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## Textiles as a catalyst in the co-creative design process

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*Abstract: This paper presents findings relating to the crucial role of textiles in the Emotional Fit (Townsend et al. 2016) collaborative research project, which is investigating a person-centered, sustainable approach to fashion for an ageing demographic. Working with a group of Nottingham women (aged 55+) the team have accrued and responded to data drawn from in-depth interviews, wardrobe inventories and body measurements, to develop a collection of co-designed fashion prototypes that aim to meet the physical and emotional needs of their participants. By integrating geometric cutting with carefully selected and bespoke printed textiles, the resulting minimal waste garments enable wearers to express themselves via universal silhouettes incorporating multiple styling options, in support of personal agency and product longevity.*

*Textiles act as the catalyst for the design and project development process by: providing a starting point for shape making through draping on the body and mannequin; as sensorial substrates to elicit tactile responses and interactions; as the surface for photographic imagery, engineered patterns and contrasting volumes, to be enacted by the human form.*

*The project demonstrates how such a co-creative or hacking approach necessitates a shift away from the established hierarchical fashion system (Busch 2009) that often undervalues its consumers. Here, by contrast, we actively explore the potential customer's lived experience of the relationship between body, cloth and dress to inform a more holistic fashion design philosophy. The methodology challenges the generally accepted view of the textiles as subordinate to the practice of fashion, by documenting normally unspoken exchanges with the semantics of fabric through handling, manipulation, testing, printing, toiling and constructing. By reflecting on the aesthetics of cloth in relation to the emotional fit of clothing, we illustrate how it is intrinsic within the creative decision-making process, whereby embodied associations with the past point towards newly imagined wearable futures.*

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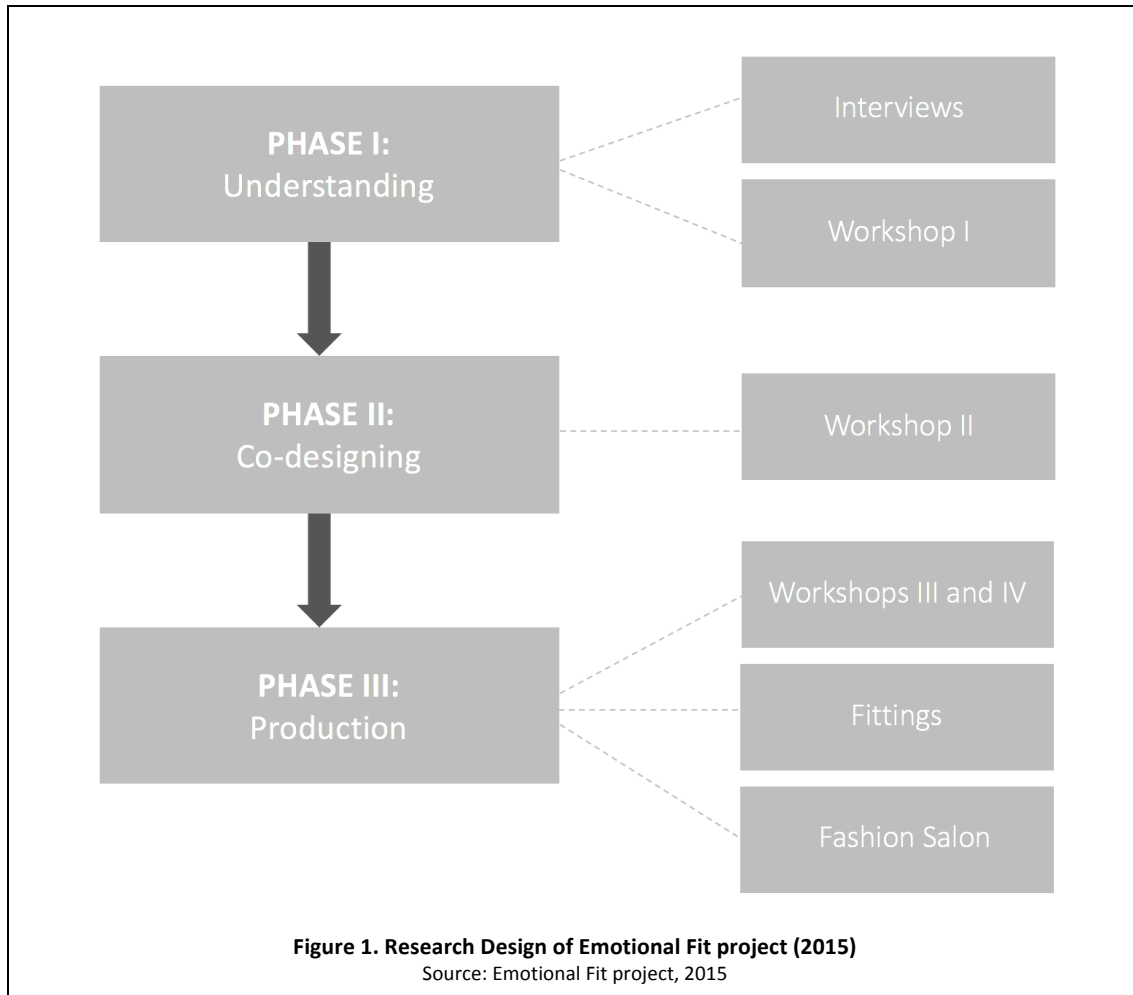
**Keywords:** Emotional fit; co-creation; body-cloth interaction; fashioning textiles; in-between garments

## Introduction

Emotional Fit is an ongoing, collaborative research project which is developing a new, more holistic approach to fashion design for older consumers by engaging with them in the co-creative and socio-material process (Townsend et al 2016 and 2017, Sadkowska et al 2015). By working with a group of over 40 women from Nottingham, aged 55-75, we are exploring some of the physical and psychological issues that concern these individuals, who are all part of the baby boomer generation (Gilleard and Higgs, 2014; Sadkowska et al 2016). In this paper we discuss key designing and making aspects involved in the project and how our participants embodied understanding of fashion is strongly connected to the relationship between their own body image and the semantics of cloth; how engagement with textiles has acted as the central catalyst within the co-creative research process.

The paper is organized in four sections that chronologically track different phases of the project: through interviews; initial toile development; printed textile and prototype design based on participants' engagement and feedback, leading to prototype development through integrating prints and garment shapes, and finally testing the resulting 'in-between garments' through trying things on in a range of contexts. While each researcher was nominally assigned a particular role at the outset of the project, based on their specialist knowledge and skills, as the project developed, sensibilities and practices overlapped. The roles of the researchers and participants also blurred, resulting in all involved being engaged in the co-designing of the final experimental collection of womenswear prototypes. The methodology, whereby fashion and textile design are practiced *with* as opposed to *for* potential consumers, subverts the established hierarchical fashion system by offering a fresh take on DIY and slow fashion (Busch 2009).

The following sections have been organised to convey the different stages of the project where the aesthetics and properties of cloth were particularly important in relation to the emotional fit of clothing, and ultimately, how textiles both emerged and were catalytic in the co-creative design process. The diagram below provides a diagram of how the research was designed and undertaken to help the reader conceptualise the different phases referred to below.



### Tracing embodied knowledge of fashion and textiles

In the first phase of the Emotional Fit study, a series of five in-depth, conversational interviews were conducted between June and July 2015. The interviewees, all women openly interested in and actively engaging with clothing and fashion (fig. 2), were selected based on their availability and interest in being interviewed they expressed. Each interview lasted between 80 and 120 minutes; the participants were interviewed at Nottingham Trent University (UK). A set of open-ended topics for discussion included: how the participants understood the concept of “fashion” and how they defined it; their past and present relationship with fashion, and how it has changed over time; their perfect fashion item; their least favourite fashion item; and, their clothing/ dressing/ wearing practices and habits; furthermore, each of the participant brought to the interview their favourite and less favourite clothing. Prompts and probes were used to encourage participants to elaborate further when unexpected, but potentially interesting, areas arose and to clarify ambiguities and avoid misunderstandings.



**Figure 2. Participants and their favourite garments; from left to right: Christine (65); Barbara (65); Elizabeth (67); all pseudonyms**

Source: Emotional Fit project, 2016

The interviews were analysed using techniques standard to Interpretative Phenomenological Analysis (IPA), with its commitment to the detailed and lengthy examination of how people make sense of their life experiences (Smith et al. 2009). Consequently, the outcomes included a series of thematic entities, describing these participants' experiences of clothing and fashion as they grow older. Here, we present one of the superordinate themes, 'Textiles as a Catalyst', which is concerned with the various ways in which textiles have functioned in the participants' lives providing a particular material gestalt underpinning the dynamics of their fashion identities. This superordinate theme comprises of three subordinate themes, which we present and interpret below. All identifying information has been anonymised in order to protect the participants' confidentiality.

Firstly, the narratives of the five interviewed women provided multiple insights into their embodied experience of fashion, clothing, and textiles. Interestingly, when asked about their personal understanding of the term 'fashion', all of the participants described their past relations with clothing, often going as far back as their childhood and early teenage years, and explaining the important role of textiles being a catalyst for acquiring certain clothes making skills, triggering their early interest in a fashionable attire. This was often linked to being part of the particular generation of British women born in 1940s and 1950s, who learned dressmaking skills from the previous generation, i.e. their mothers, women who had limited access to ready-made clothing and relied mainly on home-made garments (Goode 2016); this was discussed by nearly all of those interviewed. In the following extract Christine (65) explains how, being mentored by her mother and making clothes, offered her a space to create garments that were customised to her unique body form:

I've always had an interest in clothing which is I think because I've always been a little bit plump and quite short so not always fitting into clothes, even from a young age, and because I liked sewing and my mother was able to teach me and encourage me I've always made clothes and I've always liked fabrics and textiles.

For Christine, using textiles as a way to clothe her body in an informed and responsive way, was linked to her developing a sense of achievement by overcoming a certain issue of having what she perceives as a 'difficult' body, as she explained elsewhere in the interview:

Because over the years, I feel that my body type is a bit difficult and so therefore I've probably worked out how to dress it.

It is this potentially problematic body that forces Christine to 'work out' the best way to dress and present it (Entwistle 2002). Another participant, Elizabeth (67), who in her interview frequently comments on her short stature and related clothing limitations, discusses her interest in fashion as being closely linked to finding clothes that suit her particular figure:

So all the way through I suppose I have been kind of interested in clothing rather than fashion. What suits me and stuff.

These extracts illustrate that from a very early age, textiles facilitated a creative space for the participants, where by producing their own clothing they developed an in-depth and intimate understanding of their body forms. This can be interpreted as a specific type of (self-)tacit knowledge that through their current engagement with fashion and clothing they continue to develop. Additionally, the participants often linked the materiality of textiles with a particular sensorial feeling they experienced due to being involved in the process of production of their clothes. In the following extract, Anna (64) explains how textiles become a catalyst for her producing outfits for special occasions such as weddings:

I make my own clothes for special occasions, for weddings or special occasions I certainly do. And then if I just find some nice fabric, I go on EBay and buy some nice saris in silk and make them into jackets and tops.

Especially telling here is the use of the adjective 'nice' repeated twice in this otherwise short extract, where the carefully selected fabric allows Anna to create an outfit in which she feels happy. A similar reflection is presented by another participant, Barbara (65), who recalls a particular instance of when she made a garment from the fabric she bought abroad:

I do think of natural fabrics as beautiful, yes, wool, cotton, linen, yes, I, I went on holiday when I was four months pregnant with my first child 33 years ago in Italy, and went into a fabric shop (...) and I bought some black linen there that was, oh, just fantastic, (...) when I say shiny it wasn't a high shine, but there was something, sheen was just part of the quality - it was just fantastic quality linen, and I, I made myself a suit from that, culottes, and a boxer jacket, (...) I felt really good wearing that linen, (...) I do remember the attention that wearing that suit attracted which was great.

Barbara's account revolves around the descriptors of 'beautiful', 'fantastic', 'quality', 'good', and 'great'. This is telling in regards to how positive the experience of making and wearing those garments was for her. The extracts above, suggest that for those interviewees it was the process of embodying the role of the maker of those garments that catalysed a particularly emotional, and potentially long lasting relationship with them (Twigger Holroyd 2017). As explained further in the article the idea of facilitating and sustaining such a strong psychological connection between the maker and the wearer of the garment, by blurring the boundaries between the two roles, became an important element within the collaborative design process discussed here.

The final subordinate theme, is concerned with textiles functioning as a catalyst for a visual and emotional transformation. While the potential of fashion and clothing design is especially potent in terms of enhancing and enriching our lives (Gwilt 2015), this theme emerged as especially complex, multifaceted

and open to various interpretations. Here we present the reflections of two participants who discuss this in a different, yet conceptually coherent way. Barbara reflects on the direct way in which clothing, in this case a pair of trousers, via fabric selection and employing intelligent pattern cutting and construction, can conceal or expose particular body parts, providing the required visual transformation of body shape:

They've [the trousers I bought] got 2 inverted pleats there [stomach area] and that provides a panel across your tummy and although they are lightweight they are quite stiff material so that type of thing I find quite flattering. (...) and paradoxically since I've lost weight, when I'm larger I would go for things that drape and that are bigger and boxy, [but] now that I'm smaller, I'm at a size ten, (...) I want to go, "oh, look, look (laughs) I've got this shape body" while still trying to conceal bits of it.

Importantly, in Barbara's utterance the comfort she finds from wearing this particular pair of trousers is less a result of a physical comfort, and more of an emotional one linked to how others perceive and read her *transformed* physique. In contrast to Barbara's reflection, Elizabeth offers a different perspective, where emotional comfort is the result of the close psychological connection she makes between the garment and her husband:

The (...) thing I felt really good in was, it was in Vietnam and it was in this kind of little village and there was this tribe. They were selling kind of little hand-embroidered jackets and of course they are all small in Vietnam, the women. It was dark navy and it had this beautiful kind of blues and greens embroidery. [My husband] said oh that's nice. I just went and bought it on sight. And in fact I was told their colours run so I kind of soaked it in salt. Oh I loved that jacket. I would wear it for Christmas for do's and I actually wore it for the funeral [of my husband] because that was always something that was really happy to wear. (...) I loved that jacket.

What is significant in Elizabeth's account is the way in which the materiality of the garment, its colours and embellishment, together with the history of purchasing it while accompanied by her deceased husband allows her to find comfort in wearing it, signalling a particular emotional resonance. While this individual emotional attachment to a garment, is closely linked to the participants' personal trajectories (Lerpiniere 2015) and, consequently are difficult to artificially replicate within the design process, it was through the method of wardrobe inventories that some of the elements, may it be a specific colour tone or embellishment, of the participants' existing garments were captured and included within the series of produced artefacts.

### **How textile choices informed garment silhouette**

The textile choices in the Emotional Fit project not only informed the cutting and construction procedures, but also offered a contrasting garment silhouette in terms of fit and drape (hang), which varied greatly from the use of the same garment pattern block / design. The geometric approach to pattern cutting adopted in the project, responded to the preferences expressed by the women in the interviews and ad-hoc conversations, by offering possibilities for creating minimalistic styled, versatile garments. Effortless silhouettes with a similar aesthetic to kimono shapes could be produced. Shapes that lend themselves to simplicity and individual style in design, with more focus on comfort, fabric quality and longevity, referred to by Aakko as 'artisanal' (2016), were preferred over fast fashion and trend based garments. While body measurements were accrued in Workshops 1 and 2 informing the construction of live garment blocks, the project soon became focused on how the process of 'making' together could offer new insights for designing fashion for older women (Solomon and Sissons 2013).

A number of styles were toiled up in finely knitted jersey and woven fabrics (fig. 3); some with the garment pattern cut on the straight grain and some on the bias grain, in order to investigate the fit and hang of these geometric style garments. The jersey and bias cut garments, offered a softer silhouette and fuller drape, as explored in the Circle Dress – those realised in knitted fabrics required finishes associated with



knitwear production (Sissons 2010) while the woven versions were constructed using French seams and tiny rolled hems. In contrast the garments made in woven fabrics, cut on a straight grain, offered a structured aesthetic and a more tailored approach to design in general; these suggested a formal approach to construction, with the use of facings and linings.



**Figure 3. Initial draping on the stand to inform toile ideas using jersey and woven fabric qualities**

Source: Emotional Fit project, 2016

The participants expressed a need for the garments to be functional and flexible, either worn loosely or tied and folded in a way that enhances 'fit'. In an attempt to keep the simplistic minimalistic approach to design construction, linings were avoided throughout the development stage and different weights of jersey were investigated. The heavier weights were found to be good for garments with less volume, providing a quality drape that does not cling to every curve of the body. The lighter jersey drapes were used in the fuller shaped garments that could be tied, folded and worn in multiple ways. The finer fabrics produced less bulk, when folded or gathered in areas. The preferred finishing style overall was minimal, including the use of raw cut edges. It was important to utilise the physical body in the shape development process so as well as measurements being taken, live draping was conducted (fig. 4).



**Figure 4. Toile created by draping on the stand and body using a rectangle of woven fabric**

Source: Emotional Fit project, 2016

New forms can emerge when exploring body movements and identifying properties of comfort that occur in bodily interactions between people and their environments, especially when observing how a body is shaped and patterned, or how people wrap their bodies as part of their wearing behaviours. (Jeon 2015: 149)

The geometric cutting approach also lends itself to sustainability, as most of the garments can accommodate more than a single size, due to being cut with zero or minimal waste and their styling flexibility in wear. Rectangles were draped to follow the bodyline, while the circles work well for drape as being cut on the bias grain allowed them to mould or move and drape around on the body easily.

### **Considering the interrelationship between print, body and garment shape**

The considerations of how the fabric informed different silhouettes resulted in a range of geometric pattern shapes that were realised in plain and printed qualities. This section discusses how bespoke printed textiles were developed through triangulation of: the interview findings, research into printed garment archetypes and aesthetic responses to the 2D patterns shapes and 3D toiles.

As suggested in the interviews, growing up in the 1960s and 70s, most of our participants were proactively involved in making their own clothes (Goode 2016). Fashion designers such as Mary Quant, Ossie Clarke and Zandra Rhodes were referred to by our participants throughout the project, in relation to their influence on the style of contemporary cut/ silhouette and corresponding fabric qualities. Notably, all these practitioners designed their own textiles themselves or as in Clarke's case whose combination of a body-sculpting cut with Celia Birtwell's fluid prints was indivisible (Clark 1998 in Townsend 2004a, Ch3-7; Townsend 2008). Additionally, the work of these designers also represents three different approaches in relation to how the role of textiles can act as a catalyst in the fashion design process through examples of 'architectural, sculptural and crossover' or hybrid models (Townsend 2004a/b). For example, Quant's short, geometric shapes were often realised in bold, graphic printed, woven or knitted qualities that echoed the boxy shapes of the square and rectangular silhouettes. While the wearer's arms and legs were often revealed, the body (shoulders and waist) acted as an armature for the architectural dress form. In contrast, Clarke's utilization of Birtwell's illustrative prints on wool and silk crepes and jerseys cut on the bias, not only relied on the female body structure, but its curves and contours, for its sculptural realisation



(Townsend 2008). Rhodes oversized, kimono shapes in vibrant printed silks and voiles, were a hybrid of both archetypes, by freeing the body completely in a diaphanous shape, but also drawing attention to certain areas, by tethering the volume using decorative ties and details.

Taking these printed garment design principles into consideration, particularly the 'crossover' archetype, the research team aimed to develop styles that facilitated 'elegance, comfort and openness' and where 'the body shapes the clothes more than the clothes shape the body' (Van Essche quoted in Aakko, 2016: 187). At the start of the print design process, the team considered Townsend's 'simultaneous design method' (SDM) whereby the print and garment were originated together through modelling the garment and imagery simultaneously (on the dress stand) then manipulated in CAD to aesthetically transform (female body) shape (Townsend 2004a/b). However, although the transformative potential of print was important in the Emotional Fit project, the collaborative nature of the research required a more iterative, 'parallel' methodology (Piper and Townsend 2016) to be adopted by Townsend, whereby the prints could be designed alongside and in response to the development of the garment silhouettes and feedback from the participants.

Firstly, the embodied fashion and textile knowledge of the women was considered in terms of their personal narratives, visual and tactile choices, how they wanted garments to interact with their bodies and lifestyles. Following this, a series of fabric swatches (fig. 5) were printed with imagery based on photographs of natural phenomena found in domestic, urban and rural environments, as identified by the women as familiar contexts. Drapery, plants, and landscapes acted as starting points for initial ideas, inkjet-printed using reactive dyes on different fabric qualities, including cotton, viscose, silk, wool, linen and jersey, in response to the women's preference for 'natural fibres'. Individual designs were transposed on at least two contrasting substrates to produce 30 swatches or 'fabric sketches' for the participants to select from alongside the working toiles produced for the co-designing phase of the project (fig. 5). The prints were reviewed by the participants and ranked in order of preference, using a feedback sheet requiring a mark between 1-10 and a comment. Following the workshops, the results were analysed and the most popular print designs were developed as lengths to be combined with some of the most tried-on garment shapes, such as the Triangle and Circle Dresses.



**Figure 5. Some examples of the original fabric swatches produced for Workshops 3 and 4**

Source: Emotional Fit project, 2016

Fundamentally, it was the tactile qualities and colour ways that influenced the women's choices most, for example, one participant stated she 'would never wear anything like that' (in linen) then selected the same design printed on silk as her 'favourite'. This intuitive, embodied prioritisation of colour and texture over graphic composition was reiterated by other participants, and voiced in the Emotional Fit (2017) film. Links to 'textile memories', triggered by the look and feel of the swatches, led to recollections of particular periods in the women's lives, favourite designers, events and relationships, which complemented the interview findings.



**Figure 6. Workshops 3 and 4 – participants trying on toiles and selecting prints**

Source: Emotional Fit project, 2016

Some of the most significant interactions between the participants and researchers occurred in Workshops 3 and 4 (fig. 6) and the ‘trying on’ phases of the project. Here, the speculative nature of the partially configured material concepts allowed for unexpected interventions and outcomes. For example, the geometric toiles and swatches were handled spontaneously and knowingly by the participants, in a similar unspoken manner as when someone feels garments on a rail before taking one into the changing room. The unfinished nature of the artefacts allowed for the participants to demonstrate their in-depth knowledge of fashion and fashioning, enacting a kind of ‘hacking’ as described by Busch:

[But] hacking can also be used to mean the reclaiming of authorship (or co-authorship) of a technology by supporting transparency and unanticipated use... hacking is a critical as well as playful activity, circling around a DIY ethos and a desire to amplify our means of interaction with the world. (Busch 2009: 165)

The opportunity for ‘infinite play’ through the reintroduction of the body into the fashion process (Wibner 2017) was reciprocated through personalization through folding, stretching and cutting to reduce or extend the silhouette and prints being compared, handled and animated to mimic and assess drape and performance. Here, the ‘body itself became an essential structure in crafting the form of the textile design’ (Jeon, 2015, p. 138). It was this demonstration of the participants’ individual expression and ‘embodied fashion knowledge’ through that most significantly influenced the ongoing prototype development, how particular conceptualisations of fabric and form made our participants and co-creators ‘feel beautiful’ (Niinimäki and Koskisen (2011)).

### **Integrating, cutting and constructing textiles to create ‘research tools’**

Following the print selection process, the textile designs were experimented with by Townsend using CAD by engineering the scale, direction and placement of the imagery in relation to the square/ triangular, circular and rectangular 2D pattern pieces and by assessing the overall 3D drape of the silhouette. Taking the Triangle Dress, originally cut by Sissons, as an example: a striped design was developed and printed on fine wool (Tela Lana) based on a photograph of light permeating drapery. The Stripe was adjusted (in Adobe Photoshop) to correlate aesthetically with three different (grouped) sizes of the dress, graded by

Harrigan (fig. 7) as Small (8-12); Medium (12-16) and Ample (16-20). The overlapping sizes of the patterns reflected the versatile nature of 'fit' through interviews and engagement with the women. For example, a 'size 12' woman requiring a skimming fit could opt for a Small, while a 'size 12' seeking a loose fit could select a Medium etc. The Stripe print was manipulated to visually contour both the garment shape and underlying form of the wearer by repeating and stretching the vertical striped elements across the total (145cm) width of the fabric, at three different scales and tones; generating narrower and lighter to wider and slightly darker stripes to correlate with the different sized Triangle Dress pattern pieces (fig. 8). This resulted in a similar ratio of repeating elements to be integrated into the dimensions of each dress volume, and comparable but unique optical visual contouring effects, achieved when the body, garment and print were viewed gsimultaneously (Townsend 2004a/b).



**Figure 7. Harrigan grading the Triangle Dress pattern into three grouped sizes; Placing pattern pieces on Striped printed wool to maximize fabric usage**

Source: Emotional Fit project, 2017



**Figure 8. Striped Triangle Dress backs (in Medium and Ample) showing different tonal and placement configuration of the textile design within the pattern pieces.**

Source: Emotional Fit project, 2017



Another way in which the Stripe design was manipulated on the body was through the cutting process, experimented with by Sadkowska, Townsend and West at different stages of the project. While zero/minimal waste was a prime concern, in the case of the Triangle Dress, the similar shaped pattern pieces allowed for varying combinations to be explored through the construction process, with the stripes being placed in different directions (within the dress) while still being cut on the straight-of-grain. The dual aim of sustainable cloth consumption while creating a garment with a unique aesthetic, was facilitated via a combination of 'jigsaw' lay planning and cutting (Rissanen 2013) and an interpretation of 'optical patch-working' which drew on the practice of the artist/ couturier Sonia Delaunay (see Damase 1991 and Ch 2 in Townsend 2004a). This hand/ digital method also draws on Piper's Composite Garment Weaving (CGW) method where the consideration of 2D 'functional' textile production aspects strongly inform the 'design aesthetic' of the final 3D object (Piper and Townsend 2016: 18).



**Figure 9. Members of the Emotional Fit group trying on the Stripe and Orchid Triangle Dresses in the fashion workshop.**

Source: Emotional Fit project, 2017

The Triangle Dress was also fabricated in an Orchid print (Pearl Satin) that was manipulated in terms of scale in relation to the three base size ranges and cut in both the face and more subtle reverse of the printed silk following feedback during the 'trying on' process, as explored in the film, *Trying it On* (2017). The Stripe and Orchid dresses presented completely different visual and tactile aesthetics that could be worn in different contexts. However, both versions presented numerous options for flexible wearing and styling, through the addition and subsequent utilisation of long ties that allowed for the transformation of the body through the personal crafting of divergent 'material aesthetics' through fitted or unstructured looks (figs. 9 & 10).

Materiality in the context of aesthetics also implies connection to the body. Above all clothing serves function, which generally drives many aesthetic choices. Functionality aside, in this case materiality refers to the design process and the relationship of the garment with the body. (Aakko, 2016: 187).



**Figure 10. Participants trying on the Orchid and Stripe Triangle Dresses in a studio photo shoot.**

Source: Rebecca Lewis 2017

The Circle, Universal and Tunic dresses, based on circles and rectangles were much simpler in comparison to the Triangle Dress, in terms of shaping and construction and the prints were integrated accordingly, to be abstract, painterly, large- scale, with no decipherable repeat. Tie-dyed and plain linen in red, ink and white was cut in rectangular oversized pieces to utilise ‘the whole cloth’ and allow the volume to envelope the body. Once again, the addition of ties across the arms and chest, enabling the wearer to leave the sleeves full-length or rusche them up to the elbow, thereby revealing the forearms, one of the few parts of the body favoured by all participants.

## Conclusion

Interviewing and talking to the women in the early workshops about their likes and dislikes, looking at ‘favourite garments’ and hearing about their fashion histories and current lifestyles, informed the project on an aesthetic, technical, sustainable but ultimately an emotive level. It is the enactment of the participants ‘emotional knowledge’ through engaging with fashion and textiles, and ultimately how this made them feel that particularly influenced the practical outcomes of the project.

The versatile nature of the resulting printed (oversized and skimming) Triangle, Circular and Rectangular cut pieces represented a universality or ‘in-between garment’ that encouraged experimentation, play and agency, identified as missing from the high street by the participants (Goode in Townsend et al 2017). This co-creative research highlights the need for a new kind of participatory design methodology that links more closely to the significance of performance and ‘play’ with the materials and processes of fashion and textiles, as explored by Wibmer (2017) and others in the recent Everything and Everybody as Materials conference. The prototypes developed through the project represent ‘tools’ or ‘in-between garments’ that



can lead to more expressive objects that more closely incorporate the values of 'fashion-in between', represented by independent, artisanal and high quality design, materials and craftsmanship (Aakko 2016). The methodology developed via the Emotional Fit project (Townsend et al 2016) highlights the significant role that collaborative engagement through a more open source, less hierarchical fashion system that draws on the creative craftsmanship engendered by software related 'hacking and networking' models (Busch 2009).

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### References

- Aakko, M. (2016) *Fashion In-between: Artisanal design and production of fashion*, PhD thesis, Aalto University, Helsinki, Finland.
- Bush, von O. (2009) Engaged Design and the Practice of Fashion Hacking: The Examples of Giana Gonzalez and Dale Sko, *Fashion Practice*, 1 (2), pp. 163-185.
- Damase, J. (1991) *Sonia Delaunay: Fashions and Fabrics*, London: Thames and Hudson.
- Emotional Fit (2017) Documentary Video, School of Art and Design, Nottingham Trent University, Nottingham, UK: Katherine Townsend, Ania Sadkowska and Jim Boxall, Nottingham Trent University
- Entwistle, J. (2002) The Dressed Body. In: Evans, M., and Lee, E. (eds.) *Real Bodies: A Sociological Introduction*. Basingstoke: Palgrave, pp. 133-150.
- Gilleard, C., and Higgs, P. (2014) *Ageing, Corporeality and Embodiment*. London: Anthem Press.
- Goode, J. (2016) Fashioning the Sixties: fashioning narratives of older women. *Ageing and Society*, pp. 1–21, August 2016, Cambridge University Press.
- Gwilt, A. (2015) (Ed). *Fashion Design for Living*. London: Routledge.
- Jeon, E. (2015) Form empowered by touch, movement and emotion. In: A. Gwilt (ed.) *Fashion Design for Living*. London: Routledge, pp. 134-150.
- Lerpinriere, C. (2015) *The Textile Archive: curating personal histories and family narratives*. Unpublished PhD thesis, Leicester: De Montfort University, UK.
- Niinimäki, K. and Koskiken, I (2011) I Love this Dress, it Makes me Feel Beautiful: Emotional Knowledge in Sustainable Design, *The Design Journal*, 14(2), pp.165-186.
- Piper, A. and Townsend, K. (2015) Crafting the Composite Garment: The role of hand weaving in digital creation. *Journal of Textile Design Research and Practice*, 3 (1-2), pp. 3-26.
- Rissanen, T. (2013) *Zero-Waste Fashion Design: A study at the intersection of cloth, fashion design and pattern cutting*, PhD Thesis, Sydney: University of Technology.
- Sissons, J. (2010) *Basics Fashion Design 06: Knitwear*, London: AVA Publishing, Bloomsbury, UK.
- Solomon, R. and Sissons, J. (2013) How can 'making' transcend disciplines to offer value and insight into subjects related to the body? Keynote at *Future Scan 2: Collective voices*, Association of Fashion and Textile Courses (FTC), Sheffield Hallam, 10-11 January.
- Townsend, K., Sadkowska, A. and Sissons, J. (2016) Emotional fit: developing a new fashion design methodology for mature women. In: P. LLOYD and E. BOHEMIA, eds., *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking Conference, Brighton, 27-30 June 2016*. Coventry: Design Research Society, pp. 3521-3537

Townsend, K. (2008) *On the Dress she Wears a Printed Body*, IFFTl 2008: The Body-Connections with Fashion - 10th Annual Conference of the International Foundation of Fashion Technology Institutes, RMIT, Melbourne, Australia, 8-9 March 2008, Melbourne, Australia.

Townsend, K. (2004a) Transforming Shape: A simultaneous approach to the body, cloth and print for garment and textiles design (synthesizing CAD and manual methods), PhD Thesis, Nottingham: Nottingham Trent University.

Townsend, K. (2004b) Transforming shape: hybrid practice as group activity. *The Design Journal*, 7 (2), pp. 18-31.

Twigger Holroyd A. (2017) *Folk Fashion: Understanding Homemade Clothes*. London: I. B. Tauris.

Sadkowska, A., Townsend, K., and Sissons, J. (2015). Emotional Fit Project: Mapping the Ageing Female Form. In: *Designing for Mature People*. Shanghai: Shanghai Institute of Visual Art, pp. 281-298.

Sadkowska, A., Wilde, D., and Fisher, T. (2016). Third Age Men's Experience of Fashion and Clothing: An Interpretative Phenomenological Analysis. *Age, Culture, Humanities: An Interdisciplinary Journal*, 2 (1), pp. 33-68.

Smith, J. A., Flowers, P., and Larkin, M. (2009) *Interpretative Phenomenological Analysis: Theory, Method and Research*. London: Sage.

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