

Craft Histories, Textile Futures: Emotional Affectivity and Design Hybridity in Quilt Design.

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Introduction

This paper discusses how innovative textile design materials, processes, products and technologies might develop in 'textile design futures' by taking note of the emotional affectivity of traditional craft methods and aesthetics. Specifically, North American 19th Century quilts are activated as models for new poetic hybrids in conceptual and functional textile design. Archival material, contemporary design practice, and my own textile designs will be used as examples to support my proposals.

Method

My research paper investigates the role of contemporary, innovative textile crafts as another part of 'textile futures'. It questions how digital technologies, new materials and innovative methods of production impact on the very particular traditions, characteristics, processes and outcomes of textile craft, indicating how the aesthetics and materialities of 'craft futures' might be (re)defined.

Certain traditions of textile craft might be exemplified through North American 19th Century quilts. These function as "token[s] of our pre -industrial past, [implying] the homestead...[and indicating] the hand skills which our ancestors practiced" (J Holstein *The Pieced Quilt: An American Design Tradition* p.7). As simultaneously "domestic commodity" and "conceptual device" (S. Maharaj *Textile Art, Who Are You?* p.5), quilts activate both the functional and abstract meanings associated with "wrapping up, keeping warm, sleep and comfort, some feeling of hearth and home" (M. Constantine et al *The Whole Cloth* p.17). I propose to examine the emotionally-rich content captured in the fabrication, materiality and design of 19th Century North American quilts, and indicate how their combinations of intellectual and expressive substance and affect provide a template for emotionally meaningful textile design within a 'craft futures' scenario.

Functional, utilitarian and decorative, quilts mark the commonplace rituals and universal emotions of bed (sex, death, birth, sleep, comfort, warmth, nurture...), and the momentous and miniscule events and significations of life (recurrent motifs include wedding rings, drunken walking, 'women's work', regional symbols, architectural signs...). Those quilts are embedded with human experience, an interface where a human subject performatively meets and merges with a designed object.

Results

My paper advocates a fresh examination of the very particular traditions, characteristics, processes and outcomes of 19th Century US quilts. I discuss how the hand-crafting, fabric-salvaging, functionality, labour-intensive and emotional investment, and the collective creativity indicated by these historical, pre-industrial and domestic artefacts provide a particularity of design which, I argue, allows a redefinition of 'textile design futures'. I will disclose my vision of how technological textile innovations and advances allow the possibility of emotionally-rich designed future living.

Conclusion

Consumers increasingly refuse 'visible technology' and seek quality significations of nostalgia, memory, nurture, individualism and poeticism in (nevertheless technologically-enhanced) design. Tradition and innovation, for too long seen as oppositional, are becoming hybridised in 'textile futures' design solutions which embed the digital, the electroconductive, the laser-cut, the ultrasonically welded, the thermochromically reactive, the interactive and intelligent, the microencapsulated, the magnetic in fabric, fibre and process technology in textile design objects which share the craft histories, emotional affectivities and 'hand - aesthetics' of traditional textile-making.

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**Craft Histories, Textile Futures: the emotional affectivity of a
'future quilt' ...**

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Section 1: Historyground, pastground, futureground...

When Bart Simpson's dog shredded up the Bouvier family quilt, his mother Marge (née Bouvier) was more than upset. "Six generations, ruined!" she screamed... That old quilt covered 'historyground', so why Marge's trauma?

QuickTime™ and a
DV - PAL decompressor
are needed to see this picture.

When my childhood dog gave birth to seven pups on my father's mother's quilt, my own mother was less disturbed... It represented 'pastground': she burnt it, and bought me a duvet with a poly-cotton cover. In 1975, that drip-dry, crease-resistant, easy-care bedcover was my mother's visible textile technology, a wonder-fabric, machine-washable at 40°...

In the 'futureground' of now, textile technology stretches far beyond the historical resonances of the Bouvier quilt, and wildly eclipses my mother's poly-cotton... 'Smart' and 'intelligent' fabrics are now poised for ubiquity as we witness massive shifts forward in fibre, fabric and finishing technologies. Futuristic scenarios are proposed daily via speeding developments in genetic modification, biotechnology, bio-mimicry, nano-technology, new material sciences, electro-engineering... Their impact on textiles, and their potential to inform 'quilts' our (grand)mothers would not have dreamt of, is extraordinary...

As a text and textile practitioner, I want to use this paper to trace the web of connections between contemporary technological textile developments, personal narratives, hand-crafted textile artefacts, and my material and theoretical practice. For me, 'futureground' is about 'connexity' (Mulgan, 2003), and it is therefore a complex, multi-dimensioned strategic marriage between a range of approaches to contemporary practice... The pattern and texture of my paper reflects this as I imagine a first series of bed scenarios made potentially possible by contemporary developments in 'smart' textiles science, then locate and explore the narrative and cultural implications of my grandmother's quilt, and finally describe my current project *Blush and Blanche* where I develop a material work which links these two areas of interest. My proposition is that 'futureground' is a territory in which historical and traditional textile crafting is valued and utilised in equal partnership to the magic of textile technology...

Section 2: Imagine...

Imagine a bed that pulls back its quilt for you and your lover, remembers how you both curve together, adjusts to cool or warm you, and forms the hollows in your pillows to cradle your heads...

With programmable fibres and responsive Bluetooth (wireless) technology, as used for example by Tomoko Hayashi in her *Intimacy Across Distances* project (2004), this level of automatic and magical material response becomes a design possibility rather than a future-science dream... With kinetically reactive shape memory alloys, as in Corpo Nove's 50% titanium shirt - where the sleeves roll up when the wearer gets too hot - the prospect of your bed snuggling up to you is no longer a future-fiction...



Intimacy Across Distances 2004

Figure 2: Corpo Nove 50% titanium shirt

Phase Change Materials, pioneered by Outlast, allow your 'intelligent' bedding can maintain a stable body temperature for you and your lover as you sleep... and electroluminescent fabric technology, as employed by Rachel Wingfield in her bedding and blinds designs, wakens you 'naturally' with a 'digital dawn'...or you can 'softswitch' on your bedside light from the fabric sensor in your sheet...

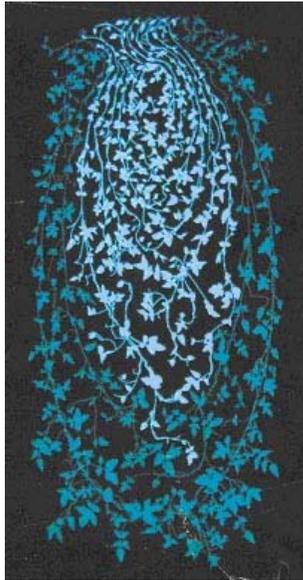
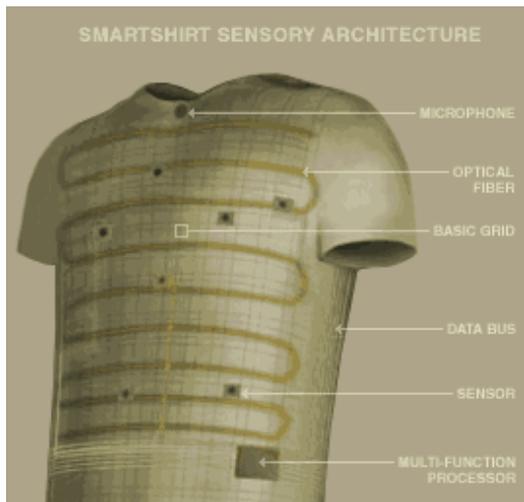
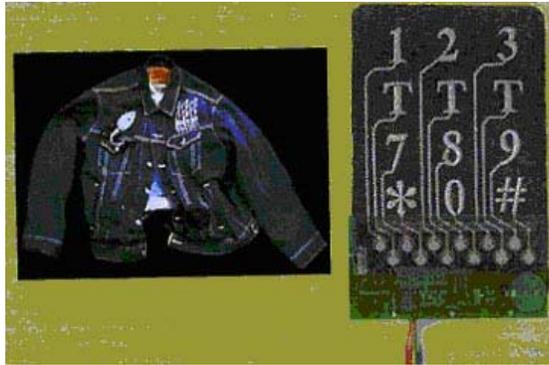


Figure 3 Rachel Wingfield *Digital Dawn Blind* 2003



Figure 4 Softswitch

From your bed, you and your lover may want to make calls, receive messages, surf the net, play digital games. Philips/Levis' seamless, wireless entertainment and communications ICD+jacket, MIT Media Lab's 'E-broidered' conductive circuitry, Gorix's electroconductive fabrics, GeorgiaTech's fabric antennae, Sensatex's sensory body-architecture, and Softswitch's soft technology all provide textile templates for doing these *via your quilt!*



(clockwise from top left)
 Figure 5 Levis / Philips Jacket
 Figure 6 SoftSwitch
 Figure 7 Gorix fabrics
 Figure 8 Sensatex Smartshirt

And if you both tire of your bed's aesthetic, thermochromic fibre treatments as utilised by Maggie Orth's International Fashion Machine or Infineon Technologies' micro-electronic light emission fabrics allow that to be altered to suit your mood... Conductive printing ink and fibres enable the printing and weaving of circuits – as pioneered by Softswitch, Gorix, Elektex and Sensatex, and the possibilities opened up for communication, play and design effect by making your bedding electronically 'live' are immense...

Ceramic core filament fibres are capable of converting the solar energy of the rising sun on your bedroom balcony into heat and electrical energy capable of altering thermo-affected inks used to dye the patterns on your bed linen... photovoltaic membranes as developed by Bekintex permit the transfer of light energy into the textile substrate, while Body Area Networks permit the generation and distribution of energy from your body and that of your lover...

To keep you both fresh and healthy, microencapsulation technology can deliver vitamins to your skin, fragrance to your bed, and provide insect-repellent, anti-bacterial and antifungal properties for your comfort through the 'fabricutical' (pharmaceutical through fabric) cloth structure of your duvet... and embedded technology used by BodyMedia of Pennsylvania potentially monitors your vital signs sending data to a collection centre for scrutiny of your well-being as you make love and fall asleep...

For safety and security, your bed frame itself can be woven three-dimensionally using composite technology and glass, carbon – or even bullet-proof Kevlar polymer fibres – to achieve strength far in excess of that of steel... And finally, the sciences of biomimesis and nanotechnology that allow the production of casein (milk) protein fibres by Toyobo, spider silk milk fibre by Nexia Biotechnologies, and lab-grown genetically modified 'living tissue' as produced by Living tissue + Art, open the way for your bedding to be scientifically manufactured from your DNA and that of your lover achieving a genetic intercellular textile intercourse way beyond the body as we know it....

I'm both seduced and repelled by this level of possible enhancement and/or interference by technology in the most intimate spaces of our lives. Fascinated and troubled by textile technology, in my current practice – *craftfutures* – I seek to temper its pervasive but exciting effects with the alternative emotional impacts of textile craft...

Section 3: Magic...

Human culture, cloth and craft are inextricably linked to myth, artefact, magic, and ritual (Seelig, 2003), and the potential for new textile processes and materials to surprise and delight is immense. The race is on, however, to technologically solve perceived problems of efficiency, power, communication, reliability, connectivity, intelligence, security, control, etc. (Gershman, 2000), rather than to emotionally excite and meaningfully inspire. And while my bedroom scenarios above are potentially technologically possible, do they convincingly entice us to experience our beds as technologically enhanced spaces where we, literally, are born, are nurtured, have sex, sleep, suffer and die?

Smith (2004) articulates the problematics of these textile technological scenarios - especially to textile designer-makers interested in 'craft'. He notes the tendency to think oppositionally in textile design, pitting 'hand' against 'digital', sensory versus rational, science denying artistry, tactile facing technological, 'flawed' opposing 'perfect', even human contrasting with machine... Thankfully, however, a range of critical practitioners and commentators are beginning to seek the 'emotional body' in technological advance (Picard, 2000, McCullough 1998). There is evidence of a search for something more 'felt' than cool efficient technology or chemical 'magic tricks':

...in the future, harmonising and humanizing the technological world will be the ultimate challenge...(Kettley, 2002)

A 'futureground' for my textile research must be concerned with finding how and where 'smart', and 'intelligent' technological textiles can maintain and celebrate a simpler, slower, emotionally meaningful design sensibility....

Section 4: Coarse Craft

In order to do this, my practice as articulated through my *craftfutures* research advocates a fresh examination of the very particular traditions, characteristics, processes and outcomes of hand-crafted, fabric-salvaged, highly-functional, labour-intensive, emotionally-invested, collectively-stitched, pre-industrial, domestic, 19th century Ulster / US quilts, working towards a vision of how technological textile innovations and advances might allow emotionally-rich, quality-measurable, poetically-valuable designed future living.

My grandmother's quilt – burnt by my mother – was neither skilfully made nor especially beautiful. A poor 'country' thing, it was a thin textile sandwich of bought striped ticking, two grey woollen blankets, and a top covering of irregularly pieced patchings of patterned cotton. Formally, it was an average example of an 'Ulster utility quilt' (Wilson, 2002), evidence of a 'make do and mend' salvage mentality necessary in working class Northern Irish homes in the early part of the 20th century.



Figure 9 Utility quilt, Ulster, c. 1900

My grandmother was a small-farmer in an isolated and barren valley. She rode a horse, gathered 'purdies' (potatoes) from their drills, snared hares, reared five children to adulthood, claimed a usable field from a bog, walked and worked 'like a man'. She went miles to worship her god, and boiled pins to ward off the 'evil

eye'. A stoical and undemonstrative woman, her sewing – like her farming - lacked finesse or superfluity. It was done with as much care as was necessary to create a functional bed-covering, no more and no less... Yet, there is highly affective quality in the genealogy and materiality of such an object, something intangible that isolated technology arguably lacks...

Conventional definitions of craft vary, but they tend to formally recognise technical skill, particular care, and detailed design (Leonard, 2003; Watney, 1997; Greenhalgh, 1997), to look towards “producing objects that were necessary to life” (Smith, 1986), and to emphasise “doing well that which is required” (Johnson, 2000). In many ways, these sentiments relate well to the technological textile developments I have outlined above. Where they tend to do less well is in relation to a kind of emotional affectivity which seems particularly well-located in the examinations of historical and art-contemporary quilts which I have made...

Jonathan Holstein (1975), writing of 18th and 19th century US quilts, locates their particular craft representations as

tokens of our pre-industrial past, the homestead which exists in fact or myth, and the hand skills which our ancestors practiced as a matter of course, symbolic of household industry.

Holstein’s articulation reflects a kind of self-consciously nostalgic for a textile past, where “hand skills” and “household industry” framed a simpler way of living. He acknowledges the contemporary tendency to mythologise the utilitarian making of textile bed coverings by women who stitched them “as fast as [they] could so [their] famil[ies] wouldn’t freeze...and as beautiful as [they] could so [their] heart[s] wouldn’t break” (Chase, 1976). And indeed it is important that he does so – this study is not an advocacy of a return to those times, but rather a proposition that we might borrow real or imaged emotional impact from them in order to articulate human feeling in techno-times...



Figure 10 Cactus Basket quilt, Kentucky USA, 1860-90
 Figure 11 Dresden Plate quilt, Kentucky USA, 1870
 Figure 12 Barn Raising Log Cabin quilt, Kentucky USA, 1900
 Figure 13 Lone Star quilt, Kentucky USA, 1930

In Joyce Moorhouse's film *How to Make an American Quilt* (1995) women of three generations (including mine) work collectively to both create a traditional marriage quilt and confirm the central youngest character in the traditions of her 'feminine role'. The protagonist's ambiguity around her 'feminine destiny' is gradually dispelled as the quilt and its metaphors take shape throughout the film's narrative. The quilt becomes highly symbolic of the 'good craft' associated with 'successful womanliness'. That is, the balance, intricacy and care manifest in such a quilt becomes what Holstein urges is a

visible expression...of culturally valued feminine virtues of thrift, industry, application, care of the home (Holstein, 1975).

References to the practices of collecting, salvaging and hoarding of "scraps of lace, labels, chintz, gingham, and other feminine paraphernalia" and "traditional craft techniques associated with women such as cutting, sewing, piecing, hooking, quilting, and appliqué" are common (Constantine, 1997). Indeed Lippard (1983) asserts the quilt as the "prime visual metaphor for women's lives, women's culture". Such references are frequently and variously problematised, utilised, and complexified a range of texts in respect of essentialisms and

definitions of femininity, domesticity and textiles (Parker, 1984; Munro, 1999; Jefferies, 1995; Aitken, 1999). Just as Parker (1984) asserts the duality of, for example, embroidery in terms of both its inculcation of femininity in women and its enabling of a negotiation of its constraints, I would do so for the quilt.

Holstein again asks us to consider the time-value of labour-investment in the meticulous piecing of fabric scraps. He writes of

the hand-based skills of an earlier, more stable and static time...
[as] ...perhaps more meaningful emotionally as relics of a
'simpler' age (Holstein, 1975).

While he speaks of this emotional content in relation to the speed of impersonal production in the industrial age, this paper seeks to consider how developments in 'smart', and 'intelligent' technical textiles also 'fit' with a simpler, slower, emotionally meaningful sensibility, and how these can inform a practice...

Section 5: Beds and Blankets

Functional, utilitarian and decorative, traditional quilts mark the commonplace rituals and universal emotions of bed (sex, death, birth, suffering, sleep, comfort, warmth, nurture...), and the momentous and miniscule events and significations of life. Recurrent motifs in traditional US quilts include, for example, wedding rings, drunken walks, 'women's work', regional symbols, architectural signs (www.americanquilts.com). Such quilts are embedded – in their composition, design, image content, and in their bodily usage – with human emotions, operating as textile interfaces where human subjects performatively meet/merge with designed objects. If cloth itself is in some fundamental way a container of human experience (Barnett, 1999), and thread a “malleable transmitter of ideas” (Johnson, 2000), they are co-joined in a quilt to extremely powerful effect...

Contemporary examples of quilts of great emotional significance are numerous and varied. British artist Tracey Emin memorably gave us her bed (Figure 14), and told us who she'd slept with (Figure 15-16).

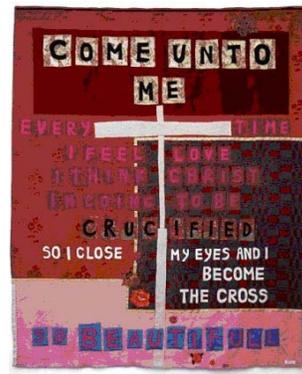


Figure 14 Tracey Emin *My Bed* 1998-99

Figure 15 Tracey Emin *Everyone I Have Ever Slept With (1963-1995)* 1995

Figure 16 Tracey Emin *Automatic Orgasm* 2001© the artist

© the artist

Photo credit: Stephen White Courtesy Jay Jopling/White Cube (London)

The NAMES Project showed by its massive scale, its tiny personal detail, and its use of the quilt-sign of comfort (Figure 17), how monumentally devastating the AIDS pandemic was and continues to be (Epstein/Friedman, 1989).

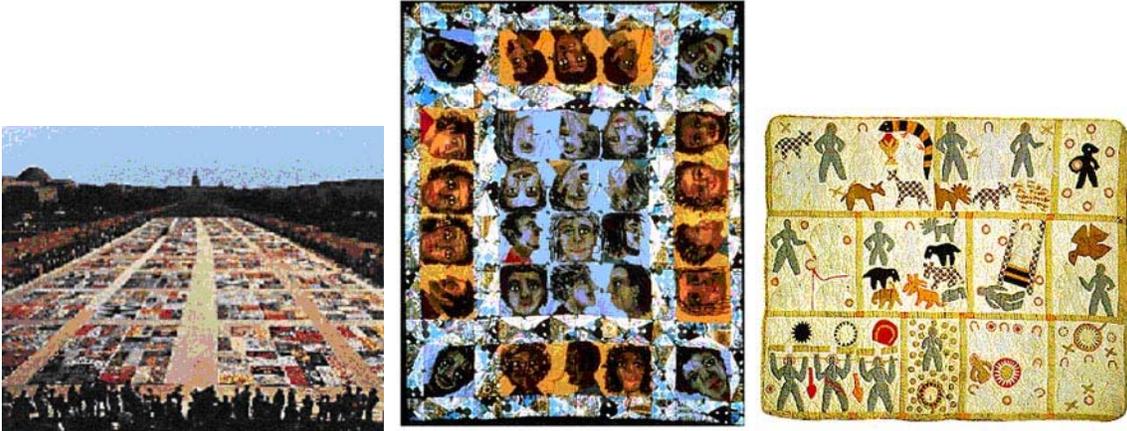


Figure 17 The NAMES Project AIDS Memorial Quilt (ongoing since 1987)

Figure 18 Faith Ringgold *Echoes of Harlem* 1980 © the artist

Figure 19 Harriet Powers (1837-1911) *Untitled Quilt*

Faith Ringgold's quilted and sewn pictures of her family and neighbours in Harlem (Figure 18) echo with the lived experiences expressed in quilts made by North American former slaves like Harriet Powers (Figure 19) (Fry, 2002). And Hella Jongerius speaks to the contemporary nomad in us all in her *Mobile Dreaming* 'quilt' (Figure 20). Each mobilises a powerful emotionality in their quilt forms.



Figure 20 Hella Jongerius *Mobile Dreaming* 2001

Sarat Maharaj reminds us that the quilt's emotional affectivity lies in its duality, its ability to be simultaneously a "domestic commodity" and "conceptual device"... With all other meanings intact, the quilt remains for him – and in the examples above - inextricably bound, even obliquely, to "the notion of wrapping up, keeping warm, sleep and comfort, some feeling of hearth and home".

I have proposed the quilt as variously a symbol of genealogical history, a memory container, a warm covering, a troubled signifier of gender, an example of hard hand-work and time-investment, a well- or poorly-crafted object, a token of domesticity, and ultimately an emotionally affective textile. What then of the correspondence between these and textile technology of the now?

Section 6: *Blush and blanche...*

My 'hybrid quilt', hand-made and electroconductive, hand-dyed and thermochromically reactive, uses a cross-disciplinary approach to traditional hand-stitching, patterning, and the processes / products of technological textile advances. Still 'in-progress', this work uses thermochromic ink handpainted onto a handsewn, appliquéd textile surface in the form and scale of a traditional bed quilt.

My grandmother's thin and irregular quilt covering my narrow childhood bed. A functional 'utility quilt' (Wilson, 2002), it evidenced frugality, salvage, isolation, Puritanism, stoicism, and lacked finesse, decoration or pleasure. It was highly invested with her tough and hard emotions... But, as I have alluded, bed is a site of sexual passion, procreative delight, coy amusement, sleepy pleasures, as well as a specifically located range of terrors and concerns... In my attempt to create a work reflecting the 'engineered emotion' of this site, I have borrowed the metaphor of a blushing and blanching cheek...

Blush and blanche is time-invested and meticulous, representative of my emotional engagement through the seductive pleasure of skilled making, focussed crafting and traditional technical expertise. The creation of emotional meaning then allows space for the intervention of a technical textile product – thermochromic ink. The thermostat-operated Gorix heat-pad on the reverse of the quilt allows me to deliver heat to specific areas of the quilt and at different times. This allows the textile surface of the work to sporadically shift its colour from deep pink to pale pink to white and cream.

Blush and blanche is functional, but its function is shifted from that of the bed-covering providing protection, warmth and privacy, to a 'conceptual function' concerned with both expressing and eliciting an emotional and technologically exciting affect (Boutrup, 2004). It is therefore created and offered as a

performative interface between an emotional human subject and an emotionally-designed, emotionally-signifying object. *Blush and Blanche* exactly activates Maharaj's 'quilt duality' wherein the quilt operates as both "domestic commodity" and "conceptual device". My grandmother would both recognise it and never have dreamt of it...Certainly, I propose that the surprise and delight the blushing and blanching quilt activates goes some way to "harmonising and humanizing the technological world" (Kettley, 2002) in a poetic and tender way which is richly emotional, of measurable quality, and of 'futureground' value...



...

Figure 21 Work-in-progress *Blush and Blanche*

Credits

The author would like to acknowledge the generous support of a Research Fellowship from the School of Fashion and Textile Design, Central Saint Martins College of Art and Design, London (2003-04) in association with the MA Design for Textile Futures Course (www.textilefutures.co.uk)

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