SHIFTING PERCEPTIONS: THE REKNIT REVOLUTION

ABSTRACT
An ongoing initiative seeks to encourage hand knitters to use their skills to rework existing knitted garments, extending product life and contributing to the 'domestic circular economy'. A pilot project demonstrated that inspiration, information and confirmation can help knitters to overcome barriers and embrace the challenge of reknitting.

KEY WORDS
Knitting; Amateur; Making; Repair; Domestic circular economy; Behaviour change

INTRODUCTION
In this paper, I will discuss an ongoing initiative that seeks to encourage hand knitters to expand their craft practices to encompass reknitting: reworking existing knitted items using knit-based skills, techniques and knowledge. This activity offers potential benefits in terms of promoting repair and re-use by individual users within the domestic sphere, and thereby contributing to the constellation of initiatives that, together, will build a circular economy.

These techniques were developed and creatively explored during a previous research project (described in this paper as the ‘pilot project’), working in collaboration with a group of six amateur knitters (Twigger Holroyd 2013). Although the primary aim of the pilot project was the generation of new knowledge about the lived experience of making and remaking, the outputs of the design activity – the reknitting techniques themselves – also have value. The pilot project demonstrated that it is possible to engage skilled knitters with reknitting, but that support is needed to help makers shift their perceptions of what is both possible and desirable. An exhibition at a public art gallery in summer 2017 and an associated series of participatory workshops will provide an opportunity to explore the sharing of the reknitting techniques beyond the pilot project.

I am using this paper to consider how to promote reknitting, drawing on the experience of the previous research and the insights that it generated. I will discuss the relationship between reknitting and the ‘domestic circular economy’; outline barriers to participation in reknitting; and consider the development of support to overcome these barriers, using the focus points of inspiration, information and confirmation.

REKNITTING AND THE DOMESTIC CIRCULAR ECONOMY

Reknitting
Reknitting was a common element of domestic knitting practice in the past, when necessity impelled people to exploit the inherent ‘tinkerability’ of the weft knitted structure. When items became worn at the cuffs, elbows or collars those elements would be unraveled and replaced (Pearson 1980; Sundbø 2000). During World War II rationing prompted an intensification of reknitting activity, with instructions guiding women in how to reclaim yarn from worn garments and combine these precious materials into fresh items (Koster and Murray 1943). Since this period, as knitting has shifted from a domestic necessity to an optional leisure activity, reknitting activity has dwindled. The knowledge of how to open, alter, unravel and reknit has largely been lost.

The pilot project sought to address this issue by developing reknitting techniques appropriate to the knitted items in our wardrobes today. Although many of these items are made from fine gauge knitted fabrics, with stitches much smaller than would normally be hand-knitted, the structure retains the same capacity for alteration. Drawing on a range of documented instructions and using my experience as a designer and maker of knitwear to generate new ideas, I developed a ‘spectrum’ of reknitting techniques (Figure 1). The spectrum captures the full range of technical processes,
or ‘treatments’, which could be used to alter and rework an item of knitwear. Each treatment is endlessly variable, according to the specifics of the original garment and factors such as the colour, scale and gauge of the alteration.

![Figure 1: The spectrum of reknitting treatments](image)

In a series of four day-long workshops I worked with a group of six amateur knitters to test these reknitting treatments, finding that the knitters drew on their tacit making knowledge to develop the practical and creative skills required. The project culminated in each participant reworking an item from their own wardrobe. The techniques were used to address problematic items: garments which were significant enough to be kept, but with problems which excluded them from wear. The participants were pleased with their reworked garments and the knowledge that they had gained. They responded positively to the challenge of reknitting, finding that the experience offered the many benefits that they associated with their usual knitting practices.

### The circular economy

The circular economy is perhaps best introduced using the ‘cradle to cradle’ concept famously proposed by McDonough and Braungart (2002). As an alternative to the linear industrial system of ‘take, make and dispose’, cradle to cradle thinking views materials as nutrients that can flow through the system time after time. Unlike the vast majority of current recycling initiatives, in which materials decline in quality as they are reclaimed and transformed, true circularity demands that quality is maintained indefinitely.

The holy grail of sustainable design is to develop products whose materials can be eternally re-used. When they reach end of life, they could be taken back to their base materials and transformed into a completely different form or function. In short, a product lifecycle that behaves just like a natural one, repeatedly transforming materials for new cycles of growth. (Goldsworthy 2014: 250)

The circular economy is built on this idea, creating ‘a continuous positive development cycle that preserves and enhances natural capital, optimises resource yields, and minimises system risks by managing finite stocks and renewable flows’ (Ellen MacArthur Foundation 2015). The cyclical approach is not confined to the re-use of base materials; recycling should arguably be seen as a ‘last resort’ once less energy-intensive opportunities for re-use have been exhausted. The circular economy system diagram created by The Ellen MacArthur Foundation (2015) illustrates four nested levels of re-use, descending in terms of scale and involving different stakeholders:
• **recycle** to reclaim base materials (parts manufacturers)
• **refurbish** and **remanufacture** (product manufacturers)
• facilitate **re-use** and **redistribution** (service providers)
• **maintain** and **prolong** useful life (individual users)

Goldsworthy (2014) distinguishes between re-active approaches to re-use and recycling, which respond to waste generated by the present linear system, and pro-active approaches, in which the reclamation of high quality base materials is considered from the earliest stages of design. She argues that both approaches are necessary in order to deal with the materials in circulation today while starting to develop a more robust circular system. Thus, overall, the circular economy requires us to ‘keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life’ (WRAP 2016).

**The domestic circular economy**

The circular economy concept has gained traction amongst businesses and policy-makers in recent years, and work is progressing across a range of industrial sectors to investigate the development of this alternative system. As Perella (2014) explains, ‘Ground-level innovation in this field is being driven by large corporations who are piloting business models based on leasing, product performance, remanufacture, and extended lifecycle thinking.’ These corporations are motivated by long-term business benefits such as protection from fluctuating commodity prices (Hower 2016).

While this work has obvious value, it is crucial that we do not fall into the trap of associating the circular economy exclusively with commercial activities and thereby sideline the domestic arena. Action by individuals has great potential in terms of clothing, because textiles are accessible materials with an inherent capacity for repair. As Fletcher (2016) points out, such actions require little in the way of energy or material inputs. Although individual instances of repair and remaking may seem insignificant, when aggregated they have the potential to deliver genuine change. And while repair and remaking activities at this scale are, by their nature, re-active, they still have an important part to play in extending product life and contributing to a circular economy.

In order to focus attention on the domestic sphere, I propose that we should consider the notion of the ‘domestic circular economy’. Inspired by the diverse economies framework put forward by Gibson-Graham et al. (2013) and the social economy discussed by Murray (2012), this encompasses all activities contributing to the circular economy at the domestic level, including all of the unpaid, non-market, reciprocal and gift-based processes involved in day-to-day household life. While activity in this sphere is of little interest to large corporations, there is a potent opportunity for design activists, such as myself, to make a contribution.

Research indicates that very little activity is currently taking place in the domestic circular economy. For most people mending, if practised at all, is limited to small tasks such as replacing buttons and sewing up hems (Fisher et al. 2008). The public-facing Love Your Clothes campaign, associated with the UK’s Sustainable Clothing Action Plan, is seeking to address this lack of knowledge by providing information on repair and refashioning. However, as Goldsworthy (2014: 252) observes, ‘changes in consumer habits are very difficult to achieve’. Furthermore, any attempt to encourage people to make and repair their garments must contend with the mixed meanings of homemade clothes in contemporary culture (Twigger Holroyd 2013). In short: even if garments are repaired, it is far from certain that they will return to regular wear.

It may be more productive to target the growing numbers of people who enjoy making clothes as a leisure activity, inviting them to consider using their skills to rework, rather than always to make new. This is already taking place in terms of sewn garments: refashioning is seeing a notable resurgence, with support available via books, workshops and online resources. The reknitting initiative under discussion seeks to encourage experienced knitters to extend their practices in a similar way. In order to pursue this approach, I must consider the barriers which are currently limiting action, and explore ways to overcome them.

**BARRIERS AND SUPPORT**

**Barriers**

Why is there not already a whirlwind of reknitting activity taking place in the domestic sphere? First, and most fundamentally, the idea of reworking a knitted item using knitting skills and knowledge is simply not in circulation. There is a widespread perception of knitting as a process of construction, rather than reconstruction. This perception is shaped by the established understanding of what it is to ‘do’ knitting: use a pattern, yarn and needles to construct a
In order for a culture of reknitting to develop, this understanding needs to be challenged. Furthermore, repair must be reframed as a positive, creative act rather than a practice associated with poverty.

Even when knitters become aware of the idea of reknitting – as in the pilot project – a range of issues arise. These issues shape both the experiences of those who might want to reknit, and the efforts of those who aspire to support them. Concerns include:

- **deconstruction**: the idea that if you ‘open’ a knitted fabric, it will disintegrate uncontrollably
- **lack of skill**: knitters frequently fail to recognise their transferable tacit knowledge
- **differences in gauge**: many pre-existing garments are constructed from smaller stitches than hand-knitted fabrics
- **no prescriptive pattern**: because garments to be reknitted are endlessly variable, any instructions must be open-ended
- **the need to design**: open-ended instructions require the knitter to make creative decisions, a task that can feel daunting to amateur makers
- **aesthetic appeal**: anxiety about whether the reworked item will look intentional and ‘whole’
- **contingency**: a recognition that unexpected problems often emerge during repair

The pilot project demonstrated that it is quite possible to shift knitters’ thinking around all of these potential barriers. With support, the participants embraced the concept of reknitting and began to see it as part of their normal knitting practice. By playing around with scrap garments, they gained a deeper understanding of the knitted structure and its capacity for deconstruction. They came to recognise their own tacit making knowledge and draw on their experience to use open-ended instructions. They gained confidence in their ability to design for themselves and developed strategies for ensuring that their items looked coherent and finished. They even came to see reworking as a rewarding journey into the unknown.

An alternative way of thinking about barriers is to consider the steps that would be involved if a novice reknitter were to successfully execute an alteration. These steps are summarised in Figure 2:

![Figure 2: Steps involved in a hypothetical first reknitting project](image)
Support

Any initiative aiming to support knitters to engage in reknitting must address the barriers discussed and also provide assistance at each step of the reknitting journey. Reflecting on the pilot project, it is evident that multifaceted support is required. This support must not only offer practical advice on how to reknit; it must also achieve the more nebulous goal of shifting perceptions of what is possible and desirable in terms of domestic knitting and repair practices. Three interconnected elements can be identified within this support, all of which proved to be crucial: inspiration, information and confirmation.

Inspiration

The first element, inspiration, primarily aims to challenge knitters’ established perceptions of both knitting and repair by providing positive examples of reknitting. In the pilot project I found that sharing precedents – whether stories of reknitting from the past or sample garments I had produced – helped the participants to develop a mental space for reknitting. Conversations from the workshops revealed that several of the knitters were inspired by the notion of connecting with a practice from the past. The examples helped them to imagine what reknitted garments could look like, and begin to generate ideas.

The public exhibition provides an opportunity to create further inspirational examples, ranging from relatively simple sample garments to ‘showpiece’ items. The pieces I make will inevitably demonstrate my own preferred aesthetic, and this could potentially put off people with different stylistic preferences. To emphasise the aesthetic diversity of reknitting, the exhibition will include projects completed by participants in the preceding workshops. A similar gallery could be collaboratively developed online, either in a dedicated space or by using a hashtag to connect relevant posts on social media platforms.

Information

The second element encompasses all of the information and advice needed to assist knitters in undertaking reknitting projects. As described above, the design of this information presents a challenge: because every item to be reknitted will be different, the instructions must be open enough for the knitter to adapt, but detailed enough to be of use during a complex process. For the pilot project I developed a range of materials, including:
• **General advice** on how to approach a reknitting project
• The reknitting **spectrum**
• Information on each treatment including **step-by-step visual instructions**, **stitch patterns** and **specialised advice**
• **Tools** to help knitters cope with changes in gauge
• Instructions on how to carry out **operations** common to many of the treatments
• **Tips and exercises** to develop design skills

Although I gathered these materials together in an online resource, the primary aim underpinning all of this instruction was to provide support while we were working on the pilot project. Further development of the instructions and advice will be necessary in order to maximise their usefulness for people working independently. In particular, entry-level instructions are required to support knitters through their first reknitting projects. Video footage would help to more clearly communicate tricky techniques. A key challenge is how to encourage independent knitters to develop confidence in their design abilities.

**Confirmation**

The final element of support needed to foster a culture of reknitting relates to confidence: makers generally need positive feedback from their peers in order to feel happy with their projects and gain confirmation that reknitting is a worthwhile activity. The pilot project demonstrated the importance of this type of support, with one of the knitters commenting: ‘I need to feed off other people, I think, to get ideas, and then to gain confidence in my ideas.’ Homemade clothes are marginal in contemporary culture; it is rather risky to make clothes without the sanctioning influence of professional manufacture or even a professionally-designed knitting pattern for support. By making alongside other people, the knitters benefited from an alternative source of sanctioning.

It was not difficult to establish this feeling of mutual support when working with a small group of like-minded makers over a period of time. The challenge for the future will be to nurture a similar environment for independent knitters. The obvious solution is to use online platforms, whether through organised groups and ‘knitalongs’ or informal connections and conversations. As Bratich and Brush (2011) suggest, ‘the knitting circle now meshes with the World Wide Web’. But at present reknitting activity is extremely sporadic and disconnected; there is not yet a community of reknitting practitioners to provide constructive feedback and praise for completed projects. Therefore I need to consider how I might provide **inspiration** and **information** to kickstart activity and, in turn, build crucial capacity for **confirmation**.

**CONCLUSION**

In this paper I have discussed an initiative to promote the use of knitting skills to rework items within the wardrobe and thereby contribute to what I have termed the ‘domestic circular economy’. While non-market domestic activity is inevitably of little interest to commercial corporations, it provides an important opportunity to extend product life and delay the need for more energy-intensive processes of re-use, remanufacture and recycling.

With a recent resurgence of interest in making clothes at home, a significant community of knitters have the skills required to rework existing garments. A range of barriers currently discourage this community from contemplating reknitting projects, including a lack of awareness that it is possible to knit without ‘knitting new’. Analysis of the support provided in the pilot project identified three interconnected elements: **inspiration**, **information** and **confirmation**. All three are needed to help knitters to embark upon and accomplish reknitting projects in the home, and will need to be constructed at a larger scale if reknitting is to gain in popularity.

Stepping back from the case of reknitting, I would argue that these three elements are crucial to any initiative seeking to promote activity within the domestic circular economy. It is my hope that this initial discussion of the three elements will be of use to others attempting to develop or evaluate such initiatives.

**REFERENCES**


