

# MAKING, EMOTION AND THE DRIVE TO RE-SHORE UK GARMENT MANUFACTURING

Douglas Atkinson  
London College of Fashion  
University of the Arts London  
✉ [d.atkinson@fashion.arts.ac.uk](mailto:d.atkinson@fashion.arts.ac.uk)

## ABSTRACT

Research suggests that the act of making with one's hands may be linked to emotional well-being. Yet fashion businesses seeking to return production to the UK are struggling to recruit the necessary skilled manufacturing workers. Given the estimated cost of depression to the UK economy and the sustainability benefits of returning local production it seems that there is potential for massive social benefit could such a workforce be mobilized. This position paper proposes novel design challenges and research questions for further exploration. Application of design methods and critical or speculative design to these challenges could help to raise social awareness of garment manufacture and increase the emotional wellbeing of manufacturing workers, while maintaining rates of production which would make re-shoring (returning to on-shore manufacturing in the UK) economically viable.

KEYWORDS: *making; depression; wellbeing; localism; social change.*

## INTRODUCTION

After attending the 1964 World's Fair, scientist and author Isaac Asimov made several predictions of society fifty years in the future in 2014. Most notably he stated:

..."mankind will suffer badly from the disease of boredom... This will have serious mental, emotional and sociological consequences, and I dare say that psychiatry will be far and away the most important medical specialty in 2014. The lucky few who can be involved in creative work of any sort will be the true elite of mankind...

Indeed, the most somber speculation I can make about A.D. 2014 is that in a society of enforced leisure, the most glorious single word in the vocabulary will have become work!" (Asimov, 1964)

While we may not recognise a world of 'enforced leisure' much of this quote rings true. In Westernised, knowledge-based, service economies the majority of occupations are now computer mediated, with no tangible output from our labours. Asimov's 'disease of boredom' may in fact be described as depression by modern psychiatry. In Westernised societies rates of depression are significantly higher than in subsistence and manufacturing based economies and it has been argued that the act of exertion to fulfill basic human needs, particularly making with your hands, triggers the effort based reward mechanisms in the brain (Lambert, 2006).

This paper specifically focuses on the UK garment industry, which over the past three decades has off-shored most of its manufacturing to countries with lower labour costs, notably East Asia and Turkey. There has recently been growing interest in returning low volume, high value garment production to the UK, however due to the years of decline there is a significant skills and labour gap in highly trained machinists for garment production (CFE, 2009). This is particularly important for luxury fashion, where quality craftsmanship and a 'Made in the UK' label are key to brand identity and the uniqueness of the business model (Frontier Economics, 2012).

## LITERATURE AND DISCUSSION

### *Garment Making and Wellbeing*

In Art Therapy and Occupational Health, making textile-based craft items has been shown to provide emotional benefits, particularly in terms of grounding and coping mechanisms (Collier, 2011). Evidence also suggests that engagement with textile making in mid to late life may confer decreased risk of cognitive impairment due to aging (Schofield-Tomschin & Littrell, 2001). Riley (2011) and other Researchers exploring Occupational Health and Art Therapy (Collier, 2011; Reynolds, 2000; Riley, Corkhill & Morris 2013) draw conclusions based on the idea of the textile maker producing works which they have personally planned and executed, often more akin to

textile art than the manufacture of designed products. This presents researchers with an opportunity to explore different populations and whether industrial garment making can confer similar benefits. Prior studies often focus exclusively on women who already engage in craft activities. Peruzza & Kinsella (2010) note that none of the papers in their literature review of creative arts and making practices in occupational therapy focused on men. Study participants were overwhelmingly white, wealthy and generally middle aged or older. Therefore, such studies fail to challenge traditional stereotypes and explore the wider therapeutic benefits of textile making activities to society as a whole.

Asimov's prediction of a creative elite can be recognized in 2014, with the emergence of the 'Creative Class' (Florida, 2002). However, Florida's construction of the Creative Class still forms an elite removed from manufacture and whose value lies in ideas rather than execution. Such attitudes are seemingly endemic within westernized societies. Sadly, employed makers (as distinct from those engaging in making for leisure, studied by Collier, 2011, Reynolds, 2000, Riley 2011 and Riley, Corkhill & Morris 2013) are not the working elite Asimov (1964) predicted, they are still undervalued and as such fewer and fewer people enter skilled manufacturing professions. Skills are being lost the world over as more countries aspire to move away from a manufacturing based economy. This is evidently unsustainable, particularly with labour costs equalizing around the globe. While many initiatives are underway to return manufacturing to service and knowledge based economies, there are often insufficient remaining workers with experience in skilled or semi-skilled tasks combined with a reluctance to learn such skills due to the negative perception of manufacturing jobs.

The toll of depression on the UK economy cannot be ignored. The Kings Fund (2012) estimates the cost of depression to the National Health Service (NHS) to be £3 billion per year and rising. Future trends predict increased mental health problems due to increases in solitary and urban lifestyles and a lack of treatment capacity.

If we are becoming depressed as we are not making (Collier, 2011; Lambert, 2006), can this gap in the labour market be addressed while also providing therapeutic benefits and alleviating pressure on the overstrained NHS? If so, most likely a significant shift in attitudes will be required.

Here, the intervention of design thinking and processes can deliver the maximum benefit, helping to change both working conditions and perceptions.

### *Design for manufacturing awareness*

A key task for designers is to raise the public's awareness of the skilled makers who contribute to garment production. In a world of automated production, it is probable that the perception of garment manufacture is of a far less skilled and operator dependent process than it is in reality. Thus, for the makers concerned it becomes a more thankless, impersonal task.

To some degree, luxury and heritage fashion brands are already addressing this issue through their marketing as they attempt to differentiate themselves from mass-produced clothing. Luxury brand Gucci's 'Artisan Corner' events (Gucci, 2012) and a recent exhibition of the work of Hermes' craftspeople (Saatchi Gallery, 2013) both centralised the skilled makers employed by the brands and encouraged the public to interact with them. Stutterheim raincoats, which are individually signed off by the seamstresses who make them (Stutterheim, 2013) are another example.

Can designers go further and create garments which can be made on a mass-produced scale yet highlight the human element of their origins?

### *Design for makers' benefit*

Many of the standards adopted by UK garment manufacturers are intended to maximise efficiency, allowing local production to become more cost effective compared to offshoring. This often results in the tasks an employee undertakes being reduced to single, repetitive 'production line' processes. Research must explore whether such limited variety still affords the maker any psychological benefit, or whether this will also afflict the maker with the 'disease of boredom'. Jackson and Mullarkey (2000) attempt to investigate this through a comparison of the psychological benefits of 'Lean' production teams using the Toyota Sewing System (a form of Quick Response Manufacturing or QRM) and traditional production line systems where bundles of work progress from operator to operator (the Progressive Bundle System or PBS). Despite differences in work design and social context of the two systems, the wellbeing outcomes showed no significant difference between the two. Jackson & Mullarkey (2000) note however that in the factories studied, QRM was the more popular system and could be linked to lower staff turnover.

Despite these findings, UK garment manufacturers generally still use PBS for large-scale production due to lack of recent investment and business innovation; or single operator manufacture of entire garments for small-scale, high-end production. However there is anecdotal evidence that a more group-based system is gradually being adopted. Hopefully, given the related increase in task variety, responsibility for whole garment production and group control amongst manufacturing workers, this may lead to increased emotional wellbeing.

Some Researchers have conversely proposed that repetitive motion may be beneficial for emotional wellbeing and depression (Jacobs, 1994; Riley, Corkhill & Morriss 2013). In Collier's (2011) study, the two most highly ranked reasons for engaging in textile making were enjoyment of the rhythm and repetition (8<sup>th</sup> most popular) and enjoyment of the sensory experience, including the kinesthetic (3<sup>rd</sup> most popular).

If there is a significant difference in emotional response between PBS, QRM and whole garment production, how can manufacturing processes be designed for optimum efficiency and to provide sufficient rewards, e.g. the satisfaction of seeing an item you have made in its finished form?

Can Ruitenber & Desmet's (2012) categories of Promise Focused design for happiness be collapsed so that both the 'product' and the 'activity' of its creation stimulate happiness, rather than the finished product inspiring happiness or an activity that stimulates it? Perhaps stimulating 'meaningful activities' (Desmet, 2011) at both the manufacturing and end use phases of product lifecycle? This may prove particularly complex as Ruitenber & Desmet (2012) note that meaningful activities are highly context and person dependent. Thus, further study of the contexts of garment making and its' manufacturing environments are required.

Prior research into workplace design and psychology has been conducted in office environments, focused on ergonomics and the creation of workers' desired atmosphere (Augustin, 2012). Manufacturing workers have less control over their environment as they may have no fixed workstation. It is therefore all the more vital that designers address the challenge of creating products which will provide them with a beneficial emotional experience during the manufacturing process.

## DESIGN RESEARCH CONCERNING GARMENT MAKING AND EMOTION

To address the problematic socioeconomic scenario herein depicted, an ongoing research programme (research questions and methodologies) is proposed below:

- Research Question 1: Do fashion designers and the public accurately perceive how much human input goes into making their clothes?

Methods: An online questionnaire (see: <https://lcf.wufoo.eu/forms/garment-manufacturing-survey/>) is currently being publicised at fashion industry events and disseminated to the public (non-experts) via social media.

- Research Question 2: Can garments be designed which highlight human manufacturing input, raising public awareness and appreciation of garment makers?

Methods: Design gaming studies and triadic comparison (Bang, 2009) will be used to discover whether the public attribute extra manufacturing effort to specific garment finishing techniques and fabrics. Sample garments will be used as elicitation tools. Based on these studies and industry examples of highlighting manufacture, a speculative design process will be used to prototype garments designed to be perceived as involving greater manufacturing effort than their conventional counterparts.

These designs will then be subject to extensive user testing to gain further feedback and be refined through an iterative process.

- Research Question 3: Does garment making on an industrial scale offer emotional and wellbeing benefits similar to those of textile making in occupational therapy? Which garment production method is the most beneficial to the maker?

Methods: The physiological (galvanic skin response) data of makers using PBS, QRM and whole garment production will be tracked along with baseline readings in a relaxed, non-work setting. Qualitative interview data describing their emotional experience will also be recorded. This process will then be applied to textile makers in an occupational therapy context who will be monitored when making, with a baseline taken during other activities. Differences in physiological data between making and baseline activities will then be compared to see if emotional benefit can indeed be observed from garment making in either or both scenarios. Each industrial method and industrial VS occupational making will then be compared, noting physiological indicators of stress levels.

- Research Question 4: Can emotional design or Kansei Engineering processes create a garment that fulfills the needs of the maker during manufacture as well as those of the end consumer?

Methods: Using a similar design research approach to Research Question 2, extensive stakeholder research with garment makers will be conducted to inform speculatively designed garments or manufacturing processes for further testing and iterative development.

## CONCLUSION

The proposed research highlights our impoverished understanding of consumers' and makers' perceptions of garments, their finishing and manufacturing processes.

The contribution of the research is to provide greater understanding of garments as a designed product and allow designers to make socially responsible choices around their manufacture, possibly facilitating a return to local production in the UK. Crucially, it will also expand the discipline of emotional design to include designing for the benefit of the maker and not only the end user as Norman (2004) proposes; as if we do not nurture the makers who produce designed products, we risk losing such capacity altogether.

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