patterns of use, which may be different to the practice employed by others. With this in mind, then, it becomes apparent that the way that garments are cared for can be vastly different between one user and the next; for example, garments may be laundered too often or infrequently, they may be ironed carefully or badly, but in many cases, independent of any established care routine, they are often discarded too quickly before repair or alteration possibilities are considered.

Before the Second World War, in the US and UK it was considered normal practice to repair and alter clothing, usually for economic reasons. Undertaken either in the home or in an industry context, the labour costs associated with repair work meant that at the time mending clothing was affordable in comparison to the price of new materials (Gwilt and Rissanen 2011). However, by the 1960s in Europe and the US, the ready-to-wear market began to dominate the fashion industry and clothes quickly became accessible and affordable. The impact of this expanding market helped facilitate a decline in mending, which in turn impacted heavily on a traditional culture of repairing and altering clothes. Significantly, the relatively high cost of clothing repair did not compare favourably with the price of new clothes. According to Fisher et al. (2008), in contemporary Western society the majority of users do not now engage in the mending of worn or damaged clothing as a regular or normal activity.

Although there may be many factors that influence this behaviour, some of the major deterrents are associated with a shortage in household skills, the attraction of new inexpensive clothes, and the price and availability of repair services (Fisher et al. 2008). But in recent years there has been a resurgence of craft practices within online and offline communities that has led to a renewed interest in creatively altering clothing at a time when the notion of mending seemed to all but disappear from the cultural landscape. However, while some sectors of society have begun to acknowledge the environmental and social benefits of repairing

clothes, this view tends to sit outside of mainstream thinking where the dominant belief is that damaged clothing should be discarded rather than repaired. The question is, then, how do we motivate and encourage people to (re)engage with mending practices?

## Reconnecting people with mending

Garments in historical costume collections typically demonstrate a wide variety of ingenious and resourceful approaches to garment repair, and a number of these could be revisited to enable contemporary users to reconnect with repair practices. For example, it seems that repair work was considered only when it was needed, but traditionally many garments were designed and developed especially to accommodate later repair and alterations. During the seventeenth century the design of the stay (bodice) undergarment included sleeves that could be detached and reattached, which enabled the user to repair, maintain and wash the pieces with improved ease (Hart and North 1998). In a contemporary context this 'design-led' approach is seen in the modular fashion garment, which is a flexible clothing system that provides the user with a range of clothing combinations emerging from a small select core range of designs. Aside from this being an efficient use of resources and cost effective for both the producer and the user, the modular concept enables the removal, repair and replacement of damaged pieces without disrupting the rest of the system.

Throughout dress history it frequently appears that when mending did take place it served to masquerade damage – making it invisible – particularly in garments that were perceived as valuable or precious. The extent of techniques used to accomplish these repairs varied enormously, depending on the user's accessibility to materials and skill, and the social and cultural norms of the time. During the Second World War in the US and UK, the government-led 'Make and Mend' campaigns promoted techniques such as darning, patching, and repurposing as a way to creatively and resourcefully reuse fabrics and garments. Numerous campaign leaflets were produced to educate the public in using a range of practical clothing care and repair strategies, which often required inventive thinking when using limited material resources. Most of the Board of Trade pamphlets produced by the UK Ministry of Information department promoted the use of invisible mending techniques that required a good level of skill, which was further supported with

council-run evening classes (Ministry of Information 1943). During this period being resourceful was perceived as a civic duty, therefore mending clothing was considered a responsible action that benefitted the nation.

However, invisibly repairing the damage in a garment has not always been perceived as a necessity. Particular sub-culture groups, such as the anarchic Punk movement in the 1970s, challenged conventional styles of dress through the adoption of motifs such as rips, tears and stains in aggressively styled garments. In the UK, designer Vivienne Westwood exploited these concepts in clothing that was intended to shock, which provoked a reactionary response from the high streets and the catwalk (Laver 2002). In the late 1980s and early 1990s Rei Kawakubo from the Japanese fashion label Comme des Garçons incorporated randomly placed holes in monochromatic knitwear pieces, while Belgian designer Martin Margiela created deconstructed pieces that signalled a distressed style using exposed seams and slash details. From the contemporary repair perspective the use of intended rips, tears and holes act as deflective devices that enable future damage to remain untouched and unnoticed.

### **What do people know and think about clothing repair? A case study of the 'Make, Do and Mend' project**

An interdisciplinary team of researchers at Sheffield Hallam University established 'Make, Do and Mend' in 2013. The project was developed to explore what people think and know about clothing repair, and to identify what is needed to support and encourage people to engage in mending practices. This was with the intention of A: identifying methods that would reinvigorate community-based approaches to clothing repair, and B: documenting the potential roles for online and offline activities to facilitate knowledge exchange, build communities and revisit repair processes and strategies. The pilot study was driven by three main research questions, which focused on understanding:

- what people think and know about clothing repair
- what people currently do with damaged clothes
- what is needed to support and encourage people to engage in repairing.

At the outset of the study it was important to explore two key aspects: firstly, to reveal what users know, and secondly, to see what they can do. While there

are a number of craft books, websites and magazines that provide information about clothing repair, little research outside of the report from Fisher et al. (2008) has been done to compare the attitudes of wearers with actual ability or behaviour. Moreover, it was necessary to reveal and compare these two positions so that the support mechanisms to encourage future participation could be identified. This required an understanding of the role that online and offline communities can play in supporting engagement. Consequently it was also necessary to explore the role of web-based networked communities, forums and groups in stimulating a wide variety of DIY approaches to craft and design practices. However, while the study focused on encouraging mending within the domestic environment, an underlying aim was to see the potential of mending from an industry perspective, and to look for business models and opportunities that could be adopted by or within the fashion industry and textile crafts arenas.

### **Our approach**

Taking a mixed methods approach, the study began with a survey that was distributed amongst online sewing communities, forums and networks. The aim was to understand how online forums support users and how knowledge is shared and interest sustained.

A further survey was distributed amongst the local community in an attempt to capture a general picture of attitudes towards the repair of clothing. We asked people what they currently do with damaged clothes, what their motivations were, the barriers they faced and what support would be needed if they were to engage in repair work in the future. We also wanted to establish whether opinions and behaviours differed between groups of users – for example, whether there were gender, cultural or generational differences.

Running concurrently with the survey collections, we observed the physical approaches of users in two practical workshops. The workshops were designed to gauge the ability of two different types of volunteer menders – the novice mender and the amateur mender. The volunteers were required to self-select and enrol in the appropriate workshop session. For the purposes of the research the novice was considered to be a person with little or no sewing/clothing repair ability, while the amateur was classified as a proficient sewer, dressmaker or repairer. Each participant was required to repair either a hole in a pair of denim jeans or a cotton

t-shirt, two basic items found in most wardrobes, and the intention was to repair the item to a wearable standard. Each participant was presented with a range of basic sewing equipment (needles, thread, fabric), household and stationary items (sticky tape, staples, glue), and resources such as a sewing machine, computer, and books. At the same time the participants took part in interviews and visually documented their process as a way of capturing their thoughts, decisions (and indecisions), dilemmas, and trials as they progressed through the task.

While we wanted to observe the thinking, approaches, creative practices and decision-making by the participants, we also wanted to understand the relevance and context of the tools and resources used to complete the task. Moreover, we were looking to see whether there were any differences in the approaches used by the novice and the amateur: Would the approaches between individual and banded participants differ? What impact did creativity or skill have on the final outcome? How did the participants feel about the task? As the participants embarked on the task it became apparent that it was necessary to question the appearance of a repaired garment, and ask how we measure good repair skills, and by whose standards. As the study progressed these points became critical as it became clear that from the moment of the workshop self-enrolment exercise the participants typically had a different view of their own ability or knowledge than that observed by the researchers.

### **Initial findings from the 'Make, Do and Mend' project**

Historically, wearing repaired clothing was a signifier of financial hardship, and this idea continues to have an influence in contemporary society where one of the challenges to overcome is encouraging people to wear garments that have been repaired, particularly if the repair is visible. For many people it is still socially unacceptable to wear visibly repaired clothing. We wondered, then, whether the participants would hide the damage of an item or allow it to remain visible and become a symbol of distinction and individuality. Would participants be confident enough to celebrate stains, holes and tears by enhancing and enriching these 'new motifs' using decorative techniques, or would they opt for the convention of the invisible repair?

Observations in the practical workshop sessions were quite different from the data collected in our survey. In the survey results 82 per cent of respondents preferred their garment repairs to

remain invisible. However, while this view was verbally echoed amongst many attending the workshops, in their own finished repaired garment the mending was often visible. In many cases the participants had hidden the damage behind a cloth patch, but the patch itself was clearly visible, almost decorative. These contradictions may be in part due to the issue of the participant's lack (or perceived lack) of skill, which within our survey and interview data was identified as one of the significant barriers to engaging with repair work. An early observation which can be drawn from both the workshop and the survey results is that if people aspire to invisible mending techniques then there is a danger that they may be disappointed as this type of repair can only be achieved by the most skilled.

In seeking clues as to what is needed to support people in repairing, it came as some surprise that from our data we established that despite the availability of specific resources (such as books, workshops, short courses or formal online groups), many people initially sought advice from a family member and/or the internet. It appears that a combination of online and offline 'resources' is considered valuable. Moreover, in the interviews with the workshop participants it was highlighted that attendance at the practical session gave the participants the time and access to resources to carry out the repair work in what was considered an enjoyable experience, despite no practical guidance or support from the researchers. This was in stark contrast to the survey data where the notion of repairing clothes at home was sometimes considered a time-consuming task that was a 'chore'.

The initial 'Make, Do and Mend' pilot study has allowed us to begin to identify issues and barriers that affect a user's relationship with clothing repair and also to begin to identify some of the mechanisms that can support engagement. It is clear that a larger study is needed to gain data that is representational of a wider variety of people, and this is being pursued as a future objective. Although the online survey involved 200 respondents, the numbers of respondents under the age of 25, along with those representing the male population, was smaller than hoped. At the close of the project we produced a public exhibition of the repaired garments and progress worksheets. From interviews and surveys completed by visitors to the exhibition we found that the number of male and younger respondents increased dramatically. Moreover, we have begun to explore how the findings from the research to date might be used to the benefit of the design

community, motivate new design models and inform new business initiatives.

## Moving forward

For the majority of fashion producers the measure of their success is grounded in the economic value attributed to the production and consumption of fashion goods. The fashion system is made up of a (global) network of producers, manufacturers, designers, and retailers, but rather than see this solely as an industry related to production perhaps it is timely to consider this as a community connected to use. If we begin to see fashion from the perspective of a community of use we are better able to explore and challenge the way that garments are created, used, cared for and discarded. It is predicted that product/service combinations will play an important role in establishing resource-efficient consumption modes (Bras-Klapwijk and Knot 2001). For the fashion industry this prediction could lead to models of practice that embrace service approaches including leasing, repairing, remodelling or remanufacturing activities that sit alongside or in place of traditional production paradigms. For example, the concept of modular fashion, discussed earlier, enables fashion producers to efficiently manufacture a small range of modular pieces in comparison to the high costs required to manufacture small numbers of individual products (Quinn 2002). However, while the modular system model can reduce production costs, it can also provide the consumer with a value-added garment (through its adaptability) at a competitive price. The potential to develop garments that actively facilitate the repairing, altering or replacing of components offers obvious benefits to the user and the environment. These possibilities, amongst others, provide new potential dimensions to the business practices of a fashion company.

The majority of the homogenised fashion that dominates the high street is a consequence of modern-day large-scale manufacturing, but the future of the industry may lie in the growth of smaller fashion enterprises that are run at the local level (Allwood et al. 2006; Black 2012; Fletcher 2008). At the local level it is possible to cultivate an interconnected fashion community that includes skilled artisans, service providers, suppliers and consumer/users who can think at a global level and yet act a local level (Manzini 2003; Fletcher 2008). However, the growth of a localised fashion community is reliant on an engaged and motivated community of users; therefore there is a need for the contemporary

fashion industry to consider a new proposition where there is a strong connection between the producer and user. A fashion product-service business that is embedded within a local community is in a position to connect with and respond to its customers whilst reducing the unnecessary over-production of garments. Designers working in this type of business need to reject the conventional approach to production, which requires designing from an external (professional) perspective, to that of designing from an internal (user) perspective. This collaborative process necessitates the designer having a better understanding of user behaviour, since it is this knowledge that can inform new product innovations and influence and encourage improved practices during use.

As we move forward to the next phase of our project the intention is to gather data that represents a wider range of attitudes and behaviours towards clothing repair. While this information can assist fashion producers and designers to develop innovative products or business models that support an improved care routine, it is also apparent that the transference of knowledge and skill between and across individuals and communities of wearers is of social benefit. However, to encourage the sharing of mending knowledge amongst communities there first has to be an acceptance of wearing visibly and invisibly repaired garments as a cultural norm. This acceptance needs to extend beyond the youth market and fashion avant-garde and into mainstream fashion markets (Fletcher 2008).

## Conclusion

It is vital that the designer begins to appreciate the functions and tasks attributed to the use phase of a garment, as the negative environmental impacts associated with fashion clothing are significant during this phase of the garment's life-cycle. However in many micro and small to medium-sized companies the process of design rarely invites the opinion of the user but instead relies on feedback from a sales team or retailer. By bringing insight into the creative process that has been gleaned from examining the use phase, then the opportunity to produce innovative solutions in fashion can arise. At a practice level the designer can begin by reflecting on their personal experience as a wearer, but the most useful insight is best gained directly from users who have experienced and interacted with previously developed products. The 'Make, Do and Mend' project has already provided data that could be beneficial to the fashion community and in particular

to those who choose to develop new improved products or explore new fashion product/service business opportunities. Moreover, the project reveals the need for society to re-engage with mending practices, and in particular for mainstream users to accept and wear repaired garments whether they utilise invisible or visible mending techniques.

These points bring to light the issue of responsibility; while the suggestion is that the designer can do more to support the repair of fashion clothing, they are also reliant on the wearer both engaging in repair work and then electing to wear the repaired article. Strategies that follow this kind of tactic reiterate the need, I believe, for us to start thinking of fashion existing within a community rather than an industry, where we – suppliers, designers, producers, retailers, wearers, menders and recyclers – all have a part to play.

## References

Allwood, J.M., Laursen, S.E., Maldivo de Rodriguez, C. and Bocken, N.M.P. (2006) *Well Dressed? The Present and Future Sustainability of Clothing and Textiles in the United Kingdom*. Cambridge: Institute for Manufacturing, University of Cambridge.

Black, S. (2012) *The Sustainable Fashion Handbook*. London: Thames & Hudson.

Bras-Klapwijk, R.M. and Knot, J.M.C. (2001) Strategic environmental assessment for sustainable households in 2050: Illustrated for clothing. *Journal of Sustainable Development* 9(2): 109–118.

Fisher, T., Cooper, T., Woodward, S., Hiller, A. and Gorowek, H. (2008) *Public Understanding of Sustainable Clothing: A Report for the Department for Environment, Food and Rural Affairs*. London: DEFRA.

Fletcher, K. (2008) *Sustainable Fashion and Textiles: Design Journeys*. London: Earthscan.

Gwilt, A. and Rissanen, T. (eds) (2011) *Shaping Sustainable Fashion*. London: Earthscan.

Hart, A. and North, S. (1998) *Historical Fashion in Detail: The 17th and 18th Centuries*. London: V&A Publishing.

Laver, J. (2002) *Costume and Fashion: A Concise History*. London: Thames & Hudson.

Manzini, E. (2003) Strategic design for sustainability: Instruments for radically orientated innovation. In: E. Manzini and F. Jégou (eds) *Sustainable Everyday: Scenarios of Urban Life*. Milan: Edizioni Ambiente

Ministry of Information (1943) *Make, Do and Mend*. London: UK Board of Trade.

Quinn, B. (2002) *Techno Fashion*. Oxford: Berg.

WRAP (2012) *Valuing Our Clothes: The True Cost of How We Design, Use and Dispose of Clothing in the UK*.