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Sewing Box for the Future

Ballie, Jennifer; More, Meredith; Clark, Becca

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Sewing Box for the Future: upskilling the next generation

Principle Author: Dr Jen Ballie

Job Title: Research Manager and Researcher

Organisation: V&A Dundee and University of Dundee

Postal Address: 1 Riverside Esplanade, Dundee DD1 4EZ

Contact Details: jen.ballie@vandadundee.org

Co-Author(s): Meredith More

Job Title: Curator

Contact Details: Meredith.more@vandadundee.org

Postal Address: 1 Riverside Esplanade, Dundee DD1 4EZ

Co-Author(s): Becca Clark

Job Title: Assistant Curator

Contact Details: becca.clark@vandadundee.org

Postal Address: 1 Riverside Esplanade, Dundee DD1 4EZ

Abstract

Within a world of resource scarcity, ready-to-wear clothing bears the air of shop finish and finality and doesn't call for repair, alteration or unpicking. Further research is required to challenge this status quo and encourage healthier habits around how we care for, use and maintain our future wardrobes. This paper will discuss 'Sewing Box for the Future', a research project and pop-up exhibition at V&A Dundee in partnership with the University of Dundee (2020). Sewing box will be used as a metaphor, to raise awareness about diminishing sewing skills and provide materials, skills and knowledge to support the public to maintain their existing wardrobes. This paper will discuss how participatory design can be used to explore circular fashion and will make recommendations for retailers and manufacturers to re-think how they might support clothing care, repair and customisation in the future.

1. Context

Every year in the UK we buy around 1.1 million tonnes of clothing, but most of us only use around 30-40% of the clothes in our wardrobes (WRAP, 2017). Our consumption and use of clothes are at odds with each other. Huge amounts of non-renewable resources are used to make clothes that are often only worn a few times before being sent to landfill.

Applied to the fashion industry, the Circular Economy (CE) aims to reduce our impact on the planet by keeping clothing in circulation for as long as possible and out of landfill. This means exhausting every opportunity for re-wearing, re-using, re-making and re-purposing. Not too long ago, the skills required to care for, repair and customise clothes were commonplace, but today many people do not know how to mend a hole in their favourite jumper or how to adjust the size of a treasured garment that has become too small.

This chapter will discuss 'Sewing Box for the Future', a live research project and pop-up exhibition at V&A Dundee in partnership with the University of Dundee. Using the idea of the sewing box as a metaphor, it raises awareness about diminishing sewing skills and explores what materials, skills and knowledge the public need to help them take proactive steps towards reducing their own fashion waste. The project is framed with a question: there is a crisis of waste in the global fashion industry, but what can we, as individuals, do about it?

By focusing on three themes: care, repair and customisation, Sewing Box for the Future aims to illustrate that by collectively making small changes, we can make a big difference – we have the power to effect change in the way we buy, care for and discard our clothes. These changes might seem time consuming or overwhelming at first, but with a needle and some thread and a few guiding principles, it is possible to continue loving fashion and updating your wardrobe. This call to action aims to raise awareness, educate and inspire by showcasing contemporary designers who are interrogating the traditional fashion system to radically re-think how clothing might be designed, used and cared for in the future.

It was important for the project to have a legacy beyond the pop-up exhibition and a deck of ten educational activity cards were designed to provide step by step illustrations and instructions to up-

skill. The project launched in February 2020 prior to the covid-19 pandemic and the participatory stations were replaced by an expanded toolkit.

This paper will discuss the conceptualisation of this project and expand upon insights from the participatory exhibition and it will draw upon the project evaluation to analyse the findings and outline opportunities for future research. And it will explore how this research might deepen fashion theory, knowledge and practical understanding of how we might encourage the retailers and manufacturers to re-think clothing care, repair and customisation in the future.

2. The Exhibition and Lessons Learnt

Every year billions of clothes are thrown away to make room for new ones, but 95% of this discarded clothing could have been recycled or upcycled (Gwilt and Rissanen, 2012). It is still not possible to recycle all clothing made from mixed fibres but the circular economy provides a model for regenerative materials to emerge (Boiten, Chou Han and Tyler, 2017). As consumers, we are potentially making our clothing obsolete, with each new purchase. As a result, £140 million worth of clothing (350,000 tones) is landfilled in the UK each year (WRAP, 2017) thus it was imperative to outline the different timescales for fibres decomposing.

The infographic in *figure 1* (below) was used as an introduction to the project and it quickly became a powerful tool to prompt conversations around the circular economy by interrogating the materials and fibre compositions of our clothing. Through these conversations it became apparent that the majority of consumers do not question or consider textile fibres at the point of purchase. Visitors fed back that they could not interpret the fibre composition by touching and handling their clothing and they relied on the labelling to interpret this information. If consumers were educated about textile fibres that make up their own clothing and how long they take to decompose in landfill, they could perhaps make more informed decisions around their own consumption.



Figure 1: How long do clothes take to decompose in landfill? Graphic By Young 2019.

The premise of this research was to raise awareness and also educate consumers to encourage healthier habits around how we care for, use and maintain our wardrobes in the future. The infographic encouraged participants to personally reflect on their own wardrobe and challenge themselves to questions their own behaviours. The activity cards discussed within the following section offer practical remedies for extending the lifetime of clothing by intercepting the journey to landfill.

The pop-up exhibition was organised around 3 themes – Care, Repair and Customise. There was also a station for distributing ten activity cards, providing free resources for visitors to take away to try on their wardrobe at home. The initial pop up had three participatory workstations for making in the museum, there were removed due to Covid-19 restrictions and replaced by expanded toolkit.



Figure2: Sewing Box for the Future Pop-Up Exhibition. Photo Tom Nolan 2019.



Figure 3: Sewing Box for the Future Pop-Up Exhibition. Photo Tom Nolan 2019.

- (1) **Care Section: The External Trench Coat** designed and developed by Swedish brand Filippa K designed this unisex External Trench Coat in collaboration with the Centre for Circular Design, University of the Arts London using the principles of circular design. This is made entirely from recycled materials and is also in itself 100% recyclable. The coat also comes with a ten-year care guarantee, which means Filippa K will mend any wear and tear for the first ten years. You can also buy Filippa K's water-repellent spray, which helps maintain the fabric.
- (2) **Care Section: Wash and Care Kit** of 5 products curated by Filippa K (2018) to help make clothes last longer. This included a water-repellent spray for increasing your clothes' ability to repel water and dirt. A Guppyfriend washing bag – washing your clothes in this will help them last longer. The bag also filters out microplastics to stop them reaching rivers and oceans. Alongside a clothes brush, sweater stone and pocket clothes brush.
- (3) **Repair Section: Where Holes Happen Map, Sweatshirt and Socks** by Celia Pym (2018) a bold confident darn, demonstrating that clothing repairs don't need to be discrete. For the Woman's Hour Craft Prize at the V&A in London in 2017-18, she mended 94 holey garments brought in by members of the public. This sweatshirt and pair of socks are part of a whole tracksuit onto which she replicated all 94 repairs, creating a map of where holes happen the most. In this 'experiment', it was the right shoulder, elbows, back of the forearms, right forefinger pad and thumb and heels.
- (4) **Customise Section: Modular T-Shirt** by Post-Couture Collective (2019) a set garments that can be made and assembled without any sewing at all. Their vision of clothing design breaks with the traditional fashion system and is built on the principles of the open-source movement; sharing digital designs online that can be made by using laser cutting facilities in local Makerspaces. The garments can be downloaded as a complete set and then made into individual pieces, informed by personal colour and fabric choices.
- (5) **Customise Section: Snake Embellished Denim Jacket** by Chloe Patience (2019) Levi Denim jacket purchased from Depop, sequins purchased from the Sustainable Sequin Company. Sometimes customising something you already have can be better than buying

something new. Chloe Patience is a textile designer specialising in hand embroidery and embellishment. For this exhibition, she designed a decorative detail in the form of a delicate snake for a second-hand denim jacket; a creative way to add a personal touch to a pre-loved garment.

Within the context of the CE, it was important to demonstrate ways in which textiles can be sustained in a circular system. Through user testing it was identified that washing and maintaining clothing was a complex task as label symbols were often misunderstood or difficult to interpret, with different countries having conflicting legislation (Van der Merwe et al, 2014). Buying less and ensuring the clothes we already have last longer is one important way we can all help to reduce fashion waste. The recipe cards below include some simple suggestions for how to do this.

Activity Cards

1. Washing
2. Wardrobe Inventory
3. Mending a Hole (Darning)
4. Mending a Hole (Needle Felting)
5. Replacing a Zip
6. Stitching on a Button
7. Hemming by Hand
8. Make Your Own Modular Garment by Post Couture Collective (2019)
9. Embroider an Embellishment by Chloe Patience (2019)
10. Make a Face Mask by Hand by Trakke (2020)

3. Analysis of Participant Feedback

As a live research project, Sewing Box for the Future has enabled ideas, as well as practical instructions and activities, to be tested in a museum with a captive audience. By focusing on re-use, the research aimed to identify what resources were being utilised and how they were being applied, if this had any impact on how individuals went on to maintain their wardrobe and consume.

The project's residency within V&A Dundee provided a live research setting to support participatory activities and for the public to respond and share their feedback. The project was evaluated using feedback cards and participants shared their learning, made a pledge to adopt a new behaviour and made recommendations for expanding the project in the future.

The data set from 243 feedback cards has been analysed using thematic analysis to present interim findings.

3.1 Evaluation Cards and Online Questionnaire

3.2 Feedback Cards

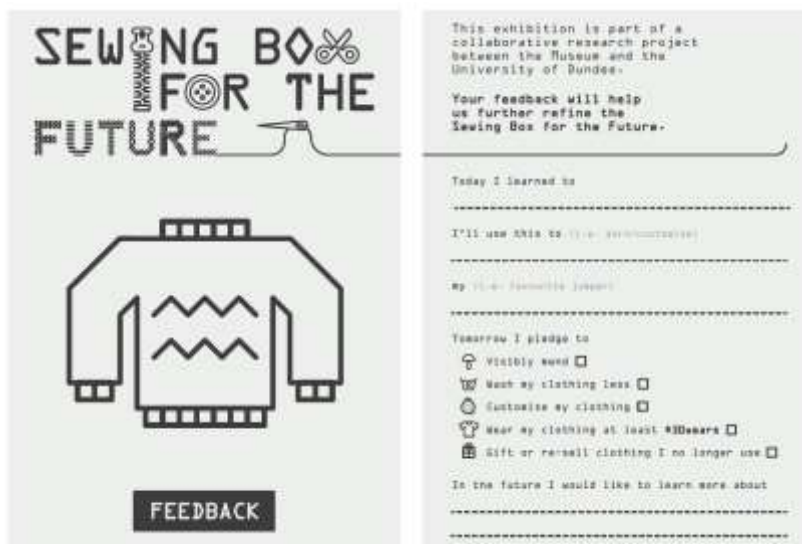


Figure 5: Evaluation Card. Graphics By Young 2019.

3.3 Future Recommendations from Participants

The insights were grouped into clusters to identify five emerging themes; Sewing and Wellbeing, Reducing the Skills Gap, Intergenerational Experiences, Repair Cafes and Services and Re-Thinking Ownership.

Theme 1: Sewing and Wellbeing	Theme 2: Reducing the Skills Gap	Theme 3: Intergenerational Experiences	Theme 4: Repair Cafes and Services	Theme 5: Re-Thinking Ownership
<p>I've used the educational packs to support my role as a guidance teacher in a school. I would like some additional resources to support me to facilitate my own workshops</p> <p>I am overwhelmed with increased screen time due to the pandemic and loved using these resources as they are nice and tactile</p> <p>Sewing is accessible, you can take your embroidery hoop with you and stitch outside, at home, on a train</p>	<p>It is an on-going journey, and these skills evolve throughout your life and experiences</p> <p>The basic principles like threading a needle and doing a running stitch is really empowering</p> <p>I think adding an estimated time on each card would support application. The button activity took less than 5 minutes, and it was more manageable than I had anticipated</p> <p>The stitches aren't perfect,</p>	<p>It hasn't been something I have passed onto my children and I wonder why</p> <p>I reminisce about my grandmother and her sewing tin. I still have it and it brings me comfort. It has been passed across three different generations</p> <p>Young people are leading the way, they are challenging fast fashion and want to be unique. I think they can teach us as much as we can teach them</p> <p>My son asked to revisit the exhibition, and</p>	<p>I haven't got the basic skills to adapt my wardrobe, but I have some many ideas</p> <p>I don't want to have clothing like everyone else, I love the idea of making my own mark. There is nothing on the high street to support me</p> <p>I worry people become dissatisfied with their personalisation, give up and discard it</p> <p>I noticed an online retailer was offering a DIY embroidery kit for a sweatshirt. They</p>	<p>There are different garments that I can see value in repairing</p> <p>I appreciate the time, energy and resources invested into producing my clothing</p> <p>I would love to capture my own data on how I can use these new skills to reduce my carbon footprint</p> <p>There is something liberating about taking back control and changing something that was design for you</p> <p>I aspire to make my own clothing from scratch</p>

<p>I need a community or social group to keep me motivated</p> <p>We can problem solve as we stitch, not just the techniques but by discussing real-life problems</p> <p>Visiting the pop-up was my first trip out in 4 months and it was a safe space to enjoy with my friend</p>	<p>and I like that they are unique</p> <p>I was astonished that these skills could all be completed by hand and without a sewing machine</p> <p>There are gaps in skills and motivation to pursue these activities. The take away kit provides the key ingredients. Expanding the kits could expand the uptake</p>	<p>after our 3rd trip he asked to spend his pocket money on an embroidery hoop</p> <p>These a lifelong skills and you can add to your own toolkit over time, throughout your life through different social relationships and experiences</p>	<p>should be retailing products to expand the life of clothing they produce</p> <p>It is important to celebrate and appreciate specialist artisan skills. Perhaps showcasing techniques at different levels</p> <p>The fee for a local tailor is sometimes more expensive than the retail cost of a new garment their clothing</p>	
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Figure x: Emerging Themes from Future Recommendations

The activities were thought to be useful and practical with requests for further resources to be developed to support re-use in the future.

4. Discussion

In Fashion, we know further research is required to consider how we might dematerialise fashion design practices and lessen our reliance on using new materials. In a circular economy, a fashion industry aspiration is to ensure that “clothes, fabric, and fibres are kept at their highest value during use, and re-enter the economy after use, never ending up as waste” (Ellen MacArthur Foundation, 2017). It is also essential to question the dependence on convenient consumption, as von Busch and Palmas claim (2009) if we want to see changes in the consumption patterns of fashion or the attitudes among consumers, we will have to design systems which include them and take their role in the lifecycle of clothing seriously.

This project explored how we break the cycle of passive consumption to create a more sustainable, durable connection with our clothes. There isn’t a quick fix or catch all approach for driving forward systemic change in the fashion industry. Despite this, Sewing Box for the Future provides a series of small scale and practical steps for individuals to challenge their own status quo by providing practical activities for them to question, make and reflect. This also mediated intergenerational conversations with a broad audience, evoking a nostalgia around traditional sewing skills that were once commonplace in the home. The meaningful encounters that happen when conversations are oriented at doing something together constitute as the building blocks of new communities of practice (Williams, 2018).

This research is interested in change-making by influencing more participatory approaches to fashion design. The role of the everyday citizen is an essential component to the narrative of the CE but to in order to engage they require more support. Consumption behaviour clearly needs addressing, and one possible avenue is through transformation of consumers into informed and engaged users (McQuillan et al, 2018). Fletcher (in Fletcher and Grose, 2012) defines the wearing and using of garments as use practice, and positions this as a central component to the practice of garment design. Fletcher’s

exploration of the craft of use of clothing encourages designers to learn from the ways in which users “mitigate... intensify, and adapt,” clothing to suit their lives (Fletcher, 2018). This creates stimulus for broadening our thinking, practice and presents opportunities to offer new fashion experiences in the future.

5. Future Research

The Covid-19 pandemic had an impact on this study due to the museums temporary closure (March – July 2020) and the participatory workstations needed to be removed ahead of re-opening (August 2020 – December 2020). However, the project was conceived and designed to be a participatory exhibition, and a crucial element of the project was always to encourage visitors to take up what they had learned at home, therefore the free activity cards were enhanced to provide a takeaway kit.

Expanding this pilot will further ascertain what can be learned, by framing fashion design research as participatory exhibitions in, and through, active museums. This research tests out ways in which design research might be positioned within a public forum like a museum, to engage in design-related activities in locations far from fashion’s usual industry and education practices. The activity cards could become resources to support a series of educational workshops in schools, colleges and universities. As the research moves forward, it will be important to recognise and amplify the new learning and reflect this back inside education and industry establishments. This will create a new consciousness towards the use of clothing and introduce new practices for using our clothing longer, maintaining it well.

References

- Boiten, V.J., Li-Chou Han, S. and Tyler, D., 2017. Circular economy stakeholder perspectives: Textile collection strategies to support material circularity. European Union’s: Brussels, Belgium. Ellen MacArthur Foundation., 2017. A new textiles economy: Redesigning fashion’s future. <http://www.ellenmacarthurfoundation.org/publications>
- Filippa K., Centre for Circular Design., 2018. The External Trench Coat <https://www.circular-design.org.uk/research/eternal-trench-coat-filippa-k/>
- Fletcher, K., 2018. The fashion land ethic: Localism, clothing activity, and Macclesfield. *Fashion Practice*, 10(2), pp.139-159.
- Fletcher, K. and Grose, L., 2012. *Fashion & sustainability: Design for change*. Laurence King Publishing.
- Gwilt, A. and Rissanen, T. eds., 2012. *Shaping sustainable fashion: Changing the way we make and use clothes*. Routledge.
- McQuillan, H., Archer-Martin, J., Menzies, G., Bailey, J., Kane, K. and Fox Derwin, E., 2018. Make/Use: a system for open source, user-modifiable, zero waste fashion practice. *Fashion Practice*, 10(1), pp.7-33.
- Patience., C. 2019. Snake Embellished Denim Jacket <http://www.chloepatience.com/va-dundee>
- Pym., C. 2018. Where Holes Happen Map, Sweatshirt and Socks <http://celiapym.com/work/where-holes-happen-map/>
- Post-Couture Collective., 2019. Modular T-Shirt by <https://www.herenow.nl/martijn-van-strien-the-post-couture-collective>
- Williams, D., 2018. Fashion design as a means to recognize and build communities-in-place. *She Ji: The Journal of Design, Economics, and Innovation*, 4(1), pp.75-90.
- von Busch, O. and Palmas, K., 2016. Designing Consent: Can Design Thinking Manufacture Democratic Capitalism?. *Organizational Aesthetics*, 5(2), pp.10-24.
- WRAP., 2017. *Valuing our Clothes: the cost of UK Fashion*. WRAP: Banbury, UK.
- Van der Merwe, D., Bosman, M., Ellis, S., Van der Colff, N. and Warnock, M., 2014. Consumers' knowledge of textile label information: an exploratory investigation. *International Journal of Consumer Studies*, 38(1), pp.18-24.

Downloadable Resources: <https://www.vam.ac.uk/dundee/info/sewing-box-for-the-future-resources>

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Curator: Dr Jen Ballie, University of Dundee/V&A Dundee
Project Curator: Meredith More, University of Dundee/V&A Dundee
Programme Assistant: Becca Clark, V&A Dundee
Exhibition Design and Build: Scott Brotherton, V&A Dundee
Graphic Design: Young
Graphics Production: Winter and Simpson